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**A SECTORAL ASSESSMENT OF THE CRUISE
SHIPPING INDUSTRY AND COMPARATIVE
ANALYSIS OF THE CRUISE MARKETS
WORLDWIDE – IMPLICATIONS AND POLICY
IMPERATIVES FOR INDIAN PORTS**

By

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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 content of this dissertation reflect my personal views, and is not necessarily endorsed by the University.

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Title of Dissertation: A sectoral assessment of the cruise shipping industry and comparative analysis of the cruise markets worldwide – Implications and policy imperatives for Indian ports

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Abstract

This dissertation examines cruise shipping from the maritime perspective, the trends and developments witnessed in the sector, the industry dynamics, the distinctive features of major cruise destinations and markets, the principal cruise lines and the emerging issues of key concern to the cruise industry. Based on this, an assessment of their likely implications and policy imperatives for Indian ports has been made.

Irrespective of the type and class of vessel and the cargo that it carries onboard, a port has to remain in a constant state of readiness and preparedness to make available adequate facilities to the vessels by providing appropriate infrastructure support and services. Every technical innovation taking place in the shipping industry has a direct bearing on the standing of ports and although static, the ports have to show dynamism in proactively attuning with the demands that these innovations bring about. The economic considerations coupled with the geo-political and geo-strategic factors are the key factors that determine the emergence of new markets and shipping routes to serve them – a maxim which holds true for cruise shipping also. Only the ports that can provide efficient and cost effective services to the shipping industry remain in business.

Obviously, these developments have pecuniary implications on the ports in terms of capital investment in creating adequate infrastructure and superstructures to serve the needs of the trade and unless backed by proper cost benefit analysis and potential assessment, it would have catastrophic results. What should, therefore, be the approach of the Indian ports to address the challenges that developments in the cruise shipping industry impose upon the ports and the proactive measures that need to be taken to benefit from these developments, is the core aim of this study.

KEY WORDS: Cruise Shipping, Liner Shipping, Cruise Industry, Cruise Ships, Indian Ports, Indian Cruise Circuit

TABLE OF CONTENTS

Declaration.....	ii
Acknowledgement.....	iii
Abstract.....	v
Table of contents.....	vi
List of Tables.....	viii
List of Figures.....	ix
List of Abbreviations.....	x
1 Introduction	
1.1 Objective and significance of the study	.....1
1.2 Scope of the study	.....3
1.3 Methodology	.....4
1.4 Limitations of the study	.....5
2 Indian Ports	
2.1 Indian Maritime History	.....6
2.2 Introduction to Indian Ports	.....7
2.2.1 Regulatory framework	.....7
2.2.2 Administrative structure	.....9
2.2.3 General business profile	.....9
2.2.4 Policy reforms and initiatives	.....11
2.3 Emerging focus of Indian ports	.....13
3 Cruise Shipping – A Perspective	
3.1 Transportation & Tourism – interdependence & relevance	.....14
3.2 Cruise Industry	.....16
3.2.1 Cruising defined	.....16
3.2.2 The cruise industry in the context of maritime transport	.....18
3.3 Cruise Industry - Characteristics analysis vis a vis liner shipping	.....20
3.3.1 Economic aspects and Demand-Supply analysis	.....20
3.3.2 Vertical and Horizontal Integration and Concentration	.....24
3.3.3 Intermodal services	.....26
3.3.4 Ownership pattern	.....27
3.3.5 Ship size	.....28
3.3.6 Cruise terminal management	.....30
3.3.7 Market segmentation and branding	.....31
3.4 Summary observation	.....32
4 Overview of Cruise Industry	
4.1 History of cruise	.....34

4.2	Major cruise destinations	.....34
4.2.1	Destination analysis	.....36
4.2.2	The Caribbean	.....37
4.2.3	Mediterranean	.....39
4.2.4	Northern Europe/Baltic	.....40
4.2.5	Mexico	.....42
4.2.6	Alaska	.....42
4.2.7	Asia (Japan/Singapore-South East Asia-Gulf)	.....43
4.3	Source markets	.....44
4.3.1	North America (United States/Canada)	.....45
4.3.2	United Kingdom & Continental Europe	.....45
4.3.3	Far East Asia	.....46
4.4	The principal cruise lines	.....47
4.5	Role of cruise line associations	.....48
4.6	Some issues of key concern to the cruise industry	.....50
4.6.1	Environment	.....50
4.6.2	Security	.....51
4.6.3	Safety	.....52
4.7	Imperatives and implications for ports	.....52
5	Cruise Shipping in India: Perspective, Policy Imperatives, Prospects and Potentials	
5.1	Cruise shipping at the Indian ports - current scenario	.....54
5.2	Present level of preparedness	.....57
5.2.1	Cruise terminal	.....57
5.2.2	Cruise reception	.....58
5.3	Policy initiatives	.....59
5.4	Star Cruises in India	.....61
5.5	Opportunities for Indian ports	.....62
5.6	Indian ports - SWOT analysis	.....63
5.7	Strategies for Indian ports	.....67
5.7.1	Positioning of Indian ports	.....67
5.7.2	Factors influencing cruise arrivals to the Indian ports	.....68
5.7.2.1	Positive influences	.....68
5.7.2.2	Negative influences	.....68
6	Conclusion and Recommendations	
6.1	Conclusion	.....70
6.2	Recommendations	.....74
	Bibliographic References	.....77
	Appendix 1.0 Responses to questionnaire	.....83
	Appendix 2.0 Operational aspects, features and facilities at Indian ports	.....87

LIST OF TABLES

Table 1	Traffic in terms of principal commodities during 2003-04	10
Table 2	Vessel traffic: category-wise 2003-04	11
Table 3	Core area of employment of ships/vessels (indicative list only)	20
Table 4	Slot capacity operated by the top twenty carriers	25
Table 5	Top three cruise shipping companies' share of the capacity 2002-2010	25
Table 6	An indicative list of the cruise ship charter market - 2005 (as at 15/11/05)	28
Table 7	Major groups and their brand sectors	31
Table 8	Sector/main market of independently-owned brands	32
Table 9	Major cruise destinations marketed in North America 2001-05	37
Table 10	Geographical Segmentation of the Bahamas and Caribbean cruise market	38
Table 11	Ocean cruise passengers worldwide 2001-2004	44
Table 12	Statistics of cruise ships and tourist arrivals at Indian ports	55
Table 13	List of some of the cruise lines and Vessels visiting Indian ports	56
Table 14	Star Cruise voyages from Mumbai Port 2005-06	61

LIST OF FIGURES

Figure 1	Major Ports of India	8
Figure 2	Share of principal commodities handled at Major Ports: 2003-04	10
Figure 3	Inbound tourism by mode of transportation	15
Figure 4	World fleet size by principal type of vessels – 2005 (% share of Dead Weight Tonnage)	18
Figure 5	Decadal growth in passengers (demand) and capacity (supply)	23
Figure 6	Worldwide cruise supply/demand projection:2006- 2015	23
Figure 7	Average total berth capacities of new cruise ships 2000-2010	28
Figure 8	Parallels between the global liner industry and cruise industry	33
Figure 9	The Caribbean Region	38
Figure 10	The Mediterranean Region	40
Figure 11	The Northern Europe/Baltic Cruise Region	41
Figure 12	The Mexican Region	42
Figure 13	Southeast Asian Region	43
Figure 14	Share of major cruise markets – 2004	45
Figure 15	Cruise taken from top 15 American ports (first 9 months of 2005)	45
Figure 16	Western European Cruise Market, 2004	46
Figure 17	Market share of major cruise lines, end 2005	48
Figure 18	Indian Cruise Ports	55
Figure 19	Cruise vessel arrivals at Mumbai and Cochin 1996-2006	56
Figure 20	The Star Cruises routings on the Indian domestic circuit	61

LIST OF ABBREVIATIONS

ALRGP	Assistance for Large Revenue Generating Projects
BOT	Build Operate and Transfer
CLIA	Cruise Lines International Association
CMA	Central Marketing Apparatus
CTO	Caribbean Tourism Organisation
EU	European Union
FEMA	Foreign Exchange Management Act, 1999
FMC	Federal Maritime Commission
GoI	Government of India
HPSG	High Power Steering Group
ICCL	International Council of Cruise Lines
IMO	International Maritime Organization
IAPH	International Association of Ports and Harbours
IP Act	The Indian Ports Act, 1908
IPA	Indian Ports Authority
Kms	Kilometres
MDF	Maritime Dependence Factor
MoSRTTH	Ministry of Shipping, Road Transport and Highways
MoT	Ministry of Tourism
MPT Act	The Major Port Trusts Act, 1963
Mts	Metres
NA	Not Available
NCCS	National Committee on Cruise Shipping
NMDP	National Maritime Development Policy
NVOCC	Non-Vessel-operating Common Carriers
OECD	Organisation for Economic Cooperation and Development
OTD	Ocean Travel Development
PHO	Port Health Organisation
Rs.	Rupees
SOLAS	International Convention of Safety of Life at Sea
Sq.Kms./ sq.m	Square Kilometres
TAMP	The Tariff Authority for Major Ports
TLF	Temporary Landing Facility
TLP	Temporary Landing Permit
TEUs	Twenty Feet Equivalent Units
TWIC	Transportation Worker Identification Credential
UK	The United Kingdom
USA/US	The United States of America
USP	Unique Selling Proposition
VLCV	Very Large Cruise Vessel
WTO	World Tourism Organisation
WTO	World Trade Organisation

Chapter 1 Introduction

1.1 Objective and significance of the study

27 November 1973, heralded a significant event in the modern maritime history of India - the reception of *M.V. President Tyler* at Cochin, *the first container vessel ever to be received at any Indian port*. Quite ironically, it took another 16 years to set up a dedicated container terminal - the Jawaharlal Nehru Port Trust¹ at Mumbai. However, by that time, Singapore and later Colombo had already emerged as major transshipment ports in the region with the result that Indian bound containers are still being transhipped at these ports, adding to the cost and reducing the competitiveness² of the Indian produce in the fiercely competitive global market place. India clearly missed the initiative and an opportunity to advance its economic resurgence and maritime prominence, at least by a few decades. The possible impact of having established a dedicated container terminal way back in the eighties at an Indian port, now remains merely of academic interest and is not the subject matter of this dissertation.

Against the above backdrop, would history repeat itself and India once again miss the train (ship) also in the case of cruise shipping? Does cruise shipping hold the same prospect and is it bound to witness the phenomenal growth as witnessed by container liner shipping, does it deserve a concerted business focus and if so what proactive measures should be adopted to tap the benefits of this vibrant sector of maritime trade? That, in sum and substance, is the core objective of this dissertation.

¹ Jawaharlal Nehru Port was established in 1989 as a satellite port of the Mumbai Port. It ranks 32nd among the Top 100 Container Ports in the World in the Calendar year 2005 and handled 2.67 million TEUs between March 2005-April 2006.

² According to an independent study commissioned by Cochin Port, Indian bound containers have to incur an additional expenditure of US\$150 to US\$225 per TEU as transshipment cost.

The cruise industry has come a long way since 1920 when cruising was popular among the affluent few. The thirties and forties saw the decline in cruise traffic because of the depression and the world war and in the sixties because of the advent of jet flights. The decline in passenger shipping led to a search for alternate uses of ships, which, resulted in the emergence of cruise shipping. Thus modern cruise shipping in its 40 years of history has not only registered remarkably steep growth but also has been responsible for an economic benefit of US\$ 51.03 billion, direct spending of US\$24.99 billion and in the generation of 536,143 jobs (G.P. Wild (International) Limited from ICCL, BREA data).

Cruise tourism is among the fastest growing sectors in the tourism industry with an average annual growth of about 8% and by 2010, the world cruise market is predicted to expand to 20 million passengers and in the times to come, the cruising levels are bound to spread as a global phenomenon. Cruise tourism essentially requires adequate port terminal facilities to handle the most sensitive cargo that is carried by ships - human beings. Evidently, ports should be adequately equipped for the reception of vessels, particularly since the cruise passengers come to visit the destination and not the ports. The increasing concerns for safety, security and environmental protection and the consequential technological innovations, make it necessary for the ports to accord attention to these aspects and this translates into cost implications and in turn has a direct impact on the price competitiveness of the port services.

Indian ports have witnessed a surge in cruise calls in the last decade. Most Indian Ports have responded to this opportunity with low cost-ad hoc solutions. The true potential of cruise tourism through the Indian ports remains largely untapped for the prime reason that handling passenger vessels is not seen as an attractive business in terms of the revenue it generates as it does not contribute towards the resource utilisation of the ports. India is a country bestowed with a diverse natural, cultural and historical heritage. Evidently, it figures prominently among the international tourism itineraries with 3.92 million arrivals in 2005. Passenger lines have been calling at Indian ports since colonial times. It was an important hub for Europeans and particularly the British to control the

rest of their colonies in the region. Yet, the modern cruise tourism is a much more recent phenomenon in India and the concerted focus on cruise shipping has been accorded only since early 2001.

This research therefore attempts to study what prospects and challenges cruise shipping offer, the implications thereto and the potentials of Indian ports to emerge as cruise ports. A brief sectoral analysis from the maritime context, industry overview and a comparative analysis of major cruise markets worldwide have been made and their salient features enunciated. These inputs are used to analyse the Indian scenario and to examine how they could be applied in the Indian context. In carrying out the research, a number of questions have been posed to which answers have been sought.

1.2 Scope of the study

With respect to the scope of this dissertation, the following aspects have been taken into consideration:

- Profiling the characteristic features of cruise shipping from the perspective of the maritime sector, and in particular liner shipping, the study of the growth trends and industry dynamics.
- The factors leading to making the cruise industry the mainstay of economic dependence in certain regions and its concentration in certain geographic areas.
- Based on the above findings, an inference has been drawn on the likely implications of the developments in the cruise shipping industry on the ports, particularly on Indian ports. An in-depth analysis of the current level of preparedness, the resources, infrastructures, policy, operational constraints and methods to bridge any deficiencies has been made.

This dissertation is not aimed at any market promotion or market research study but is intended to make a broad industry analysis to facilitate the authorities concerned to appreciate the nuances of the cruise shipping industry and help them to take proactive steps in formulating concomitant policies.

1.3 Methodology

The research focuses on the above questions and on the basis of these findings, this dissertation draws conclusions, evolves strategies and makes necessary recommendations in an attempt to prepare and position Indian ports as cruise destinations; and is divided into five chapters. *Chapter 2* traces the Indian maritime history and how the Indian ports have evolved over a period of time and emerged as cornerstones of the economic edifice of India. This chapter then funnels down to the regulatory and administrative framework within which Indian ports function, their general business profile, the increasing focus on cruise shipping and the policy initiatives being taken by the authorities to gear up the Indian ports to face the challenges of globalisation and the new paradigm orientations.

Chapters 3 and 4 constitute the core research area of this dissertation. Beginning with a brief study on interdependence of transport and tourism sectors and the definition of cruise, Chapter 3 addresses cruise shipping in the context of the maritime industry. Thereafter a comparative analysis between the container liner trade and cruise shipping has been made with the objective to compare, contrast and extrapolate the dynamics and developments of both the vibrant sectors of the maritime trade(s) and to infer the emerging trend and thereby to draw a parallel between the industries considering that during the past few decades, the container liner trade has greatly shaped the standing of ports in the overall maritime transport sector.

In *Chapter 4*, an extensive study of the cruise industry has been made. Beginning with the genesis of cruising, it tapers to the destination analysis, their comparative advantages, study of major cruise markets and their potentials, the principal cruise lines and their level of dominance, the role of cruise associations and finally, the critical issues of concern to the cruise industry and their implications to the ports.

Chapter 5 elaborates on the preparedness and the policy initiatives taken by Indian ports in the recent past to address the increasing calls of cruise traffic on Indian ports

and includes an analysis of the operations of Star Cruises, which for the first time deployed a vessel exclusively on the Indian domestic circuit. In conclusion, a SWOT analysis of the Indian ports and the suggested strategies to be adopted has been made.

In conducting this research, information available in several books and research material available on the subject in the WMU Library and on the Internet, data available on the websites of cruise lines and Cruise Line Associations have been sourced and relied upon in addition to input from some industry experts obtained during field trips and through email questionnaire. The experience gained during the last few years by interacting with cruise line executives, passengers, and industry experts in the capacity of being the Coordinating Officer of Cruise Cell, Cochin Port and as a Member of the Central Marketing Apparatus of the National Committee on Cruise Shipping, coupled with the academic exposure at the World Maritime University have also come in good stead in appreciating the industry perspective from the point of view of the maritime economics.

1.4 Limitations of the study

This study is restricted to only those six out of the 12 Major Ports of India, which are currently handling cruise vessels. This study does not dwell on the river cruise and short sea/coastal ferry shipping. Scant attention is paid to cruise shipping except for the regular economic impact analysis studies that are being commissioned by the Cruise Line Associations, therefore, it was difficult to source material of academic research on the subject except from books, most of which except for a few, are more oriented towards statistical analysis. Although, between May and July 2006 questionnaires (26) were sent to experts from industry, academia, ports and cruise lines, only 8 responded (31%), 2 of which were in negative. An attempt has therefore been made to compare and contrast the features of cruise shipping vis a vis the liner shipping trade – a much researched topic and to which cruise shipping demonstrates a resemblance, and to construct an emerging pattern in order to make an empirical analysis.

Chapter 2 Indian Ports

2.1 Indian maritime history³

India's maritime history is as ancient as its civilisation. Over centuries, Indian shores have either been the staging theatres or the lure of expeditions, be it military, religious, trade or commercial, and the Roman, Greek, Babylonians, Phoenicians, Arabs, Chinese, Portuguese, Dutch, British, French have all added colour and flavour to this pageantry at some point of time.

The world's first tidal dock is believed to have been built at Lothal around 2300 BC during the Harappan civilisation, near the present day Mangrol harbour on the Gujarat coast. The ancient texts and scriptures such as Atharva Veda and Rig Veda written around 2000 BC, have extensively dwelt on knowledge of the ocean routes commonly used by ships. In Indian mythology, Varuna is adored as the God of Seas and Rivers. Two Indian astronomers of repute, Aryabhatta and Varahamihira, are credited to have accurately mapped the positions of celestial bodies and a method of computing a ship's position from the stars. A crude forerunner of the modern magnetic compass called Matsyayantra was being used around the fourth or fifth century AD. The Vijaynagaram and Kalinga kingdoms of Southern and Eastern India had established their rules over Malaya, Sumatra and Western Java. Roman writer Pliny speaks of Indian traders carrying away a large quantity of gold from Rome, in payment for much sought exports such as precious stones, skins, clothes, spices, sandalwood, perfumes, herbs and indigo. Trades of this volume could not have been conducted over the countries without

³ Based on the inputs from the official website of the Indian Navy, Ministry of Defence, Government of India

appropriate navigational skills. It is also believed that Emperor Ashoka used the sea route to travel to the south east of Asia and spread Buddhism.

The decline of Indian maritime power commenced in the thirteenth century, and Indian sea power had almost disappeared when the Portuguese arrived in India (1498 A.D.). The European colonisation that followed for the next 400 years brought about a revival of the Indian maritime trade and the prominence can be gauged by the fact that the first liner conference was formed in August 1875 by the lines trading between the United Kingdom and Kolkata (Stopford, 1997, p.348). The period of 4000 years between Indus civilisation and modern day Indian Ports therefore, offers tangible evidence of the maritime supremacy and the seafaring skills that India possessed in the days of yore.

2.2 Introduction to Indian ports

2.2.1 Regulatory framework

The Union Ministry of Shipping, Road Transport and Highways (MoSRTTH), Government of India, encompasses within its fold the ports and shipping sector which include shipbuilding and ship repair, major ports, national waterways and inland waterway transport. MoSRTTH is entrusted with the responsibility to formulate policies and programmes on these subjects and their implementation.

Indian ports are broadly classified as “major” and “minor”, a legal distinction made under the two key source of laws viz., Indian Ports Act, 1908, (15 of 1908) [IP Act] and the Major Port Trusts Act, 1963 (38 of 1963) [MPT Act], that govern the port sector in the country. This classification is also based on the principles governing the sharing of revenue earnings from the port sector between the Central and State governments as per the Central, Concurrent and State subjects, listed under the Constitution of India. Major ports are listed in the serial 27 of the Constitution and all ports, other than “major port” are listed under the concurrent list of the Constitution and administered jointly by

Central and State governments. In pursuance of the provisions of the subjects that fall within List 1 of the Seventh Schedule to the Constitution of India, the administration of the ports declared as major ports under the IP Act and MPT Act are vested with the Ministry of Shipping, Road Transport and Highways, Government of India (GoI).

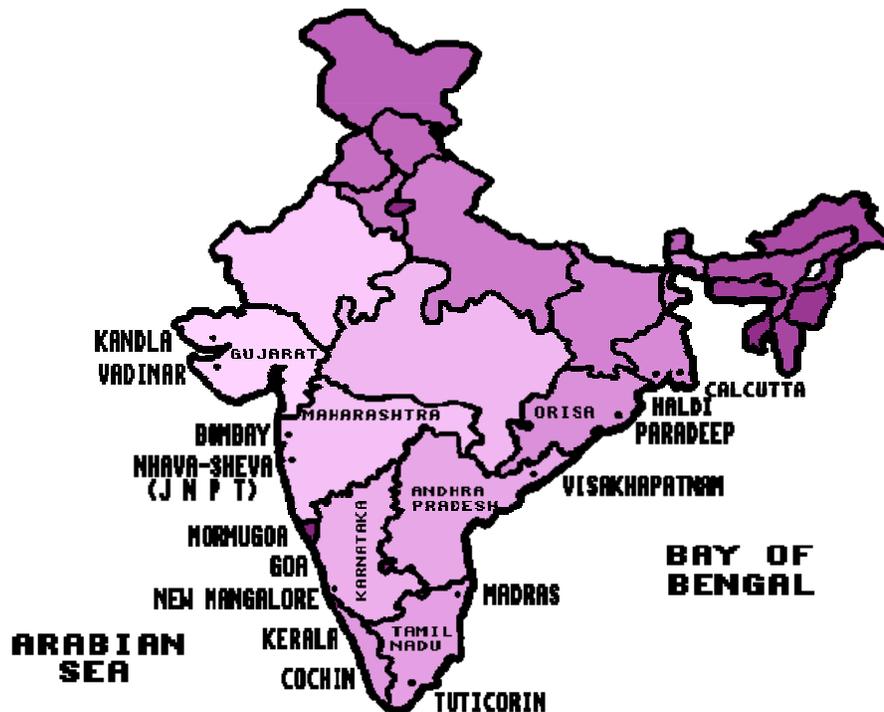


Figure 1 Major Ports of India

Source: Indian Ports Authority

There are 12 Major Ports in India (Figure 1) – six on the west coast viz., Kandla, Jawaharlal Nehru Port, Mumbai, Mormugao, New Mangalore and Cochin, and six on the east coast viz., Tuticorin, Chennai, Ennore Port Limited, Vishakhapatnam, Paradip, Haldia Dock Complex and Kolkata. In addition to this, there are 187 Minor/Intermediate ports along the 7,517 kms (including 1962 kms of Andaman & Nicobar Islands and 132 kms of Lakshadweep Island) long peninsular coast line of the country, which are under the jurisdiction of respective State Governments. States have established Maritime Boards to administer the minor ports.

2.2.2 Administrative structure

The Major Ports are autonomous bodies of the MoSRTTH and are administered by a Board of Trustees constituted by Government under the provisions of the MPT Act, 1963 which comprises of representatives from the industry, labour and government. The Chairman of the Board is appointed by the Government and he is assisted by a Deputy Chairman and a team of Heads of Department in discharging the routine functions. Besides the IP Act, 1908 and MPT Act, 1963, the other maritime related laws that govern the Indian maritime sector in general are the Merchant Shipping Act of 1958, the Dock Workers (Regulation of Employment) Act, 1948, the Indian Customs Act, 1962, the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment Protection Act, 1986 and the Indian Multimodal Transportation of Goods Act, 1993. The Tariff Authority for Major Ports (TAMP), an independent authority, regulates all tariffs, both vessel related and cargo related, and rates for lease of properties in respect of Major Port Trusts and the private operators located therein. This authority has jurisdiction only over major port trusts and private terminals therein.

India is a member state of the International Maritime Organization (IMO) and a signatory of MARPOL 73/78, the convention relating to the prevention of pollution from ships and this also has an impact on port development and operations. The major ports in India are ISPS Code compliant and are also ISO 9001 certified ports.

2.2.3 General business profile

Between them, the 12 Indian Major Ports handle 345 million MT of cargo, 3.9 million Twenty Feet Equivalent Units (TEU) containers, receive 18,731 vessels annually, employ 72,719 employees and thus act as vital cogs of India's economic edifice (figures for 2003-04. Source-Indian Ports Authority). The volume of the cargo handled at Indian ports has increased from a level of 19.38 million tons (major ports) in 1950-51 to around 457.96 million tons (major and non-major ports) by 2003-04. The share of traffic at major (Table 1) and non-major ports stood around 345 and 113 million tons respectively.

At present the 12 Major Ports handle about 75 % of maritime cargo of the country. With infusion of new technology and capacity-building, the congestion at Indian Ports witnessed in the 1990s has reduced in some places and operational efficiency has also improved leading to capacities being marginally ahead of demand. However, with the projected growth of traffic and growing containerization, there is a need to expand the capacities in the sector through investment from both the public and private sectors. A sizeable volume of cargo at the Indian Major Ports consists of bulk commodities (Figure 2 and Table 2); evidently, the focus of future development is more towards creation of adequate infrastructure facilities to match the demands of these core areas of businesses; particularly containerization and automation of bulk cargo handling facilities.

Table 1 Traffic in terms of Principal Commodities During 2003-04 (IN '000 TONNES)

Port	Period	POL	Iron* ORE	Fertilizer		Coal		Container		Others	Total
				Finished	Raw	Thermal	Coking	Tonnage	TEUs		
Calcutta	2003-04	5200	30	-	-	-	-	1746	123	1717	8693
Haldia	2003-04	15036	3752	245	370	3195	4473	2275	137	3221	32567
Paradip	2003-04	1365	5934	-	1588	11013	2224	60	4	3127	25311
Vishakhapatnam	2003-04	17427	12378	839	661	2493	6090	277	20	7571	47736
Ennore	2003-04	-	-	-	-	9277	-	-	-	-	9277
Chennai	2003-04	9200	8360	412	326	1838	992	8623	539	6954	36710
Tuticorin	2003-04	558	-	182	609	5266	-	2687	254	4376	13678
Cochin	2003-04	9960	-	101	395	142	-	2125	170	849	13572
New Mangalore	2003-04	17954	5414	239	-	-	94	96	7	2876	26673
Mormugao	2003-04	1322	22942	129	-	103	1602	103	10	1673	27874
Mumbai	2003-04	18576	-	113	406	-	-	2816	197	8084	29995
J.N.P.T.	2003-04	1939	-	95	53	-	-	27785	2269	1318	31190
Kandla	2003-04	23626	-	502	269	-	-	2404	170	14722	41523
All Ports	2003-04	122163	58810	2857	4677	33327	15475	51002	3900	56488	344799

Source: Indian Ports Authority

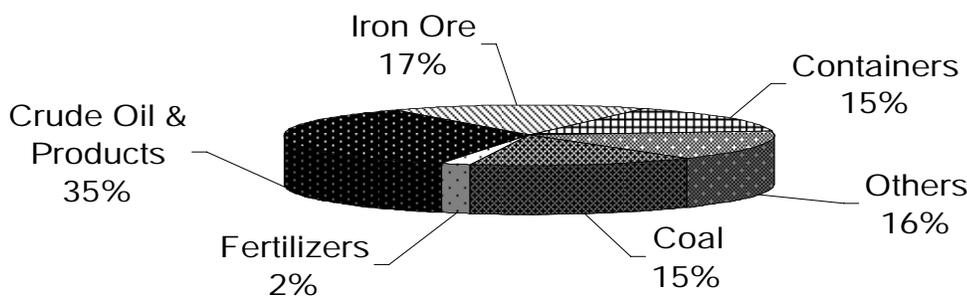


Figure 2 Share of principal commodities handled at Major Ports 2003-04

Source: Indian Ports Authority

Table 2 Vessel Traffic: category-wise 2003-04

								(In Nos.)
Port	Period	Dry Bulk	Liquid Bulk	Break Bulk	Container	Total	Others #	Grand Total
Kolkata	2003-04	4	222	218	307	751	14	765
Haldia	2003-04	505	791	136	457	1889	-	1889
Paradip	2003-04	757	165	85	23	1030	11	1041
Vishakhapatnam	2003-04	785	516	264	112	1677	27	1704
Chennai	2003-04	379	449	361	467	1656	-	1656
Tuticorin	2003-04	288	173	502	516	1479	38	1517
Cochin	2003-04	52	338	136	381	907	226	1133
New Mangalore	2003-04	198	547	82	49	876	3	879
Mormugao	2003-04	416	184	15	62	677	-	677
Mumbai	2003-04	128	840	534	298	1800	-	1800
J.N.P.T.*	2003-04	10	298	140	1678**	2126	1555	3681
Kandla	2003-04	375	789	364	295	1823	-	1823
All Ports	2003-04	4063	5312	2837	4645	16857	1874	18731

Note : (#) - LASH/Passenger/Tugs/Non-Cargo Vessels.
 (*) - Including the vessels handled at NSICT;
 (**) - Excluding Barges 119 at JNPCT and 117 at NSICT

Source: Indian Ports Authority

2.2.4 Policy reforms and initiatives⁴

Infrastructure is the pivot of the economic wheel, and transportation in particular is a critical infrastructure, providing backward and forward linkages of connectivity between the production centers and markets, both domestic and foreign. Infrastructure impairment can lead to severe bottlenecks and stifle the growth prospects. It is observed that about 95% by volume and 70% by value of the country's trade is carried by means of maritime transport. Having regard to the current level of India's share in global merchandise trade at around 0.8%, the Government has drawn up extensive strategies aimed at strengthening the maritime infrastructure and for the trade facilitation.

Policies of the Central Government regarding the maritime sector have in the past addressed issues of mismatches of capacities and traffic at major ports, acquisition of shipping tonnage for facilitating cargo carriage, the need to encourage inland water

⁴ Adapted from the National Maritime Development Policy Document 2004-05 of the Ministry of Shipping, Road Transport & Highways, Government of India.

transport and positioning of navigational aids as warranted from time to time. The programmes in each of these sub-sectors have been structured as part of 5 year-Plan schemes of the MoSRTTH. The economic liberalization policies initiated in the 1990s provided the impetus to the maritime sector whereby private public partnerships have been encouraged in provision of port and handling facilities.

Consistent with the commitment of the Government to ensure that the economy grows at 7 to 8% per year in a sustained manner over the next decade and in order to realize the growth potential, the MoSRTTH in the year 2004 focused its attention towards the development and modernisation of the economic infrastructure to become globally competitive. A National Maritime Development Policy (NMDP) was drafted in the year 2004 regarding ports, shipping and inland water transport that is purposive to induct modern technology and achieve increased levels of synergy and coordination. The policy emphasizes the complementary roles of maritime and other modes of transport to provide for cost effective services and timely deliveries to meet the demands of trade. The policy, addresses not only issues for strengthening the sector through synergies of initiatives of the Centre and the States but also encourages the flow of investments into the sector - for upgradation of infrastructure and for modernization of facilities in respect of the maritime ports, shipping and inland waterways transport (IWT) sectors. The Policy for the maritime sector emphasizes the importance of cost effective movement of cargoes, transparency of decisions on objective considerations in matters of investment decisions, the efficiency of operations of the infrastructure as well as the relevance of core competent maritime personnel.

A separate Directorate General of Ports is proposed to be set up and its mandate would include policy and its implementation for all Ports (including non-major ports, private ports/terminals and fishing ports) in the country. The policy also envisages institutional and administrative reforms as the successful functioning of ports in the existing competitive environment depends on quick decision-making, and therefore adequate powers would be delegated to the port authorities so that business decisions on day-to-

day matters are taken at the port level, leaving only policy issues to the Central Government for guidance or decision. Ports play a vital role in the foreign trade. Delays at the ports have far reaching implications (both quantifiable and non-quantifiable) for the importers and exporters. It is, therefore, proposed under this policy to put in place a mechanism whereby the users and trade interests have a bigger role to play. The policy would also encourage the Major Ports to enter into sister port relationships with ports in other countries, particularly with those ports, which have similar features and with whom Indian ports share cargoes.

2.3 Emerging focus of Indian ports

Although India ranks 15th among the top 35 maritime nations with 1.51% of world total deadweight tonnage (UNCTAD, 2005, p.33), in terms of the Maritime Dependence Factor (MDF), with an MDF of 4%, India only ranks 30th (2003) among the top 56 countries that make up 75% of world trade (Ma, 2005, p.12). The opening up of the economy in the nineties has given the much needed impetus to the re-emergence of the Indian maritime sector and the Government of India has accorded serious attention towards the development of port and shipping related infrastructure. Under the NMDP initiative, a total of 228 projects worth 610 billion Indian Rupees (INR) (US\$ 14 billion approximately), would be executed in two phases, over a period of 10 years mostly under Build Operate Transfer (BOT) schemes and the Government would invest in the attendant basic infrastructures like connectivity, navigational channels, dredging, etc.

The confidence of the international maritime community in these reform measures is evident from the increasing presence of maritime giants such as the Port of Singapore Authority, DP World (now including P&O Ports) and Maersk/APM Terminals at the major ports of India.

Chapter 3 Cruise Shipping – A Perspective

3.1 Transportation & Tourism – Interdependence & relevance

Transport, in all perceivable forms, since time immemorial, has been germane to the wanderlust nature of mankind. This indulgence in turn manifested into the infusion of different value systems into the society. Thus transportation has significantly shaped and influenced the evolution of civilisation. Transportation has helped in the discovery of new worlds, access to new markets, resources and in permeating the geographical divide. If today the world has come to become the proverbial 'global village', it is due to transportation as much as it is attributable to the technological incursions such as the internet. Stopford (1997, p.2) quotes Carlo Cipolla from his book *The Economic History of World Population*, that the transport industry has been one of the prime forces responsible for shifting the world from an essentially national system to the global economy that exists today. Transport is one of the four cornerstones of globalisation together with telecommunications, trade liberalisation and international standardisation (Kumar & Hoffman, 2002, p.35).

Transportation has, therefore, acted as an engine in the evolution of modern civilised society. Scientific and technological revolutions led to making transportation more reliable and in helping it emerge as a critical economic activity; more significantly in dissipating the process of globalisation and integrating the global economy. Transportation is as integral to tourism as it is to trade and commerce. The transport sector coupled with the globalisation process has greatly influenced the tourism sector, resulting in the emergence of the international travel and tourism industry as one of the most prominent growth sectors of the world economy. According to the World Travel &

Tourism Council , the travel and tourism activity is expected grow at an annual rate of 4.2% in real terms between 2007 and 2016. As per the World Trade Organisation the value of world merchandise trade (imports & exports) is US\$18,157 billion (2004) whereas, the World Tourism Organisation estimates value of tourism at US\$622 billion (2004): According to the World Trade Organisation (WTO) *Facts and Figures*, international tourism receipts represented in 2003 approximately 6 per cent of worldwide exports of goods and services (as expressed in US\$) and 30% share when considering service exports exclusively.

Transport and tourism are intricately intertwined economic activities that exhibit a high level of elasticity. The function of transport is to bring products to the end users or vice versa, which in the present case is the tourist and the destination. Tourism is also a network industry like the transport sector, exhibiting a high degree of interdependence in that there are many small, medium and larger enterprises that compete, cooperate and participate in the supply and distribution value chains and networks providing different interrelated services and products. Tourism is a major driver in the transport sector and is characterised by the presence of different modes of transport that compete within a geographic dimension, viz., rail, road, air and sea. The sea leg represents a relatively small segment of tourism as is illustrated in the Figure 3.

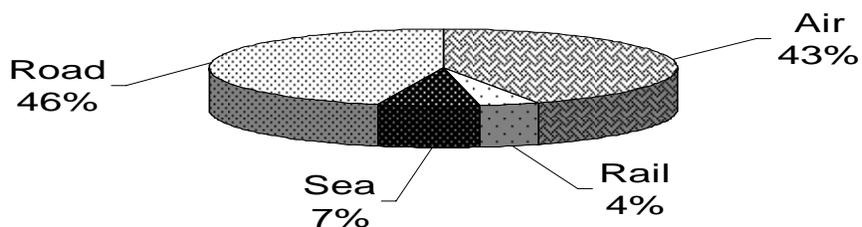


Figure 3 Inbound tourism by mode of transportation
Source: World Tourism Organisation

Tourism as a commodity has a spatial dimension, as it relates to destinations. Since the destinations are unique in terms of their features, it can be said that there exists a monopolistic competition. However, globalisation has also led to the emergence of new

regions competing with the existing and established tourism destinations. The tourism demand is highly influenced by the cost of the transportation service and calls for investment in infrastructure, facilities, networks and supply chain. Efficiency of the transport infrastructure and system, in terms of cost affordability, accessibility and reliability is, therefore, the critical factor that influences the travel industry.

3.2 Cruise Industry

3.2.1 Cruising defined

Leading dictionaries attribute the origin of the word *cruise* to the Dutch word “*kruisen*” which means ‘to cross’. Cruise, cruise shipping, passenger ships, passenger liners, ocean liners, are some of the commonly used inter-related terms and notwithstanding the thin divide of their technical definitions, one thing that runs in common is the fact that they all relate to the carrying of human beings onboard a ship, albeit with different purposes, be it for transportation or for leisure. Cruising is clearly distinct from the transportation of passengers or the traditional transatlantic voyages on ocean liners transporting passengers, in that cruising is essentially an act of leisure and accommodation onboard a sailing vessel meant specifically for the purpose – called the cruise vessel.

A *passenger ship*, as defined under The International Convention for the Safety of Life at Sea, 1974 (SOLAS) , Regulation 2f, is a ship which carries more than twelve passengers. Cartwright & Baird, (1999, p.xix & 23), define cruise liner/ship as a passenger vessel operating for pleasure purposes only and not employed in the transportation industry. According to them, whereas for a cruiser it is a matter of a holiday package, for a passenger on a traditional liner or ferry it is a matter of motivation to go from point A to point B. Quartermaine & Peter (2006, p.10) explain that a cruise ship is a large passenger vessel whose voyages are driven not by the demands of enterprise, but of entertainment. Where passenger liners of an earlier period provided scheduled transport services around the globe, cruise ships mostly ply a relatively

limited number of routes. Chris Hayman ⁵, Managing Director, Seatrade Communications Ltd., UK and Publisher of Seatrade Cruise Review, opines that the cruise industry fits into the tourism and leisure sectors as the shipping industry provides transportation and cruising is '*very definitely not transportation*'.

Ma (2005, p.3), points out that technically, passenger shipping, especially cruise shipping, is similar to freight shipping, but operationally and especially commercially it is more close to the hotel and entertainment business on board the ships and to tourism activities ashore. *Cruise liners/cruise ships* are vessels which are used commercially for leisure onboard. An *ocean liner* is a large commercial ship that carries passengers on a regular schedule. *Passenger ships* ply between two ports carrying people and also carry cargo. *Ferry services* carry both passengers and vehicles such as cars and trucks. Wikipidea (www.wikipedia.org) defines a *cruise ship* as a passenger ship used for pleasure voyages, where the voyage itself as well as the amenities of the ship are considered an essential part of the experience and an *ocean-liner* as a large passenger ship that undertakes longer voyages on the open sea primarily for the purpose of transporting people from one place to another. As per the World Tourism Organisation (WTO) (2003, p.9), cruise shipping is a distinct business from the transatlantic ocean liners both in concept and business type. Whereas the latter was conceived mainly as transport, the key element in cruise is the ship as accommodation. Cruises not only share the characteristics typical of a destination, but are destinations and experience in themselves.

It emerges from these substantiations that the cruise industry is a distinct sub-set of the tourism industry but definitely not quite divorced from the maritime industry. Whereas, cruising is a niche human element oriented, maritime based leisure activity, maritime transportation on the other hand involves the transportation of cargo from origin to destination and vice versa and is governed by the law of seas, maritime legislations, maritime laws etc – both national and international.

⁵ As conveyed in response to email questionnaire on 22 June 2006. (See Appendix 1.0 page 84)

Evidently, experts in the industry and academia are unanimous in asserting cruise as a leisure and tourism based industry and in not according it as much significance as a critical element of maritime transport as is given to the liner and tramp trades. This could perhaps be attributed to the fact that in the overall tourism scenario, transportation is only a means to reach the destination and not an end in itself as also due to the fact that tourism by itself has emerged as a niche market and distinct economic activity with its own set of networks and systems. Another factor could be the sheer insignificant size of the percentage of dead weight tonnage of passenger vessels among the world fleet, which in 2005 represented only 0.60% (Figure 4).

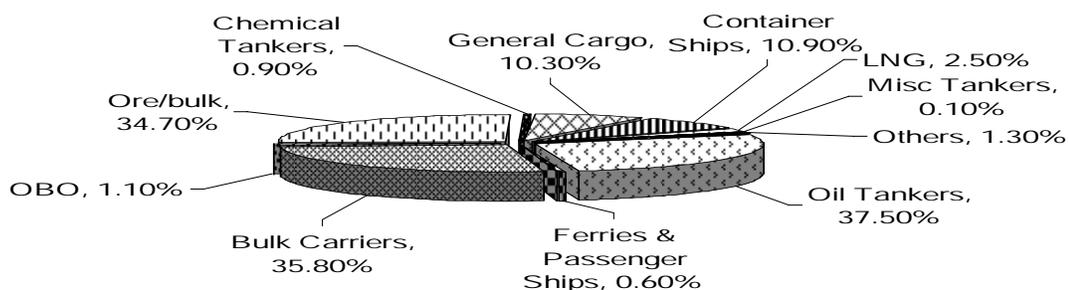


Figure 4 World fleet size by principal type of vessels – 2005 (% share of dead weight tonnage)

Source: UNCTAD Review of Maritime Transport 2005

3.2.2 The cruise industry in the context of maritime transport

It is *felt* that *cruising* is as integral to the maritime transport industry as is its twin *container shipping*⁶, both of which are contemporaries in terms of their resurgence/origin, in the sixties. Further from a port's perspective, the endeavour and the amount of effort required to maintain the desired level of services is similar for any kind or class of vessel that calls at a port, irrespective of whether it is a container, tanker, bulk or cruise vessel; perhaps they are more exacting in case of a cruise vessel. Therefore, it is essential to have a perceptive understanding of the basic characteristics

⁶ 26th April 2006 marked the fiftieth anniversary of containerisation, one of the most significant developments in logistics and transportation that has exerted more influence on the shape of the world trade, ports, and our lives. The revolution was led by Malcolm McLean. On April 26, 1956, *Ideal X*, a converted tanker, sailed from Newark, New Jersey to Houston, Texas loaded with 58 modified 35-foot truck containers. (Based on presentation made by Gerald Malia on 30th May 2006 at World Maritime University, Malmö, Sweden and other sources.)

of the maritime transportation industry in relation to the cruise industry. This aspect is being analysed and examined in this section; particularly since this dissertation primarily aims at evaluating the implications of the development of the cruise industry on the Indian Ports.

Until 1960, shipping was not as specialised as it is today and the liner services had to carry a mixture of manufactures, semi-manufactures, minor bulks and passengers. A tramp could become a liner and vice versa. For instance, a vessel returning to load grain would often carry a general cargo backhaul (Stopford, 1997, p.339). As trade grew in the twentieth century, the system was redefined and developed in order to improve upon productivity and profitability. Quoting from Rochdale Report, Stopford (1997, p.6-7) further emphasises that shipping is a complex market where the conditions governing one sector need not necessarily apply to the other. Ships vary in size and are put to a whole range of services for a variety of goods. He points out that even though liner and bulk shipping belong to the same industry, they seem to have little else in common. Commercially, liner and bulk shipping differ in terms of services provided, cargo carried and economic structure.

In this context it makes an interesting paradox to cite that container liners (deployed for maritime transport) carry passenger on what is popularly called *freighter cruises*. Since freighters have sufficient cabin space onboard, they carry passenger, not exceeding 12 on their voyages. A plethora of trip options ranging from transatlantic voyages, Mediterranean to round the world voyages are on offer for a price that ranges from 85€-145€ per day. CMA-CGM, Conships, Norasia Lines and Rickmers Linie are some of the container liners that offer such services (www.freightercruises.com). It is also interesting to note that the cruise vessel *Costa Allegra* was built as a container ship before being converted in 1992 to a cruise ship (www.maritimematters.com).

Against this background, it would not be out of context to maintain that a cruise vessel carrying “vacationing cargo” (human beings) is as critical an element of the shipping industry as is a container ship carrying containers for trade, a tanker carrying crude for

refining or a bulk vessel carrying ore/mineral for manufacturing or industrial purposes. The *purposes* (Table 3) for which a vessel is employed may differ technically, operationally and commercially according to the nature of the ships and the trade the shipping company is engaged in, but the act of *carrying*, which is also termed as transportation, remains the same. The fact that today liner and tramp shipping have become distinct disciplines and containerisation has assumed prominence should not be the reason to weed out cruise as a secondary, if not insignificant, element of maritime transportation. To write off these averments as mere semantics would be missing a crucial point.

Table 3 Core area of employment of ships/vessels (indicative list only)

Vessel Type	Core area of employment
Container	Container trade
Bulker	Bulk cargo, e.g. Ore, grains, cement
Tanker	Crude, Petroleum, Chemical carriage
Cruise	Leisure & tourism/"Vacationing cargo"
Warship	Naval Defence & Coastal security
Gas carrier	LNG and LPG carriage
Combination	Ore/Bulk/Oil carriage

Source: Compiled by Vipin Raman Menoth from various sources

In the succeeding section, an attempt has been made to compare and contrast some of the distinguishing features that are apparently similar in both container liner shipping and cruise shipping. Given the dynamism of the maritime industry, it is felt that over a period of time, cruise shipping would demand the same level of attention as any other sector of maritime transportation; these assertions being a step towards that.

3.3 Cruise Industry - Characteristics analysis vis a vis liner shipping

3.3.1 Economic aspects and Demand-Supply analysis

Maritime economists have identified the level and location of economic activity, distance factors, population levels and trend factors as the key determinants of demand and point out that the concept of derived demand serves to define and predict the nature and pattern of demand for shipping (Alderton & Rowlinson, 2002, p.164). This is also

echoed by Ma (2006, pp.18-21) where he elaborates that some of the major factors that affect maritime transport are economic factors, political events and developments, natural factors, technical reasons, value versus volume, etc.. And if these are the deterministic factors critical to maritime transportation, then cruise industry cannot be, by any means, an insignificant constituent of maritime transportation since these factors seem to have equal bearing and similar impact on the cruise industry. Some of these aspects, *restricted to the cruise industry* have been briefly discussed and elucidated here, as also the analogies derived from the liner trades, to which cruise lines are more akin, to substantiate them.

According to the *WTO Facts and Figures*, tourism demand depends on the economic conditions in major generating markets as growth in economies will result in rise in disposable income, a relative part of which will be spent on tourism, particularly in the case of emerging economies. The trend will reverse with the tightening of the economic situation. This is explained to a certain extent, by the level of expenditure on leisure and recreation as a percentage of the total consumer expenditure (for year 2003), which in case of major cruise markets viz., United States of America (USA), Canada and Japan was around 9%-11% as compared to developing nations in Asia such as China, Indonesia, Malaysia and India where it was around 2%-4% (G.P.Wild (International) Limited, 2006, p.23).

Likewise the level and location of economic activity factor noted above, is explained by the fact that the Asia and the Pacific are expected to be the fastest growing regions in the world with 9% growth due to the growing inter-regional middle-class market and the public-private investment and improvement of tourism related legislations, according to the forecasts for 2006 made by the World Tourism Organisation. Conversely, although Australia has a fair share of population that can afford to take cruise vacations as also destination-wise it is bestowed with cultural, geographical and historical features, it suffers the locational disadvantage of being far away from the supply sources and this reduces its growth potential (WTO, 2003, p.101). Natural factors such as attractiveness of destination markets, proximity of the destination markets to the major supply sources,

the geo-strategic locational factor of being located on the main shipping route, and natural events like tsunamis, hurricanes, etc., and epidemics like SARS, Bird Flu and Norovirus (Norwalk-like-virus), all have impacted on cruise lines' bookings and itineraries in one way or the other.

Political events such as war or internal strife in a country, greatly affect the cruise inflow as could be seen in the aftermath of the Gulf War and the '9/11 attacks' in the United States. In fact the Second World War brought an end to the pleasure cruising (Cartwright & Baird, 1999, p.26). The most visible impact of 9/11 on the cruise industry was that the fear to fly led the cruisers to avoid flying to ships and they started to rather choose to drive. This in the short term forced lines to deploy more ships closer to North America. This also meant opening up of a series of homeports across the US coastline and opening up of new markets. But on the flip side, the luxury brands of cruise which have exotic destinations on their itinerary often requiring passengers to fly, suffered loss of business due to the reluctance of passengers to travel.

Technological advent in form of air transport decimated North Atlantic passenger shipping in the first instance and this left a large number of relatively new passenger vessels lying idle (Cartwright & Baird, 1999, p.29). The fact that the freight rates (for dry and wet bulk) rose twice as much as airfares was the reason why shipping lost the passenger transport business to the airline industry (Stopford, 1997, p.5). But the same technical factor, the airliner, now carries passenger to far flung destinations, enabling itineraries during the off-peak season, particularly for European based ships, which now venture to the Far East and South America quite separately from the series of World Cruises (Mayes, 2005, p.11).

Industry experts maintain that in the cruise industry supply stimulates demand and a relative lower growth in capacity would suggest slowdown in passenger growth as illustrated in Figures 5 and 6, which exhibit a relatively strong correlation. Monie et. Al. (1998, p.175), observe that the introduction of mega ships is another exponent of structural changes resulting in a reshaping of the competitive structure of the cruise

industry and this will lead to fewer, but larger cruise ships which in turn will strengthen supply-side concentration. This will obviously further increase competition among port destinations and raise the bargaining power of the cruise lines particularly in view of the fact that the top three cruise lines control about 78% of the capacity. However it is felt that the increase in competition and addition of newer capacity coupled with the existence of substitute products such as river cruises, luxury yachts, freighter cruises and competition from the land based tourism could perhaps lead to a situation where the cruise would become as affordable as land based holidays.

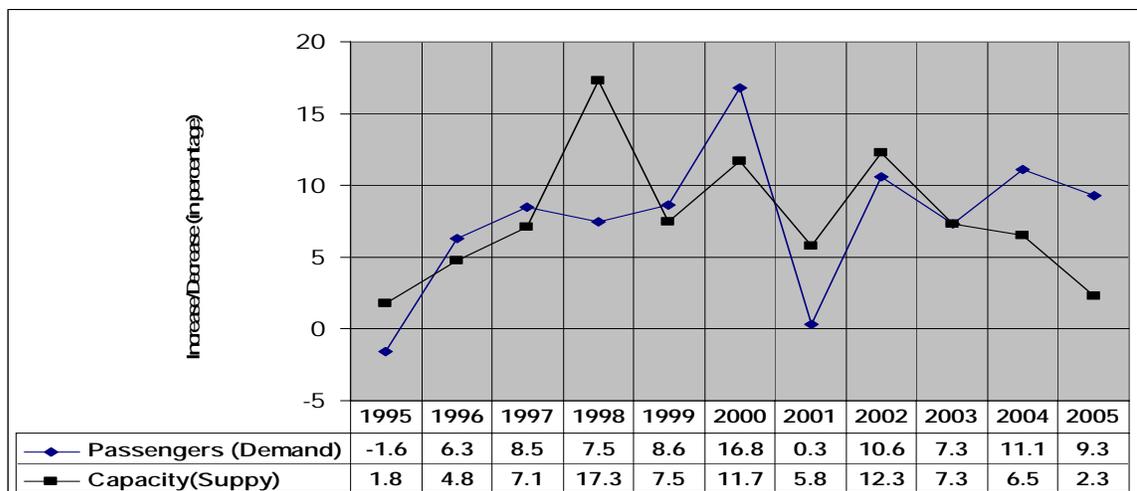


Figure 5 Decadal growth in passenger (demand) and capacity (supply) (in %)

Source: Peisley, 2006, p.110, Tables 3.2 and 3.3

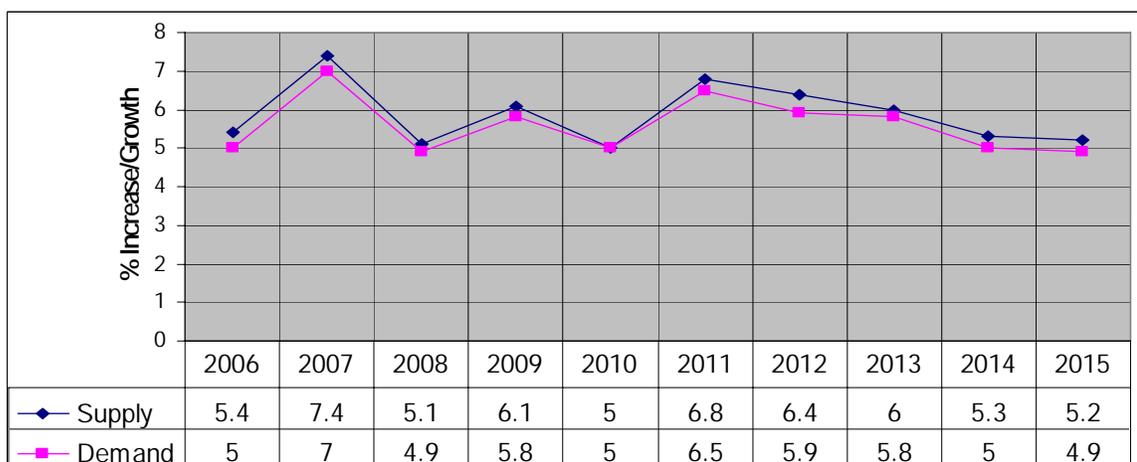


Figure 6 Worldwide cruise supply/demand projection: 2006-2015 (in %)

Source: Peisley, 2006, p.29

3.3.2 Vertical and Horizontal Integration and Concentration

Change in the liner shipping industry, has been characterised by increased horizontal and vertical integration⁷. This is exhibited by the events of acquisitions and mergers and in form of management of container terminals as well as the provisions of intermodal services and logistics services. The strategies of lines to ensure faster, more reliable services are resulting in on-going shifts in the span of activities in which the shipping lines are engaged (Heaver, 2004, pp. 375-380). Notteboom (2004, p.90) in his article Container Shipping and Ports-An Overview, points out that the economic rationality behind mergers and acquisitions witnessed in the liner shipping is rooted in the objective to size, growth, economies of scale, market share, market power, gaining instant access to markets and distribution networks, obtaining access to new technologies or diversification.

Similarly, the cruise industry exhibits structural characteristics that are strikingly similar to those seen in liner trades, which cannot be merely written off as an analogy. The cruise industry has large players who benefit from standardisation and economies of scale and in association with their affiliates or partners are in a better position to offer to their clients more attractive services and competitive prices. The prime logic behind the takeovers in cruise industry has been the market share and the minimising of costs (Mott, 2006). The three largest groups, Carnival, Royal Caribbean and Star Cruises control between them 125 mostly large cruise ships (including those on order) and control about 80% of the market. The mergers and alliances in the cruise industry, notable among them being Carnival and P&O Princess (2003), Star Cruise and Norwegian Cruise Lines (2000) and Celebrity Cruises and RCL (1997), can be easily contrasted with those that have taken place in the container liner shipping, viz., P&O-Nedllyod (1997), APL-NOL (1997), Hanjin-DSR Senator Lines (1997) and Maersk-Sealand (1999) [Panayides & Gong, 2002, p.600] (see Tables 4 and 5).

⁷ Vertical integration is the extent to which a firm controls its upstream suppliers and/or its downstream buyers. Horizontal integration refers to the concentration process which increases the size of a unit considering the group it belongs to (Pierre Cariou, 2006, p 7 & 10).

Table 4 Slot capacity operated by the top twenty carriers

Jan-80		Sep-95		Jan-00		Apr-03		
Carrier	Slot# Capacity	Carrier	Slot# Capacity	Carrier	Slot# Capacity	Carrier	Slot# Capacity	
1	Sea-Land	70	Sea-Land	197	Maersk Sealand	620	Maersk Sealand	846
2	Hapag-Lloyd	41	Maersk	186	Evergreen	317	MSC	470
3	OCL	31	Evergreen	182	P&O Nedlloyd	281	Evergreen	428
4	Maersk	26	COSCO	170	Hanjin/DSR Senator	245	P&O Nedlloyd	411
5	NYK Line	24	NYK Line	137	MSC	225	Hanjin/DSR Senator	289
6	Evergreen	24	Nedlloyd	120	NOL/APL	208	NOL/APL	250
7	OOCL	23	Mitsui OSK	118	COSCO	199	COSCO	243
8	Zim	21	P&OCL	99	NYK Line	166	CMA/CGM	237
9	US Line	21	Hanjin	92	CP Ships	141	NYK Line	221
10	APL	20	MSC	89	Zim	136	CP Ships	197
11	Mitsui OSK	20	APL	82	Mitsui OSK	133	K-Line	187
12	Farrell	16	Zim	80	CMA/CGM	123	Mitsui OSK	167
13	NOL	15	K-Line	76	K-Line	113	Zim	167
14	Transfreight	14	DSR-Senator	75	Hapag-Lloyd	103	China Shipping	166
15	CGM	13	Hapag-Lloyd	72	Hyundai	102	OOCL	156
16	Yang Ming	13	NOL	63	OOCL	101	Hapag-Lloyd	153
17	Nedlloyd	12	Yang Ming	60	Yang Ming	93	Yang Ming	136
18	Coulmbas	11	Hyundai	59	China Shipping	86	Hyundai	125
19	Safmarine	11	OOCL	56	UASC	75	CSAV	114
20	Ben Line	10	CMA	46	Wan Hai	71	Hamburg-Sud	112
Slot capacity top 20		435	2058		3538		5074	
C4-index		38.6%	35.7%		41.4%		42.5%	
Share of top 5 in top 20		44.1%	42.3%		47.7%		48.2%	
Share of top 10 in top 20		69.1%	67.5%		71.7%		70.8%	

figures in '000 Source: Notteboom, T.E. (2004). Container shipping and ports: an overview, Review of Network Economics, Vol.3, Issue2-June 2004, p 91

Table 5 Top three cruise shipping companies' share of the capacity 2002-2010 (in %)

Company	2002	2006	2010 [□]	2010 ^{□□}
Carnival Corporation	28.1%	48.1%	50.1%	51.6
Royal Caribbean Cruises	20.4%	21.6	20.8%	23.2
P&O Princess Cruises	11.1%	Merged into Carnival		
Star Cruises Group	9.7%	9.8%	9.9%	12.0%
Share of top four/three	69.3%	79.5%	80.8%	86.8
[□] Based on existing orders (Jan 2006) to 2010				
^{□□} Based on projected orders to 2010				

Source: Peisley, T. (2006), The Future of Cruising – Boom or Bust? A Worldwide Analysis to 2015, page 10

Tour operators like Airtours (acquired Direct Cruises in 1998) and Thomson, are able to use their large fleets of charter aircraft to support their cruise holidays (Cartwright & Baird, 1999, pp.116-118). Royal Caribbean (cruise line) and First Choice (tour operator) operations in the United Kingdom is another example of vertical integration. In their deposition as Industry Specialists before the Competition Commission of the United Kingdom⁸ (2002), Cartwright & Baird have argued that cost reduction in the cruise industry could be achieved through economies of scale and mergers would enable this.

⁸ Permission to use data obtained on 23 June 2006 from the Competition Commission of the United Kingdom.

Carnival, which made a modest beginning with a converted transatlantic liner, the *Mardi Gras*, has since absorbed many of the famous passenger shipping lines across the continents such as Costa Cruises in Italy, Cunard, Ocean Village, P&O and Swan Hellenic in the UK, Princess Cruises in the USA and the Dutch company Holland America Line, to cite a few.

Standardisation of services results in increasing return on investment and economies of scale and in turn this results in growth and productivity. As the size and volume of business increases, competitors are weaned out of the market, thus creating a process of concentration and an almost oligopolistic market structure. This is substantiated by Mayes (2005, p.10) where he states that, in times to come, large cruise ships will remain within their original owner-group until being retired and scrapped which means that there will no longer be a natural source of suitable second-hand tonnage for most of the smaller operators, and the difficult decision will have to be made between buying new ships or moving out of the cruise business altogether. Michael Lambros (2006) of Majestic Cruises, which operates from Greece, feels that the cruise game is being played among the major companies, the giants – in other words, those who have shaped the overall setting and control the greatest percentage of the market. Evidently, the mergers and acquisitions in the cruise industry have also gone through the scanners of Competition Commissions in the UK and that of the USA as also the Regulation (EEC) No 4064/89 - Merger Procedure, of the European Union, as have similar events in the container liner industry.

3.3.3 Intermodal services

Container lines see value-added services in logistics as offering faster growth and better profitability although the conduct of logistics services is largely done in independent business units. Such re-branding of logistics services carry the group name of shipping lines, e.g., Maersk Logistics, APL Logistics, COSCO Logistics, etc. (Heaver, 2002, p.385-388) - organisations which are dedicated to logistics management.

Much akin to such door to door logistics services being provided by most of the container lines today, cruise lines also have tied up with the hotel and airline industries to provide for pre-post cruise transportation and stay for passengers. The role of such service providers, who are vertically integrated, is to provide a service at each point in the overall holiday chain; in the same way as a clearing & forwarding agent, who attends to the cargo at the destination. In the UK, all fares involving flying are quoted as a package whereas in North America, although it is not quoted so, the cruise lines do have arrangements with hotels and airlines for customer accommodation and transportation. Thus the cruising, in these terms, has no longer remained just a ship-board leisure activity beginning and terminating at the port wharves.

Further, in case of a container line, intermediary channels such as the Non-Vessel-operating Common Carriers (NVOCC) and freight forwarders provide services of cargo consolidation, space booking, issuing of transport documents and arrange for the land transportation of cargo (Ma, 2005, pp.76-77). In the cruise industry, travel agents and tour operators discharge roles similar to NVOCCs and freight forwarders by arranging cruise bookings, on-land shore excursions and other activities. Analogically, both these intermediaries serve/attend to the “cargo” being carried on board a ship.

3.3.4 Ownership pattern

The ownership pattern in the cruise industry is also a reflection of the practice seen in container liner shipping. Cartwright & Baird, (1999, pp.xx-xxii) observe that one of the biggest barriers to entry into the cruise industry is the cost of ships and, therefore, in order to avoid the high initial cost, the cruise companies opt to charter a vessel from its owner and then operate it under the cruise companies' logo. Ships change owners but remain under the same operating companies. Leaseback arrangements, under which a shipping company commissions the ship and then sells it to a financial institution who then leases it back to the cruise company is also a prevalent practice. Bare boat charter, chartering and ship transport contracts are also widespread in the cruise industry as illustrated in the Table 6.

Table 6 An indicative list of the cruise ship charter market - 2005 (as at 15/11/05)

	Vessel	Owner/Operator	Charterer	Market	Type	Charter Period/Term
1	ALBATROS	Club Cruise	Phoenix Seereisen	Germany	T/C	Year-round to 2008
2	ASTORIA	German Interests	Transocean	Germany	B/B	Year-round to 2010
3	DELPHIN RENAISSANCE	Cruiseinvest LLC	Delphin Seereisen	Germany	BB/HP	Year-round long term to 2016
4	EMERALD	Louis Cruise Lines	Thomson Cruises	UK	T/C	Undisclosed
5	GRAND VOYAGER	Horizon Navigation	Iberojet	Spain	D&E	Year-round to 2006
6	HANSEATIC	Private Interests	Hapag Lloyd	Germany	BB	Year-round to 2008
7	MAXIM GORKIY	Sovcomflot	Phoenix Seereisen	Germany	T/C	Year-round to 2008
8	MINERVA II	Octavian Shipping	P&O/Swan Hellenic	UK/US	BB/HP	Year-round to 2010
9	NAUTICA	Cruiseinvest LLC	Oceania Cruises	US/Europe	BB/HP	Year-round long term
10	OCEAN MAJESTY	Majestic International	Page & Moy	UK	T/C	Summer 2006 (c200 days)
11	THE TOPAZ	Topaz International	Peaceboat	Japanese	T/C	Year-round to 2005

Source: www.cruise-community.com (Seatrade Insider News). Information compiled by UK based Cruise & Maritime Services

KEY: TC - Time Charter DE - Deck & Engine Charter BB - Bareboat Charter BB/HP - Bareboat/Hire Purchase Option

3.3.5 Ship size

Another striking similarity between cruise and container liner shipping is the growing size of ships – a feature that has direct bearing on the reception capabilities of a port in terms of draft, equipment support and backup area to handle the large volumes that these ships carry. The trend in the cruise industry is towards building bigger ships (Figure 7) as has been the case of container ships where the carrying capacities have burgeoned progressively from 4400 TEU (1991), 6000 TEU (1996), 7500 TEU (2003), 9200 TEU (2005), 11000 TEU (2006) and to the yet to come 12500-13000 TEU range of ships (Hsu & Hsieh, 2005, pp.936-951).

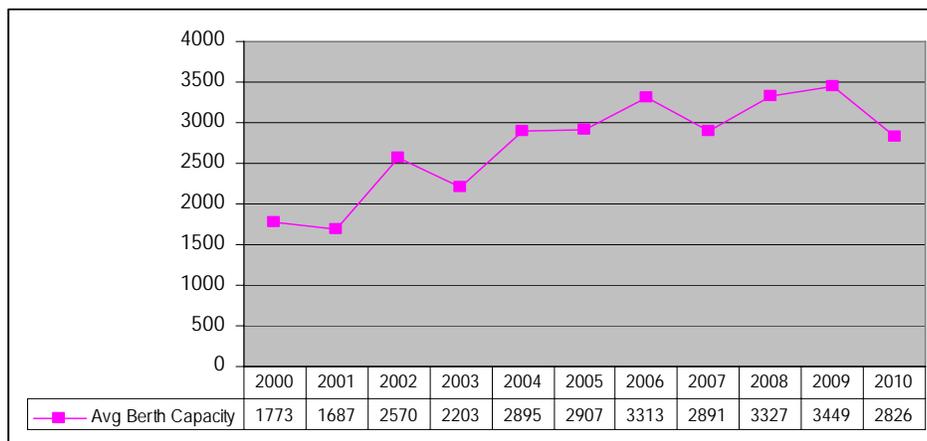


Figure 7 Average total berth capacities of new cruise ships 2000-2010

Source: Peisley, T. 2006, *Future of cruising – boom or bust? A worldwide analysis to 2015*, p.27 (from original source: A.R.Peisley Ltd/Seatrade)

The new cruise tonnage is stimulating the cruise market growth and the cruise liners are getting larger in order to exploit the economies of scale to bring about reductions in operating costs per passenger unit thereby enabling more competitive tariffs to be offered to the market (Branch 1998, p.149). *Queen Mary 2* of Cunard, is one of the largest passenger ships ever built (Mayes, 2005, p.10). According to a recent news report (www.about.cruise.com), Royal Caribbean has leapt forward in the construction of giant cruise ships by ordering a 5,400-passenger, 220,000-GRT ship to be developed under the name 'Project Genesis' which will be 1,180 feet long, 154 feet wide and 240 feet high. Carnival is reported to be in discussion with Fincantieri for its 'Pinnacle Project' to build the largest-ever cruise ship at an estimated cost of US\$ 1 billion.

As pointed out earlier, the increase in the size of cruise vessels would put severe pressure on the port infrastructure and it is likely that some of the ports may be pushed out from the cruising itinerary of these very large cruise vessels (VLCV). Yet it also offers equal opportunity to some ports in that these larger liners would push out the smaller vessels from certain markets forcing the lines to deploy them in alternative routes/circuits. This is substantiated by Peisley (2006, p.202), where he notes that with the deployment of larger vessels on the Caribbean circuit, cruise lines now have smaller ships available to pioneer new ports in touristically-underdeveloped countries like Guatemala, Nicaragua, Honduras and Belize.

Notteboom (2004, p.88) makes an interesting observation that the economies of scale leads to surplus space onboard of the container vessels that lines are eager to fill but the unused capacity onboard cannot be stored and used later and this further increases the pressure to go for volume. Similarly, as in case of mega container vessels, these VLCVs would also be subject to serve pressure to fill the space, which calls for increased investment in land based networks. As for the ports, this would mean suitable redesigning of terminal facilities, deepening or widening of the navigational channels and increased security cost particularly when it comes to handling over 6000-7000 visitors (crew-passengers including), at one go. Necessarily, it would also mean that the cruise lines would have to build up excellent port interface and onshore networks.

3.3.6 Cruise terminal management

Traditionally port authorities and stevedores managed and operated container terminals. However, the spell of privatisation witnessed in the 1990s resulted in large container lines entering into terminal operation particularly to ensure fast and efficient transfer of containers (Heaver, 2002, p383-384). Leading lines such as Maersk, CMA-CGM and Evergreen operate dedicated container terminals.

Similarly, cruise lines have also ventured into cruise terminal operations to provide a seamless cruise experience right from the check-in and embarkation through to disembarkation. The industry's investment in terminals is driven largely by the growth of cruise travel as the new generation of mega-ships poses another challenge for older cruise facilities. The arrangements involve direct financing, loans, prepaid or guaranteed port fees and financial help to port authorities. The port typically owns the terminal and leases the space to the cruise company, which usually gets some say in the design, plus preferential, but not exclusive, berthing for its ships.

Along with Carnival, Royal Caribbean and Disney Cruise Lines have been pioneers in financing passenger facilities. Star Cruises in 2002 signed an agreement with the Port Authority of Thailand to develop, operate and manage a passenger cruise terminal at an estimated cost of US\$15 million. Similarly, Carnival Corporation in 2003 built a US\$40 million facility at the new Long Beach facility, the first in the U.S. to be built by a cruise operator wherein it will manage and operate the new facility and the terminal will be used for other vessels within the corporation's brands (<http://cruisediva.com>). In 2002, the Port of Galveston entered into a public-private partnership with Royal Caribbean, Carnival and CH2M HILL to expand cruise ship services and facilities. The cruise lines provided up-front investment in exchange for commercial terms regarding return on its investment (www.ncppp.org). The LA Times (www.latimes.com) reports that Royal Caribbean International, Costa Cruises and MSC Cruises are spending about US\$20 million to renovate a terminal, built in the 1930s in Naples, Italy. In order to give the passengers a cruise experience the minute they arrive at the terminal,

Disney Cruises opened a theme-park-style terminal when it launched its family-oriented line in 1998 at Port Canaveral, Florida.

3.3.7 Market segmentation and branding

There is clear market segmentation in the cruise industry. While some excel in niche markets, most are in a position to tap new markets and offer new product variants in order to increase their profitability and reduce production (operation) cost. The cruise lines are rated into different brands⁹ based on the amenities offered to their passengers, different atmosphere or price range, viz., Contemporary, Budget, Premium, Luxury and Niche. Some of the parameters used to categorise the ships as different brands include size and age of ship, size and décor of cabins and the public spaces both indoors and outdoors, facilities offered, quality and style of food, on-board entertainment, cuisine, service, (distance to) port of departure, length of cruise, itinerary, etc.. A brand can consist of one single ship or several ships bound together by some common brand image expressing a certain common product standard of service and entertainment.

The main difference between the Contemporary and Premium categories is the size of ship, number of passengers onboard, and quality of food, service, and entertainment. The main difference between the Premium and Luxury categories lies in the onboard amenities and privileges. The luxury cruise ships are smaller and the size of accommodations is much larger whereas Niche cruises are small ships that focus on educating each guest, viewing wildlife and experiencing the culture of the destination. Table 7 lists some of the major cruise groups and their brands while Table 8 lists those of independently owned brands.

Table 7 Major groups and their brand sectors

Brand	Carnival	Royal Caribbean	Star Cruise
Contemporary	AIDA, Carnival, Costa,	Royal Caribbean	NCL America, Norwegian Cruise Lines, Star
Budget	Ocean Village, P&O Cruises Australia	Island Cruises	Star
Premium	Cunard, Holland America Lines, P&O Cruises, Princess, Swan Hellenic, Windstar	Celebrity Cruises	Orient Lines
Luxury	Seabourn		

Source: Peisley, T. 2006, Future of cruising – boom or bust? A worldwide analysis to 2015, p.35 (from original source: A.R.Peisley Ltd/Seatrade)

⁹ Compilation based on inputs (print and electronic) sourced from books written among others, by Peisley, 2006, p.28-88, Cartwright & Braid, 1998, p.103-112, G P Wild (International) Limited, 2006 and other online sources.

Table 8 Sector/main market of independently-owned brands

Budget	Contemporary	Premium	Luxury
Fred Olsen Cruise Line/UK, Iberojet Cruceros/Spain, Louis Cruise Lines/Europe & UK, MSC Cruise/Europe, Page & Moy/UK, Pullmantur/Spain, Thomson Cruises/UK, Transocean Tours/Germany, Travelscope/UK	Disney Cruise Line/USA, Hapag Lloyd Cruises/Germany, Iberojet Crucero/Spain, MSC Cruises/Europe, Pullmantur/Spain	Fred Olsen Cruise Line/UK, Hapag Lloyd Cruises/Germany, Peter Deilmann Cruise Line/Germany, Radisson Seven Sea Cruises/USA, Saga Cruise/UK, Voyage of Discovery (Discovery Cruises)/UK & Worldwide	Crystal Cruises/Japan & USA, Hapag Lloyd Cruises/Germany, Hebridean/UK, Radisson Seven Sea Cruises/USA, SeaDream Yacht Club/USA, Silversea Cruises/ UK, Europe & USA

Source: Peisley, T. 2006, Future of cruising – boom or bust? A worldwide analysis to 2015, p.36 (from original source: A.R.Peisley Ltd/Seatrade)

The “big three” (Carnival, Royal Caribbean and Star Cruises) in the cruise industry cater to the mass-market in both the contemporary and premium sectors, and to a small extent the luxury and expedition sectors, followed by the more exclusive operators such as Crystal Cruises, with small fleets of luxury ships, the small fleets of premium and upper standard ships, the lower end mass-market companies including MSC, and finally the specialised operators of smaller expedition type ships and discovery cruises (Mayes, 2005, p11). Although the larger cruise lines own several brands, they continue to maintain separate branding as in case of Carnival, which apart from the original Carnival Cruise Line owns Cunard, Costa, Seabourn, Windstar, etc. A similarity can be drawn from the Maersk owned Safmarine, a brand which operates exclusively out of the African markets. Similarly, some cruise brands are only or mainly marketed in certain countries, for example Cunard and P&O Cruises focus on the British market, while Aida and A'Rosa focus on the German market (Commission of European Communities, 2002).

3.4 Summary observation

The above substantiations provide sufficient evidence of the cruise industry replicating the structural characteristics and patterns of economic, organisational and commercial considerations muck akin to the liner shipping industry; yet it is distinct in terms of the nature of the ‘cargo’ that it carries onboard. In sum, it would be relevant to draw a parallel between the global liner industry and cruise industry based on the following illustration (Figure 8) made by Harlaftis and Theotokas (2002, p.16):

Globalised Liner Industry ^α	Globalised Cruise Industry
<ul style="list-style-type: none"> • Economies of scale – resources specificity and frequency of transactions lead to <ul style="list-style-type: none"> - Internal development - Vertical integration - Mergers and acquisitions - Strategic alliances • Vertically and horizontally integrated global companies that cover the transport needs of global customers • Regional companies that serve regional demand and feeder for global players 	<p>Stimulated by the consistent growth in passenger demand, cruise lines are building larger ships and increasing their capacity (economies of scale) in order to gain market share and market control. Mergers and acquisitions drive led by Carnival, Royal Caribbean etc. and deployment of ships to cater to brand specific markets is a case at point.</p> <p>Vertical integration (Royal Caribbean-First Choice, easyCruise-easyJet) and horizontal integration (Carnival-P&O Cruise, Star-NCL) aid the cruise industry to attend to the needs of global customers.</p> <p>Cruise liners like MSC, Costa, AIDA, NCL, etc. are deployed to cater to the regional demands.</p>

Figure 8 Parallels between the global liner industry and cruise industry

^α Source: Parallel drawn based on observation extracted from Figure 2: Shipping markets, 1970-2000s by Harlaftis, G. & Theotokas, J. (2002). Maritime business during the 20th century: continuity and change. In C.T.Grammenos (Ed.), *The handbook of maritime economics and business*, (p16), London & Hong Kong

It can be asserted that cruise shipping is close in essence to scheduled liner services, but nonetheless with its own unique features which prevent it from being considered purely as scheduled liner services (WTO, 2003, 187). Yet, merely because cruise vessels are employed for leisure and tourism purposes cannot be a reason sound enough not to accord cruise shipping the same importance as any other trade in the maritime transportation. As pointed out by Stopford (1997, pp.338-339), until 1960, shipping was not as specialised as it is today and it would be perhaps worthwhile to consider a dichotomy of liner shipping into cargo and *vacationing* cargo (passenger tourism). The above analysis emphatically reveals the contours of the emerging trends of the cruise industry, which suggests that the cruise shipping will impact the ports world over, in the same manner as has the container line shipping in the last few decades.

Chapter 4 Overview of Cruise Industry

4.1 History of cruise

A brief presentation of the history of the cruise industry would throw light on the dynamics it has gone through at its various stages of evolution. Cruising perhaps traces its origin to the trans-Atlantic voyages and voyages to the imperial colonies spread across the continents far and wide. It is widely acknowledged that in 1818 the Black Ball Line operating out of New York was the first shipping company to offer a scheduled passenger service from the United States to England. Colonial settlements necessitated communication and ships were used to deliver mail. With trade came leisure and together they fuelled the demand for the manufacture of larger and more luxurious ships. Mayes (2005, p.37) records that on 4th July 1840, the steamer *Britannia* of Samuel Cunard's British and North American Royal Mails Steam Packet Company, which later came to be known as the Cunard Line, inaugurated the first North Atlantic steamship mail service under a contract with the Admiralty and this was followed by Mediterranean services in 1850.

Mayes (2005, p.43), however, credits Peninsular and Oriental Steam Navigation Company as the company that invented cruising in 1844 when it advertised a 'Grand Tour' by sea from Southampton to Gibraltar, Malta, Athens, Smyrna, Jaffa and Alexandria utilising three ships, the *Lady Mary Wood*, the *Tagus* and the *Iberia*. Throughout the second half of the nineteenth century P&O increased its routes to cover the far flung corners of the British Empire; Australia, the Indian Sub-Continent and the Far East became the most important routes for the company. In 1904 the company advertised its first proper cruise on *Vectis* – a ship refitted specifically for that purpose.

According to Cartwright & Baird, (1999, p.23), cruising made its advent into the shipping industry after the advent of steam since it enhanced the ability to run scheduled services. It is noted that the first ocean 'pleasure' cruise was in 1881 when the Oceanic Yachting Company bought P&O's *Ceylon* and refitted her for the European market. White Star Line, P&O and Hamburg Amerika Line were among the pioneers to offer regular cruises around the 1900s. The first purpose-built, ocean-going cruise ship, according to Quartermaine & Peter (2006, p.37), was the German *Prinzessin Victoria Luise* (1900). The two World Wars interrupted the building of new ships, and many older liners were used as troop transports. In the years in between 1920 and 1940 European lines benefited from the transportation of refugees to North America and business travellers and tourists to Europe. Increasing air travel, however, marked the ending of transatlantic business for ocean liners. Passenger ships were sold and lines went bankrupt from the lack of business (Boyd, undated).

Modern cruising, according to Quartermaine & Peter (2006, p18-41), began in the United States when some entrepreneurs exploited the opportunity to run older tonnage on cheap and cheerful jaunts from sunny Florida ports to Nassau in the Bahamas; the earliest among them being the Eastern Shipping Corporation, which in 1947 ran *Nuevo Dominico* from Miami. During the brief interlude of the Depression in the 1930s, cruising gained popularity of sorts with their 'prohibition busting booze cruises' from New York to beyond the state limits. Cartwright & Baird, (1999, p.24) attribute the 'prohibition of manufacture, sale or transportation of intoxicating liquors' introduced in 1920 in the USA as one of the catalysts that boosted cruising in the USA since to many of the law abiding Americans, illicit drinking was not in order. The non-US flagged vessels were free to sell liquor once out of the territorial limits of the USA. This perhaps triggered the cruising out of US an acceptable method of annual getaway. However, cruising remained the indulgence of the affluent few due to its exclusivity and being expensive.

Similarly the restriction on carrying not more than £50 of foreign exchange imposed by the United Kingdom Government in the 1960s also in a way acted in promoting cruising since British-registered ships used sterling as the currency on board and passengers

could use their foreign currency allowance only whilst ashore (Cartwright & Baird, 1999, p.28). The German government under Adolph Hitler used cruising as a political measure to reward their workforce and *Kraft durch Freude* offered inexpensive holidays for workforce and Nazi party members (Cartwright & Baird, 1999, p.25). This made cruising affordable to the middle and working class, unlike in the United Kingdom, where cruising was very expensive and affordable only to the upper crust of the society.

Most authors, however, agree that the 1960s witnessed the beginnings of the modern cruise industry when full deployment of vessels for cruising became the practice. Cruise ship companies concentrated on vacation trips in the Caribbean, and created a "fun ship" image, which attracted many passengers who would never have had the opportunity to travel on the super-liners of the 1930s and 1940s (Boyd, undated).

4.2 Major cruise destinations

4.2.1 Destination analysis

Technological innovations in transportation, have aided in the mobility of masses and in turn in influencing the concept of time and space. Cruising has spatial dimensions as it is a destination oriented leisure activity. Today, the cruise companies are reaching out to new geographic markets and there is hardly a coast in the world that does not feature in the cruise brochures.

Monie et al (1998, pp.177-178) point out that the geographical location is one of the toughest obstacles for a destination since a port may be a perfect destination, but lie too close or too far from another scheduled port. According to them, the three key factors of the port selection criteria are appeal of the destination, major attractions and uniqueness of the destination. At the same time, port related attributes such as berthing facilities, passenger reception facilities, port dues, vessel security, immigration process, etc also play an important role in the selection of a destination. Cartwright & Baird, (1999, p.127) suggest that search for the "sun" remains a major feature of the cruise industry with no less than 77% of the world's cruise capacity operating within areas

renowned for their long, hot, sunny days. The major cruise destinations marketed in North America during 2001-2005 (Table 9) indicate that the Mexican Riviera and South America/Antarctica region are showing remarkable growth whereas, Asia is also emerging in preference although in number terms, it still remains relatively insignificant.

Table 9 Major cruise destinations marketed in North America 2001-05

Destination	2001	2002	2003	2004	2005	% change 05/04
	% share (Passenger days)					
Caribbean/Bahamas	44.53	46.58	45.71	45.11	46.38	2.74
Mediterranean	12.67	10.22	11.53	12.55	12.59	0.31
Alaska	7.89	7.95	7.45	7.65	8.30	8.51
Mexico Riviera	1.96	5.33	4.80	6.24	7.45	19.31
Europe/Scandinavia	8.12	10.89	10.92	9.78	7.14	-26.96
Trans-Panama Canal	4.02	3.29	3.94	3.79	3.52	-7.23
Hawaii	2.61	2.99	2.76	3.40	3.76	10.57
Canada/New England	1.91	1.81	1.56	1.93	1.52	-21.12
Bermuda	2.13	1.93	2.09	1.71	1.72	0.35
South America/Antarctica	2.47	2.31	2.49	1.59	2.03	19.92
World	1.03	0.91	0.53	0.60	0.60	0.49
Asia	1.08	1.11	0.48	0.55	0.91	67.11
Others	9.58	4.68	5.74	5.10	5.36	n.a
Total	100.00	100.00	100.00	100.00	100.00	

Source: Peisley, T. 2006, *Future of cruising – boom or bust? A worldwide analysis to 2015*, p.116, Table 3.9 (from original source: CLIA)

The following section briefly discusses the five major cruising regions, viz., the Caribbean, Mediterranean, Mexico, Alaska, Northern Europe/Baltic plus emerging Asian cruise region and their distinct features (WTO, 2003, p119).

4.2.2 The Caribbean

The Caribbean is the most popular cruising region with nearly 50% of the capacity marketed in North America. It is estimated that 90% of the cruise passengers in the Caribbean are North Americans (Monie et. al., 1998, p.166). Since 1980, cruise arrivals in the region have grown at an average annual rate of 7.1%. The major base ports serving the Caribbean are Miami, Port Canaveral and Port Everglades (Fort Lauderdale) on the Florida coast and San Juan, Puerto Rico (G.P.Wild (International) Limited, 2006, p.57). As illustrated in Table 10, the Caribbean consists of four segments: the Western, Eastern, Southern and the Deep Caribbean and the Bahamas are added as a fifth segment due to their importance and proximity to the Caribbean market.



Figure 9 The Caribbean Region

Source: http://travel.yahoo.com/p-travelguide-577544-map_of_caribbean-i

Table 10 Geographical Segmentation of the Bahamas and Caribbean cruise market

Bahamas	Western Caribbean	Eastern Caribbean	Southern Caribbean	Deep Caribbean
Free Port, Nassau, CocoCay#, Pleasure Island#, Princess Cays#, and Royal Isle#	Cayman Islands, Cancun, Cozumel, Jamaica and Key West (Cuba)	Antigua, British Virgin Islands, San Juan, St. Barts, St. John, St. Kitts & Nevis, St. Maarten, St. Thomas, Virgin Gorda, Labadeeee#, and Serana Cay#	Barbados, Dominica, Gaudeloupe, Martinique, St. Lucia, St. Vincent and Princess Bay#	Aruba, Bonaire, Curacao, Cartagena, Grenada, Isla de Margarita, La Guaira, Panama Canal, Puerto Cabello and Trinidad & Tobago
Home Port				
Miami	Miami, Montego Bay and Tampa	Miami and San Juan	San Juan, Miami and Barbados	San Juan, Aruba and Montego Bay
Cruise Duration				
1-day	4-days	7-days	7-days	7-days
3-days	7-days	10-days	10-days	10-days
4-days		11-days	11-days	11-days

#: Private out-island

Source: Monie et al, 1998, p161, (Original source: Willem S.A. Da Costa Gomez, prepared for the Sint Maarten Ports Authority N.V., Sint Maarten Cruise Tourism Action Strategy, p.15)

The emergence of the Caribbean as the major cruise region can be attributed primarily to its climate, political stability in the region, access and proximity to the major market of North America. A large number of accessible islands enable the cruise lines to offer port-a-day cruises and in spite of the emergence of newer destinations and destination diversification, the Caribbean remains the major cruising region (Monie et. al., 1998, p.153 and Peisley 1992, p.107). The islands, provide contrasting styles and exhibit French, Dutch, US, Danish and British influence, which also explains the influx of cruise tourists to the Caribbean from these European nations. Besides a high per capita income and tourism temper, most of the cruise lines have their modern fleets of cruise

vessels harboured at US Ports, particularly in the state of Florida. Again, the investment from the US facilitated the development of cruise related facilities and associated industries, which in course of time helped the Caribbean resorts to offer value added packages such as Golf tours, Scuba –Snorkel tours, Casino Tours, etc to retain the tourist interest. Cartwright & Baird (1999, pp.129-131) state that the relative proximity to the continental USA, English language and acceptance of US Dollars everywhere makes the region attractive to the cruise companies.

Sobers (2006) of the Caribbean Tourism Organization (CTO) notes that the growing focus on shorter cruises post 9/11 have resulted in decreased cruise activity in the southerly cruise destinations. Monie et. al. (1998, p.163) attribute hurricanes (between June and November) among the possible reasons for the shift of cruise itineraries from the Eastern to the Western Caribbean; others being intense marketing and bored repeat passengers. However the deployment of a large number of vessels by the major cruise operators enables them to offer Caribbean cruises round the year and the concept of a distinct Caribbean season is becoming less relevant (GP Wild, 1994, p.6).

4.2.3 Mediterranean

The relatively sheltered waters of the Mediterranean saw the beginning of cruising in the late nineteenth century on account of it being conveniently located close to the industrialised nations that were at the forefront of ship design and construction (Quartermaine & Peter, 2006, p.33). The feature that makes the Mediterranean arguably the most attractive and flexible of cruise destinations is its proximity to so many different countries with cultural diversity and historical attractions within a small geographical area,. However, political volatility in the Eastern Mediterranean states has also been instrumental in the frequent downturns in its cruising fortunes. This and other factors resulted in the exodus of vessels from the region in 1991, but over a period of time the region has gradually emerged as the second major cruising region after the Caribbean, with over 21% share of the world wide cruise market. The leading ports in the Mediterranean are Genoa, Venice and Piraeus with other ports such as Civitavecchia (Rome), Naples, Malaga, Barcelona and Malta increasing in prominence.



Figure 10 The Mediterranean Region

Source: http://encarta.msn.com/map_701514601/Mediterranean_Sea.html

The Mediterranean region, which serves essentially the markets of the UK and other European countries, has seen an influx of North American passengers. There is no specific cruise season for the Mediterranean, although it offers a good alternative for cruise re-positioning during the hurricane season in the Caribbean. However, winter cruising in the Mediterranean remains a hard sell among the cruise passengers. WTO (2003, p.151), attributes the growth of UK source market, the deployment of European based cruise lines, viz., MSC, Festival, Costa, etc., the very large cruise vessels which necessitated search of alternate markets outside the traditional Caribbean market and the active involvement of the US based cruise giants like Carnival and Royal Caribbean who have been aggressive in market promotion, as the possible reasons for the development of the Mediterranean.

4.2.4 Northern Europe/Baltic

The Norwegian fjords have remained a favourite with the European cruisers for a long time and are a preferred summer cruising area. The easing of political tensions with the former Soviet Union facilitated the extension of the cruising region up north towards Spitzbergen and also by including Iceland and Greenland as part of cruise itineraries. Further, the independence of Latvia and Estonia and opening up of Poland have made the historic ports of Tallinn, Gdansk and Riga along with Helsinki and Stockholm, to figure among the Baltic cruise itineraries.

The easy access from the UK ports and the relatively ancient touch of the towns make the Baltic ports a favourite among the UK and North American passengers. Another factor that can be attributed to the increasing importance of this region as a cruise region is the fact that this also happens to be an area where many of the North Americans have their roots (Cartwright & Baird, 1999, pp.137-138). Peisley (2006, p.219) observes that in the wake of “9/11” and Iraq war, cruise traffic to Northern Europe has experienced healthy growth. According to WTO (2006, p.149) one reason for the development of this region is also the very high logistical support in terms of supply of provisions and in the repair and maintenance of equipment, which help the cruise lines in keeping the operating cost low.



Figure 11 The Northern Europe/Baltic Cruise Region

Source : http://en.wikipedia.org/wiki/Image:Baltic_Sea_map.png

A strategic location and well served airport makes Copenhagen the key base port for the Baltic cruises and popular with lines wanting a one week fly-cruise programme. Cruise Copenhagen Network, in association with Cruise Malmö Network have initiated a drive to centralize cruise operations in the hope of increasing home-porting activity. Based in Copenhagen, ships can either make the northern ports (St. Petersburg, Helsinki, Tallinn, Stockholm and Oslo) itinerary or the Norwegian fjords/North Cape circuit. This increases the repeat business potential and keeps the prices down in what is an expensive cruise area for both lines and passengers (Peisley, 1992, pp.38 & 117). The cruise season in the region is limited to May-September.

4.2.5 Mexico

Peisley (2006, p.199) notes that the rise in cruising in the Central American region is due to the combination of past-passenger demand for new destinations and cruise lines seeking them out to avoid popular ports. This coupled with the enterprising drive of the local entrepreneurs offering a range of land-based tours such as kayaking, hiking, biking and diving has made Mexico a favourite among the baby boomer families. Mexico is famous among cruisers, predominantly from the USA and Canada, for its beaches, natural history and archeology. The Pacific and the Caribbean coasts of Mexico have emerged as popular cruising grounds in recent years with the development of mainland cities such as Acapulco, Mazatlan, Huatulco, Ensenada and Cancun. Cozumel has emerged as the busiest individual cruise port. Much of the cruise traffic handled on the Pacific coast is from vessels engaged in trans-canal itineraries and the western Caribbean cruises commencing from Florida (GPWIL, 1994, pp.77-83).



Figure 12 The Mexican Region

Source: <http://www.ownerdirect.com/map/mex/map-mexico.htm>

4.2.6 Alaska

Scenic splendour, wildlife and mild summers make Alaska a prominent cruising region on the west coast of North America. The Alaskan cruise season is relatively short and lasts from May to September and nearly half of the tourists to Alaska come by cruise ship (Peisley, 1992, p.115). Vancouver and Seattle are the major ports serving this

region. But the ecologically sensitive nature of Alaska coupled with the environmental concerns following the Exxon Valdez spillage have to a certain extent limited the cruise calls to this region. As a matter of fact the local communities and National Park Services at various port cities have of late demonstrated their strong resistance towards infrastructure related development required for the reception of mega vessels (Peisley, 2006, pp.189-191).

4.2.7 Asia (Japan/Singapore-South East Asia-Gulf)

The geographical vastness of Asia on the one hand offers a vast choice of destinations bestowed with varied attraction, yet on the other hand for the same reason, cruising has not emerged as a cluster of region specific activity. This coupled with low purchasing power parity among the developing nations has resulted in leaving cruising popular only among the developed nations of Asia, mainly Japan and Singapore.



Figure 13 Southeast Asian Region

Source: <http://www.gate1travel.com/southeast-asia/maps/SoutheastAsiaMap.gif>

The Japanese indigenous market has grown into a self standing entity where ships offering dedicated facilities required for this market are plying. Between 1994 and 1998 the influx of passengers from North America and the UK saw a spurt in cruising activity between Singapore and Thailand (Cartwright & Baird, 1999, p.135). The opening of the Singapore Cruise Centre in 1991 and Star Cruises, good air links, port and tourism

infrastructure, have all aided in Singapore emerging as a major cruise destination in this region. Singapore also has the same advantage as that of the Caribbean in that it offers cruises of shorter duration ranging from 1 day to a fortnight – cruising to the neighbouring countries viz., Thailand, Indonesia, Malaysia, Hong Kong, Taiwan, etc. Although Dubai had shown promising growth, lack of cruise tourism infrastructure in other ports/countries in the region and the political atmosphere in the region has to a certain extent restricted its growth.

Events such as the economic collapse of 1998, SARS epidemic (2003), tsunami (2004), bomb attacks in Bali, Indonesia (2002 & 2005), etc., have all resulted in suppressed tourism activity in the region. Peisley (2006, p.239) comments that future growth of Singapore is dependent on more ports being developed of a uniformly high standard to match its own and the best way to ensure this is to share its expertise with other ports in the region like in China and India. Penang, Phuket, Xianmen, Shanghai and Hong Kong are some of the major cruise ports in the region.

4.3 Source markets

This section gives a brief introduction of the major cruise markets, which according to Cartwright & Baird (1999, p.114) are North America, the United Kingdom and Europe and the Far East as illustrated in Table 11 and Figure 14. Peisley (2006, p.109) estimates the 2005 world cruise passenger figure at 14.4 million, a growth of 7.5% and as illustrated in Figure 15, the client profile is dominated by the passengers from North America (69%), Europe (13%) and Britain (8%), clearly the developed countries with a comparatively higher per capita income.

Table 11 Ocean cruise passengers worldwide 2001-2004

Market	2001	2002	2003	2004
North America	6,906,000	7,470,000	8,195,000	9,107,000
United Kingdom	776,000	824,000	963,000	1,029,000
Continental Europe	1,130,000	1,296,000	1,709,000	1,764,000
Asia (excluding Japan)	600,000	600,000	500,000	450,000
Japan	200,000	220,000	200,000	200,000
Australia	75,000	116,000	154,000	158,000
Others (including Latin America)	505,000	672,000	620,000	655,000
Total	10,192,000	11,198,000	12,340,000	13,383,000
Year on year increase	1.2%	9.9%	10.2%	8.5%

Source: Peisley, T. 2006, *Future of cruising – boom or bust? A worldwide analysis to 2015*, p.109

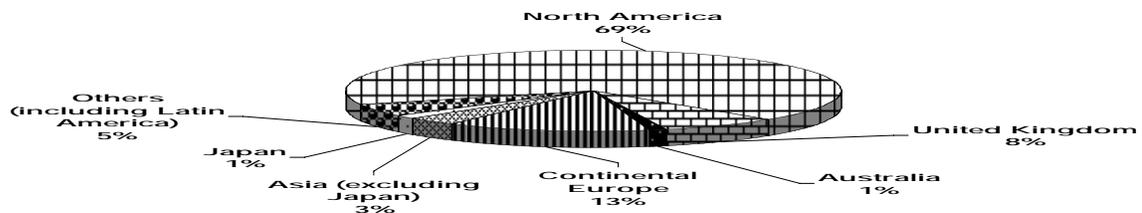


Figure 14 Share of major cruise markets - 2004

Source: Peisley, 2006, p 109

4.3.1 North America (United States/Canada)

North America is the world's major cruise market and according to *U.S. Economic Impact Analysis* done by Business Research and Economic Advisors in August 2005, for the International Council of Cruise Lines (ICCL), the United States accounts for more than 75% of the activity of the North American cruise industry with the cruise passenger embarkations at U.S. ports increasing by 13.9% at 8.1 million. The North American market began to expand rapidly in 1966 when Ted Arison and the Norwegian Company Kloster Reederei formed a partnership to offer Caribbean cruise from the then relatively lesser known port of Miami (Cartwright & Baird, 1999, p.37). The average cruise duration for North America is seven days and the Caribbean is the most favored choice of destination, as shown in the Figure 15.

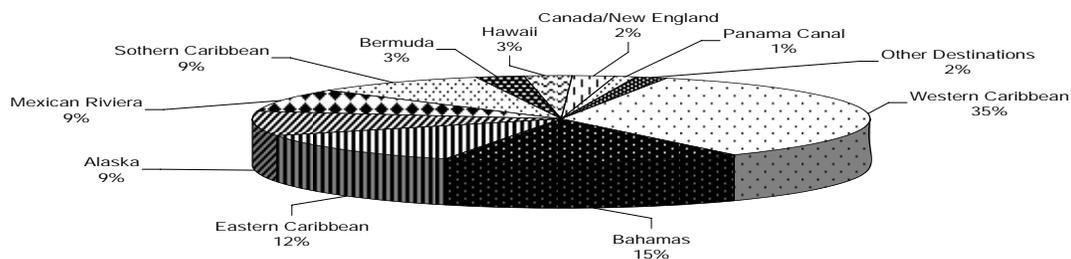


Figure 15 Cruises taken from top 15 American ports (first 9 months of 2005)

Source: Peisley, T., 2006, p.115

4.3.2 United Kingdom & Continental Europe

Next to North America, Continental Europe is the major source market for cruise lines and prominent among them are the United Kingdom, Germany, Spain and Italy (Figure 16). These markets are characterized by major national cruise line operators and a

string of overseas and niche operators competing for the market. In 2004, about 2.8 million Europeans took a cruise, with over 70% visiting European destinations. The cruise industry in Europe has expanded significantly over the last 15 years with an annual growth rate of 10% since 2001. The European Cruise Council predicts that by 2014 nearly 4.9 million people from Europe (including UK) would take to cruise (Peisley, 2006, pp.122-132).

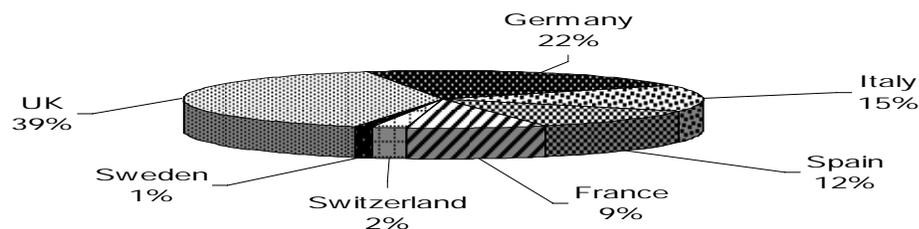


Figure 16 European Cruise Market 2004

Source: European Cruise Council

According to Heylen (2006, June/July), this growth is attributable to the favourable economic conditions in the Western European countries as well as higher disposable income, greater holiday leave entitlement for working class people, the steady stream of capacity addition over the last five years resulting in increased competition thereby lowering of cruise fares and availability of cheap air connections. There has been a huge investment in new and larger ships, which has enabled operators to make cruising more affordable to a wider audience.

4.3.3 Far East Asia

Although Asia/Pacific is officially the world's fastest growing major tourist destination, Asia's share of the global cruise market remains very low and cruise tourism currently represents 1% of Asia's overall tourism. This is attributed to the low level of growth in the Asian cruise source market and to the slow growth of the cruise industry in the region. Except for Star Cruises, there have not been any other significant players in the region. Singapore, the main cruise port in the region has seen a growth in cruise passengers from 62,000 in 1990 to more than a million in 1999, 80% sourced from Asia. Cruise lines are targeting the affluent population of China and Star Cruises has already

set up its own wholly-owned travel agency to gain a hold on the emerging Chinese market (Peisley, 2006, pp.142-145). Japan is the only Asian country that has a longer cruising history as compared to other Asian countries, part of which perhaps can be attributed to the comparative affluence of their population as also the presence of cruise lines like NYK Cruises and Nippon Cruises dedicated to cater to the domestic market. 55,000 Japanese passengers took a cruise in 2004 (average age 64 years) and the most popular cruise duration is seven days. WTO (2003, p.156) notes that the real potential for the Asian market lies in selling products designed by Asians for Asians, as its demographic profile of demand is very different from the European market.

4.4 The principal cruise lines¹⁰

The cruise industry is dominated by a few players and the spate of mergers and acquisitions during the last few years have left the market quite concentrated. Many cruise lines such as P&O Princess, Chandris, Kloster, Costa, Epirotiki/Ulysses and Lelakis have lost their independent identity. As at the end of 2005, three of the top corporations viz., Carnival Corporation & Plc (Carnival) with about 45%, Royal Caribbean Cruises Ltd (Royal Caribbean) with approximately 21% and Star Cruises Group (Star) 9%, control over two thirds of the global capacity (Figure 17). With the new buildings also placed by these giants, Peisley (2006, p.9) predicts that by 2010, these corporations would together hold a market share of 85%. As in 2005, there are 253 ocean going cruise ships, which offer 332,000 berths and by the year 2010 this number is expected to increase to 274 ships with average capacity of 1606 berths, offering a total of 440,000 berths (Peisley, 2006, p.28).

Carnival owns 12 brands each of which is a clear market leader in the markets that they operate in viz., Carnival Cruise Lines in the USA, P&O Cruises in the UK, AIDA Cruises in Germany and Costa Crociere in Italy. Cunard Lines, Holland America Line and

¹⁰ Compilation based on inputs sourced from books and articles written among others by, Peisley, 2006, p9-108, Peisley, 1992, p.44-62, GP Wild (International) Limited, 1994, p.21-33, Chris Ashcroft, 2005, p14-15 (from the ECC Annual Cruise Review Book, 2005), World Tourism Organisation, 2003, p55-104 and other online sources.

Princess Cruises are leading players in the European market. The remaining brands are Seabourn Cruise Line, Windstar Cruises, Ocean Village and Swan Hellenic.

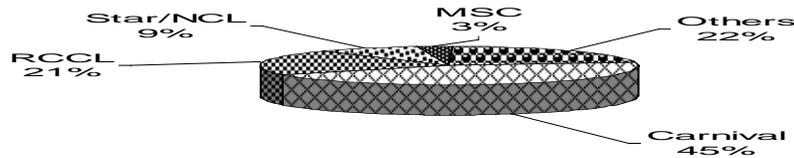


Figure 17 Market share of major cruise lines, end 2005

Source: G P Wild (International) Limited, 2005, p.10

Royal Caribbean owns the Royal Caribbean International (contemporary) and Celebrity Cruises (premium) brands. Royal Caribbean is dominant in the Caribbean region although it has forayed into the UK and Continental European market as well. Most of the vessels in its fleet are in the range of 2000 plus (Empress of the Sea/Legend of the Sea) to 3800 berths (Adventure of the Seas/Voyager of the Seas). It has a joint venture with First Choice, which operates as the Island Cruises brand for the UK market. Star Cruises dominates the Asian market with its Superstar class vessels catering to the clientele from countries such as Malaysia, India, Australia and the North Americas. Star, which is based in Malaysia also owns Norwegian Cruise Lines, which is employed to cater to the North American clientele.

Apart from these, another notable cruise line is MSC Cruise, a subsidiary of Mediterranean Shipping Company SA. It operates a fleet of seven ships which are deployed in the Mediterranean. The other prominent cruise lines in business are Louis Cruise Lines, NYK Yusen KK, Disney Cruise Line, Thomson Cruises, Fred Olsen Cruise Line, Page & Moy, Iberojet, Phoenix Reisen, Seadream Yacht Club, Radisson Seven Seas Cruises, Crystal Cruises, Silversea Cruises, Oceania Cruises, Hapag Lloyd, Peter Deilmann, Abercrombie & Kent and Star Clippers.

4.5 Role of cruise line associations

There are several cruise line associations in existence, and although these associations are not liner conferences and they do not under any circumstances set common pricing

and transportation policies, nevertheless, they have almost similar objectives (WTO, 2003, p.55). These associations aim at promoting cruise holidays collectively through advertising, market research, publications etc., train selling and travel agents and join forces to lobby governments and international organisations.

Cruise Lines International Association (CLIA) founded in 1975 is based in New York, USA and is the most prominent of all cruise associations. CLIA's 19 member lines represent nearly 98% of the cruise capacity marketed in North America. On 15th June 2006, CLIA merged with the International Council of Cruise Lines (ICCL), which according to them was driven by continued growth in the industry. The expanded structure will incorporate the existing functions of both the CLIA and ICCL organizations, including agent training, education, research, marketing, consumer and public education, industry and government relations, issues management, safety, environment, and public health. Similarly, the Florida-Caribbean Cruise Association aims at promoting good working relations between the cruise industry and port authorities and the governments of the Caribbean islands.

In the United Kingdom, the Passenger Shipping Association of the United Kingdom (formerly Ocean Travel Development [OTD]) is active. OTD was formed in 1958 as an Association of Passenger Ship Owners with an objective to focus public attention, and that of the travel trade, on sea travel as a holiday leisure pursuit and as the modern alternative to transportation from A to B. Nearby in Europe, the European Cruise Council, which represents the leading cruise companies in Europe, aims to promote the interests of cruise operators with the EU institutions in all matters of shipping policy and ship operations, and to promote cruising by the European public and encourage expansion of the European cruise market.

According to Mai Elmar¹¹, Cruise Director, Rotterdam Port and Executive Manager of Cruise Europe, an association of 94 north-west European Ports, Cruise Europe has

¹¹ In response to email questionnaire.

been established (1991), in order to get a better dialogue with the European Union (EU), to strengthen the position of the importance of cruise business within Europe and to jointly address matters such as future deployment, safety, environmental matters and improvement of facilities offered by the ports as well as making efforts of marketing and communication. She further notes that Med Cruise, a similar organisation set up on the role model of Cruise Europe, works together on EU matters and where efforts can be made to get the cruise industry further established and acknowledged as important for the future within Europe.

It can be seen that cruise shipping as an industry has consolidated its sectoral status in the overall maritime trade and associations such as these are fora that would play an important role in framing benchmarks, industry standards-benchmarks and also be instrumental in the implementation of international conventions through their members.

4.6 Some issues of key concern to the cruise industry

The cruise industry like any other in the maritime sector has been subjected to the same challenges, be it political, technological or environmental as other sectors of the maritime industry. Peisley (2006, p.6) observes that the industry's foreign flag status is still treated with suspicion by those who believe that it is a device to evade taxes and regulations. This section briefly highlights some of the key issues relating to the cruise industry that need to be taken into cognizance.

4.6.1 Environment

Quartermaine & Peter (2006, p.65) note that the large ships, and the thousands of passengers that they carry, have an intrusive impact both on the region and on the environment. The risk of marine pollution is no small issue as a cruise ship processes up to 140,000 gallons of sewage and up to 1.2 million gallons of grey water daily and all the garbage, which is compacted, dried and incinerated. Ships designed after 2004 are required to have modern diesel engines to achieve virtually zero emissions and gas turbines that are environmental friendly. Removing wastes and dumping the garbage

over board was very common in the past but today there are strict laws and exemplary penalties for such practices. In Alaska, the National Parks Service restricts the number of entry permits for cruise vessels. Cruise passengers during their short stay may come across shady traders selling trivialized forms of native handicrafts, illegally obtained artifacts etc. (GP Wild, 1994, p.91) and this when patronized, while on the one hand creates negative publicity for the destination, on the other could also cause some level of concern to the authentic local culture.

Cruise lines, associations, regulatory agencies and ports have all joined hands to alleviate the possible side-effects on the environment by cruise shipping to the minimum. Cruise lines today are educating its passengers about the areas they are visiting and advising them on how to behave when ashore so as not to disturb the environment (Peisley, 1992, pp.104-105). Ports like San Francisco and Seattle have environmental requirements for cruise ships visiting the ports that include ships being banned from dumping even treated water within the bay area and to plug into a land power source when docked (Peisley, 2006, pp.187-188).

4.6.2 Security

Modern day cruise ships are virtual global villages carrying thousands of passengers of different nationalities and multinational crew. This imposes severe pressure in terms of passenger security and particularly to deal with mundane matters like petty theft, fights and drug use. The 1985 seizure of *Achille Lauro* by terrorists and murdering of one passenger is an infamous incident which led to the IMO adopting in 1986 the first measures of Suppression of Unlawful Acts against Passengers and Crews on Board Ships, which outlined specific procedures that cruise ships, ports and flag states must follow in regard to security (Charalambous, 2005), Many of the cruise companies have gone beyond the mere implementation of the International Ship & Port Facility Security Code (ISPS Code), and some for instance, have even implemented biometric identification boarding systems (Kulovaara, 2005).

Of course, an indirect impact of the adoption of these measures would be the increased cost in terms of cruise handling equipments and infrastructures that the ports have to install in compliance. US ports are seeking more Federal aid to implement the security regulations and this was highlighted in late 2005 when Port Everglades and Miami tried to impose a security levy on its cruise line clients (Peisley, 2006, p.179). In the net, any increase in cost would have an impact on the competitiveness of the port, particularly since the cruise lines in the process of cost control and increasing profitability are demanding lower port tariffs.

4.6.3 Safety

Although cruising has proved to be a relatively safe method of taking a vacation, considering the prestige value that is attached to a cruise vacation, it attracts instant bad publicity when incidents or accidents happen such as fire on board, food poisoning, ships running aground occur. However, there have been few major cruise-ship disasters (Quartermaine & Peter, 2006, p.65). The sinking of *Titanic* in 1912 resulted in the adoption of the first version of the International Convention of Safety of Life at Sea (SOLAS) and since the establishment of IMO, significant progress has continuously been made towards implementing the highest practical international standards for passenger ships through adoption of various regulations under the framework of the SOLAS Convention at IMO (Sekimizu, 2005).

4.7 Imperatives and implications for ports

Location remains one of the predominant factors in the selection of a cruise destination and as a general rule a port must lie within reasonable reach of the envisioned itineraries to warrant consideration by a cruise line. Accordingly, a port can either be a home port or a port of call depending upon the quality of port and destination related attributes and the overall perception of the cruise line company (Monie et al, 1998, pp.177-186). This, therefore, makes it incumbent upon the port and the authorities at the destination to join forces to promote the destination. Similar views are echoed by some of the industry experts who were contacted by email seeking their opinion on the

key determinants in selection of a port as a cruise destination (see Appendix-1.0) and most agree that commercial, logistics, technical and destination related features are the key factors that determine the selection of a port as a cruise destination.

The selection of a base port depends on factors such as the technical conditions of the infrastructure facilities (passenger terminal, draft, berth length, supplies to the ship without disturbing passengers, manoeuvrability) and port services (navigation, pilotage, tugs), the saturation level of the berth, the proximity to other secondary ports, the tourist services and leisure facilities around the city, proximity to international airport, accessibility of land transport, the availability of bunkers and supplies, political and religious holidays, opening times of museums and city attractions and, most of all, excellent security in terms of actual physical security and overall political stability (WTO, 2003, pp.119-121). A world class cruise terminal facility would include a berth capable of accommodating today's massive mega-liners, ample parking bay for buses and passenger cars, passenger gangway, passenger hall, baggage trolley, air-conditioned departure hall, arrival/baggage claim hall, X-ray screening machine, telephone-internet, ticketing and check-in counters, tourist information centre, food and beverage outlets, souvenir and gift shops, duty free shops, taxi and bus services, vehicle parking area, terminal security for visitors, passengers and crew and office space.

Evidently the ports that are able to offer quality infrastructure facilities and improved quality of services would emerge as the preferred choice. Halter, (2006) remarks that in the chain of value, ports are capital and ports should try to capitalise on this booming trend working in conjunction with cruise line operators to improve port calls. The increasing addition in the capacities and new buildings supplemented by a concomitant growth in cruising demand suggest that cruise lines will source newer destinations for the deployment of their vessels either in the form of new itineraries or in terms of development of dedicated markets. Considering that various security related regulations, especially the ISPS code, imply rising security and operating costs, ports aspiring to become cruise destinations must do a proper demand and cost-benefit analysis before embarking upon any capital intensive infrastructure development.

Chapter 5 Cruise Shipping in India: Perspective, Policy Imperatives, Prospects and Potentials

5.1 Cruise shipping at Indian ports- Current scenario

The tourism sector, which is among the fastest growing sectors, has been infusing vibrancy to the world economy for the last few decades, India being no exception. The number of tourists leaving their homes on vacation worldwide has been growing and their number is likely to swell to 1.5 billion and receipts from them are expected to cross US\$ 2000 billion. India aims at partaking in this revolution by bringing about a change in its strategies and focus to improve upon its current share of global tourist arrivals, which is 0.49%. One among the several initiatives towards this end is the promotion of cruise tourism through Indian ports by encouraging and facilitating cruise shipping.

The core competence of the 12 major ports in India, like any other ports the world over, lies in cargo handling operations and providing infrastructure facilities required for ships handling cargo – dry bulk, liquid bulk or containers. Together they handle about 75% of the maritime cargo of the nation. Some of the ports also handle cruise vessels and occasionally foreign defence vessels on goodwill visits. Regular ferry services are also being operated by the Shipping Corporation of India from the ports of Chennai and Kolkata to the Andaman and Nicobar Islands and from Cochin to Lakshadweep Islands.

Cruise liners on their round the world voyages touch Indian Ports. Most of the cruise vessels call at the ports that are located on the western coast of India viz., Mumbai, Mormugao (Goa), New Mangalore and Cochin, while some also visit the ports at Chennai and Tuticorin that are located on the south-eastern coast (Figure 18). The

highest number of calls of cruise vessels in a year was registered in the year 2000-2001¹², when a total of 34 cruise calls (Table 12) were made at Indian ports (Cochin & Mumbai). Passenger vessels constitute only about 2 to 3% of vessels handled at Indian ports. The ports of Cochin, Mormugao and Mumbai are the leading cruise ports of India. The cruise season in India begins around October and lasts up to April.



Figure 18 Indian Cruise Ports

Source: Central Marketing Apparatus, National Committee on Cruise Shipping, India

Table 12 Statistics of cruise ships and tourist arrivals at Indian ports

Year	Mumbai	Cochin	Mormugao	New Mangalore	Tuticorin
2000-2001	34	34	25	14	0
2001-2002	17	22	11	5	3
2002-2003	10	11	10	1	1
2003-2004	18	18	12	2	0
2004-2005	16	19	11	8	1
2005-2006#	18	19	10	4	-

Does not include the figures of the calls made by Super Star Libra on the domestic circuit

Source: Central Marketing Apparatus, National Committee on Cruise Shipping, India

¹² In India, the statistics are normally calculated for a financial year which runs from April of a current year to March of the succeeding year.

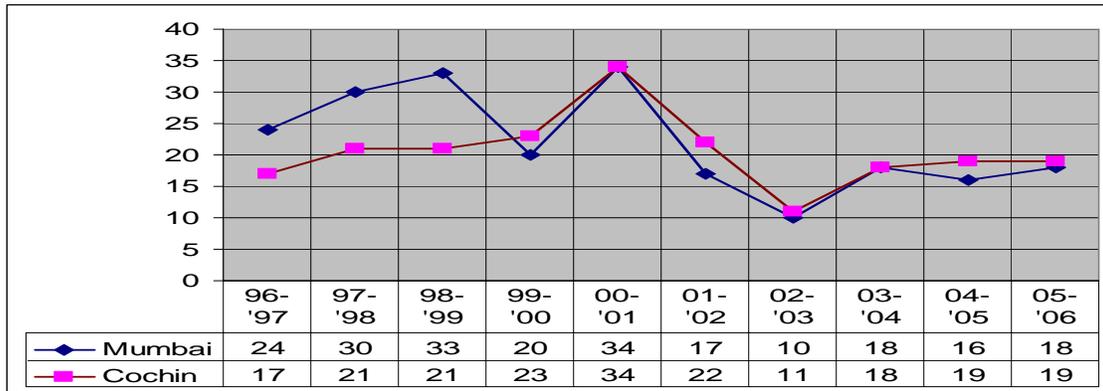


Figure 19 Cruise arrivals at Cochin and Mumbai 1996-2006

Source: Central Marketing Apparatus, NCCS

As can be seen from the Figure 19, during the period 2000-01, there was an impressive increase in the cruise arrivals but in the succeeding years there was a sudden dip. This can be clearly attributed to the general blip in the tourism industry in the aftermath of the 9/11 attack, SARS, the war in Afghanistan and the political tension in the Middle East. However, consistency in the quality of service offered by Indian ports and the confidence in the general harmony prevailing in India, has led to the resurgence of cruise arrivals.

It is, therefore, evident that there is a marked increase in the volume of the passengers and cruise vessels arriving on Indian coast. Though most of the foreign tourists prefer to fly into the country with a view to saving time and cost, tourists preferring a cruise have also been on the increase. Evidently, cruise tourism to India is picking up particularly in the wake of the spurt of tourism to India witnessed during the last few years as a result of promotional activities embarked upon by the State Tourism Departments individually and by the Government of India. Table 13 lists some of the cruise lines and their vessels that touch the Indian coast.

Table 13 List of some of the Cruise Lines and Vessels visiting Indian ports

CRUISE LINES
Royal Caribbean Cruise Line, Crystal Cruises, Star Cruises, Star Clippers, Radisson Seven Seas Cruise, Cunard Lines, Holland America Line, Indian Ocean Cruise Lines, Swan Hellenic, Maxim Gorky Shipping, NCL, Silversea Cruises, Hebridean Island Cruises, P & O Princess Cruises, Hapag – Lloyd, Delphin Seereisen, Classical Cruises, Peter Deilmann Reederei, Seetours, Japan Cruise Line, Phoenix Reisen, Mistui OSK Lines, Transocean Tours

VESSELS	
Star Flyer, Song of the Flower, Seven Seas Mariner, Seven Seas Navigator, Seabourn Legend, QE II, Seabourn Spirit, Sea Princess, Oriana, Pacific Princess, Arcadia, Regal Princes, Royal Princess, Star Princess, Rotterdam, Prinsendam, Nutica, Ocean Majesty, Minerva, Maxim Gorky, Marco Polo, Crown Odyssey, Legend of Seas, Silver Shadow, Hebridean Sprit, Europa, Bremen, Columbus, Delphin, Crystal Symphony, Crystal Serenity, Clelia II, Berlin, AIDAcara, Orient Venus, Albatross, Nippon Maru, Astoria, Astor	
Not exhaustive List	Source: Central Marketing Apparatus, NCCS, India

5.2 Present level of preparedness

Lack of suitable infrastructure to handle modern cruise vessels, relatively new business as well as lack of experience and exposure to attend to the exacting requirements of cruise business characterise Indian cruise initiatives. The surge in the cruise arrivals makes it incumbent upon Indian ports to gear up to effectively service this segment.

5.2.1 Cruise terminal

Being ports of call, most ports (except Mumbai and Chennai) do not have a dedicated cruise terminal; they make use of the available facilities at conventional general cargo berths to “host” the cruise vessels. Details about the features and existing facilities at these ports are given at Appendix 2.01, 2.02 and 2.03. While the 6 major ports within the Indian Cruise Circuit have upgraded their infrastructure to meet the immediate requirements of the cruise ships, to really promote this sector having dedicated state of the art cruise terminals as at other international ports like Miami, Singapore, Dubai, etc is a must. As at present only Mumbai Port and Chennai Port have dedicated cruise terminals. Mumbai Port, the principal cruise port of India has a dedicated cruise terminal at Ballard Pier Berth where International cruise liners call. Passenger amenities are provided on a make-shift basis as visits are interspersed with long gaps. Mumbai, Cochin and Goa ports, which are on the present domestic cruise circuit, are thus planning new cruise terminals.

Cruise terminal projects are basically capital intensive and do not offer adequate returns to the ports and thus are not financially viable from the port’s point of view. This is due to the fact that unlike the cargo vessels, where the ports earn primarily out of the cargo that they load or unload and the equipments hired out, in case of passenger vessels,

which do not make use of port resource or equipments except for the berths, the ports do not gain economically. The economic returns of cruise tourism will, in fact, be derived by the State and other sectors which are the principal beneficiaries. Also in view of the low returns, the projects do not hold much attraction for the private sector. Thus, the ports are seeking financial assistance in form of viability gap funding, to be funded by either the Ministry of Tourism (MoT) or financial institutions to set up cruise terminals. The MoT has been very forthcoming and proactive towards this end. It has floated a scheme – Assistance for Large Revenue Generating Projects (ALRGP) which aims at extending financial assistance to such capital intensive projects.

5.2.2 Cruise reception

Cruise vessels calling at Indian ports are accorded “walk in” berthing priority which means that the vessel does not have to wait for berth. This is ensured by proper coordination between the local vessel agent, Customs, Immigration and Port Authorities. Most of the ports have constituted a “Cruise Cell” which liaises with the officers, crews and the passengers of the vessels to address their specific requirements as also coordinates with the officials of the allied agencies such as Customs, Immigration, Port Health Office (PHO), etc. to ensure hassle free and speedy services/clearances. Appendix 2.0.4 illustrates the flow chart of cruise vessel reception and 2.0.5 tabulates the legal framework and the relevant provisions in the various enactments, rules and the related procedures/documents concerning a cruise call.

As the vessel enters the outer harbour, immigration officers board along with the pilot and start processing the immigration documents of the passengers in order to ensure that the moment the vessel is docked at the berth, the passengers are ready to be taken on to their designated ground tours. At ports like Cochin, this has enabled the passengers to be immediately transferred to the airport to take flights to up country tourist destinations like New Delhi and Agra; the passengers either join the vessel by evening or they join the vessel at the next port of call in India, usually Mumbai. Thus, “Cruise-Fly-Cruise” has become a regular feature for the vessels calling at Indian ports.

The availability of airports in close proximity to the ports also facilitates crew and passenger change-over and in some cases, the passengers are flown over and taken to the vessel berthed at the port for an onward sea-tour as in the case of the luxury vessel *Hebridean Spirit* of the Hebridean International Cruise, from Cochin Port. Thus the concept of “Fly-Cruise-Fly” is also being promoted through Indian cruise ports.

Ground support in terms of pre-paid taxi services, curio stalls and single window clearance for customs and immigration, emergency medical support, hotels, traditional welcome, etc. are also being provided. All Indian ports are ISO-9001 and ISPS compliant ports. The security of the ports is an assigned function of the Central Industrial Security Force (CISF) a dedicated force under the direct control of the Ministry of Home Affairs, Government of India. All the 6 ports on the Cruise Circuit have extended discounts in vessel related charges, for cruise ships. However, in case of higher volumes, the Ports can consider further reduction.

5.3 Policy initiatives

Although Indian ports have been regularly receiving cruise vessels they have not been given the level of importance as given to other areas of the core functions of the port. In the year 2001, Dr. Jacob Thomas, the then Chairman, Cochin Port pioneered a major initiative to accord a business focus to the promotion of cruise shipping through the port under the Integrated Development Plan – a project aimed at holistic development of the Cochin Port. It was realized that the cruise lines prefer a region rather than a port and, therefore, it was felt essential to develop a cruise circuit comprising other Indian ports. The Government of India, recognising the importance of Cruise Shipping, constituted the National Committee on Cruise Shipping (NCCS) under the Chairman, Mumbai Port Trust in October 2001, to explore the potential of cruise tourism at the Major Ports. The NCCS comprises of the Chairmen of all the six cruise ports as well as the representatives of the Union and State Ministry of Tourism, Ministry of Home Affairs, Central Board of Customs & Excise, Tour Operators, etc. The focus of this Committee among others is to identify the gaps in the infrastructure in the ports for promoting

cruise passenger lines, to examine the interconnectivity between various agencies and to harmonise their operations and to suggest strategies and prepare an action plan.

In its report submitted to the Government of India in June 2003, the NCCS had among other things, recommended the constitution of a *Central Marketing Apparatus* (CMA). The objective behind the constitution of this body was to provide a platform to formulate business strategies, development plans, and liaison with the cruise lines at corporate level and to address all other trade promotion requirements such as advertisement, publicity, and preparation of brochures and other promotional materials, etc. The CMA under the directions of the NCCS has streamlined the methods and means of handling cruise vessels across Indian ports and promoted Indian Cruise Circuit.

The Government of India, proactively responding to the recommendations of the NCCS, constituted a High Power Steering Group (HPSG) under the Chairmanship of the Hon'ble Union Minister of Shipping and Co-Chairmanship of the Hon'ble Union Minister of Tourism with other senior officials from the Ministries of Shipping, Tourism, Home and Finance. The major decisions taken by the HPSG include the development of an Integrated Indian Cruise Circuit comprising the ports of Mumbai, Goa, Mangalore, Cochin, Chennai and Tuticorin, the ports to invest in minimum requisite infrastructure/ facilities in short term, vessel related charges be slashed to attract cruise liners, initiate actions to promote cruise tourism for Indian tourists and the Tourism Ministry to share cruise infrastructure development expenditure. Further to encourage cruise tourism in India the Government of India has exempted the foreign flagged cruise vessels from the provisions of Sub-Section (I) of Section 407 of the Merchant Shipping Act, 1958 relating to *cabotage* for a period of 5 years with effect from 26.12.2003. This relaxation effectively allows foreign cruise ships to carry tourists from one Indian port to other Indian ports without the requirement to touch a foreign port in between. This was one major step and it had a very positive result, which came in the form of the decision of Star Cruises to introduce a dedicated ship on Indian domestic circuit. Plans for an Indian Ocean cruise venture operating round-trip cruises out of Goa down the west coast of India to Cochin and possibly as far as Colombo, are also well advanced.

5.4 Star Cruises in India

The Star Cruises, the third largest cruise line in the world, commenced its commercial operations on 2nd October 2005 from Mumbai Port on the Indian Cruise Circuit deploying the cruise vessel Superstar Libra – a 42000 GRT vessel with a capacity to carry 1500 passengers and 600 crew. The vessel, which was home-ported at Mumbai. offered 4-night cruises to Kadmat (Lakshadweep) and Goa, 2-night cruises to Goa and 1-night weekend getaway cruises (Figure 20). A total of 96 calls were made by the vessel and 65,473 passengers took the cruise as shown in Table 14. At Mormugao Port, the vessel made 51 calls (26,665 passengers).



Figure 20 The Star Cruise routings on the Indian domestic circuit.

Source: Central Marketing Apparatus, National Committee on Cruise Shipping, India

Table 14 Star Cruises voyages from Mumbai Port 2005-06

Month	Number of Call	Passengers Embarked
October 05	13	7519
November 05	11	7020
December 05	14	10000
January 06	13	8286
February 06	12	7706
March 06	13	7876
April 06	11	9088
May-06	9	7978
TOTAL	96	65473

Source: Central Marketing Apparatus, National Committee on Cruise Shipping, India

An itinerary wise analysis of the inaugural Star Cruises operations indicates that one night cruises had 61% average occupancy and was most popular which is explained by the fact that tourists seeking to experience the 'ship' and the 'cruise' had to pay less i.e. one night experience only. The least popular was the 4 night cruise to Lakshadweep where the average occupancy was 30% apparently due to the cost/affordability factor. Therefore, for the next season Star Cruise proposes to revise its itinerary to provide two more 'one' night cruises in a week, in addition to cutting down the cruise period to Lakshadweep to 3 nights and reducing frequency to one cruise a fortnight. One more once a fortnight overnight cruise from Goa, is also proposed for the next season.

Evidently this has placed great strain on the berth (called BPX terminal) which is also used for handling cargo ships. In order to strike a balance between the two, cruise and cargo, Mumbai Port has persuaded Star Cruise to operate on certain days from an alternate berth. In addition to Star Cruises, Indian Ocean Cruises, a part of Fore Sight Group of UK is also proposing to homeport a luxury cruise vessel 'Ocean Odyssey' at Mormugao from October 2006 - April 2007 offering 14 night cruises covering Mangalore, Cochin, Tuticorin, Colombo and Lakshadweep. The target clientele during the first two years of operations would be predominantly luxury cruisers from UK and USA.

All these developments are placing enormous strain on the existing infrastructural facilities at all the ports especially Mumbai and Mormugao whose prime cargo berths are also used as the prime cruise servicing berths. At the same time the increasing cruise calls necessitate an assessment of infrastructure capabilities and examination of the need for the creation of dedicated infrastructure away from cargo ports/berths with separate access and also recreation facilities in or in the vicinity of the cruise terminal. The process is slow and of course viability funding is a critical aspect for which the ports are seeking financial assistance from the Ministry of Tourism, Government of India.

5.5 Opportunities for Indian ports

Asia witnessed the cruise traffic boom only in 1991 with the opening of the Singapore Cruise Centre and establishment of Star Cruises in 1993 – the two key factors that led

to the promotion of cruise traffic in the region. However, Indian ports are yet to capitalize their potentials as cruise ports. There has been a steady growth in the tourist arrivals to India - from 2.29 million tourists in 1996 to 3.37 million in 2004 (Ministry of Tourism, Government of India). Compared to this, during the same period, the passengers opting for a cruise vacation have been in the range of 9000 to 15,000. Although, the introduction of Superstar Libra by Star Cruise Lines in the 2005-06 season saw a sudden spurt in the cruise tourism, however, the cruise ships calling India on the round the globe cruises remained more or less steady at around 15-20 calls per year.

Evidently, there is a large pool of domestic client base that remains largely untapped and if the inaugural response to the positioning of *Superstar Libra* of Star Cruises is any indication, there is a tremendous growth potential. As per the MoT survey, in the year 2003 about 2.5 million Indians traveled abroad of which, 16% went for leisure and holiday and 12% for religious reasons or pilgrimage, the rest being either for business trips, studies or for professions. Thus there is a large customer base that can be tapped by any cruise line intending to promote a cruise line from the Indian shores.

India is a natural tourist destination offering virtually an unending choice of tourism products. A glorious historic past coupled with the diversity of culture, rituals, ethnic practices, geographic riches and a variety of seasons, makes India a natural choice for travellers from all over the world. The growth of cruise traffic to the ASEAN region during the last decade, addition of newer tonnage and destination saturations suggest that the Indian market and region, which has so far remained largely untapped, has promising prospects. At this juncture, it would be worthwhile for the Indian ports to enter into dialogue with other cruise ports in the region to forge a strategic action plan to attract more cruise lines to the region.

5.6 Indian ports - SWOT analysis

Against this backdrop and based on the industry analysis, a SWOT Analysis for the Indian Ports has been made to assess the prospects and potentials for the Indian Ports.

STRENGTHS

• NATURAL

- India has a natural tourist appeal, the uniqueness of Indian destinations and wide options at each destination
- Tourism Potentials: The proximity of exotic tourist locales in the vicinity of the port city as also the availability of multiple tour options
- Connectivity: excellent rail-road-air grid connecting the entire nation and international cities
- Hospitality and tourist friendly people
- Stable political atmosphere
- Hospitable weather all through the season conducive to cruise shipping

• PORT RELATED

- All Indian ports are ISO 9001 and ISPS compliant
- Skilled manpower and capability to handle cruise vessels of all size and type
- Ports conversant with handling cruise traffic
- All the ports are well connected with the national rail and road network and airports are in close proximity of the ports
- All the port cities are acknowledged tourist destinations and have sufficient number of hotel accommodation to cater to tourist influx
- Proximity of Indian ports to the maritime highway (cruising route) - Mumbai & Cochin to the Middle East and Cochin & Chennai to Singapore
- Linkages to Indian ports from Singapore and Gulf ports offer attractive expansion options to the cruise liners

WEAKNESSES

• PORT

- Lack of adequate infrastructure and congestions at berth
- Available infrastructure incapable to handle modern mega cruise ships
- High cost of operation at Indian ports
- Can affect cargo operations, if not properly managed

- ☑ Lack of customer service orientation for attending cruise
 - ☑ Not the area of core competence
 - ☑ Less attractive in terms of income generation when compared to cargo handling operation
- LOCATIONAL**
- ☑ Distance from US and Europe - the main cruise markets
 - ☑ Political unrest in the neighbouring region and the related security threats
 - ☑ Lack of development of cruise tourism in the neighbouring countries
 - ☑ Vast stretch of ocean increases cruising distance
 - ☑ Lack of cruise awareness in the local market and preference of “fly-cruise-fly” over “cruise-fly-cruise” mode (Indian tourists constitute a sizeable number of cruisers from Singapore)
 - ☑ Low Per Capita Income and low market potential in the home market
- OTHER**
- ☑ Complicated visa and immigration regulations/procedures
 - ☑ Possible harassment by law enforcement officials/authorities
 - ☑ Dependence on foreign users and foreign ports
 - ☑ Could perhaps result in some form of social evil and exploitation

OPPORTUNITIES

- PORT**
- ☑ An opportunity to take initiative to emerge as major cruise destination since industry trends suggest boom in cruising activity
 - ☑ Opportunity to make use of spare capacity at ports – with the core activities like container and bulk cargo handling being privatized, the ports can make use of their spare capacities
 - ☑ Significant addition of infrastructure not required
 - ☑ A means of increasing the revenue and an opportunity for diversification
 - ☑ An opportunity to tap the booming tourism in India and an opportunity to

encash on the growth of cruise traffic to the Asia Pacific Region.

- Growing worldwide interest in Asia Pacific Region as a vacation destination.
- An opportunity to attract investment to Indian ports
- Promises a synchronized and balanced regional growth
- An opportunity to fulfil the social objective by being a facilitator for generation of additional employment and promotion of tourism
- Economic benefits, increase in foreign exchange earnings and foreign trade (traditional handicrafts, curios, etc.)

• OTHER

- Affluent Indians can afford/prefer to cruise-untapped market potentials in India
- Saturation and growing competition in the Caribbean resulting in search of new markets/destination by cruise lines
- Indian destinations still largely unexploited by cruise traffic
- Opportunity to develop Cruise Circuit links with Dubai and Singapore
- Presence of third largest cruise line - Star Cruises – in the region
- Improving cruise awareness among Indians and a majority of cruisers from Singapore being Indians who rather opt for “fly-cruise-fly”
- Cruise is a growing business (8% worldwide, 24% Asia-Pacific). As new cruise vessels get added with new deliveries, the existing old ships will be deployed elsewhere Cochin and Mumbai Ports can also act as CREW TRANSIT PORTS since they are positioned advantageously midway between Europe and the Far East and have excellent air connectivity and flourishing tourist and hospitality industries (Appendix 2.0.6)

THREATS

- SATURATION that has inflicted certain markets will also follow Indian ports after a certain cycle
- OVER DEPENDENCE on cruise traffic will digress the ports from their core activities

- ☑ Can result in CONFLICT between the cargo operation and cruise operation if dedicated infrastructure is not made available
- ☑ EXTERNAL FACTORS like war in the Middle-East, Sri Lanka, pirate threat in the Malacca Straits, security threats, epidemics and natural disasters, strikes, internal strife, political instability, weather, etc. will strongly influence the arrivals of cruise passengers to Indian Ports
- ☑ MICRO FACTORS like strikes, bomb blasts, terrorism, drug trafficking, beggars, touts, lack of cleanliness at ports and outside, harassment by officials will also affect the cruise preference for an Indian port.
- ☑ Increase in CHEAPER CONNECTIVITY BY AIR will lead to tourists opting more for “fly-cruise-fly” options in order to save time and cost
- ☑ Unwise to invest if demand is weak or the POTENTIAL IS LOW
- ☑ COMPETITION from Singapore and Dubai
- ☑ Environmental and anti tourist groups can create STIR over issues relating to exploitation, ecological degradation, cultural defiling, etc.

5.7 Strategies for Indian ports

The obvious first step towards a strategic action plan will be to synergise the locational potentials of the Indian ports and to project them as a close-knit circuit of ports. Whereas Cochin enjoys the locational advantage of being in the close proximity to the maritime highway connecting Europe to the Pacific Rim, Mumbai is at a close cruise distance from the Gulf Ports. In light of the findings of the study so far on the cruise sector, the cruise industry and the emerging trends, the suggested strategies for Indian ports are enumerated below.

5.7.1. Positioning of Indian ports

- ✓ As a gateway to the vast realms of the rich Indian heritage
- ✓ As a stop over link between the Asia Pacific and the Middle East
- ✓ As a crew and passenger change over port

- ✓ A route to discover India's hitherto fore unexplored and unexploited exotic locales. To therefore target, the Cruise Liners (253 as in 2005, Peisley, 2006 p.28), many of whom have so far not visited the Indian Ocean region.
- ✓ As a major market in the Asian region with an increasing population that can afford to take a cruise
- ✓ As cruise friendly ports highlighting the features and the uniqueness of offerings
- ✓ As a lead nation promoting the cruising in Indian Ocean region by linking not only to the Indian Ports but also the neighbouring Ports like Colombo, Maldives, etc. so as to make an economically feasible cruise proposition.

5.7.2. Factors Influencing cruise arrivals to the Indian ports

5.7.2.1 Positive influences

- ✓ Having tourist locations in close proximity alone will not bring cruise vessels to India. Cruise vacationers look forward to making the most of their land trips and would prefer to have a hassle-free visit. Offering personalized services, expeditious clearances from Ports, Health, Immigration and Customs (boarding of officials at the last port of call) help in making both the cruise and the passengers comfortable. Since the most effective media of publicity is 'by word of mouth', it is essential that these aspects be given utmost importance.
- ✓ Another influencing factor is the transport, hinterland connectivity and communication facilities. If passengers can be swiftly moved to the destined locations, the economies in terms of time saved will be an added attraction.
- ✓ Warmth and affability shown by the port officials as well as officials from other agencies leave a marked impression in the minds of the crews and passengers.

5.7.2.2 Negative influences

- ✓ Macro factors such as political strife in the Middle East, Sri Lanka and the reported pirate threat in the straits of Malacca will also significantly influence the cruise arrivals to the Indian shores.

- ✓ Law and order disturbances, strikes, political strife, terrorism, etc are some of the fears allayed by the tourists when visiting India. These factors would play a significant role in the cruise calls to the Indian shores.
- ✓ Epidemics and natural disasters
- ✓ Non-availability of clean berths, delay in berthing and allied support services, non-responsiveness from the port officials will also act as a deterrent.
- ✓ One of the significant factors that aid in creating or spoiling the image of the Indian ports is the speed with which the clearance and formalities are done. Since cruise vessels come with a definite itinerary, it is incumbent upon the ports to gear up to meet the schedule of the vessel so that the arrival and departure are punctual. Besides, the tourists onboard want to make the most of their trip within this short time and, therefore, delays in clearances are key factors. A port can create a good Unique Selling Proposition (USP) by providing efficient and cost effective services to the vessel.
- ✓ Harassment by the Customs officials is often the reasons cited by the cruise lines in avoiding a port. The Customs officials are often insensitive to the business promotion measures of the ports and as a result, treat the cruise vessel in the same vein as a cargo vessel.
- ✓ Harassment by beggars, touts and taxi-auto drivers is common at most tourist destinations world over. When within the port area, one should ensure the orderliness of these elements.

In the sum, it is evident that Indian ports are endowed with destination features and have the wherewithal to cater for the burgeoning cruise business. In order to tap the true potentials of the market, the authorities concerned should adopt a holistic development approach by drawing up an action plan involving the cruise lines, service providers and the related agencies to create an adequate infrastructure and superstructure as well as to provide for a bottleneck-free hinterland transfer. The most crucial factor, however, is the deftness of handling cruise ships without compromising the productivity of cargo handling operations.

Chapter 6 Conclusion and Recommendations

6.1 Conclusion

The core object of this dissertation is the study of the characteristics of cruise shipping, the sectoral trends and developments in the cruise industry and the analysis of their likely implications on Indian ports and the imperatives thereto. Cruise shipping, as a niche sector of the maritime industry, is apparently not an academically significant topic of maritime transportation economics and does not contribute significantly to the ports earnings or resource utilisation, but despite this, ports can not wish cruise ships away since they carry the most sensitive and precious of all cargos afloat – the human being.

It emerges that cruise shipping exhibits features that are distinct, yet similar to liner shipping but unlike other maritime trades, cruising is essentially a leisure oriented, maritime based activity and not transportation per se. The characteristics that are generic to the container liner trade such as vertical and horizontal integration, concentration, terminal management, intermodal logistics and increasing ship size are observed in the cruise line industry also. Evidently, economic considerations override the choice of a destination although cruise lines adopt market specific segmentation and branding while deploying vessels. The cruise industry also suffers from the seasonality in that each market flourishes for a certain period of the year depending, among other things, on the weather conditions, income elasticity of the market, vacation periods and political factors.

The demand for cruise shipping is supply driven, however, this demand is fraught with uncertainties considering the involvement of the human element, and as such, cruise shipping, besides global conflicts, disasters and economic factors, has been most

significantly impacted on by the stringent requirements of technical and regulatory compliances, as compared to any other trade in the maritime transportation sector.

The increasing concerns of safety, security and environmental regulations obviously entail pecuniary implications – both on the cruise lines and the ports receiving cruise ships, which in turn impact on their operational efficiency and price competitiveness. While the availability of substitutes in form of the land based leisure coupled with other modes of travel, puts pressure on cruise lines bookings, the cascading effect, with increasing dominance of profit margin objectives, is that the cruise lines prefer only those ports and destinations that can provide the most cost efficient services at a most competitive tariff. Further, destinations are emerging the world over trying to lure cruise lines and this poses additional competitive challenges on the ports.

In pursuance of the requirements of SOLAS and the ISM code, the cruise lines have brought about technological innovations in ship design and are increasingly incorporating design features that minimise the adverse impact on the sensitive ocean ecology, air and noise pollution. While safety and stability is of key concern, cruise lines are compelled to find ways to ensure that these design considerations do not limit space or constrain the intrinsic onboard appeal considering that the onboard revenue is a significant constituent of cruise ship earnings.

Cruise lines attempt to keep costs under control by applying the principles of economies of scale. This is reflected in the increasing size of the vessels and the cabin capacities onboard. A contemporary class of vessel, which is fairly large in size, carries an upward of 2000 passengers and vessels currently waiting delivery are slated to carry over 5000 passengers. The implication of this development is direct on the port infrastructure in terms of the improvisations required in the navigational facilities like draft and channel width, sufficiently large terminal space to accommodate the large influx of passengers and additional investment for the provision of safety and security implements. Such vessels would also require a lot of ancillary services such as bunkering, ship chandelling, provisions, logistics support etc. Therefore, the ports aiming at benefiting

from the cruise traffic have to make considerable investments based on the actual traffic potential.

Further, for the ports, the safety and security of passengers in terms of compliance with the ISPS code, necessitates that in addition to having a suitable infrastructure to handle the current trend of very large cruise vessels, they have to invest in the installation of equipment and implements as well as increase additional security within the terminal area. Cruise vessels generate a lot of wastes and ports have, therefore, imposed stringent waste and garbage disposal norms not just within the port area but also beyond. Some ports have already made it compulsory for cruise ships to use onshore electricity supplies while at the port and certain ecologically sensitive regions also regulate or limit extra calls by cruise ships.

All these measures ultimately echo the price competitiveness of the port as the burden of additional investment would be reflected in the tariff. A case in point is the cost of implementation of US Department of Homeland Security's proposed rules of Transportation Worker Identification Credentials (TWIC) that includes a terrorist background check of the port workers in order to improve port security. In addition to imposing substantial costs in terms of sharing 39% of the more than US\$ 1 billion cost of implementing TWIC, it is apprehended that the ports would also be subjected to significant congestion and bottlenecks with little measurable decrease in risk (www.cruise-community.com). If after all these investments, the ports were not able to attract sufficient cruise traffic volumes owing to several other factors, it is bound to have catastrophic effects, particularly in case of Indian ports which have to meet the entire capital investment through their own reserve funds.

As regards developments in the cruise industry, the additional capacities that would be added to the cruise fleets will have to be spread out to other markets in order to ensure that the over supply does not result in market saturation and a resultant fall in revenue. The search for substitute markets, therefore, becomes inevitable. Relatively untapped

markets such as Asia, Pacific, Gulf and African East coast emerge as potential alternatives during the winter seasons of the northern hemisphere.

The positive growth trend of the cruise industry, which is projected in the range of 5-6% through to 2015, is indicative of future prospects for India. Having well established hardware and software in place would increase the likelihood of India finding a place in the cruise itinerary. Even otherwise, it is obvious that the cruise lines will source for newer markets, particularly considering that many of the repeat cruisers will seek out to reach destinations hitherto not visited. The lure to tap the vast middle class Indian market could possibly prompt the cruise lines to deploy a contemporary class vessel on the Indian cruise circuit and on the flip side, if such large vessels are to be placed to exclusively cater for the proven destinations like the Caribbean and the Mediterranean, then it is likely that the smaller luxury class vessels would be placed on round the world cruises and this, in turn, would mean an increase in the frequency of calls at Indian Ports. In either case, unless adequately backed up by proper port based and hinterland based infrastructure support, Indian ports can not expect to benefit from this opportunity.

Traditionally, cruising follows industrial and economic growth, and with business comes leisure. As the foreign direct investment increases and new trans-national enterprises become established in India, it is obvious that the cruise leisure phenomena would also gain momentum. Thus, even if it would be some time before any of the major cruise lines deploy a cruise vessel dedicated to the Indian circuit, Indian ports must nevertheless gear up to cater to the interim surge in cruise calls.

It also emerges that cruise lines finalise an itinerary based on the potentials of a region rather than a port in particular. The conclusion drawn from this is that besides the destination attractions, the cruising region should be politically safe, have sufficient infrastructure facilities for both the cruise ships and the tourists, the cruising distance between ports must be short and have historic links with the major markets. It is therefore, imperative that Indian ports should link up with other ports in the region like

those in the Indian Ocean region, particularly Sri Lanka, Maldives, Seychelles and Mauritius.

Since the Caribbean region is getting increasingly competitive with new tonnage being placed there, the Indian Ocean cruising region can definitely act as a welcome alternative, particularly for the lines deployed in the Mediterranean region where the winter utilisation of ships is an issue of concern. It would, therefore, be worthwhile to forge a regional alliance with the ports in the Gulf-Middle East Asia and promote the Indian Ocean region. It would also be worthwhile to emulate the efforts of the Cruise Associations present in the major cruising regions.

In the final analysis, the cruise industry emerges as a vibrant sub-sector of maritime transportation and in the quest of economising returns, cruise lines are bound to look for alternate routes which would mean that Indian ports can expect a surge in cruise calls. This demands for a concerted focus on planning the infrastructure requirements based on a realistic demand analysis before making sizeable investments.

6.2 Recommendations

Against the above background, as Indian ports struggle to match their capacities with the ever burgeoning cargo traffic, the options that could be explored are either to cater for the concomitant growth in the cruise industry using the existing infrastructure or else create dedicated facilities so as not to clash with the cargo operations. At present, all cruise vessels arriving at any Indian port get priority berthing over cargo vessels. Providing adequate berthing facilities for cruise vessels without affecting cargo operations is indeed an onerous task, particularly considering that the berth occupancy ratio at most of the Indian ports is over 70% on average.

Cargo that is bound for India will come anyway and will continue to be handled. However, the same does not hold true for cruise vessels. Cruise lines seek hassle free services and cruise passengers look for destination experience. If the ports are not in a position to provide superior quality of service, it is likely that India may lose out on

business. It is interesting to note that the UK and the USA, which dominate the passenger market for cruise lines, also lead in the overall tourist arrivals to India. If these are any indications, then this only augurs well for the Indian cruise segment, coupled with the fact that there has been a steady increase in fly-cruise passengers from the UK. Star Cruises have already made an entry into the Indian market and this is likely to be followed by other lines soon.

The industry developments and trends indicate that Indian ports will definitely witness a surge in cruise arrivals in times to come. However, it must be clearly borne in mind that cruise shipping, like any other sector, is severely impacted on by the political scenario, global conflicts and natural disasters, and therefore a cautious approach needs to be adopted before committing investment in infrastructure building as also in depending too much on external source markets. Security related regulations imply rising security and operating costs and therefore Indian ports must do a proper demand and cost-benefit analysis before embarking upon any capital intensive infrastructure development considering that the return should be adequate to justify such investment.

In the **short term**, therefore, the feasibility of encouraging private investment in terminal and cruise operation needs to be explored on the lines of the European markets, which are characterized by major national cruise line operators and a string of overseas and niche operators competing for the market. Evidently, a similar phenomenon also has to fall in place if the Indian cruise circuit has to prosper. The authorities concerned should enter into dialogue with the major cruise lines and obtain their first hand feedback on the measures to be adopted to meet their exacting requirements. The best option for the Indian ports is to adopt the public-private partnership model in either leasing out the existing facilities or for creating new infrastructure facilities and to leave the management of terminal operations to private agencies of proven capabilities as has been successfully done in case of container terminal operations.

The focus of Indian ports has been on increasing the volume of vessels and cargo handled and must remain so. However, cruise traffic is an area that has not been

seriously recognized as a business opportunity as it constitutes only 2%- 3% of the total vessels handled by the ports. With some concerted efforts India can improve upon the cruise traffic to Indian ports and benefit from the potential and the opportunities arising out of the international tourist influx being witnessed in India. Although the ports may not be the direct beneficiaries, the economic benefits that cruise tourism brings to the region need not be over-emphasised. Indian ports must synergise their strengths to derive the most out of this venture. It would be a feasible proposition to invite private participation to create the basic infrastructural facilities like a passenger terminal and other support services and their expertise can be used for marketing and strategic tie-ups with Indian ports. Indeed, Indian ports must aggressively market and reach out to as many cruise lines as possible. A seamless coordination between the ports and the Ministry of Tourism, Customs, Immigration, Police, Local Bodies, and other related service providers is quintessential for developing a well integrated service system.

In the *long term*, it would be worthwhile to consider creating dedicated facilities for cruise operations split from cargo handling areas, initially at two or three ports in India, until the traffic build-up and returns justify further investment. A policy initiative to perhaps *de-link cruise operations* from the purview of Major Ports and to bring them under the ambit of an agency (linking transport, tourism and local bodies) that exclusively attends to cruise shipping would not only facilitate in according a concerted focus on this sector but would also relieve the burden of investment and the pressure on the cargo handling operations at the Major Ports. Regional alliances with other ports in the region for the promotion of the Indian Ocean as a cruising region should also be worked upon.

As India embarks on the path of economic resurgence, the Indian ports will have to adorn new roles to be catalytic in this process and should, therefore, chalk out a strategic action plan to tap the potentials and prospects of the boom that the cruise shipping is set to witness, so that India consolidates its position as an emerging cruising region.

BIBLIOGRAPHIC REFERENCES

a. Books

- Alderton P. & Rowlinson M. (2002). The economics of shipping freight markets. In C.T.Grammenos (Ed.), *The handbook of maritime economics and business*, London & Hong Kong.
- Branch A.E., (1998). *Maritime economics*, Cheltenham, The United Kingdom.
- Cariou, P., (2006), *Port Competition PM-332*, Unpublished lecture handouts, World Maritime University, Malmö, Sweden.
- Cartwright, R. and Baird, C. (1999). *The development and growth of the cruise industry*, Oxford.
- G.P.Wild (International) Limited (1994). *The cruise market*, The Lloyd's Business Intelligence Centre, London
- G.P.Wild (International) Limited (2006). *Cruise Industry Statistical Review 2005*, West Sussex.
- Harlaftis, G. & Theotokas,J. (2002). Maritime business during the 20th century: continuity and change. In C.T.Grammenos (Ed.), *The handbook of maritime economics and business*, London & Hong Kong.
- Heaver T.D. (2002). Supply chain and logistics management: implications for liner shipping. In C.T.Grammenos (Ed.), *The handbook of maritime economics and business*, London & Hong Kong.
- Indian Ports Authority. (2004). *Major ports of India - A profile:2003-04*, New Delhi
- Kumar S. & Hoffman J. (2002). Globalisation: the maritime nexus. In C.T.Grammenos (Ed.), *The handbook of maritime economics and business*, London & Hong Kong.
- Ma, S. (2005), *Maritime economics*, Unpublished lecture handout, World Maritime University, Malmö, Sweden.
- Mayes, W. (2005). *Cruise ships*, Windsor.
- Monie, G., Hendrickx, F., Joos, K.. & Peeters, C. (1998), *Strategies for global and regional ports – The case of Caribbean container and cruise ports*, Boston, Dordrecht, London.

Notteboom, T.E. (2004). Container shipping and ports: an overview, *Review of Network Economics*, Vol.3, Issue 2-June 2004, (provided with unpublished lecture handouts on Port Economics II, Port competition, (2006) World Maritime University, Malmö, Sweden).

Panayides P.M. & Gong, H.X.S. (2002). Consolidation, merger and acquisitions in the shipping industry, In C.T.Grammenos (Ed.), *The handbook of maritime economics and business*, London & Hong Kong.

Peisley, T. (1992), *The world cruise ship industry in 1990s*, The Economic Intelligence Unit, London

Peisley, T. (2006), *Future of cruising – Boom or bust? A worldwide analysis to 2015*, Essex.

Quartermaine, P. & Peter, B. (2006). *Cruise identity, design and culture*, London.

Stopford, M. (1997). *Maritime economics*, London & New York.

World Tourism Organisation, (2003), *World cruise ship activity*, Madrid.

b. Periodicals

Balcony threat for cruising. (2006, April), *Fairplay*, 356(6376),11

Charalambous, N.L. (2005), The ICCL at Work with the IMO, *ICCL 15th Anniversary Issue*, 44.

Kulovaara, H. (2005), Safety at Sea: The Cruise Ship Perspective, *ICCL 15th Anniversary Issue*, 39.

Lambros, M. (2006, March). Cruise Industry: present and future prospects, *Shipping*, 19

Mott, D. (2006, January). 15 years of cruise rationalisation. *Cruise & Ferry Info*, 10-11.

Sekimizu, K.(2005), Cooperation with ICCL for Cruise Ship Safety, *ICCL 15th Anniversary Issue*, 37.

c. Laws and Conventions

The International Convention for the Safety of Life at Sea, 1974, Consolidated Edition, IMO, (2004).

The Major Port Trusts Act, 1963

d. Presentation, proceedings of meetings and compilations

Data and information compiled by the Central Marketing Apparatus of the National Committee on Cruise Shipping, India

Deliberations, Minutes of Meeting and discussions held by the National Committee on Cruise Shipping, constituted by the Union Ministry of Shipping, Road Transport and Highways, Government of India.

Presentation on containerisation made by Gerald Malia on 30th May 2006 at World Maritime University, Malmö, Sweden

e. Electronic sources

i. Online references

AAPA cites support, concerns for TWIC, Retrieved on 30/6/2006 from the World Wide Web: <http://www.cruise-community.com/ShowStory.asp?ID=9909>

Ashcroft, C. (2005), Overview of the global cruise industry. *The European Cruise Council, Annual Cruise Review Book, 2005*. Retrieved on July 15, 2006 from the World Wide Web: <http://www.europeancruisecouncil.com/content/pdfs/14-15-Map.pdf>

Boyd, L. (Undated), Brief history of the passenger ship industry, *Ad*Access, Duke University*. Retrieved on July 7, 2006 from World Wide Web: <http://scriptorium.lib.duke.edu/adaccess/ship-history.html>. (Formal permission to use data obtained through email on July 10, 2006).

Carnival Corporation unveils new Long Beach cruise terminal. *Cruise Diva cruisediva.com*, Retrieved on July 7, 2006 from the World Wide Web: http://www.cruisediva.com/longbeach_terminal.htm. (Information on cruise terminals)

CLIA and ICCL, to merge, *Cruise Lines International Association*. Retrieved on June 19, 2006 from the World Wide Web: <http://www.cruising.org/press/press-kits/news/news.cfm?NID=252>.

Commission of European Communities, (2002, July). *Decision of 24.07.2002 declaring a concentration to be compatible with the common market and the functioning of the EEA Agreement (Case No COMP/M.2706 - Carnival Corporation / P&O Princess)*. Retrieved on July 11, 2006 from the World Wide Web: http://ec.europa.eu/comm/competition/mergers/cases/decisions/m2706_en.pdf

Competition Commission [of the United Kingdom], (2002, June). *P&O Princess Cruises plc and Royal Caribbean Cruises Ltd: A report on the proposed merger, Para 7.58, p 109, Chapter 7: View of third parties*. Retrieved on June 20, 2006 from

http://www.competition-commission.org.uk/rep_pub/reports/2002/fulltext/468c7.pdf
and http://www.competition-commission.org.uk/rep_pub/reports/2002/468po.htm#full
(Formal permission to use information and data obtained from the Commission via email on 23 June 2006)

Cruise Lines International Association (2006, April). *CLIA 2006 Cruise Market Profile, Report of Findings*. Retrieved on July 28, 2006 from the World Wide Web:
<http://www.cruising.org/press/research/2006%20Market%20Profile%20Study.pdf>

Cruise ship, *Wikipedia, the free encyclopedia*. Retrieved on June 22, 2006 from the World Wide Web: http://en.wikipedia.org/wiki/Cruise_ship. (Information relating to definition of cruise ships)

Disputes involving a Cruise Line, *Federal Maritime Commission* - Retrieved on July 27, 2006 from the World Wide Web:
<http://www.fmc.gov/bureaus/secretary/DisputesinvolvingaCruiseLine.asp>

Engle, J. (2006, April 9). New wave of growth, glamour transforms drab port terminals, *Los Angeles Times latimes.com*. Retrieved on July 7, 2006 from the World Wide Web:
<http://www.latimes.com/features/health/medicine/la-tr-insider9apr09,1,1956163,full.column?coll=la-health-medicine>

Environmental Regulations (2006). *American Association of Port Authorities*. Retrieved on July 7, 2006 from the World Wide Web: http://www.aapa-ports.org/industryinfo/cruise_industry.html

Facts & figures – Information, analysis and know-how, *World Tourism Organisation*. Retrieved on June 19, 2006 from the World Wide Web: <http://www.world-tourism.org/facts/menu.html>

Facts & figures – Information, analysis and know-how, *World Tourism Organisation*, Retrieved on June 21, 2006 from the World Wide Web: <http://www.world-tourism.org/facts/menu.html>.

Fact Sheet: Transportation Worker Identification Credential (TWIC) Prototype, US Department of Homeland Security. Retrieved on July 28, 2006 from the World Wide Web: <http://www.dhs.gov/dhspublic/display?content=4119>

Growth in the value of world merchandise trade by region, 2004, *World Trade Organisation*. Retrieved on June 19, 2006 from the World Wide Web:
http://www.wto.org/english/res_e/statis_e/its2005_e/section1_e/i03.xls.

Guinness World Records, Retrieved on July 17, 2006 from the World Wide Web:
http://www.guinnessworldrecords.com/content_pages/record.asp?recordid=43775.

Heylen, J (2006). (As quoted by Melanie Dayasena in her report titled Mutual Benefits). *Lloyd's Cruise International* (June-July 2006). Retrieved on July 15, 2006 from the

- World Wide Web: http://www.lloydscruise.com/Storage/lsgResourceFile/Jul-2002/18/lloyds_cruise_magazine_feature_1.pdf.
- Hsu, C.I. and Hsieh, Y.P.(2005). Shipping Economic Analysis for Ultra Large Containership. *Journal of the Eastern Asia Society for Transportation Studies*, Vol. 6, 936 – 951. Retrieved on July 17, 2006 from the World Wide Web: http://www.easts.info/on-line/journal_06/936.pdf
- Maris freighter and speciality cruises (Undated), Retrieved on July 19, 2006 from the World Wide Web from:<http://www.freightercruises.com/> (Information on freighter cruise)
- Port of Galveston cruise terminal development (undated). *The National Council for Public Private Partnership*. Retrieved on July 7, 2006 from the World Wide Web: <http://ncppp.org/cases/galveston.html>. (Information on cruise terminals)
- Sobers, A. (2006). Report on Caribbean tourism industry performance for 2005 by Director of Information and Research, *Caribbean Tourism Organisation*. Retrieved on July 13, 2006 from the World Wide Web: <http://www.onecaribbean.org/information/documentview.php?rowid=3740>
- Talley, W.K. (2004), Foreword, *The Review of Network Economics*, Vol3, Issue 2 - June 2004, pp 83-85. Retrieved on July 4, 2006 from the World Wide Web: <http://www.rnejournal.com/abstracts/foreword%5Fwayne%5Fk%5Ftalley%5Fjune%5F04.html>. (Information on containerization)
- The 2006 Travel & Tourism Economic Research, *World Travel and Tourism Council*, Retrieved on June 19, 2006 from the World Wide Web: <http://www.wttc.org/2006TSA/pdf/World.pdf>.
- The Contribution of the North American Cruise Industry to the U.S. Economy in 2004, (2004). *International Council of Cruise Lines*. Retrieved on July 15, 2006 from the World Wide Web: http://www.iccl.org/resources/2004_economic_study.pdf Retrieved
- United Nations Conference on Trade and Development, (2006), *Review of maritime transport, 2005*. New York and Geneva, United Nations. (Copy received from UNCTAD through email on 20 January 2006)
- United Nations World Tourism Organisation Tourism Highlights, Edition 2005, *World Tourism Organisation*, Retrieved on June 19, 2006 from the World Wide Web: <http://www.world-tourism.org/statistics/index.htm>
- Wild, P. and Moody, A.(2005). Economic impact of the cruise industry in Europe, *The European Cruise Council, Annual Cruise Review Book, 2005*. Retrieved on July 15, 2006 from the World Wide Web: <http://www.europeancruisecouncil.com/content/pdfs/48-49-Wild.pdf>

ii. Online links of Conference proceedings

Halter, M.B. (2006). The Importance of Cruise Tourism in Europe
UNWTO European Conference, Vilnius, Lithuania. Retrieved on 21 June 2006 from the World Wide Web: http://www.world-tourism.org/regional/europe/PDF/2006/vilnius/manuel_butler.pdf (Permission to use data obtained on 23 June 2006 by email.)

iii. Websites

Cruise Europe: <http://www.cruiseeurope.com/home.php>

MedCruise: <http://www.medcruise.com/>

Ministry of Defence, Government of India: http://indiannavy.nic.in/maritime_history.htm

Ministry of Shipping, Road Transport and Highways, Government of India
<http://shipping.nic.in/>

Ministry of Tourism, Government of India: <http://tourism.nic.in/>

The Passenger Shipping Association of the United Kingdom: <http://www.the-psa.co.uk/>

iv. Inputs on branding of cruises. Retrieved on July 17, 2006 from the World Wide Web:

- <http://aruba-guide.info/getting.there/cruises/>,
- <http://barbados-guide.info/getting.there/cruises/>,
- <http://www.worldlii.org/eu/cases/EComm/2002/44.html>,
- <http://www.cruising2mexico.com/faq.html#q26>,
- <http://www.discover-cruises.co.uk/factsheetdetail.aspx?id=11&guide=5>,
- http://www.travelstoreusa.com/pages/757/Cruise_FAQ.htm

v. Maps

Retrieved on July 18, 2006 from the World Wide Web:

- The Caribbean Region: http://travel.yahoo.com/p-travelguide-577544-map_of_caribbean-i
- The Northern Europe/Baltic Region:
http://en.wikipedia.org/wiki/Image:Baltic_Sea_map.png
- Mexico: <http://www.ownerdirect.com/map/mex/map-mexico.htm>
- South East Asia: <http://www.gate1travel.com/southeast-asia/maps/SoutheastAsiaMap.gif>
- The Mediterranean Region:
http://encarta.msn.com/map_701514601/Mediterranean_Sea.html

Appendix 1.0 Responses to questionnaire

Questionnaire

The questions posed to the respondents were:

- a. Cruise shipping constitutes only a small segment of the total shipping sector. Would you call it categorise as a Shipping business or Tourism business?
- b. How do you see cruise industry's prospect in general?
- c. What are the key determinants in selection of a destination?
- d. What has been your experience in the development or promotion of a cruise destination?
- e. How many agencies are involved in the endeavour and how do they contribute to the success of your port as cruise destination?
- f. The revenue generation from Cruise calls are comparatively lesser than that from cargo vessels. Do you think cruise calls offer a viable business alternative from the port's perspective?
- g. What are your views on concerted development of cruise shipping particularly in wake of the stringent ISPS regulations, security demands, reception facilities etc?
- h. Could you provide a detail on any standard operating procedure that you have adopted for providing hassle free services to cruise lines and passengers?
- i. In your opinion, what are the prospects of India in developing as a cruise destination?
- j. What basic measures would you suggest that Indian port authorities should take to emerge as a credible cruise destination?
- k. Any other comments that you may wish to add.

Questionnaire was sent by email to 26 respondents from industry, ports, cruise lines and cruise line associations between May and July 2006. Responses were received from only 6(23%) respondents. In addition to this, discussion was also held in person with Rene Kouwenberg, Director, Passenger Terminal Amsterdam (The Netherlands) during the field trip and his responses are also summarized.

Response received by email on 6 May 2006 & personal discussion during field trip to IMO, London

According to Stan Deno#, features to make a destination attractive is the convenience and also security and quality of the terminal are critical. Facilities that are friendly to the disabled and have facilities for the ships to properly dispose of wastes are also very important.

#Stan W. Deno is the Director of Operations, International Council of Cruise Lines, USA

Response received by email on 22 June 2006

Chris Hayman# opines that, so far as individual port selection is concerned, it is of course necessary to differentiate between the hub port, and the port of call. A hub needs all the infrastructure necessary for passenger exchange, including air lift, terminal facilities for passenger and baggage handling, ship provisioning, pre and post cruise options etc. A port of call needs to be either a destination with a strong marquee value (a famous place which people aspire to visit) or a strong delivered value (passengers will enjoy the experience because of the particular attractions it offers).

There is a far lesser need for elaborate infrastructure in a port of call than a hub. Indeed many cruise line executives say they are looking for a facility that is clean, safe and efficient, and that elaborate facilities are unnecessary. In some popular ports of call tendering is still used as the means for disembarking passengers.

Hayman, firmly believes that there is a big opportunity at hand for India to become a major cruise tourism destination and attributes this to the challenge of seasonality which prompts the cruise lines look for more winter destinations and therefore the Indian ocean linked with the Gulf) provides an excellent option. India is well established as a tourist attraction, especially in Europe and the pattern of cruise tourism tend to follow that of land based tourism. India is able to provide along its extensive coastline exactly the sorts of port combinations that are needed for the creation of a strong cruise itinerary. The availability of a growing source market for passengers in India provides a top up opportunity for cruise lines operating in the area.

Hayman suggests that for Indian port to emerge as a credible cruise destination the first and most important priority for the authorities is to present a unified marketing position to the cruise industry. India as a destination can best be sold as a joined up series of contrasting port experiences, and the cruise lines will be impressed by the fact that the ports are working together. This process has already started in India to good effect, with the establishment of the India cruise circuit. Second, Indian ports should look at their connectivity with other neighbouring regions, such as the Gulf and East Africa for the west coast ports and Asia Pacific for the East coast ports. Third, there is a growing demand for one off calls from round the world cruise itineraries which can be good business for the ports to go after. Having established the potential, it is then necessary for each port authority to decide whether realistically it sees its future as a hub port or as a port of call. It then needs to take the necessary steps to prepare for that role. Finally, when all of that work has been done, it is necessary to present the Indian cruise destination to the cruise lines in a sharply focused way.

The cruise geography of the world is getting more and more complex, so there are more and more cruise destinations promoting themselves to the lines. It is therefore essential that the Indian story is presented in a way that addresses the questions that the lines need to have answered and on a regular basis. The Seatrade events and publications, both hard copy and online, provide a good means of communicating with the industry.

Not all cruise lines are likely to consider India as a destination. It will be many years, i believe, before carnival cruise line for example, is ready to consider deploying a ship in India. On the other hand, there will be strong and growing interest from lines in Europe and in Asia, following the pattern already established. It is therefore wise for Indian cruise tourism planners to familiarize themselves with the strategies of different cruise brands to ensure that they are talking to the right companies.

#Chris Hayman is Managing Director of Seatrade Communications Ltd. He was closely involved in the establishment of the Seatrade Cruise Shipping Convention in Miami more than 20 years ago, and other Seatrade Cruise Conventions in Hamburg (Seatrade Europe), the Mediterranean (Seatrade Med), Dubai Seatrade Middle East Maritime) and Singapore (Sea Asia). He is also Publisher of the quarterly publication Seatrade Cruise Review.

Response received by email on 25 May 2006

Mai Elmar# contributes their service concept – “think with the cruise lines what their passengers want and be pro-active further to advocate in a proper way the possibilities in our region” as the factor for development of Rotterdam Port as a major destination.

Rotterdam has a dedicated cruise terminal close to the city centre and it is estimated that an average call brings in about Euro 450.000 gross/gross on spendings and purchases from the ships side per call. She feels that there is a need to learn to apply the law (ISPS regulations, security demands, reception facilities etc) in a similar way through Europe and learn that matters can be handled in a customer friendly way. Quality of service, efficiency and information is of utmost importance as is the availability of proper luggage handling area that is safe and expedient for turnarounds.

#Mai Elmar, is Cruise Director, Rotterdam Port and Executive Manager of Cruise Europe, an association of 94 north-west European Port

Response received by email on 26 June 2006

According to Bob Browne#, the key determinants in selection of a port as a cruise destination are

- Facilities; suitable for cruise ships (safe areas for passengers, adequate berth, draught, water supply, waste etc.) to accommodate the vessels.
- Activities/Attractions; Interesting and/or high quality port city tourism attractions for day visits and regional attractions that can be visited usually in one day only
- Adequate land transport infrastructure and services
- Reasonable level of port charges (but note cost recovery concerns above)

According to him, India should develop a national cruise strategy linking ports, transport and tourism organizations with inputs from private and public sector organizations, financial institutions etc. to be endorsed by Government of India. This may have a regional dimension and link to other countries/the region. If without the above, the port authorities need to have a coordinated strategy for cruise tourism development but this would not be as effective as a proper national strategy.

He further suggest the following cruise circuits:

1. Round India-probably including Sri Lanka
2. Sub Regional-Pakistan (older civilizations of the Indus valley maybe?) India, Bangladesh (wildlife), Myanmar, Thailand
3. Regional say Asia or Asia Africa or Asia/Middle East

Robert Brown, Member, Port Planning & Development Committee of the International Association of Ports and Harbours, is a project economist and financial analyst who has worked in some 70 countries including India, as a consultant to the International Finance Institutions, Governments and the private sector within the transport and tourism sectors over a 30 year career. He is currently working on a one year assignment funded by the World Bank in Indonesia related to accelerating private sector partnerships in the provision of public sector infrastructure. He was recently involved in the planning of cruise ship infrastructure and related facilities in Dominica.

Response received by email on 26 June 2006

Kay-Uwe Maroß # informs:

"As you know AIDAcara was calling Indian ports two times, on the way to Thailand and on the way back to Europe. For our passengers it was a positive but exotic experience. We see great potential for this area of the world. Further efforts in advertising the destinations should lead to demand for cruise calls at Indian ports.

According to our last experience (2 years ago) an improvement of the touristic infrastructure (e.g. busses) would be necessary to be ready for regular calls of bigger cruise vessels. Via our local agent we follow the latest developments and recognize the efforts especially Mumbai takes to improve the conditions for cruise vessels. We trust the other ports will follow policy soon."

#Kay-Uwe Maroß is the Senior Manager Port Operations of AIDA Cruises.

Response of Rene Kouwenberg#

According to Kouwenberg, besides an excellent infrastructure and tourist attractions, the existence of excellent inter-agency support and coordination is quintessential for a destination to successfully cater to the need of cruise lines and the passengers. Another important aspect is the capability of the terminal to be used for alternate purposes during the off season so as to maintain steady flow of revenue. The ports must also be proactive to the changing demands of the cruise industry and keep introducing innovative services to retain the client interest.

#Rene Kouwenberg is the Director, Passenger Terminal Amsterdam (The Netherlands). Response obtained during the field trip.

Appendix 2.0 Operational aspects, features and facilities at Indian ports¹³

2.0.1 Port Facilities for Cruise Ships

PORTS	APPROACH CHANNEL (In meters)		BERTH DETAILS (In meters)		TURNING CIRCLE (In meters)		MEAN HIGH WATER (In meters)	MEAN LOW WATER (In meters)
	LENGTH FROM HARBOUR ENTRANCE	DEPTH	WIDTH	LENGTH OVERALL (LOA)	DEPTH (DRAFT)	WIDTH		
MUMBAI	9.6 KM	8.50 below CD	350	240	10	500	2.28 at spring tide and 4.40 at neap tide	5.94 at spring tide and 4.80 at neap tide
MORMUGAO	6.0 KM	14.4 below CD	250	300	11	480	2.30 at spring tide and 1.00 at neap tide	--
NEW MANGALORE	7.5 KM	15.40	245	200	10.3	570	1.5	3.25
COCHIN	10.5 KM	13.20	200	350	10.75	500	1.00	1.00
TUTICORIN	2.4 KM	12.50	183	345.5	10.7	488	2.58	3.35
CHENNAI	7.0 KM	19.2m	305m	170.60	12	548	1.15 at spring tide and 0.84 at neap tide	0.14 at spring tide and 0.43 at neap tide

2.0.2 Navigation

PORTS	Navigational features
MUMBAI	Round the clock navigation aided by Vessel Traffic Monitoring System (VTMS), which keeps VHF, watch on channel. The vessels call up "VTS MUMBAI" for assistance. The port is well equipped with pilot launches & tugs.
MORMUGAO	Round the clock navigation. Lighted buoys in addition to other navigational aids prescribed by the Indian Naval Hydrographical Chart mark Mormugao ports approach. Also one radio beacon works round the clock displaying dots & dashes on the ships radar X-band. It is also provided with the Vessel Traffic System as Automatic Identification system.
NEW MANGALORE	Round the clock navigation by well marked & lighted buoyage channel duly assisted by pilot tugs & mooring crew
COCHIN	Round the clock berthing with priority "walk in berthing" for Cruise vessels assisted by Voith Schneider propulsion tug. No tidal or draft restriction.
TUTICORIN	Vessels below 7 meters, draft that enter the Port will have to come and wait keeping the Fairway Buoy on the Portside with a distance of 0.5 miles, South East direction. Vessels with a draft of 10.7 Mts. should keep Fairway Buoy on the Portside heading towards the entrance and should wait 1.5 to 2 miles South East direction depending upon the Safety of the vessel. Master of the vessel should declare the ETA to Pilot Station 3 hours before. Round the clock navigation.
CHENNAI	All weather Port, round the clock navigation duly assisted by pilot tugs & mooring crew. Well-marked and lighted buoyage channel.

¹³ Complied by Central Marketing Apparatus, National Committee on Cruise Shipping, India

2.0.3 Terminal facilities

Port	Facilities
Mumbai	Newly refurbished Terminal building (about 3000 sq.m of space, scope for further development, tourist information centre, helpdesk, Passenger lounge, modern toilets, distilled drinking water, Traditional welcome, Customs, Immigration, tour operators, foreign exchange, communication centre (internet, fax, STD, ISD etc.) ample car parking, shops selling curios & other artefacts, baggage handling facility along with a battery operated van, security arrangements.
Mormugao	Newly refurbished Terminal building of 1250 sq.m. Traditional welcome, Security, modern toilets, medical aid, immigration & custom clearance, arrangement by tour operators, shopping,
New Mangalore	Construction of Cruise Terminal proposed. Security, modern toilets, medical aid, information centre, immigration & custom clearance, ground tour, arrangement by tour operators, shopping, and traditional welcome.
Cochin	Consultants being appointed to advise the creation of cruise terminal and allied facilities. Facilities like immigration, Customs, shops, Traditional welcome, sufficient parking space for tourist buses & taxis, pre-paid taxi, tourist information counter arranged by tour operators/vessel agents. Leading 5 star hotels within walking distance from the berth, close proximity to tourist destinations, city centre, airport & railways.
Tuticorin	Traditional welcome, speedy customs and immigration clearance, On line modern communication facility, shopping arcade on the berth, ample parking area on the berth for the luxury coaches, tour arrangements to places of historical interest, adequate supply of clean drinking water, Bunkering facilities, Port Security under the ISPS Code.
CHENNAI	Total terminal area of 3200 sq.m. Infrastructure Facilities for Money Changer, Food Court, Communication Centre, Duty free shop, Entertainment, etc available. Fully air-conditioned lounge for Higher Class Passenger and separate Lounges for Domestic/Overseas Tourists and VIP. Port well connected by Road, Rail and Air.

2.0.4 Flow chart of cruise vessel reception at Indian ports

Step	ACTIVITY	Action By Authority Concerned	RELEVANT ACT / SECTION	WHEN
1.	Filing of Berthing Application.	Ship Agent		Before Arrival.
		Port	MPT Act, 1963 and Docks Bye-Laws.	
2.	Filing of Passenger manifest, details of Embarking, Disembarking, Tourists, Transit Tourists, Crew, etc.	Ship Agent		Before Arrival.
		Customs	Customs Act, 1962	
		Immigration	Foreigners Act, 1946	
3.	Payment of dues - (a) Berth Hire charges, Pilotage, Port dues. (b) Light Dues	Port Health Officer	Port Health Rules under Indian Ports Act, 1908.	Before Arrival.
		Ship Agent		
		Port	MPT Act, 1963. Docks Scale of Rates Ports Scale of Rates	
		Customs	Light House Act.	

Step	ACTIVITY	Action By Authority Concerned	RELEVANT ACT / SECTION	WHEN
4.	Declaration of ship arrival as also regarding yellow fever, SARS, Contagious diseases.	Ship Agent		Before Arrival.
		PHO	Port Health Rules.	
5.	Pilot boarding vessel at stream and towing to berth.	Port	MPT Act, 1963.	Upon Arrival.
6.	Health clearance of tourists and Crew-en route from stream to berth.	PHO	Port Health Rules.	Upon Arrival. PHO boards at anchorage
7.	Immigration check of passport and visas with Purser and to stamp them.	Immigration	Foreigners Act, 1946 and Rules framed thereunder.	Ship at Berth. Immigration officials board.
8.	Issue of shore passes for transit tourists for city sight seeing.	Immigration	Foreigners Act, 1946	Ship at Berth.
9.	Issue of longer transit passes for passengers disembarking for longer tours and their subsequent joining of vessels at another Indian Port.	Immigration	Foreigners Act, 1946	Ship at Berth
10.	Customs clearance of Baggage/Bond.	Customs	Customs Act, 1962	Ship at Berth. Customs officials board.
11.	Clearance of baggage of disembarking tourists. (When there is a large number of disembarkations, Ship Agent arranges Customs official to board ship at previous port of call and clear the baggage en route).	Customs	Customs Act, 1962	Ship at Berth.
12.	Port State Control	Director General Shipping	Merchant Shipping Act, 1958	Ship at Berth.
13.	Disembarking Tourists' Baggage delivery.	Ship Agent	--	Ship at Berth.
14.	Transit tourists taken to the Coaches, Cars, etc. for sight seeing.	Tour Operator	--	Ship at Berth.
15.	Disembarking tourists taken to the Airport/ Hotel.	Tour Operator	--	Ship at Berth.
16.	Clearance of ships' requirements viz. provisions, fuels, water supply.	Ship Supplier/ Chandlers		Ship at Berth.
		Customs	Customs Act, 1962.	
17.	Garbage disposal begins.	Port	MPT Act, 1963 and Docks Bye-Laws.	Ship at Berth.
18.	Embarking tourists arrived a) Baggage clearance by the Customs at Terminal. b) Immigration clearance at Terminal.	Custom	Customs Act, 1962.	Ship at Berth.
		Immigration	Foreigners Act, 1946	
19.	Transit tourists arrived from their city tours/sight seeing or long tours.	Tour Operator/ Ship Agent/		Ship at Berth.
		Immigration	Foreigners Act, 1946	
20.	Customs clear ship for sailing.	Customs	Customs Act, 1962	Ship at Berth.
21.	Port clearance for sailing.	Port	Indian Ports Act, 1908	Ship at Berth.
22.	Port Pilot boards and Ship sails.	Port	MPT Act, 1963	Ship at Berth.

2.0.5 Legal Framework

The relevant provisions in the various enactments, rules, regulations, the related procedures/documents and agency-wise and function-wise framework relating to the handling of cruise at the port are as under:

Organisation	Port	Custom	PHO	Immigration	D.G. Shipping
Governing Act	Major Port Trusts Act, 1963 & Indian Ports Act, 1908	Customs Act, 1962 Foreign Exchange Management Act, 1999	Indian Ports Act, 1908	Foreigners Order, 1948	Merchant Shipping Act, 1958
Subordinate Legislation/ Regulation etc.	Dock Bye Laws Docks Scale of Rates Port Scale of Rates	Baggage Rules 1998 Foreign Exchange Management (Export & Import of Currency) Regulation, 2000	Indian Port Health Rules, 1955	Registration of Foreigners Rules, 1992. The Passport (Entry into India) Rules, 1950.	---
Sections Applicable	(Bye Law No.3 Application for berthing. (Bye Law No. 6 – BPX preferential berth. Bye Law No.36- Disposal of garbage. Bye Law No.122 – Application for sailing.	Section-79 of Customs Act, 1962 and Rule No.7 of Baggage Rules, 1998 Rule 6 - Import of Foreign Exchange into India. Rule 7 - Export of Foreign Exchange.		Section 3 of Foreigners Order, 1948 - Power to grant or refuse permission to enter India. (Section 4 – Landing of Seamen. Section 5 - Power to grant permission to depart from India. Rule 4 of Registration of Foreigners Rules, 1992 – Passenger on vessel to report arrival in India. Rule 16 of RFR, 1992 - Obligation of Master of vessel.	Section 406 - Indian ships and Chartered ships to be licensed. Section 407 - Licensing of ships for coasting trade.
Broad areas where applicable	Relating to berthing. Payment of charges Requirement of pilot for berthing / sailing off	Rummaging and Preventive Clearance. Ship's bond stores/ clearance. Tourists' baggage clearance & currency declaration. Port Clearance for ship.	Clearance of crew and tourist from communicable diseases notified from time to time like yellow fever etc.	Checking and Stamping of Passport and visa. Issuance of shore leave passes to passengers and crew who have valid visa. Issue of Temporary Landing Permit (TLP).	Exercise Port State Control over the ship. Ensure compliance for cabotage of ships.
Formats / Applications d by whom)	Berthing Application (Ship Agents)	Passenger Manifest (Ship Agents)	.Maritime Declaration of Health (by Master)	Shore Pass for Passengers (Yellow Colour) (by Tourists / Ship Agents / Immigration)	
	Application for payment of Port Charges (Ship Agents)	Bond stores declaration (Master/ Ship Agents)	De-rating Exemption Certificate (by Master)	Shore pass for crew (Pink colour) (by Crew / Immigration)	
	Application for Pilot (Ship Agents)	Currency declaration Form under Foreign Exchange Management Act 1999 (Tourists)	Port call list for last 30 days (by Master)	Govt. of India Embarkation Card.- Departure [(Rule 5 & 15 (2)) (by Tourists)	
	Application for Sailing (Ship Agents)		Crew list at arrival. (by Master) Passenger list at arrival. (by Master) Crew/ Passenger Embarkation / Disembarkation List (by Master / Ship Agent) Yellow Fever Vaccination List (by Master / Tourists)	Govt. of India Disembarkation Card - Arrival (Rule 5 & 15) (by Tourists) Temporary Landing Permit (by Tourists / Immigration)	

2.06 Distance between Major Cruise Ports in India and Neighbouring Countries

2.0.6.1 Indian Cruise Circuit – East Coast African ports Distance-Time matrix

For a Cruise Ship at 20 nautical miles per hour D: Distance in Nautical Miles T : Time in Days										
	PORBUNDER		MUMBAI		MORMUGAO		COCHIN		CHENNAI	
	D.	T.	D.	T.	D.	T.	D.	T.	D.	T.
MAURITIUS	2755	6	2535	5	2345	5	2143	4	2555	5
MOMBASA	2630	6	2400	5	2340	5	2354	5	3040	6
DARES SALAM	2560	5	2330	5	2439	5	2427	5	2840	6
DURBAN	4030	8	3800	8	3683	8	3572	7	4088	9
CAPETOWN	4860	10	4630	10	4466	9	4362	9	4885	10

2.0.6.2 Intra-Indian Cruise Circuit Distance-Time Matrix

For a Cruise Ship at 20 nautical miles per hour D : Distance in Nautical Miles T : Time in Hours																
	PORBUNDER		MUMBAI		MORMUGAO		NEW MANGALORE		COCHIN		TUTICORIN		CHENNAI		VISHAKHA-PATTANAM	
	D.	T.	D.	T.	D.	T.	D.	T.	D.	T.	D.	T.	D.	T.	D.	T.
PORBUNDER	-	-	315	16	502	25	672	34	853	43	1144	57	1750	88	2015	101
MUMBAI	315	16	-	-	223	11	388	19	580	29	816	41	1468	73	1733	87
MORMUGAO	502	25	223	11	-	-	170	9	376	19	642	32	1248	62	1513	76
NEW MANGALORE	672	34	388	19	170	9	-	-	206	10	472	24	1068	53	1353	68
COCHIN	853	43	580	29	376	19	206	10	-	-	236	12	888	44	1153	58
TUTICORIN	1144	57	816	41	642	32	472	24	236	12	-	-	730	37	995	50
CHENNAI	1750	88	1468	73	1248	62	1068	53	888	44	730	37	-	-	327	16
VISHAKHA PATTANAM	2015	101	1733	87	1513	76	1353	68	1153	58	995	50	327	16	-	-

2.0.6.3 Indian Cruise Circuit – Gulf ports Distance-Time matrix for a cruise ship

For a Cruise Ship at 20 nautical miles per hour D : Distance in Nautical Miles T : Time in Hours										
	PORBUNDER		MUMBAI		MORMUGAO		COCHIN		CHENNAI	
	D.	T.	D.	T.	D.	T.	D.	T.	D.	T.
DUBAI	869	43	1151	58	1304	65	1627	81	2482	124
FUIJAIRAH	703	35	985	49	1216	61	1461	73	2316	116
SALALLAH	801	40	822	41	1053	53	1402	70	2257	113
ABU DHABI	903	45	1204	60	1338	67	1693	85	2548	127