ANNUAL REPORT 2015-16

सत्यमेव जयते

MINISTRY OF SHIPPING
GOVERNMENT OF INDIA
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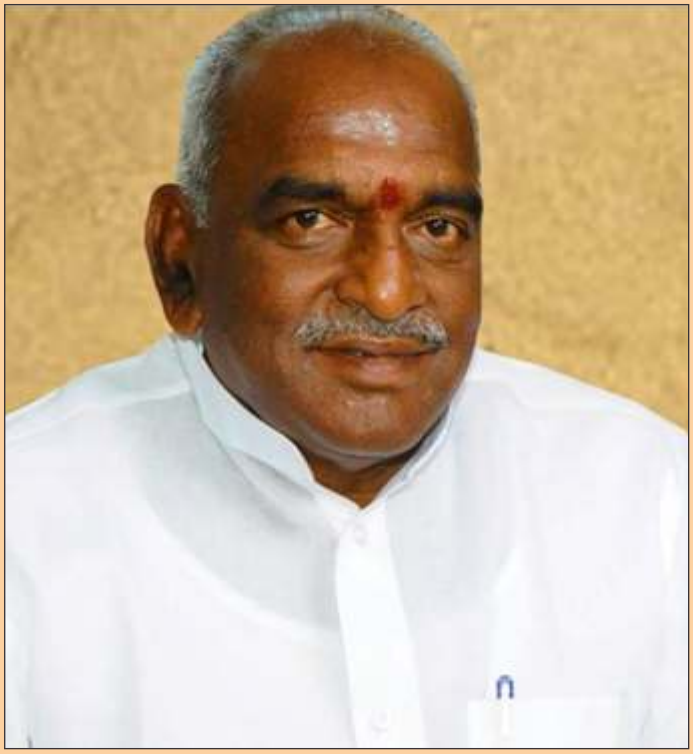
Shri Nitin Jairam Gadkari
Hon'ble Minister of Shipping



Shri Pon. Radhakrishnan
Hon'ble Minister of State for Shipping

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MINISTRY OF SHIPPING
GOVERNMENT OF INDIA
NEW DELHI

CONTENTS

CHAPTER – I

INTRODUCTION

1.1 Ministry of Shipping was formed in 2009 by bifurcating the erstwhile Ministry of Shipping, Road Transport and Highways into two independent Ministries.

1.2 Maritime Transport is a critical infrastructure for the economic development of a country. It influences the pace, structure and pattern of development. The Ministry of Shipping encompasses within its fold shipping and port sectors which also include shipbuilding and ship repair, major ports and inland water transport. The Ministry has been entrusted with the responsibility to formulate policies and programmes on these sectors and their implementation.

1.3 Comprehensive policy package is necessary to address the diverse issues facing the maritime transport sector. The capacity of the ports in terms of their berths and cargo handling equipment needs to keep pace with the growing requirements of the overseas trade. The shipping industry must be enabled to carry higher shares of the sea-borne trade in indigenous bottoms.

1.4 Historically, investments in the transport sector, particularly in the ports, have been made by the State, mainly because of the large resources required, long gestation period, uncertain returns and a number of externalities associated with this infrastructure sector. However, the growing resource requirements and the concern for managerial efficiency and consumer responsiveness have led to the active involvement of the private sector in infrastructure services in recent times. To encourage private sector participation, Ministry of Shipping has laid down comprehensive policy guidelines for private sector participation in the Major ports.

FUNCTIONS

1.5 The subjects allocated to the Ministry of Shipping are listed at **Annexure - I**.

Organizational set-up

1.6 Shri Nitin Jairam Gadkari is the Union Minister of Shipping.

1.7 Shri Pon. Radhakrishnan is the Minister of State for Shipping.

1.8 Secretary (Shipping) is assisted by Additional Secretary, Joint Secretary (Shipping), Joint Secretary (Ports), Joint Secretary (Sagarmala), Adviser(Economic), Adviser (Statistics), Development Adviser (Ports), officers at the level of Directors, Deputy Secretaries, Under Secretaries and other Secretariat/ Technical Officers.

1.9 The Finance Wing is headed by Additional Secretary & Financial Adviser who assists in formulating and processing of all policies and other proposals having financial implications.

1.10 The Accounts side is headed by a Chief Controller of Accounts who is, inter-alia, responsible for accounting, payment, budget, internal audit and cash management.

1.11 Adviser (Transport Research) renders necessary data support to various Wings of the Ministry for policy planning, transport coordination, economic & statistical analysis on various modes of transport with which the Ministry is concerned.

1.12 The Finance Wing, Accounts Wing and Transport Research Wing are common with the Ministry of Road Transport & Highways.

1.13 The Development Adviser (Ports) renders technical advice on matters relating to the development of Major Port Projects, Andaman & Lakshadweep Harbour Works (ALHW) and the Dredging Corporation of India. He is also associated with processing technical and administrative matters related to the International Navigation Association–Permanent International Association for Navigational Congress (INA-PIANC) of which India is a member country. DA(Ports) also coordinates the Research Committee works of the Ministry in respect of Ports, Shipping and Inland Water Transport (IWT) sectors.

1.14 The following attached/subordinate offices, autonomous organisations, societies/ associations and public sector undertaking are functioning under the administrative control of the Ministry of Shipping :

(A) ATTACHED/SUBORDINATE OFFICES

1. Directorate General of Shipping
2. Andaman, Lakshadweep Harbour Works
3. Directorate General of Lighthouses and Lightships
4. Minor Ports Survey Organisation

(B) AUTONOMOUS BODIES

1. Tariff Authority for Major Ports (TAMP)
2. Port Trusts at Kandla, Mumbai, Jawaharlal Nehru, Mormugao, New Mangalore, Kochi, V.O. Chidambaranar (Tuticorin), Chennai, Visakhapatnam, Paradip and Kolkata
3. Kolkata Dock Labour Board
4. Inland Waterways Authority of India
5. Seamen's Provident Fund Organisation
6. Indian Maritime University
7. Seafarer's Welfare Fund Society
8. National Shipping Board

(C) ASSOCIATIONS

1. Indian Ports Association.

(D) PUBLIC SECTOR UNDERTAKINGS

1. Shipping Corporation of India
2. Cochin Shipyard Limited
3. Central Inland Water Transport Corporation Limited
4. Dredging Corporation of India
5. Hooghly Dock and Ports Engineers Limited
6. Kamarajar Port Ltd., Ennore
7. Sethusamudram Corporation Limited.

1.15 The Organisation Chart of the Ministry of Shipping is given at **Annexure - II.**

CHAPTER-II

YEAR AT A GLANCE

Background

2.1 The Maritime Sector in India comprises of Ports, Shipping, Shipbuilding and Ship repair and Inland Water Transport Systems. India has 12 Major Ports and about 200 Non Major Ports. Indian Shipping Industry has over the years played a crucial role in the transport sector of India's economy. Approximately 95% of the country's trade by volume and 68% by value is moved through Maritime Transport. Therefore, shipping and ocean resources, ship design and construction, ports and harbours, issues relating to human resource development, finance, ancillaries and new technologies need to be developed in the light of the emerging scenario. Shipping continues to remain unchallenged as the world's most efficient means of transportation and we need to do all, we can, to recognize, reward and promote quality within the industry.

Geographical features

2.2 India has a long coastline of about 7517 km, spread on the western and eastern shelves of the mainland and also along the Islands. It is an important natural resource for the country's trade.

Twelfth Five Year Plan

2.3 Planning Commission approved a Gross Budgetary Support (GBS) (at current prices) of Rs 6,960 crore for the Ministry of Shipping for the 12th Plan period (2012-2017). This implies a 108.5% increase in GBS allocation to the Ministry during the current Plan compared to 11th Plan allocation of Rs. 3337.58 crore. Out of GBS of Rs 6960.00 crore approved by Planning Commission, the share of Ports, Shipping and IWT sectors are Rs. 3057.47 crore, Rs. 2402.53 crore and Rs. 1500.00 crore respectively.

2.4 A comparison of 11th Plan actual expenditure and 12th Plan allocation of GBS and IEBR is given below at **Table - 1**:

Annual Plan 2015-16

2.5 The Budget Estimate of GBS for FY 2015-16 was Rs. 932.79 crore for the Ministry. However, at the stage of Revised Estimate (RE), this has been reduced to Rs. 824.00 crore. Against the RE allocation of Rs. 824.00 crore, actual expenditure as on 31.12.2015 was Rs. 688.16 crore.

2.6 Summary of Annual Plan 2015-16 is given below at **Table - 2**:

ANNUAL PLAN 2016-17

2.7 Total Plan allocation for the Ministry during the year 2016-17 is Rs.4183.14 crore, out of which the share of GBS and IEBR are Rs. 1000.00 crore and Rs. 3183.14 crore respectively which is given below at **Table - 3**

(Rs in crore)

Table 1

Sector	GBS		IEBR		TOTAL	
	11th Plan-Actual	12th Plan Allocation	11th Plan-Actual	12th Plan-Allocation	11th Plan-Actual	12th Plan-Allocation
Ports	1227.90	3057.47	5676.66	12706.96	6904.56	15764.43
Shipping	388.38	2402.53	8864.76	6239.22	9253.14	8641.75
IWT	535.25	1500.00	0.00	0.00	535.25	1500.00
Total	2151.53	6960.00	14541.42	18946.18	16692.95	25906.18

Table 2

Sector	**2015-16 (BE)**		**2015-16 (RE)**		**Actual Exp. (2015-16)***
	GBS	**IEBR**	**GBS**	**IEBR**	**GBS**
Ports & Lighthouses	479.50	2786.24	452.07	1671.48	331.07
Shipping	153.29	827.50	84.21	861.94	81.35
IWAI	300.00	–	287.72	–	275.74
Total	**932.79**	**3613.74**	**824.00**	**2533.42**	**688.16**

*** upto 31st December, 2015**

Table 3

Sector	**2016-17 (BE)**		
	GBS	**IEBR**	**Total**
Ports & Lighthouses	601.77	1832.09	2433.86
Shipping	48.23	351.05	399.28
IWAI	350.00	1000.00	1350.00
Total	**1000.00**	**3183.14**	**4183.14**

2.8 Out of the GBS of Rs. 1000.00 crore, Rs. 100.00 crore have been earmarked for the North Eastern Region.

PORT SECTOR

Cargo Traffic at Indian Ports

2.9 During April, 2015 – December 2015, major and non-major ports in India handled a total cargo throughput of around 786 Million Tonnes (MT). The traffic grew by 1.4% over the corresponding period of previous year. The 12 Major Ports handled a traffic of 447.05 MT during April – December 2015, representing an increase of about 3.18% over the corresponding period of previous year. Of the 12 Major Ports, cargo handled during April – December 2015 at 9 ports showed positive growth. Amongst these 9 major ports, growth in throughput at Mormugao was the highest at 35.31% followed by V.O.Chidambaranar(19.30%), Kolkata(including Haldia Dock) (13.36%), Paradip(5.23%),Kandla (4.26%) and Cochin (3.12 %).

Commodity-wise Cargo Traffic at Major Ports

2.10 During 2015-16 upto December 2015, 12 Major Ports handled 447.05 MT of traffic as against 433.27 MT over the corresponding period of previous year. The composition of the cargo is given below:

(In Million Tonnes)

Table 4

Year	POL	Iron Ore	F & RM	Coal	Container (In Million TEUs)	Other Cargo	Total
2005-06	142.09	79.17	12.19	58.76	61.98 (4.61)	69.38	423.57
2006-07	154.34	80.58	14.13	59.98	73.44 (5.54)	81.31	463.78
2007-08	168.75	91.80	16.63	64.93	92.27 (6.71)	84.94	519.31
2008-09	176.14	94.04	18.23	70.40	93.14 (6.59)	78.59	530.53
2009-10	175.09	100.33	17.72	71.71	101.24 (6.90)	95.00	561.09
2010-11	179.17	87.06	19.99	72.73	113.93 (7.52)	96.97	570.03
2011-12	179.10	60.40	20.39	78.78	120.10 (7.78)	101.36	560.14
2012-13	185.98	28.47	14.74	86.66	119.82 (7.70)	110.12	545.79
2013-14	187.31	24.66	13.74	104.73	114.64 (7.46)	110.42	555.50
2014-15	188.77	17.91	16.20	117.86	119.44 (7.96)	121.16	581.34
April-Dec. 2015	144.28	7.86	13.18	95.12	91.20 (6.09)	95.41	447.05

2.11 While the commodities viz. Coal and POL are showing steady growth, there has been fluctuation in traffic of Fertilizer and Containers during the last few years. Iron Ore traffic declined due to restriction imposed by the Government on Iron ore mining. The other general traffic continued to grow. Jawaharlal Nehru Port Trust (JNPT) continued to be the leading container handling port in the country with a share of about 48% followed by Chennai (25%) and the remaining share of 27% handled by other major ports.

Cargo Traffic at Non-major Ports

2.12 During the Eleventh Five Year Plan (2007-12), the traffic at non-major ports increased at annual rate of close to 14.75%. Non Major ports handled around 43% of the total maritime freight traffic of the country during April to December, 2015. The growth in cargo handled at non-major ports has been facilitated by sustained growth in non-major ports located on Andhra Pradesh and Gujarat aided by substantial increase in the cargo traffic of POL, Fertilizers and Raw Materials and containers. The growing importance of non-major ports in handling cargo traffic has helped alleviate the congestion at major ports. Gujarat accounted for around three fourth of the total traffic handled by non-major ports followed by Andhra Pradesh (16%) and Maharashtra (5%). Three maritime states namely Gujarat, Maharashtra and Andhra Pradesh together accounted for close to 95% of the total estimated traffic by the non-major ports in the current year i.e. during April-December, 2015.

Eleventh Five Year Plan target

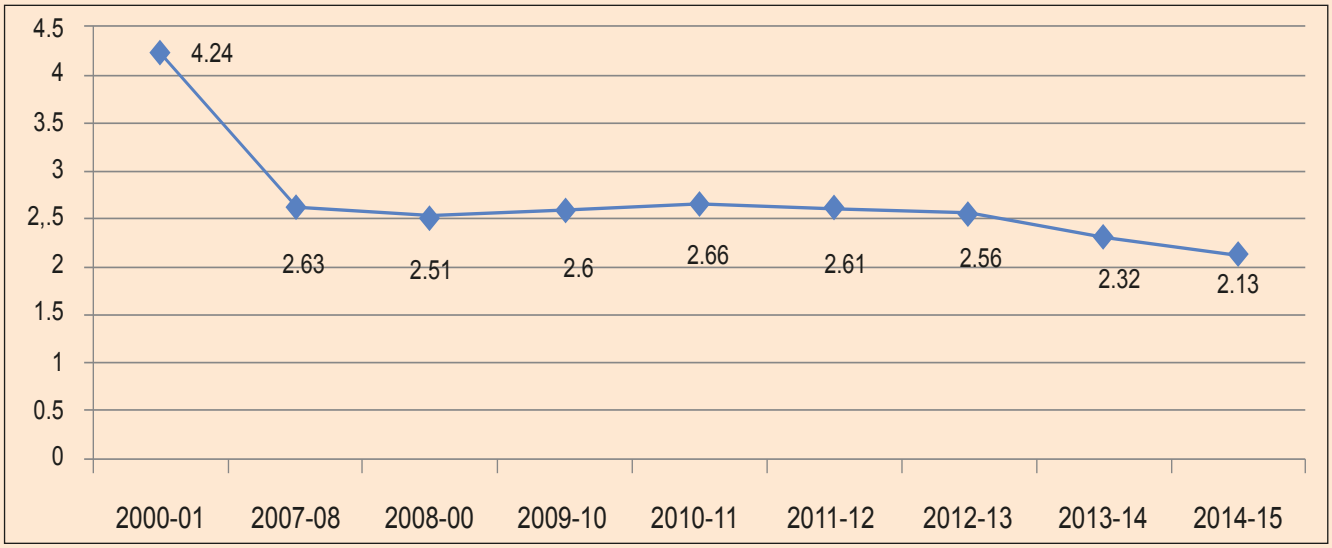
2.13 The Eleventh Five year plan envisaged an increase in capacity of major ports to 1016.55 MT by the end of 2011-12 from the pre-plan base level of 504.75 MT. Average annual growth in capacity addition was envisaged at 15 per cent. Actual capacity addition during the plan (2006-07 to 2011-12) was however moderate and showed a growth of 6.65 per cent per annum.

Twelfth Five Year Plan target

2.14 The projected capacity during the terminal year of Twelfth Plan period for the Major ports would be 1229.24 MT, nearly, 1.53 times of the existing capacity. The expected demand by the end of the 12th plan in terms of cargo handling at major Ports is 943.06 MT with an estimated annual growth of 10.98%. The cargo handling capacity in Major Ports at the end of December 2015 was 892.92 MT.

Port Efficiency

2.15 Efficiency at ports has an important bearing on the transaction cost of the shipping lines. Major ports have improved their efficiency of operation particularly in terms of turnaround time (TRT). Amongst the 12 Major ports, improvement in TRT during 2014-15 in comparison to 2013-14 was discernible in most of the major ports. The Average Turnaround Time (Port A/c) improved from 4.24 days in 2000-01 to 2.13 days in 2014-15 as depicted in graph below:



During the year 2015-16, upto December, 2015 the average turnaround time has further improved to 2.12 days.

Maritime Agenda 2010-20

2.16 In the Maritime Agenda 2010-20, a target of 3,130 MT port capacity has been set for the year 2020. More than 50 per cent of this capacity is to be created in the non-major ports as the traffic handling by these ports is expected to increase to 1,280 MT. The objective of the Maritime Agenda is not only creating more capacity but augmenting port performance. This enlarged scale of operation is expected to reduce transaction costs considerably and make Indian ports globally competitive. The proposed investment in major and non-major ports by 2020 is expected to be around Rs. 277380 crore. Most of this investment has to come from the private sector including foreign direct investment (FDI). FDI up to 100 percent under the automatic route is permitted for construction and maintenance of ports. Private-sector participation will not only increase investment in the ports infrastructure, but also efficiencies in ports through induction of latest technology and better management practices. Public funds will be mainly deployed for common use infrastructure facilities like deepening of port channels, rail and road connectivity from ports to hinterland etc.

Private-sector Participation

2.17 Maritime Agenda 2010-20 has estimated that investment required in new projects of major ports will be Rs. 1,09,449.40 crore of which Rs. 72,878.20 crore is expected to come through private sector participation and the balance Rs. 36,571.20 crore to be funded through internal and external budgetary support. States have also identified projects for development of non-major ports at an estimated cost of Rs. 1,67,930.80 crore for creation of additional capacity of 1293.60 MT. The private sector is envisaged to fund most of the projects through PPP basis viz. Design Build Operate Finance and Transfer (DBFOT) basis or Build Operate Own and Transfer (BOOT) basis etc.

2.18 During 2015-16, upto December, 2015, 18 projects have been awarded/approved involving an investment of Rs. 9072.57 crore and additional capacity of 43.05 MTPA.

SAGARMALA

2.19 The Sagarmala Programme aims to promote port-led development in India with focus on modernization of existing ports & development of new ports, creating efficient & effective connectivity between the ports and the hinterland, port-led industrial development and coastal community development. The Union Cabinet approved the concept of the Sagarmala Programme on 25.03.2015. The Cabinet also directed that a comprehensive plan for integrated development of islands be finalized in a time bound manner in consultations with the Ministries/Departments concerned. The Cabinet further directed that the prospects for cultivation of oil palms in the islands off the eastern coast be explored.

2.20 Following the approval of the Sagarmala Concept Note, a Consortium of M/s McKinsey & Co. and M/s AECOM India Pvt. Ltd. were appointed on 15.05.2015 to develop the National Perspective Plan (NPP) for the Sagarmala Programme. NPP is currently under finalisation. As part of the NPP development, Project Development Consultant has undertaken the following activities:

a) The draft report on Origin-Destination (OD) study, for POL & LNG, Iron Ore & Steel, Coal, Container, Food Grains and Fertilizer is under review and the final report is being prepared based on the inputs received from the relevant stakeholders. Findings from the OD study will be fed into the Major Ports Master Planning and Multi-Modal Transportation Grid Study. Opportunities for Rs.30,000-40,000 crore of annual savings by 2025,

from logistic cost and time reduction for key cargo movement, have been identified as part of the OD study.

b) Draft Master Plans for JNPT, Kandla, Mumbai, Vizag, Tuticorin, Ennore, KoPT and Paradip have been submitted to the respective Ports for review and inputs. Draft Master Plans for NMPT, Mormugao, Cochin and Chennai Port are under development.

c) On the new port development front, the Empowered Committee of Secretaries (ECS) meeting for Sagar Island Port was held on 30.12.2015 and the finalized TEFR on Sagar Island Port was submitted on 31.12.2015 after incorporating inputs from ECS, KoPT and Ministry of Shipping. Draft Techno-Economic feasibility Report (TEFR) for Vadhavan Port, Maharashtra was submitted on 30.11.2015 and draft TEFR for Paradip Outer Harbour is under preparation. A case for development of Ennore Outer Harbour and ports in Central Andhra Pradesh/Tamil Nadu is being evaluated.

d) Perspective plans are also under development for 8-10 Coastal Economic Zones.

2.21 While the NPP is under development, it is proposed to take up identified pilot projects for implementation forthwith. In this regard, 12 projects have been considered for part funding for implementation under Sagarmala. A sum of Rs.70 crore has been released for two of the projects (Phase 2 road connectivity project at Vizag Port Phase II & RoB Ranichak, KoPT). Detailed Projects Report (DPR) is under preparation for 10 projects, 55 road projects and 28 rail projects have been shared with Ministry of Road Transport & Highways and Ministry of Railways respectively for their consideration.

2.22 In order to implement the Sagarmala Programme, the Cabinet, inter alia, decided to establish an institutional mechanism at the National and State level. This mechanism includes the National Sagarmala Apex Committee (NSAC), Sagarmala Coordination & Steering Committee (SCSC), State Sagarmala Committees (SSC) and the Project SPVs. The SCSC and NSAC have been constituted and their first meetings were held on 01.10.2015 and 05.10.2015 respectively. West Bengal, Odisha, Puducherry, Goa, Maharashtra, Andhra Pradesh have constituted their SSCs and other Maritime States are also in the process of constitution of SSCs. Besides this, a company Sagarmala Development Company under the Companies Act, 2013 is to be set up to take up projects emanating from Sagarmala Programme. After the consideration of proposal of SDC by EFC, Cabinet approval for setting up this company is being sought.

2.23 The final report on the possible commercial and developmental activities in the islands subject to environmental aspects was circulated by Ministry of Shipping to the other stakeholders. The Ministry of Shipping has also shared with the Ministry of Home Affairs the list of 34 island lighthouses to be taken up for development on priority basis.

2.24 Based on the discussion with the concerned States / Agencies, Ministry of Agriculture & Farmers Welfare has informed the Ministry of Shipping that oil palm cultivation in the islands off the coast of Odisha, Andhra Pradesh and Tamil Nadu and in the Andaman & Nicobar Islands is not feasible. It was also informed that the Indian Institute of Oil Palm Research (IIOPR) will study the possibility of oil palm cultivation, in the islands off West Bengal. The report is awaited from IIOPR.

SHIPPING SECTOR

2.25 Shipping is an important indicator of both commodity and services trade of any country. It

plays an important role in the Indian economy with around 95% of India's trade by volume and 68% in terms of value being transported by sea.As on December 31, 2015, India had a fleet strength of 1247 ships with Gross Tonnage (GT) of 10.51 million, with the public-sector Shipping Corporation of India having the largest share of 38%. Of this, 373 ships with 9.00 million GT cater to India's overseas trade and the rest to coastal trade.

2.26 As of January 1, 2015, Panama, Liberia and the Marshall Islands are the largest vessel registries. Together, they account for 41.81% share of world tonnage. Marshall Islands recorded an impressive growth of over 13.32% year on year.More than three quarters of world fleet is registered in developing countries including many open registries. Open registries are those where the owner does not need to be of the same nationality as the country where the ship is registered. The tonnage registered under a foreign flag (where the nationality of the owner is different from the flag flown by the vessel) is 71% of the world total.

2.27 Greece continues to be the largest ship owning country, accounting for 16.11% of the world total, followed by Japan, China, Germany and Singapore. Together, the top five ship-owning countries control more than half of the world tonnage (DWT). Five of the top ten ship-owning countries are from Asia, four are European and one is from the United States.

2.28 Over the last decade, China, Hong Kong (China), Republic of Korea and Singapore have moved up in the rankings of largest ship owning countries while Germany, Norway and the United States have a lower market share today than in 2005.

2.29 In South America, the largest ship owning country (in DWT) continues to be Brazil, followed by Mexico, Chile and Argentina. The African country with the largest fleet ownership is Angola followed by Nigeria and Egypt.

2.30 India ranked 17th in the world in terms of world tonnage with a share of only 1.26% as on January 1, 2015. In comparison, China ranked 3rd with a share of 9.08%.

2.31 As on March 31, 2015, 44.05% of the fleet was over 20 years of age and 11.82% in the age group of 15-19 years. The international average age of ships is 13.9 years. While India's overseas seaborne trade has been growing exponentially over the years, there is a sharp decline in the share of Indian ships in the carriage of India's overseas trade from about 40% in the late 1980s to 7.45% in 2014-15.

2.32 India is also one of the major countries supplying seafarers.

2.33 The global shipping industry has been experiencing turbulent waters since the year 2012 due to the continued economic downturn. Indian shipping companies faced problems of restricted cash inflows due to very low charter hire and freight rates in all segments of shipping.

2.34 Shipping plays an important role in the economic development of the country, especially in India's international trade. The Indian shipping industry also plays an important role in the energy security of the country, as energy resources, such as coal, crude oil and natural gas are mainly transported by ships. Further, during crisis situation, Indian shipping contributes to the uninterrupted supply of essentials and can serve as second line of defence. Approximately, 95% of the country's trade by volume and 68% in terms of value is being transported by sea.

2.35 Indian shipping tonnage (capacity) was practically stagnant at around 7 million gross tonnage (GT) till the beginning of 2004-05. However, the tonnage tax regime introduced by

the Government of India in that year boosted the growth of the Indian fleet as well as its tonnage.

2.36 In order to provide the Indian shipping industry a level playing field and make it competitive at international level, the government implemented certain policies as mentioned below:

(i) Infrastructure status for shipyards

The Institutional Mechanism Infrastructure has on December 21, 2015 recommended inclusion of shipyards undertaking shipbuilding and ship-repair under the Harmonized List of Infrastructure sectors.

(ii) Financial assistance and eligibility support for Indian shipyards

Government has on December 9, 2015 approved Financial Assistance Policy for Indian shipyards for ten years commencing from April 1, 2016. Government has also approved that all government departments or agencies including CPSUs have to provide Right of First Refusal to Indian shipyards while procuring or repairing vessels.

(iii) Parity between indigenously built ships and imported ships

Government has on November 24, 2015 exempted Customs and Central Excise duty on inputs used in manufacture of ships to provide a level playing field between indigenously built ships vis-à-vis imported ships.

(iv) Ease of Doing Business for Indian shipyards

Government has on November 24, 2015 relaxed the limitation to operate shipyards under customs control under Section 65 of the Customs Act, 1962 to avail duty free imports or domestic procurement of inputs used in shipbuilding.

(v) Boost to movement of containerized cargo through coastal route

Government has on September 17, 2015, exempted Customs and Central Excise duty leviable on bunker fuels, namely IFO 180 CST and IFO 380 CST, used in Indian flag vessels carrying a mix of EXIM, empty and domestic containers between two ports in India. This tax incentive will reduce operational costs of coastal transportation and will encourage growth of Indian tonnage as well as promote development of transshipment hub in India.

(vi) Boost to availability of special vessels in Indian market

In order to promote Coastal Shipping, Inland Water transportation and decongesting roads and railways Government has, on September 2, 2015, relaxed cabotage for special vessels such as Roll-On Roll-Off (Ro-Ro), Hybrid Roll-On Roll-Off (Hybrid Ro-Ro), Roll-On Roll-Off cum Passenger (Ro-Pax), Pure Car Carriers, Pure Car and Truck Carriers, LNG vessels and Over-Dimensional cargo or Project Cargo Carriers for a period of five years.

(vii) Parity for Indian seafarers employed on Indian flag ships vis-à-vis those employed on foreign flag ships

Government has, on August 17, 2015, brought parity in the tax regime of Indian seafarers employed on Indian flag ships vis-à-vis those on foreign flag ships and mandated that the period of stay in India shall be counted as per the entries made in his/her Continuous Discharge Certificate (CDC).This would benefit around 35,000

seafarers presently employed on Indian flag ships. This would not only change the perception of Indian seafarers with regard to serving on Indian ships, but would also reduce the additional cost burden on Indian companies and help retain quality officers.

(viii) Simplification in collection and assessment of light dues

E-payment of light dues was put in place on May 5, 2015. For the collection of light dues, a simplified mechanism has already been adopted on November 26, 2014 for container ships whereby collections shall be made on TEU (Twenty feet Equivalent Unit) basis instead of net tonnage basis. This would facilitate faster clearance of ships and reduce detention time of vessels for payment of light dues.

(ix) Right of First Refusal (RoFR) for Indian flag vessels and Indian dredgers.

Keeping in view of the Government's policy of strengthening and promoting the Indian shipping and dredging industry in a competitive framework, Government has, on March 26, 2015, extended the ambit of the Right of First Refusal (RoFR) for Indian flag vessels by removing the earlier 10% price band cap with respect to L1 for operation in coastal waters. Similar benefit has been extended to Indian dredgers for undertaking dredging works in non-major ports. This would help Indian flag vessels as well as dredgers to get more business.

(x) Reduction of service tax incidence on coastal shipping

Realizing the need for encouraging transportation of goods through coastal shipping rather than road or rail, the Government has, in the Union Budget 2015-2016, brought the abatement of service tax on coastal shipping at par with road and rail i.e. 70%. With this change, only 30% of the value of the service for transportation of goods by vessels would be subject to levy of service tax. This initiative would reduce costs of coastal transportation for shipper and would encourage use of coastal shipping by the shippers for domestic transportation of cargo.

(xi) Simplification of procedure for registration of Ship Repair Units

As a step towards creating a climate of ease of doing ship repairing business in the country, Government has, on February 13, 2015, simplified the procedure for registration of Ship Repair Units by dispensing with the requirement for their registration with the Director General of Shipping, Mumbai with immediate effect. This would encourage establishment of more ship-repair units which would maximise employment potential.

(xii) Use of re-rolled steel obtained from ship-breaking for the purposes of ship-building

To bring down the cost of construction of barges, river sea vessels (RSV Types 1 & 2) and port and harbour crafts and to meet demand for steel by ship and barge builders, the Government has, on February 9, 2015, decided that re-rolled steel obtained from re-cycling yards/ship breaking units would be certified for use in construction of these vessels.

(xiii) Simplifying legal paradigm

13 rules out of 67 under M. S. Act, 1958 are being rescinded. The draft Merchant Shipping Bill is under circulation, consisting of 16 parts and 267 sections as against 25 parts and 581 sections of the present MS Act in vogue.

(xiv) Promotion of e-governance for permissions

- Facility for online application for chartering permission and for e-payment of requisite fee for the charterers has been introduced on December 8, 2015.
- Facility for online application for Multi-modal Transport Operator license and for e-payment of requisite fee for the operators has been introduced on November 30, 2015.
- Facility for online application and for e-payment of requisite fee for issuance of fresh CDC and renewal/replacement/duplicate CDCs has been introduced on June 15, 2015.
- Facility for online application for registration and for e-payment of requisite fee for the ship-owners has been introduced on March 20, 2015.
- Facility for online application and assessment for the Certificate of Competency examinations has been introduced on January 12, 2015.

2.37 Other initiatives that have been taken in the recent past include the following:-

(i) Ferry service between India and Myanmar

In order to accelerate the trading relations between India and Myanmar, Shipping Corporation of India has started a direct container shipping service from Chennai Port on October 3, 2014.The service has been started initially on a fortnightly basis and SCI has plans to make it weekly in future when the service becomes popular with the trade.

(ii) Simplification of fishing vessels registration procedures

Powers vested earlier in DG (Shipping) have been delegated by the Government on August 14, 2014 to State Maritime administrations to register, survey and certify Indian fishing vessels having length more than 20 metres.

(iii) Indian shipping enterprises allowed to maintain foreign flag vessels in India

Government has, on July 23, 2014, allowed shipping enterprises based in India to acquire ships abroad and also flag them in the country of their convenience. This policy initiative of “Indian Controlled Tonnage" (ICT) has facilitated Indian ship-owners to gain access to cheaper funds abroad and also save on costs of setting up subsidiaries abroad to acquire and maintain such tonnage.

(iv) Simplification of ship licensing procedures

Government has, on July 21, 2014, approved issuance of one time General trading license (GTL) to Indian ships in place of periodic licenses. The power to grant General Trading Licenses, earlier centralized in the Office of DG Shipping, has also been delegated to all Registrars of Indian Ships across the country.

(v) Tax exemption granted to boost ship repair sector

Government has, on July 11, 2014, exempted Service Tax on repair of foreign vessels in India.

(vi) Acquisition of all type of ships, through import has been brought under the Open General Licence (OGL).

(vii) To attract investment for the growth of this sector, the Government has allowed 100% Foreign Direct Investment (FDI) in the shipping sector.

(viii) With a view to provide a level playing field to the Indian shipping sector, the Government has introduced tonnage tax regime during 2004-2005 which has effectively brought down the tax liability of the shipping companies to a level comparable to the international level from the previous levels of the corporate tax regime in line with their actual carriage volumes.

(ix) The green channel scheme for extension of surveys has been made applicable to all ships below 25 years of age, irrespective of type of the ship, subject to their meeting certain conditions. Also, survey towards grant of extension and exemption from intermediate docking have now been permitted to be carried out by any Regional Office with which the vessel is classed. Both these steps will give flexibility to shipping companies in their smooth operation.

(x) To mitigate the shortage of management level shipboard officers, the Directorate General of Shipping has allowed management level officers of Indian nationality having Certificate of Competency from abroad eligible for temporarily placement on Indian flag vessels.

(xi) Indian Shipping industry has been provided cargo support in the form of Right of First Refusal (RoFR) and policy of Free On Board (FOB) import is being followed for government owned / controlled cargoes.

COASTAL SHIPPING

2.38 The share of Coastal Shipping in domestic cargo movement is around 7% including just 0.5% through Inland Waterways. The contiguous coastline of India covers 5400 kms and 2100 kms of shores on more than 1190 islands. Therefore, there is huge potential for coastal shipping in India. Coastal shipping is best suited for bulk cargo. Coastal transportation at present is regulated through a policy on cabotage enshrined in the Merchant Shipping Act, 1958. As an intermediate measure, a scheme of green channel clearance of coastal cargo and priority berthing for coastal vessels has been operationalized. Coastal vessels are exempted from lighthouses dues. 40% rebates on coastal related charges are provided to all coastal vessels at major ports.

2.39 The steps taken for development of Coastal Shipping in 2015-16 are:

(i) Bunker fuels - Government has removed customs and excise duty on bunker fuel used in Indian flag vessels for transportation of mix of EXIM, empty and domestic containers between two ports in India.

(ii) In order to increase the share of coastal shipping and Inland water transportation to 10% by 2019-20 and to promote cruise tourism leading to development of coastal regions, the Ministry of Shipping has prepared a vision for 'Coastal Shipping, Tourism and Regional Development' in consultation with stakeholders along with an action plan to achieve the objectives. The key elements of the Vision are to increase share of coastal/IWT mode from 7 to 10% by 2019-20; development of coastal shipping as end to end supply

chain; integration of IWT and coastal routes; development of regional centres to generate cargo for coastal traffic; development of domestic cruise industry and promotion of lighthouse tourism.

(iii) Tariff Authority for Major Ports has phased out wharfage charges on Ad-Valorem basis from the Scale of Rates in Cochin Port, Jawaharlal Nehru Port, Mormugao Port, Kolkata Port, Paradip Port and levied wharfage charges on per unit basis for transportation of automobile cargo through coastal RO-RO vessels. Chennai Port, Kandla Port, Mumbai Port and V.O. Chidambaranar Port have also been advised by TAMP for prescription of wharfage charges on per unit basis.

Inland Water Transport

2.40 Various projects for development and maintenance of National Waterways 1, 2, 3, 4 & 5 (The Ganga river, the Brahmaputra river, the West Coast Canal, Krishna – Godavari rivers alongwith canal system between Kakinada and Puducherry and Brahmani river - East Coast Canal, Matai river and Mahanadi delta rivers) were implemented by Inland Waterways Authority of India (IWAI) for providing / upgrading / maintaining Inland Water Transport (IWT) infrastructure as per requirement.

2.41 Transportation of imported coal from Sandheads in Bay of Bengal to Farakka power plant of NTPC started in October 2013 is going on. A similar project for NTPC's power plant at Barh is being pursued for finalization.

2.42 Implementation of Jal Marg Vikas Project for capacity augmentation on NW-1 from Haldia to Allahabad (1620 km) has commenced with estimated cost of Rs. 4200 crore with 50% loan assistance from World Bank. Consultants for technical feasibility / detailed engineering; environmental and social aspects of the proposed project and resultant traffic potential on account of proposed developmental work progress have been appointed and their respective studies / works are progressing as per stipulated timelines.

2.43 The National Waterways Bill, 2016 for declaration of 106 new waterways as 'National Waterways' has been passed by both the Houses of Parliament.

2.44 International Finance Corporation (IFC), an arm of World Bank has been appointed as consultant to identify & develop IWT terminals on PPP mode.

2.45 Capital dredging in NW – 3 was completed due to which a navigation channel with 2.0 m depth is now available in the entire 205 km length of the waterway.

CHARTERING

2.46 The Baltic Dry Index (BDI) opened the year at 771 on 2nd January, 2015 as against 2113 on 2nd January, 2014. Due to slow down in shipping sector BDI dropped by 34% and arrived at a level of 509 on 18th February, 2015. Thereafter, during the year, it improved slowly and reached to the highest level of 1222 on 5th August, 2015. This improvement, however was short-lived and BDI started its down-trend journey and declined to an all time low level of 471 on 16th December, 2015.

2.47 The Baltic Dirty Tanker Index (BDTI) opened the year at 885 on 2nd January, 2015 as against 1021 on 2nd January, 2014. Thereafter, with slight fluctuations, BDTI moved up slowly and reached to the highest level during the year at 1088 on 23rd June, 2015 and came down to a level of 869 on 24 December, 2015.

2.48 A total number of 231 shipping arrangements were made by the Chartering Wing during the period from 1st January, 2015 to 31st December, 2015 for shipment of total quantity of approx. 173.33 lakh MT of cargoes on Government's account. Out of 231 ships chartered, 109 were Indian ships which carried approx. 59.48 lakh MT i.e. approx. 51.62% of the total quantity. The cargoes for which shipping arrangements were made during the year included crude oil, coking coal, fertilizer, fertilizer raw material, lime stone and iron ore etc. besides project/container/break bulk cargoes.

2.49 Shipping coverage was provided at competitive freight rates and as per the requirement of indenting departments. While making shipping arrangements, efforts were made for maximum utilization of available/ suitable Indian tonnage.

2.50 The Cabinet has since decided to decentralize chartering services. All Ministries/ Departments/PSUs were informed about the decision on 8th September, 2015 so as to organize their own chartering arrangements as the services of Chartering Wing of the Ministry of Shipping were available during transition period only until 31st December, 2015. Accordingly, Chartering Services provided by Shipping Ministry now cease to exist. The importing Government Department/PSUs are now free to make their own shipping arrangements without the need to route their requirement through Chartering Wing of Ministry of Shipping.

SWACHH BHARAT ABHIYAN

Activities carried out by Main Secretariat

2.51 During the special Swachhata Abhiyans all the rooms under the Ministry were cleaned and unused and obsolete items were removed. Necessary repair and white washing has been done and Toilets have been put under strict supervision by the officers for regular monitoring on their cleanliness. For regular monitoring and ensuring of the cleanness, five officers at the level of Under Secretary have been assigned specific room/sections in the Ministry. A condemned motor cycle, a car and unusable furniture, electrical and electronics items have been disposed off by auction. 4621 files were recorded and transferred to the Departmental Record Room and 10446 files/ records were destroyed.

Activities carried out by Organizations under this Ministry

2.52 All the Organizations/Offices under the Ministry got their premises cleaned, unused and obsolete items were removed. Necessary repair and white washing of the corridors of the premises of Organisations was done. Office premises of the Organisations were regularly washed with phenyl. All toilets were regularly cleaned. Substantial amount allocated towards construction and maintenance of school toilets, community and public toilets, maintenance of parks and gardens, provisions of safe drinking water, cleaning and maintenance of roads and drains and recycling of waste water through STP. Organisations/Offices had cleaned areas outside their premises like garden in front of hospitals, post offices, roads in front of hospitals, garden and removed garbage and vegetation in the vicinity of their premises. Organisations/Offices have disposed off old condemned vehicles by inviting open tenders. All the unusable furniture, electrical and electronic items have been disposed off. All the records were reviewed by the Organisations/Offices and unwanted records/files were weeded out as per record retention scheduled.

Evacuation from Yemen

2.53 During the recent operation launched by the Govt. of India to evacuate Indian nationals from strife-torn Yemen, two Indian flag merchant vessels 'Kavaratti' and 'Corals' belonging to Lakshadweep Administration had been deployed at Djibouti to assist the said official mission. These two vessels on their return voyage from Djibouti to India w.e.f. the early hours of 12.04.2015 have brought back 157 & 318 passengers, respectively. While 'Kavaratti' evacuated 27 Indians, 65 Bangladeshi and 65 Yemeni nationals, 'Corals' evacuated 46 Indians and 272 Bangladeshi nationals. All these passengers, after following all procedural formalities, disembarked at Kochi on 18.04.2015 and proceeded for onward destinations. The entire operation was closely coordinated by the Ministry of Shipping along with Directorate General of Shipping, Shipping Corporation of India and Cochin Port Trust.

Impact of evacuation operation

2.54 The timely and sustained rescue efforts taken to evacuate the Indian nationals trapped in Yemen was highly appreciated especially because of the strife-torn and hostile conditions prevailing in Yemen.

CHAPTER-III

PORTS

INTRODUCTION

3.1 Ports provide an interface between the ocean transport and land-based transport. There are 12 Major Ports in India out of which 6 are located on the East Coast and 6 on the West Coast.

KOLKATA PORT

3.2 Kolkata Port is the only riverine major port in India having an existence of about 138 years. It has a vast hinterland comprising the entire Eastern India including West Bengal, Bihar, Jharkhand, UP, MP, Assam, North East Hill States and the two landlocked neighboring countries namely, Nepal and Bhutan. The port has twin dock systems viz. Kolkata Dock System (KDS) on the eastern bank and Haldia

MAJOR PORTS IN INDIA

Dock Complex (HDC) on the western bank of river Hooghly.

3.3 Kolkata Port handled 37.304 Million Tonnes (MT) traffic in 2015-16 (upto December, 2015). KDS handled traffic of 12.396 MT and HDC handled 24.908 MT. The port has 51 berths (KDS – 34 and HDC – 17) handling various types of cargos including containers with a capacity of 75.36MTs. Important projects awarded by the port during the year (upto December, 2015) include grant of permission for setting up Floating Storage & Regasification unit/Floating Storage Unit, Setting up of Floating Riverine Barge Jetty with connecting road to the storage area and Supply, Operation & Maintenance of different cargo handling equipment at berth nos. 2 & 8 of HDC under PPP/allied mode. Projects completed during the year (upto December, 2015) include Floating Pipeline Handling facility for unloading Edible Oil at HDC, setting up of Riverine Barge Jetty for handling Fly Ash, Integrated Container Handling at Berth No. 10 & 11 of HDC under PPP /allied mode, Installation of VTMS as a scientific aid to navigation for safer pilotage of the vessels in the Hugli Estuary on a turnkey basis at KoPT and Procurement of 1 Stacker-cum-reclaimed for Coal Handling Plant at HDC. M/s. Bharat Kolkata Container Terminals Pvt. Ltd., a wholly owned unit of PSA International has commenced container handling operations at KDS from December, 2015. Bio-Diesel dispensing unit has been installed at HDC and the bio-diesel is being used by all the equipments/vehicles operated at HDC by port and port users as per Government guidelines. Use of Eco-friendly Biodiesel will reduce greenhouse emission levels and offer operational benefits through increased fuel lubricity.

PARADIP PORT

3.4 Paradip Port Trust (PPT) was decided as the eighth Major Port in India on 18th April, 1966, making it the first Major Port in the East Coast commissioned in independent India. Paradip Port is situated 210 nautical miles south of Kolkata and 260 nautical miles north of Visakhapatnam.

3.5 The Port handled traffic of 55.13 Million Tonnes (MT) during the year 2015-16 (upto December, 2015). The port has 18 berths/jetties(including SPM, Ro-Ro Jetty) for handling different types of cargoes with a capacity of 108.50 MT. Important Projects relating to Capital dredging works for the BOT deep draught Iron Ore Berth, Coal Berth and Multipurpose Clean Cargo Berth and supply installation and commissioning of 4 nos. of HMC were awarded. Projects relating to "Capital dredging for enhancement of draught in the existing Dock system (from 12.5 to 14.5 metres)" and "Capital dredging work for the South Oil Jetty" were completed during the year. 2 Nos. of HMC were installed and commissioned. Important project relating to Mechanization of EQ1 to EQ3 berths at Paradip Port on BOT basis and Supply installation, Commissioning operation and maintenance and RFID system at Paradip Port have also been taken up.

NEW MANGALORE PORT

3.6 New Mangalore Port was declared as the ninth Major Port on 4th May 1974 and was formally inaugurated on 11th January 1975. Over the years, the Port has grown from the level of handling less than a lakh tonnes of cargo to 36.57 million tonnes handled during the year 2014-2015. During the year 2015-16 the port has handled a traffic of 25.29 million tonnes (upto December, 2015). The major commodities imported through the port are POL, crude oil for Mangalore Refinery and Petrochemicals Limited (MRPL), coal, iron ore fines, LPG, fertilizer, edible oil, limestone, wooden logs, cement, liquid chemicals, containerized cargo etc. and the major export

cargo are POL products, iron ore pellets, granite stone, maize, wheat, containerized cargo like coffee, cashew kernels, etc.

3.7 The port has 16 berths and 1 Single Point Mooring (SPM) with a total capacity of 77.77 MTPA. The Port had taken up the work of mechanization of Berth no. 12 for providing equipment for handling bulk cargoes through PPP on Design, Build, Finance, Operate and Transfer (DBFOT) model basis for a capacity of 6.73 MTPA. The estimated cost of the project is Rs. 469.46 crore. The ONGC MRPL has proposed to develop LNG Terminal in NMPT for which MoU was signed between ONGC-MRPL and NMPT on 17.10.2015. The Port has been awarded the 16th Annual Greentech Environmental-2015 award in the 'Gold Category' for the Port Sector 2015 for its steps in conserving environment.

COCHIN PORT

3.8 The modern Port of Cochin was developed during the period 1920-1940 due to the untiring efforts of Sir Robert Bristow. The port of Cochin is located on the Willington Island at Latitude 9'93" North and 76'27' East on the South-West coast of India about 930 KM south of Mumbai and 320 KM North of Kanyakumari. With its strategic location on the South-West Coast of India and at a commanding position at the cross roads of the East-West Ocean trade, the port is a natural gateway to the vast industrial and agricultural produce markets of the South-West India. The hinterland of the Port includes the whole of Kerala and parts of Tamil Nadu and Karnataka . A study carried out on the traffic flow in the hinterland of the Port indicates that about 97% of the total volume of traffic is accounted for by Kerala. Cochin with its proximity to the international sea route between Europe and the Far East and Australia can attract a large number of container lines offering immense business opportunities.

3.9 Cochin Port has 19 berths plus a single buoy mooring and a capacity of 49.66 MTPA. The port handled 16.49 million tonnes of traffic during 2015-16 (upto December, 2015). The cargo handled by the port includes break bulk, container, dry bulk, liquid bulk. The container handling grew to 3.06 lakh TEUs (Upto December, 2015) as against 2.80 lakhs TEUs during the corresponding period of the preceding year (2014-15). Important projects awarded during the year are construction of Multi-User Liquid Terminal (MULT) at Puthuvypeen SEZ, Refurbishment and Capacity Enhancement of Coastal Liquid Terminal and Standardisation of Electrical power supply distribution network at Willington Island-Phase IV (upto December, 2015). A new container service by a consortium of 4 major shipping lines viz. RCL, Hanjin, Emirates and KMTC has commenced to call at Cochin. The service named "GALEX" connects Cochin with Dubai and China and is operating weekly. Under the service a 14.5 m draft vessel berthed at ICTT for the first time since commissioning during July, 2015.

JAWAHARLAL NEHRU PORT

3.10 Constructed in the mid 1980's and commissioned on 26th May, 1989, Jawaharlal Nehru Port has come a long way by becoming a world-class international container handling port. It is situated in between 18 56'43" North and 72 56'24" East along the eastern shore of Mumbai harbour off Elephanta Island.

3.11 Jawaharlal Nehru Port is an all-weather tidal Port having 12 berths with a capacity of 71.17 MTPA. The port handled a traffic of 48.23 MT during 2015-16 (upto December, 2015) of which containerized cargo account for 42.63 MT. The Port has undertaken a mega project of 6/8 laning to the existing road infrastructure of the Port roads leading to National/State Highways. In case of the Container Terminals, NSICT operated by DP word has completed the RFID based Gate Automation from 3rd December,

2015. Another Container Terminal; APMT is in the process of implementing it in phases and is likely to complete the work before March, 2016. JN Port operated Container Terminal JNPCT is also in the process of implementation of RFID based gate automation system.

MUMBAI PORT

3.12 Mumbai Port is a fully integrated multi-purpose Port handling container, dry bulk, liquid bulk and break bulk cargo. The port has extensive wet and dry dock facilities to meet the normal needs of ships using the port. There are three enclosed wet docks namely, Prince's, Victoria and Indira Docks, having a total area of 46.30 hectares and quay age of 7,776 meters inside the wet basin and 853 meters along the harbour wall. The Prince's and Victoria Dock basins are now being filled up and will be used as Container Storage Yard under the Offshore Container Terminal Project.

3.13 There are 4 berths at Jawahar Dweep, to handle crude and POL tankers and an offshore berth at Pir Pau to handle liquid chemical and some of the POL traffic. Fourth berth at Jawahar Dweep which was commissioned in 1984, can handle tankers with a maximum loaded draft of 12.20 meters and upto 1,25,000 displacement tonnes. Two berths can receive tankers upto 70,000 displacement tonnes. The New Pir Pau Jetty commissioned in December 1996 can handle tankers of 47,000 DWT with a maximum loaded draft of 11.1 meters. Container Freight Stations have been set-up at Manganese Ore Depot and Timber Pond. Rail Container Depot has been developed at Cotton Depot as well as inside the Docks to International Container Depot (ICD) traffic.

3.14 The port has 31 berths with a total capacity of 50.25 million tonnes. The port handled a traffic of 46.40 million tonnes during 2015-16 (upto December, 2015). The major cargo commodity handled is POL (58.34% of the total traffic). Important projects awarded during the year include Development of Bunkering Terminal, Renewal Energy Project and Supply and installation of Quick Release Hooks at Jetty no. 1 at MOT- Jawahar Dweep and First Chemical Berth at Pir Pau. Project relating to 'construction of second berth for handling liquid chemicals/specialised grades of POL off New Pir Pau Pier' is completed. Project taken up for implementation include construction of two off shore berths for handling containers at Mumbai Port, construction of 5th oil berth, improvement of rail & road infrastructure, Floating Storage Re-gasification Unit (FSRU) in Mumbai Harbour, construction of Ro-Ro Pax facility etc.

KAMARAJAR PORT LIMITED (ENNORE)

3.15 Kamarajar Port Limited (KPL), the 12th major port under the Ministry of Shipping was commissioned in 2001, primarily as a Coal Port dedicated to handling Thermal Coal requirements of Tamil Nadu Electricity Board (TNEB). KPL has the distinction of being the only corporate port amongst the Major Ports administered by the Central Government.

3.16 The port has 6 berths with a total capacity of 30 MT. The port handled a traffic of 22.97 MT during 2015-16 (upto December, 2015) which includes Coal, POL, and other cargo. Important projects relating to ' Capital Dredging Phase-III' and 'Construction of Coal Berth 4 for TANFEDCO' have been awarded during the year. Besides, projects relating to installation of 2 nos of shore based un-loaders in Coal berth-2, VTMS , Deepening of CICTPL, Coal Berth-1 , Coal Berth-2 and its approaches and Development of Additional Car Parking Yard have been completed during the year.

3.17 The port has been given "Excellent" grading for the last six year years for meeting the MoU parameters by Department of Public Enterprises, Government of India.

CHENNAI PORT

3.18 Chennai Port is an all weather artificial harbour with one Outer Harbour and one Inner Harbour with a wet Dock and a Boat Basin with round the clock navigation facilities. The Port was established in 1875 located at 13.08^{0}′ N latitude and 80.28^{0}′ E-longitudes on the Bay of Bengal.

3.19 Chennai Port has 24 berths with a total capacity of 91.04 MTPA. The port handled a cargo of 37.42 MT during the year 2015-16 (upto December, 2015). The cargo handled comprises (container – 22.57 MT, POL – 8.68 MT, Fertiliser – 0.24 MT and others – 5.93 MT). Projects relating to construction of coastal berth and installation of 0.1MW Solar power plant on roof top of building has been awarded during the year. Supply, Operation and maintenance of 100 T capacity, 2 Nos. Mobile Harbour Cranes on revenue share basis has been made operational by the Port during the year. A number of projects have been taken up by the port for implementation during the year. These are:

a) Development of Marine Highway along East coast connecting Chennai and Kamarajar (Ennore) Ports.

b) Project relating to ERP in the Port Trust

c) Construction of EXIM Godown- 2 nos for storage of export and import cargo alongwith allied structures.

d) Construction of Coastal Road Protection Work.

MORMUGAO PORT

3.20 Mormugao Port, situated on the west coast of India, is more than a century old port. It has modern infrastructure capable of handling a wide variety of cargo. It is a natural harbour protected by a breakwater and also by a mole. The Port has excellent infrastructure and a conducive work culture. A deep draft channel with 14.4 mtrs.depth permits large vessels to enter the harbour.

3.21 Mormugao port has 7 berths plus trans-shipment with a total capacity of 46.15 MT. The port handled a traffic of 13.89 MT during the year (upto December, 2015). Projects relating to balance 5.2 km stretch as part of 4 lane Port Connectivity Road NH-17 B from Verna Junction to Varunapuri junction and Capital dredging of the approach channel, turning circle, Berths 5,6,7 & approaches for capsize vessels at Mormugao Port were awarded during the year. Project relating to Development of area behind T2 shed for storage of cargo including improvement of drainage was completed during the year. Project relating to redevelopment of berths 8,9 and barge berths was also taken up for implementation.

V.O. CHIDAMBARANAR PORT (TUTICORIN)

3.22 V.O. Chidambaranar Port is located strategically close to the East- West International sea routes on the South Eastern coast of India at latitude 80 45'N and longitude 780 13'E. located in the Gulf of Mannar, with Sri Lanka on the South East and the large land mass of India on the West.

3.23 The Port has 14 berths with a total capacity of 44.55 MTPA. It handled a traffic of 27.80 MT during the year 2015-16 (upto December, 2015). Work of "Mechanization of Evacuation at Berth No. 9 to coal yard" was awarded. Projects relating to Dredging of dock basin in front of NCB-II and 2 Nos of Shallow Draught Berths" , " Development of road facilities for cargo evacuation from Hare island", Widening and strengthening of South Breakwater Approach Arm Road" and " Widening and resurfacing of VOC Road from TTPSRoundana to Green Gate" were completed

during the year. The Port has also taken up a number of projects for implementation during the year these are:

a. Construction of Shallow Draught Berth for handling cement and related materials on DBFOT basis

b. Construction of Shallow Draught Berth for handling Construction Materials on DBFOT basis

c. North Cargo Berth – III for handling Thermal Coal and Rock Phosphate on DBFOT basis

d. North Cargo Berth- IV for handling Thermal Coal and Copper Concentrate on DBFOT basis

e. Dedicated Coastal Cargo Berth

KANDLA PORT

3.24 Kandla Port was established in the year 1950 as a Central Government Project and Union Government took over Kandla for its development as a Major Port.

3.25 Kandla Port has 30 berths including oil jetties & dry cargo berths and an off-shore terminal at Vadinar with a capacity of 115.96 MTPA. The port handled 73.87 MT of traffic during 2015-16 (upto December, 2015). Important projects awarded/completed/taken up for implementation during the year (as on December, 2015) include construction of oil jetty no. 7, upgradation, maintenance and operation of existing Barge jetty at Tuna, on BOT basis under PPP Model, Development of Maritime Liquid Terminal facilities consisting of SPM & Two product jetties in KPT waters at OOT Vadinar, on Captive Use Basis, Development of Oil Jetty to Handle Liquid Cargo and Ship Bunkering Terminal at Old Kandla.

3.26 The port received the "Samundra Manthan Award" for the Best Major Port of the year 2015.

VISAKHAPATNAM PORT

3.27 Port of Visakhapatnam, a natural harbour, was opened to commercial shipping on 7th October, 1933. The Visakhapatnam Port is the only Indian Port possessing three international accreditations viz. ISO 14001; 2004 (EMS)/ OHSAS 18001 and ISO 90001:2000 (QMS). The Port has mechanized handling facilities for iron ore, iron pellets, alumina, fertilizer raw material, crude oil & POL products, liquid ammonia, Phosphoric acid, edible oil, caustic soda and other liquid cargoes.

3.28 Visakhapatnam Port has 24 berths with a total capacity of 93.83 MTPA. The port handled traffic of 42.25MMT during the year 2015-16 (upto December, 2015). The projects relating to " Development of west Quay- North (WQ 7 & 8 in inner habour", "Installation of two HMCs at EQ 5 & 6" and "Development of 10 MW solar power" have been awarded during the year. The Projects relating to Construction of Green channel coastal berth, Development of WQ-6 berth in Inner Harbour for handling multipurpose cargo on DBFOT, Development of EQ- 10 berth in Inner Harbour for handling Liquid Cargoes and chemicals on DBFOT and Ph-III dredging in the inner harbour and turning circle and channel to (-) 16.10 m dredging depth have been completed during the year. Other projects taken up by the Port for implementation during the year are:

a. Replacement of existing quay berths (EQ 2,3,4,5) to cater to 14.5 mtrs draft vessels

b. Development of Port Connectivity Road (PCR) Phase-II under Sagarmala

c. Replacement of two harbour mobile cranes on license basis.

PERFORMANCE OF MAJOR PORTS

3.29 Traffic handled at Major Ports:

(In million tonnes)

Table 5

S. No.	Port	Actual 2014-15	Provisional 2015-16 (upto December, 2015)
1	Kolkata	15.28	12.40
2	Haldia	31.01	24.91
3	Paradip	71.01	55.13
4	Visakhapatnam	58.00	42.24
5	Chennai	52.54	37.42
6	V.O. Chidambaranar	32.41	27.81
7	Cochin	21.60	16.49
8	New Mangalore	36.57	25.29
9	Mormugao	14.71	13.90
10	Jawaharlal Nehru	63.80	48.23
11	Mumbai	61.66	46.40
12	Kandla	92.50	73.87
13	Kamarajar (Ennore)	30.25	22.96
	Total	**581.34**	**447.05**

3.30 Cargo Handled at Major Ports

(In Million tonnes)

Table 6

S. No.	Commodity	Actual 2014-15	Provisional 2015-16 (upto December, 2015)
1	POL	188.77	144.28
2	Iron Ore	17.91	7.86
3	Fert. Raw Materials	16.20	13.18
4	Coal	117.86	95.12
5	Containerised Cargo	119.44	91.20
6	Others	121.16	95.41
	Total	**581.34**	**447.05**

3.31 The details of important performance indicators of the Ports are given below:

(i) Average Pre-Berthing detention and Average Turn Round time

Table 7					
S. No	Port	Average Pre-Berthing Detention-on Port/ Account (Hours)		Average Turn round Time/ (Days)	
		2014-15	2015-16 (upto December, 2015 (*)	2014-15	2015-16 (upto December, 2015 (*)
1	Kolkata	0.14	0.23	2.58	2.55
2	Haldia	11.84	3.74	2.59	2.42
3	Paradip	0.88	0.98	2.25	2.03
4	Visakhapatnam	1.89	1.17	2.48	2.02
5	Chennai	0.81	0.00	1.63	1.62
6	V.O.Chidambaranar	3.84	8.16	2.54	2.37
7	Cochin	1.84	1.89	1.12	2.22
8	New Mangalore	0.96	1.11	1.70	1.62
9	Mormugao	6.00	4.97	2.34	2.00
10	Jawaharlal Nehru	9.50	10.08	1.68	1.64
11	Mumbai	7.10	8.60	2.98	3.00
12	Kandla	9.60	4.08	2.53	2.24
13	Kamarajar (Ennore)	0.03	0.04	0.08	1.80

(*) Provisional

(ii) Average Output per Ship Berth Day

(In Million Tonnes)

Table 8			
S. No.	Port	Average Output Per Ship Berth Day	
		2014-15	2015-16 (upto December, 2015(*)
1	Kolkata	3840	4126
2	Haldia	6802	6650
3	Paradip	17736	19856
4	Visakhapatnam	10638	12367
5	Chennai	15444	15562
6	V.O.Chidambaranar	10147	10058
7	Cochin	16770	14925
8	New Mangalore	17200	16090
9	Mormugao	11332	13753
10	Jawaharlal Nehru	24411	21209
11	Mumbai	7619	7680
12	Kandla	16457	16227
13	Kamarajar (Ennore)	30004	30367
	Total (All Ports)	**12458**	**12614**

(*)Provisional

MAJOR DEVELOPMENTS IN PORTS

3.31 Capacity at Major Ports

(In Million tonnes)

Table 9

S. No.	Year	Port capacity	Traffic Handled
1	2001-02	343.95	287.58
2	2002-03	362.75	313.55
3	2003-04	389.50	344.80
4	2004-05	397.50	383.75
5	2005-06	456.20	423.41
6	2006-07	504.75	463.78
7	2007-08	532.07	519.31
8	2008-09	574.77	530.53
9	2009-10	616.73	561.09
10	2010-11	670.13	570.03
11	2011-12	689.83	560.14
12	2012-13	744.91	545.68
13	2013-14	800.52	555.50
14	2014-15	871.52	581.34
15	2015-16(upto December, 2015 (*)	892.92	447.05

(*)Provisional

OTHER PORT RELATED ORGANIZATIONS

3.32 Besides these Major Ports, there are some organisations under the Ministry which are entrusted with port-related matters.

TARIFF AUTHORITY FOR MAJOR PORTS

3.33 The Tariff Authority for Major Ports (TAMP) was created in 1997 by an amendment to the Major Port Trusts Act, 1963 and was constituted by the Government of India through a Gazette Notification on 10th April, 1997. The regulatory jurisdiction of the Authority extends to all major port trusts and private terminals operating therein. The Authority is statutorily empowered to fix rates for services rendered by the Major Port Trusts and Private Terminals thereat as well as charges for use of port properties. It is mandatory not only to notify the rates but also the conditionalities governing application of the rates. The Authority consists of a Chairman who is of the rank of the Secretary to the Government of India, one Member from amongst economists and one Member with experience in Finance. The Headquarter of Tariff Authority for Major Ports is located at Mumbai. At present, the sanctioned strength of officers and staff of this Authority is 36. Tariff Authority for Major Ports is an ISO 9001:2008 and ISO 27000:2013 certified organization.

3.34 The Tariff Authority for Major Ports has disposed of 797 tariff cases since its inception. During April 2015 to 31st December, 2015, the Authority disposed of 26 tariff cases.

ANDAMAN LAKSHADWEEP HARBOUR WORKS

3.35 Andaman Lakshadweep Harbour Works (ALHW) a sub –ordinate office under Ministry of Shipping was established during 1965 for the service of A& N islands and Lakshadweep Islands.

The ALHW is entrusted with the responsibilities of formulating and implementing the programme of Ministry of Shipping for providing Port and Harbour facilities in Andaman & Nicobar and Lakshadweep Islands. From its inception, ALHW has been implementing the Port development schemes from the funds provided by Ministry of Shipping under Central Sector Plan schemes starting from the Third Five Year Plan onwards. Apart from the creation of Port infrastructures, ALHW is also entrusted with maintenance of Port structures & Cargo Handling equipments under the funds provided by Andaman & Nicobar Administration and Lakshadweep Administration. The following facilities have been established.

a) Sheltered harbours with breakwater at Rangat in Middle Andaman, Hut Bay in Little Andaman, Campbell Bay in Great Nicobar and Mus in CarNicobar of A&N Islands .

b) Wharves for Mainland ships at Haddo berth no.1 to 4, Chatham, Hope Town, Mayabunder, Hutbay& Campbell Bay (in A&N Islands), Androth, Kalpeni, Minicoy, Kavaratti,Amini & Agathi in Lakshadweep Island i.e. 09 Nos of wharves in A&N Island and 06 Nos in Lakshadweep Islands

c) Jetties for Inter island ships at Rangat, Diglipur, Havelock, Little Andaman, Mus, Kamorta, Campbell Bay & Port Blair (in A&N Islands) (ie. 15 nos in A&N Islands)

d) 49 Nos. of Ferry Jetties /Vehicle Ferry jetties have been constructed in A&N Islands and similarly in Lakshadweep Islands, 15 Nos. of jetties have been constructed to cater to low draught vessels.

e) Ship repair facilities such as Dry Dock in Port Blair, Slipways at Port Blair, Mayabunder and Little Andaman

YEAR AT A GLANCE

3.36 A total of Rs. 30.38 crore was allocated under the Budget Estimate for the financial year 2015-16, which was enhanced to Rs. 50.96 crore at the RE stage.

3.37 The following Projects have been completed by ALHW during 2015-16 :

Table 10

Sl. No.	Name of Project	Cost (Rs. in Crore)	Approach Length x Breadth in mtr	Berthing Length x Breadth in mtr	Depth alongside
1	Construction of Marine Hard cum jetty at Chowra.	Rs. 14.98	119.00 x 5.50	50.50 x 14.50	5 to 6 m
2	Construction of jetty at Bengali village at Teressa in Nancowrie group of island.	Rs. 23.60	300.00 x 5.00	50.00 x 15.00	5 to 6 m
3	Construction of RCC jetty for inter-island vessels at Katchal.	Rs. 38.20	188.00 x 9.00	122.60 x 16.10	5 to 6 m
4	Extension of RCC berthing jetty at Havelock.	Rs. 11.56	60.00 x 4.00	184.00 x 20.00	5 to 6 m
5	Re-construction of Berthing head and extension of jetty approach at strait island in South Andaman.	Rs. 5.77	30.00 x 4.00	20.00 x 10.00	5 m

3.38 The following works under Central Sector are in progress.

a) Replenishing of damaged Breakwater and approach to wharf at Hut Bay.

b) Construction of Sea wall / Shore protection at Campbell Bay

c) Acquisition of 2 Nos, Tug.

d) Replacement & up-gradation of Cargo Handling equipment at various ports in A & N Island.

3.39 The New projects sanctioned by Ministry of Shipping during 2015-16 are given below:

a) Extension of wharf 60 m at Hope Town in South Andaman.

b) Construction of Additional approach jetty, berthing jetty and dredging in front of jetty Neil Island in Andaman & Nicobar Island.

3.40 The detail of works being undertaken by ALHW during the year for various Departments on behalf of A & N Administration are as follows:-

i) Works under MPLAD Scheme.

ii) Works for PMB under State Sector.

iii) Works for DSS under State Sector.

iv) Works for Electricity Department.

v) Works for Forest Department.

vi) Works for Tourism Department

vii) Construction of Fish Landing Centres in A & N Islands

3.41 Further, 56 Projects have been envisaged under Perspective Plan on Ports & Shipping in A & N Islands (2015-2030) for around Rs. 4000 crore.

DREDGING CORPORATION OF INDIA

3.42 Dredging Corporation of India Ltd. (DCIL) was formed in 1976 to provide integrated dredging and related marine services for promoting the country's national and international maritime trade, beach nourishment, reclamation, inland dredging, environmental protection and ultimately to become a global player, in the field of dredging.

3.43 Located strategically on the eastern seaboard of India at Visakhapatnam, DCI helps ensure continuous availability of the desired depths in the shipping channels of the major and minor ports, Navy, fishing harbours and other maritime organizations. It further serves the nation in a variety of ways, be it capital dredging for creation of new harbours, deepening of existing harbours or maintenance dredging for the upkeep of the required depths at various ports.

CAPACITY AUGMENTATION

3.44 In continuation of the steps taken for capacity augmentation, the company has proposals to purchase two higher capacity dredgers in 12th Plan (2012-17).The company is also planning to take up refurbishment of the existing aged Dredgers so as to enhance their life as well as their efficiency. The company is sure that with the ongoing capacity augmentation, the performance will continue to improve over the years to come.

DREDGING FLEET

3.45 The dredging fleet of the company consists of 3 Cutter Suction Dredgers, 12 Trailer Suction Hopper Dredgers and one Back Hoe Dredger apart from other ancillary crafts. The capacity utilisation during the year is 97% of the targeted capacity in quantity and 102% of the targeted capacity in number of days.

FINANCIAL PERFORMANCE

3.46 The Profit after tax of the company increased to Rs. 6240.84 lakh for the year 2014-15 as compared to Rs.3754.67 lakh for the previous year 2013-14 i.e a rise of 66%. The company's earnings per share also increased to Rs.22.29 for 2014-15 as compared to Rs. 13.41 for 2013-14.The operational income of the company is Rs.73496.05 lakh for 2014-15 as compared to Rs.77040.86 lakh for the 2013-14. The other income is Rs. 883.25 lakh as compared to Rs.229.41 lakh for the previous year. The total income for the year is Rs.74379.30 lakh as compared to Rs. 77270.27 lakh for the previous year.

DIVIDEND

3.47 Keeping in view the financial performance of the Company and other relevant considerations, the company has paid dividend at the rate of 30% on the paid up capital i.e Rs.3 per equity share of Rs.10 each amounting to Rs. 840 lakh.

MANPOWER

3.48 As on March 31, 2015, the total number of employees in DCI was 566 as against 599 as on March 31, 2014.

CALCUTTA DOCK LABOUR BOARD

3.49 Calcutta Dock Labour Board (CDLB) was constituted under Section 5(A) of the Dock Workers (Regulation of Employment) Act, 1948 and is functioning as an Autonomous Body under the Ministry of Shipping. The Board administers two Govt. of India Schemes for regulation of employment of dock workers engaged in Kolkata Dock System for handling of cargo on board the vessel. During 2015 – 16 (upto December, 2015), CDLB handled 4,39,175.5 TEUs of containers and 6,36,504 tons of break-bulk cargo. The overall average rate of productivity was 648.44 tons (approx.) per hook per shift. There was neither any loss of mandays nor any report of accident of registered dock workers. At the end of the year 2015 – 16 (upto December, 2015) there were 75 registered workers 70 office employees and 5959 pensioners. Summarized financial result of the Board for the year 2015 – 16 (Upto December, 2015) shows an overall deficit of Rs.35.64 crore (approx.) after taking provision for different arrears. Merger of CDLB with Kolkata Port Trust (KoPT) following the provisions of the Dock Workers (Regulation of Employment) (Inapplicability to Major Ports) Act, 1997 could not take place due to huge outstanding liability of CDLB.

SETHUSAMUDRAM CORPORATION LIMITED

3.50 Sethusamudram Ship Channel Project, which is being implemented through the Special Purpose Vehicle namely, Sethusamudram Corporation Limited, envisages dredging of a ship channel in the shallow portion of sea to connect the Gulf of Mannar and Bay of Bengal through Palk bay to enable the ships moving between east and west coasts of India to have a continuous navigable sea route around the peninsula within India's territorial waters.

3.51 Dredging work of the Sethusamudram Ship Channel was awarded to M/s Dredging Corporation of India, a Government of India enterprise on nomination basis. The project was inaugurated on 02.07.2005. Subsequently based on PILs filed in the Supreme Court, the dredging work in Adam's bridge was stopped on 17.09.2007. At present the project work is kept in abeyance as the matter is sub-judice in the Supreme Court of India.

CHAPTER-IV

SHIPPING

4.1. Shipping industry is one of the most globalised industries operating in a highly competitive business environment that is far more liberalized than most of the other industries and is, thus, intricately linked to the world economy and trade. Shipping plays an important role in the transport sector of India's economy especially in EXIM trade. Approximately 95% of the country's trade in terms of volume and 68% in terms of value is moved by sea.

4.2. Indian shipping tonnage which was only 1.92 lakh Gross Tonnage (GT) on the eve of Independence, now stands at 10.51 million GT with 1247 ships as on December 31, 2015.

4.3. India has been a founder member of the International Maritime Organization (IMO), a specialized agency set up under the United Nations primarily dealing with the technical aspects of shipping relating to Maritime Safety, Protection of Marine Environment, Standards of Training and related legal matters. India has been participating in various meeting of the IMO Committee, Sub-Committees, Council and Assembly and has actively contributed towards the development of various Conventions, Protocols, Code and Guidelines developed by the IMO.

4.4. To promote Indian tonnage and to save precious foreign exchange, the Cabinet

in December, 1957 had decided that in all negotiations for large contracts involving shipping arrangements by Central Government Departments, State Government Departments and Public Sector Undertakings (PSUs) under them, the Department of Transport would invariably be consulted and all such import contracts were to be finalised on FOB/FAS basis and those for exports on C&F/CIF (Cost and Freight/Cost, Insurance and freight) basis and in case of departure there from, prior permission was required to be obtained from Department of Transport on a case-to-case basis.

4.5. In the changed context of economic liberalisation and new thrust on competitiveness and performance improvement of PSUs, the Cabinet in October, 2001 decided that while the existing policy for placing import contract on FOB/FAS basis will continue, the policy was relaxed in case of exports. Government Departments/PSUs were permitted to finalise export contracts on FOB/FAS basis without seeking prior clearance from the Ministry of Shipping.

4.6. However, despite government support for import contracts being on FOB/FAS basis, while India's EXIM trade has been steadily growing at Compounded Annual Growth Rate (CAGR) of 19.46% from 1987-88 to 2013-14. The share of Indian ships in the carriage of India's EXIM trade has drastically declined from 40.7% in 1987-88 to about 9.1% in 2013-14.

4.7. Exports have come to be regarded as an engine of economic growth in the wake of liberalization and structural reforms in the economy. According to sources from Ministry of Commerce, India's exports in value terms fell by 1.22% from US$ 314.41 billion to US$ 310.57 billion in 2014-15, while imports fell by 0.48% from US$ 450.19 to US$ 448.04 billion.

4.8. Over a period of time, though the movement of traffic in terms of export and import cargoes has witnessed a growth, the capacity of Indian shipping has not kept pace with the same. Consequently, the dependence on the foreign flag ships for the carriage of overseas trade is becoming higher and higher. Continued slippages in the share of Indian shipping in the carriage of India's overseas trade is resulting in increasing dependence on foreign flag ships for the carriage of overseas trade and in turn causing a drain on precious foreign exchange in terms of payment of freight charges, which could otherwise be used for other high priority imports or for building up indigenous infrastructure. There is tremendous potential for increasing earnings/savings of Indian shipping companies by increasing the share of national shipping in India's overseas trade from the present.

4.9. According to a study conducted by the National Council of Applied Economic Research (NCAER), shipping as a single industry is one of the largest contributors to the foreign exchange pool of India and, it is expected, on the basis of the NCAER's analysis of the trade and freight data, that a 5% increase in the national shipping tonnage saves or earns an additional 17% of the freight bill. Thus the need to augment the Indian tonnage and increase the quantity of cargo carried on Indian ships, which also calls for cargo support. The emerging sectors, where there is a potential for enhancing trade (exports and imports), need to be focused upon and ways to open up sea routes on these sectors need to be considered. Some examples are the International North-South Transport Corridor(INSTC) route which would considerably shorten the distance from India to Commonwealth of Independent States (CIS) through Iranian ports; the routes to South East Asian countries which still have the scope for development like Thailand, Vietnam etc. akin to the sea routes which were opened up for Bangladesh and Myanmar (as part of Act East Policy of the Government). Keeping in view the strategic importance of a sector specific service, commencement of such services could

be considered with the help of a subsidy and assured cargo support.

4.10. During the years, India's overseas trade has expanded considerably both in terms of composition and direction due to the policy of export promotion being pursued by the Government. At the same time, efforts are being made to provide and improve the trade related infrastructure, especially the transport, to facilitate the movement of traffic more efficiently. So far as the movement of traffic by ships to overseas destinations is concerned, both Indian as well as the foreign flag ships operating consortium liner shipping services have been providing the services either directly or through transshipment arrangements for the general cargo in break-bulk or containerized form. Similarly for the bulk cargo moving either as imports or exports, the services of tramp ships both Indian and foreign usually engaged on chartering basis are available to all the destinations.

4.11. Improvement in export related infrastructure has been a consistent endeavour to promote exports. Inadequacies in seamless transport through road, rail, ports and airports are obstacles faced in the infrastructure development for promoting exports. However, it is a fact that in the transport sector, most of the funding in our country has been towards the railways and road and highways sectors. Against a total expenditure of Rs. 7.32 lakh crore for the entire transport sector (roads, railways, shipping and ports and civil aviation in the period) from the Fifth Five Year Plan till the Eleventh Five Year Plan, the expenditure in railways has been Rs. 3.77 lakh crore (i.e. around 51.33% of total expenditure in transport sector), while the expenditure in the same period on roads and highways has been Rs. 2.38 lakh crore (i.e. around 32.5% of the total expenditure in transport sector). The expenditure in the civil aviation sector has been Rs. 69,290 crore (i.e. around 9.5% of the total expenditure in transport sector). Compared to these sub-sectors, the expenditure in the shipping sector comprising of shipping, ports and inland waterways has been Rs. 47,391 crore (i.e. around 6.5% of the total expenditure in transport sector) in the same period through central government's budgetary support. While the importance of roads and railways in the economy is undeniable, there is also a greater need to encourage the maritime sector to enable it to achieve its full potential. Thus there is a strong case for supporting waterway transportation.

SHIPPING CORPORATION OF INDIA (SCI)

4.12. During the last 54 years, SCI has been providing yeoman service to the country's economy by meeting its ocean transport requirements. Starting out as a Liner shipping company with 19 vessels with a capacity of mere 0.19 million Dead Weight Tonnage (DWT) in 1961, SCI today owns 69 vessels of 5.89 million DWT and comprises 38% of the Indian tonnage. This also includes the largest vessel in the Indian fleet i.e. "Desh Vishal" of 321,000 DWT. The next immediate Indian shipping company, Great Eastern Shipping Co. (GESCO) has vessels with a capacity of nearly 2.42 million DWT.

ENERGY TRANSPORTATION

A. Crude Transportation

4.13. India has one of the world's fastest growing energy market. Energy security is of paramount importance. Looking at nation's immense energy needs for growth, SCI gradually shifted its focus from liner business to energy transportation starting with crude oil transportation in 1964. SCI ordered several crude and product tankers in 1970s to exclusively meet the needs of the Indian Oil Industry. Today SCI has a fleet of 35 crude and product tankers. SCI had four VLCCs and the fifth VLCC was delivered on 28.03.2015 from China and they are mainly employed on voyage Charter.

SUPPORT DURING OIL SHOCK IN THE 1970S

4.14. SCI's supportive role during the 1970s oil crisis cannot be undermined. Rising up to the occasion in late 1970s, SCI converted its tankers for ONGC to enable storage and offloading of Bombay High crude. With the acquisition of Floating, Production, Storage and Offloading (FPSO) vessels, this need has recently tapered. However, SCI is always in readiness to provide its tankers to ONGC to meet any situational exigencies.

SUPPORT DURING GULF WAR

4.15. Merchant marine of any country serves as a second line of defence for any country. SCI has always risen to the call of the nation in emergencies. During the prolonged Gulf war of early 1980s, it was proved beyond doubt that the existence of a national tanker carrier such as SCI is of vital importance to reinforce the country's energy security and economy at large. Just before the war, Indian fleet, including SCI used to carry roughly about 2/3rd of country's crude and product imports to Indian shores. However, during the period of war, Indian fleet (mainly SCI) carried over 95% of crude and products import since foreign ship owners refused to send their tankers to the strife torn areas or started demanding exorbitantly high premium.

MEETING THE TRANSPORT NEEDS OF OIL PSUS STEP BY STEP

4.16 Till 1992, SCI was the focal agency working in tandem with "Oil Coordination Committee" to meet the crude oil import transportation requirements of the nation. Presently, SCI carries almost 100% of crude oil on coast for PSU refineries on their tankers. Movement of Bombay High crude is dynamic in nature. SCI plays crucial role in ensuring that ONGC's production plan is not affected and there is no production loss by timely placing the ships for evacuation of cargo at loading locations viz. Mumbai, JNPT, FPSO (by specialized tandem mooring technique) and Offshore fields. Many a times the requirement suddenly increases due to emergency situations like increase in production by ONGC, increased requirement of refineries, accidents like ONGC pipeline leakages etc. SCI has deployed dedicated fleet of LR 1 and LRII tankers for movement of Bombay High crude on the coast. These requirements are met under COA/Time Charter arrangements with the Oil Industry. SCI with its flexible and dedicated fleet ensures that the additional requirement of the oil industry is met at all the times. Similarly, for total crude import, SCI handles 50% of the imports handled by Indian fleet.

B. LNG TRANSPORTATION

Joint Ventures for LNG Transportation

4.17. In 2004, SCI was the first Indian Shipping Company to have ventured into LNG Transportation and remains the only Indian company operating in LNG sector in India. It co-owns three LNG carriers in consortium with premier Japanese companies and independently manages their techno-commercial operations. SCI along with its consortium members has also been awarded contract for the 4th LNG tanker with Petronet for transportation of LNG to India from Australia. Further, SCI has also signed MoU with GAIL for transportation of LNG from USA to India from 2016-17 where SCI is providing technical consultancy and has step-in right for equity ownership (up to 26%) with the winning bidders. MoU has been signed with Mitsui OSK Lines of Japan on 16th December, 2014 for forming a JV in Singapore for managing MOL's LNG vessels. JV has already been incorporated and fourth LNG Tanker is under construction at HHI, South Korea.

COMMODITY/PRODUCT TRANSPORTATION

4.18. SCI took fullest advantage of the recession in the shipping industry in early 1980 and did

massive fleet acquisition (tankers as well as dry bulk vessels) to meet nations growing EXIM trade. In 1991, SCI diversified into Chemical tankers and cryogenic operations. As of date, SCI has 17 dry bulk carriers. SCI still operates two LPG carriers, which again are serving the Indian Oil industry. SCI's bulk carriers were regularly doing triangular voyages carrying iron ore to Japan and picking up coal (mostly for SAIL) from Australia earlier. The Bulk carriers market worldwide is prevailing at all time low levels.

CONTAINER MOVEMENT

4.19. One of the strengths of SCI lies in their having a diversified fleet. As Liner business was changing from break bulk to containers, SCI was the first Indian Shipping Company to acquire cellular container vessels in 1993. SCI is the only Indian Shipping Company providing container services from India to West as well as East. Though small, SCI today also has a fleet of five container vessels, out of which three are employed on the coast. Presence of SCI in this segment has proved to have a moderating effect on the freight rates thus protecting the interest of Indian exporters.

OTHER COASTAL SERVICES

4.20. SCI also manages Oceanographic & Coastal Research vessels on behalf of Government agencies/departments viz. three vessels owned by Geological Survey of India under Ministry of Mines and one vessel of National Centre for Antarctic & Ocean Research, one vessel of Centre of Marine Living Resources and Ecology and three vessels of National Institute of Ocean Technology under Ministry of Earth Sciences.

4.21 Besides above, SCI also manages passenger-cum-cargo vessels and other vessels on behalf of various Government Organizations / Departments.

DRDO PROJECT

4.22 The Defence Research & Development Organization (DRDO), Government of India (GOI), Ministry of Defence (MOD) had requested SCI for hiring of three support vessels as a platform for ship-borne tracking stations for flight trials over the Bay of Bengal and Indian Ocean. SCI had in-chartered two suitable vessels for a period of one year w.e.f. 27.03.2012 and 05.04.2012. The existing contract for these vessels was valid till 16.09.2015 and 25.09.2015.

FINANCIAL HEALTH

4.23 The financial health of SCI has been impressive in 2015. A glimpse of the health of the company over the years is as under:

4.24 SCI has been a dividend paying company to its shareholders including the Government of India with an exception of only 6 years in last 54 years. SCI suffered a loss for consecutive three years in 1977-80, when the markets were depressed and again during the immediately preceding three years for the same reasons. SCI has also been ranked as one of top 10 dividend paying companies in the past and on an average, dividend has been paid at 80% of the paid-up capital for 8 years from 2003-04 to 2010-11. SCI notched a historic high profit of Rs.1,420 crore in the year 2004-05, a record which is yet to be surpassed by any Indian Shipping Company. This was followed by two more consecutive years of over Rs.1,000 crore of profit.

4.25 Even during the worst of the times when SCI has incurred losses, it has not sought any budgetary support from the Government. In the recent years, due to high depreciation, SCI has incurred book losses primarily on account of higher depreciation set-off resulting from acquisition of new fleet. No cash loss has been incurred.

4.26 SCI has been achieving a very healthy profit to turnover ratio due to its financial

and operational efficiency. Due to high credit worthiness, SCI has been able to raise funds from the foreign market for vessel acquisition at a mere interest of 2.18%. The loan portfolio of SCI is also expected to come down substantially by 2017-18. Further, average age of SCI's fleet is now very young at about 9 years as against the Indian average of 17 years besides also comparing favourably with the world average of 15 years. Hence SCI is better placed to take advantage when the market upturns.

4.27 SCI had been a profit-making organization till financial year 2010-11, however, prolonged depressed market conditions impacted SCI and it incurred losses of Rs. 428 crore, Rs. 114 crore & Rs. 274.66 crore during 2011-12, 2012-13 & 2013-14 respectively. In 2014-15, SCI posted a profit after tax of Rs. 200.93 crore due to the tanker market showing improvement which partly offset the losses of the bulk carrier segment. During current financial year 2015-16, SCI has registered a net profit of Rs. 163.54 crore.

CARGO POLICY

4.28 Foreign ships can engage in coasting trade in India only after obtaining a licence from DG (shipping) (section 407 of Merchant shipping Act). Grant of such licences are governed by guidelines (Cabotage policy) as per which Indian Ships have the first right of refusal. In order to promote Coastal Shipping, Inland Water transportation and decongesting roads and railways, Government has relaxed cabotage for special vessels such as Roll-On Roll-Off (Ro-Ro), Hybrid Roll-On Roll-Off (Hybrid Ro-Ro), Roll-On Roll-Off cum Passenger (Ro-Pax), Pure Car Carriers, Pure Car and Truck Carriers, LNG vessels and Over-Dimensional cargo or Project Cargo Carriers for a period of five years.

NATIONAL SHIPPING BOARD

4.29 The National Shipping Board is a permanent Statutory Body established in 1959 under Section 4 of the Merchant Shipping Act, 1958 to advise the Government of India on matters related to Shipping including development thereof. In terms of the aforesaid provision, the Board is re-constituted after every two years.

4.30 The Board comprises 6 Members of Parliament (4 from Lok Sabha and 2 from Rajya Sabha), 5 representatives of Central Government, 3 representatives each of shipowners and seamen and 5 representatives of other interests including its Chairman. The Board has been reconstituted for a period of 2 years from 1st September, 2014.

DIRECTOR GENERAL OF SHIPPING, MUMBAI

4.31 The Directorate General of Shipping, an attached office of the Ministry of Shipping, Government of India was established in 1949 for administering the Indian Merchant Shipping Act, 1958 on all matters relating to shipping policy and legislation, implementation of various International Conventions relating to safety, prevention of pollution and other mandatory regulations of the International Maritime Organizations, promotion of maritime education and training, examination & certification, supervision of other subordinate offices for their effective functioning etc. The Director General of Shipping enjoys statutory recognition under section 7 of the Merchant Shipping Act, 1958.

4.32 The Director General of Shipping's administrative secretariat consists of Joint Director General of Shipping and Deputy Directors General of Shipping (non-technical). On the technical side, he is assisted by the Nautical Adviser, on the Engineering side by the Chief Surveyor and on the Naval Architecture side, by the Chief Ship Surveyor. The field formation of Directorate General of Shipping is headed by Principal Officers who are assisted by surveyor of Engineering and Nautical side. The Heads of allied offices supported by their

subordinate officers also assist the Director General of Shipping in the overall discharge of various statutory functions. The Nautical Adviser and Chief Surveyor are also Chief Examiners of Master/Mates and Engineers respectively.

Functions of offices under the administrative control of the Directorate General of Shipping

(A) MERCANTILE MARINE DEPARTMENT, MUMBAI / KOLKATA / CHENNAI / KOCHI / KANDLA.

4.33 The Mercantile Marine Departments (MMDs) were set up in 1929 with Headquarters at Mumbai, Kolkata and Chennai and two new MMDs at Kochi and Kandla were opened in 2005 to implement the Safety of Life At Sea (SOLAS) Conventions and Load Line Conventions. These Departments were directly under the Ministry till the establishment of the Directorate General of Shipping at Mumbai in 1949. The main functions of MMDs are to administer the various Merchant Shipping laws and rules relating to safety of ships and life at sea, registration of ships, tonnage measurement, crew accommodation, survey for load line, safety construction, prevention of pollution, enquiries into shipping casualty and wrecks, surveys of passenger ships, radio equipments on board, inspection and approval of statutory equipment for life saving and fire fighting appliances, wireless telegraphy, global maritime distress and safety systems, navigational aids, pollution prevention equipments, supervision of repairs and construction of ship on behalf of State and Central Government organizations, Port State Control inspection, examination and certification of various grades of certificates of competency as per relevant examination rules under Merchant Shipping Act, 1958 etc.

4.34 The Principal Officers and the Surveyors-in-Charge have been notified to be the Registrar of Indian ships and fishing vessels under section 24 and 435 (e) of the Merchant Shipping Act, 1958 respectively. In pursuance of Central Govt. guidelines for ease of business, state maritime boards have also been delegated with powers of registration of Indian Fishing boasts vide DGS order No. 1 of 2015 dated 13.4.15 and 5 of 2015 dated 17.11.15. Under section 22 of the M.S. Act, every Indian vessel exceeding 15 tons net, going out to sea, is required to be registered under Part V of the Merchant Shipping Act, 1958.

4.35 In keeping pace with the stupendous growth of the industry the Maritime administration has initiated various user friendly regulatory measures for the all round development of the sector.

4.36 The additional responsibilities imposed from time to time in the form of new statutes like MMTG Act, Admiralty Act, RP&S Rules and so on and also various International Conventions, received adequate attention of the Directorate and MMDs. During the year, the surveys and inspections relating to safety of ships have been delegated to the IRS with selective supervisory role for the DGS on important surveys.

PASSENGERS SHIP SURVEY

4.37 All passenger ships are subjected to survey of hull, Machinery, equipment etc. during construction and thereafter annually. On completion of survey, Certificates such as Passengers Ship Safety Certificate, Space Certificate, Special Trade Ship Safety Certificate, Exemption Certificate, 'A' Certificate and Certificate of Survey are issued.

CARGO SHIP SAFETY CONSTRUCTION (CSSC) SURVEYS

4.38 Under the requirements of SOLAS 74 Convention as amended, administration is responsible for conduct of CSSC Surveys of various types of Cargo Ships under construction and periodical and annual surveys thereafter. The task of surveys of Cargo Ships under constructions/re-construction abroad and subsequent periodical/annual surveys has been delegated to recognized Classification Societies.

The inspection reports submitted by the Classification Societies are scrutinized by MMDs and thereafter certificates with appropriate validity are issued.

SAFETY EQUIPMENT SURVEYS

4.39 The Department carries out the Surveys of Safety Equipment on board ships under the requirements of SOLAS Convention 1974 as amended and the M.S. (Fire Fighting Appliances) Rules, 1990 and M.S. (Life Saving Appliances) Rules, 1991. This Survey is mandatorily carried out by the Department.

INTERNATIONAL OIL POLLUTION PREVENTION (IOPP) SURVEYS

4.40 The Department is responsible for survey and certification for Oil Pollution under the various Annexes of MARPOL 73/38 Convention. In this survey, inspection of pollution prevention equipment to protect and safeguard the marine environment is undertaken. This survey is also entrusted to the Authorized Classification Societies and on receipt of their report, the Department issues the IOPP Certificate after scrutinizing the said report.

CERTIFICATE OF FITNESS AND INTERNATIONAL POLLUTION PREVENTION CERTIFICATE (IPPC)

4.41 The Certificate of Fitness / IPPC for the carriage of Noxious Liquid Substances in Bulk are issued after survey is carried out under Annex – II of the MARPOL and the Gas and Chemical Codes formulated by the International Maritime Organizations. This survey is usually carried out by the Classification Societies on behalf of the Department and the certificate is issued to the vessel on the basis of their report.

EXAMINATIONS

4.42 The MMDs conduct various grades of Certificate of competence Examinations in Nautical and Engineering disciplines under the International Convention of STCW '78, as amended in '95 under M.S. (STCW) Rules '98, Fishing Grade Examinations and the Examinations for various Certificates of Competency under IV Act. As on 31.12.2015, 2891 fresh Certificates of competency were issued & 13 revalidated in nautical disciplines and 3066 no. of candidates passed various grades of examination in engineering.

(B) SHIPPING OFFICES, MUMBAI / KOLKATA / CHENNAI :

4.43 The main functions of the Government Shipping Offices established under Section 11 of the Merchant Shipping Act, 1958 are:

(i) To provide means for securing the presence on-board at proper times of the seamen who are so engaged.

(ii) To facilitate making of apprenticeship to the sea service.

(iii) To hear and decide disputes under Section 132 between a Master, owner or agent of a ship and any of the crew of the ship.

(iv) To transmit the complaint of any dispute of a foreign seaman of a vessel, registered in a country other than India.

(v) Issue of Continuous Discharge Certificate-cum-Seafarers Identity Document (CDC).

(vi)) Enquiry into cause of death on board Indian ships, collection of levy fees from the shipping companies in respect of seamen engaged and transfer of such amount to the Seamen's Welfare Fund Society (SWFS).

SEAMEN'S EMPLOYMENT OFFICE MUMBAI/ KOLKATA/ CHENNAI.

4.44 The Seamen's Employment Office, Kolkata/Mumbai/Chennai established under section 12 of the Merchant Shipping Act 1958, continued to function in accordance with the

provisions contained in Section 95 to 98 of the M.S. Act and as guided by the instructions and orders issued by the Directorate from time to time. In term of the amended section 95 of the M.S. Act, 1958 the business of the Seamen Employment Offices include:-

(i) Issuance of licence, regulating and controlling the recruitment and placement service providers.

(ii) Ensuring that no fees or other charges for recruitment or placement of seafarers are borne directly or indirectly or in whole or in part, by the seafarers.

(iii) Ensuring that adequate machinery and procedure exist for the investigation, if necessary, of complaints concerning the activities of recruitment and placement service providers.

(iv) Maintaining registers of seamen in respect of the categories of seamen.

SEAMEN'S WELFARE OFFICE, CHENNAI

4.45 This office undertakes the liaison work between the Indian seamen and the officials of the country they visit and render all assistance to the seamen in case of distress and also provides recreational facilities etc. to them.

REGIONAL OFFICE (SAILS) MUMBAI/ JAMNAGAR/ TUTICORIN

4.46 The Regional Offices (Sails) at Mumbai, Jamnagar and Tuticorin assist the sailing vessel owners for standardization of trade by securing cargo and elimination of malpractices, registration of sailing vessels, issuance / renewal of identity cards and issues Tindal's permit to the Tindal of sailing vessels, repatriation of standard seamen due to sailing vessels casualties, etc.

MARITIME TRAINING IN INDIA

4.47 India has a long maritime tradition. It is the 20th largest maritime country in the world. The single largest contribution factor to this glorious tradition is the presence of a strong, dedicated, efficient and reliable reservoir of officers and ratings of Merchant Navy in India. The safety and efficiency of ships are crucially dependent upon professional ability and dedication of well trained seafarers. Great importance has always been attached to the maintenance of high quality training imparted to maritime personnel in India, which has facilitated India emerging as a major manpower supply nation to the world-wide shipping. The ever increasing demand of the India seafarers world-wide is testament of the quality of education and training received in India.

4.48 To meet the requirement of trained manpower in the merchant navy, the Directorate General of Shipping through various maritime training institutes both in public and private sector, imparts pre-sea and post sea training in engineering and nautical discipline.

4.49 There are 133 Training Institutes at present. The summary of the capacity of the various pre-sea training institutes is given as under:-

ANNUAL INTAKE OF PRE-SEA COURSES:

Table 11		
TOTAL NO. OF MARITIME TRAINING INSTITUTES : 133 No. of Pre Sea Institutes : 78 No. of Post Sea Institutes : 55		
Pre-sea Training	Number of training institutes	Total approved annual capacity
Pre-sea training for Nautical discipline	35	4338
Pre-sea training for Engineer discipline	42	4575
Pre-sea training for polyvalent discipline	1	31
Pre-sea training for GP Rating	39	5384
Certification course in Maritime Catering	12	1076
Orientation Course in Maritime Catering	15	880
NCV (Deck)/(Engine)	2	80
Pre-Sea Training Electro Technical Officers	8	760
Total		**17124**

REGION WISE ANNUAL INTAKE OF PRE SEA COURSES:

Table 12			
REGION	**No of Pre sea Institutes**	**Name of the Course**	**Approved intake**
Eastern Region	11	Pre Sea training for Nautical Discipline	310
		Pre Sea training for Engineer Discipline	490
		Pre sea training for GP Rating	600
		Certificate Course in Maritime Catering	160
		Orientation course in Maritime Catering	160
		Pre Sea training for Electro Technical Officers	120
		TOTAL	**1840**
Western Region	25	Pre Sea training for Nautical Discipline	1972
		Pre Sea training for Engineer Discipline	1575
		Pre-sea training for Polyvalent discipline	31
		Pre sea training for GP Rating	1800
		Certificate Course in Maritime Catering	756
		Orientation Course in Maritime Catering	720
		NCV (Deck)	80
		Pre-sea for Electro Technical Officers	280
		TOTAL	**7214**

South West Region	4	Pre Sea training for Nautical Discipline	40
		Pre Sea training for Engineer Discipline	410
		Pre sea training for GP Rating	220
		Certificate Course in Maritime Catering	80
		Orientation Course in Maritime Catering	80
		TOTAL	**830**
Southern Region	31	Pre Sea training for Nautical Discipline	1616
		Pre Sea training for Engineer Discipline	2000
		Pre sea training for GP Rating	2220
		Certificate Course in Maritime Catering	80
		Orientation Course in Maritime Catering	720
		Pre Sea Course for Electro Technical Officer	360
		TOTAL	**6996**
Northern Region	8	Pre Sea training for Nautical Discipline	360
		Pre Sea training for Engineer Discipline	100
		Pre sea training for GP Rating	544
		Certificate Course in Maritime Catering	00
		Orientation Course in Maritime Catering	400
		TOTAL	**1404**
TOTAL	**82**	**GRAND TOTAL**	**18284**
TOTAL NO. OF MARITIME TRAINING INSTITUTES : 133 **No of Pre Sea Institutes : 78** **No of Post Sea Institutes : 55**			

The summary of various Post sea courses is given as under:

Table 13

REGION-WISE	No. of Institutes
Eastern Region	07
Western Region	19
South West Region	02
Southern Region	15
Northern Region	12
TOTAL	55

WELFARE ORGANISATIONS

Seamen's Provident Fund Organization, Mumbai.

4.50 The Seamen's Provident Fund Scheme, the first social security scheme for Indian Merchant Navy Seamen, brought under statute by enactment of the Seamen's Provident Fund Act, 1966 (4 of 1966) was introduced retrospectively with effect from 1st July, 1964, to provide for the institution of a provident fund for seamen as old age retirement benefit and their family members in the event of death of seamen members.

4.51 The Seamen's Provident Fund is vested in and administered by the Board of Trustees consisting of the Chairman and three representatives each of the Government, Employers and Employees. The Director General of Shipping is an ex-officio Chairman of the Board of Trustees and the Commissioner is the Chief Executive Officer and the Secretary to the Board.

NATIONAL WELFARE BOARD FOR SEAFARERS

4.52 As provided under Section 218 of Merchant Shipping Act, 1958 the Government of India has constituted a National Welfare Board for Seafarers headed by the Union Minister of Shipping for advising the Government on the measure to be taken for promoting the welfare of Seamen whether on shore or aboard.

4.53 The Board functions with Minister of Shipping as the chairman and Minister of State for shipping as Vice Chairman. It comprises of 2 Members of Parliament (one from Lok Sabha and one from Rajya Sabha), 4 representatives from Central Government, 3 representatives each of Ship-owners and Seafarers, 2 representatives from Port Trusts, 1 non-official Member from the field of Seamen's Welfare of Public, representative from Society interested in Seamen's Welfare.

SEAFARERS' WELFARE FUND SOCIETY

4.54 The SWF Society is set up as a Central Organisation for the Welfare of Indian Seafarers and their families. It is registered under the Societies Registration Act, 1860 and as a Trust under the Bombay Public Trust Act 1950.

4.55 The Society represents various interests connected with Indian Shipping which includes representatives of Indian and Foreign Ship-owners and also of Seafarers' Unions separately for officers and seamen. The control of business and affairs of the Society is vested with the Committee of Management of which the Director General of Shipping is the ex-officio Chairman.

MINOR PORT SURVEY ORGANISATION

Structure and Function:

4.56 Minor Ports Survey Organization (MPSO) is a subordinate office under the Ministry of Shipping, entrusted with the responsibilities of carrying out Hydrographic surveys in minor/ major ports and inland waters on agreed program. The Senior Hydrographic Surveyor is the Head of the Office with its Head Quarters at Navi Mumbai. The Director General of Shipping, Mumbai is its Head of the Department.

PERFORMANCE:

4.57 The Hydrographic survey works carried out by the organization up to 31.12.15.

Table 14	
i	MPSO supervising jointly with Kandla Port Trust surveyors the tripartite Hydrographic surveys conducted by Dredging contractors with their launch and equipments in Kandla Port Trust Channel, alongside berths and jetties on monthly basis.
ii	MPSO supervised, witnessed and third party certification of survey related jobs conducted by Kamrajar Port Ltd., (Ennore) with their launch and equipment at Ennore, Tamil Nadu State.
iii	MPSO supervised the tripartite pre and post dredging survey of maintenance dredging in New Mangalore Port Channel Zone I, II, III, IV Extension Zone I, Old Dock Arm alongside Berths and Lagoon area conducted by the dredging contractor.
iv	MPSO supervised jointly with Mumbai Port Trust surveyors the tripartite interim and joint survey of Offshore Container Terminal conducted by dredging contractor with their launch and equipment. MPSO also conducted land survey for filling of the existing Princess and Victoria Docks by sand dredging and witnessing the Capital Dredging works for Second Chemical Berth of Pir Pau, Hay and Haji Bundar conducted by MbPT surveyors with their launch.
v	MPSO supervised jointly with Mumbai Port Trust surveyors the tripartite Determination surveys of Maintenance dredging of Indira Dock Basin, Approach Channel, Turning Circle, Outside Berth Pocket of OCT Project conducted by dredging contractor with its launch and equipment in Mumbai Port.
vi	MPSO is conducting monthly progressive survey of ICTT Basin at Vallarapadam and Outer Channel, Ernakulam and Mattancherry Channel for Cochin Port Trust.

CENTRAL INLAND WATER TRANSPORT CORPORATION LTD. (CIWTC), KOLKATA

4.58 The Central Inland Water Transport Corporation Ltd. (CIWTC) was incorporated on 22nd February 1967 by taking over all the assets of the erstwhile River Steam Navigation Co. Ltd. (A Sterling Company) and liabilities to the State Bank Of India and Govt. of India under a Scheme of Arrangement, approved by the Calcutta High Court on 03.05.1967.

4.59 The Corporation is under the administrative control of Ministry of Shipping. The Registered Office and Corporate Office of CIWTC are located at Kolkata and various branch offices are at Guwahati, Karimganj, Badarpur, Silchar and some other places. The corporation is headed by Chairman – cum – Managing Director.

PRINCIPAL ACTIVITIES

4.60 The principal activity of the Corporation was transportation of cargo by barges through Inland Waterways in the country and through the routes identified in the Protocol on Inland Water Transport between India and Bangladesh.Presently the operation of the Corporation is stopped.

4.61 The Authorised Share Capital of the Corporation as on 31.03.2015 was Rs. 251.00 crore with a paid-up capital of Rs. 130.48 crore being contributed as follows :

Table 15			
		Rs.	%
(a)	Government of India	130.34 crore	99.89
(b)	Government of West Bengal	5.72 lakh	0.04
(c)	Government of Assam	8.84 lakh	0.07

4.62 The Government on 24.12.2014 approved an Improved Voluntary Retirement Scheme (VRS) for the employees of CIWTC Ltd. and disinvestment of CIWTC thereafter. The said scheme was implemented in CIWTC for 03 months during 12.01.2015 to 10.04.2015.

4.63 Out of 252 employees as on 31.03. 2015, 247 employees were released under Improved Voluntary Retirement Scheme and only 05 employees comprising of 01 no. Jr. Officer, 02 Sub-staff & 02 lower grade Floating Staff are continuing.

INDIAN MARITIME UNIVERSITY

4.64 IMU is a Teaching-cum-Affiliating University established on 14th November 2008 to provide quality maritime education, training and research. Headquartered in Chennai, it has 5 Regional Campuses at Chennai, Kolkata, Mumbai, Visakhapatnam and Cochin. Kandla Port Campus was closed down in March 2015 due to poor student intake.

4.65 IMU has 37 Affiliated Institutes across the country. Two Institutes - M/s RL Institute, Madurai and M/s Maharashtra Academy of Naval Education & Training, Pune - were given affiliation in the year 2015.

EDUCATION AND ADMISSION DETAILS

4.66 IMU is conducting the following Under Graduate and Post Graduate Programmes –

UG Programmes

(a) B.Tech (Marine Engineering) - 4 years

(b) B.Tech (Naval Architecture & Ocean Engineering) – 4 years

(c) B.Sc (Ship Building & Repair) – 3 years

(d) B.Sc (Maritime Science) – 3 years

(e) B.Sc (Nautical Science) – 3 years

(f) Diploma in Nautical Science leading to B.Sc. (Nautical Science) – 1 year

PG Programmes

(a) MBA (Port and Shipping Management) – 2 years.

(b) MBA (International Transportation & Logistics Management) – 2 years.

IMU HEADQUARTERS - NEW BUILDINGS

(c) M.Tech (Naval Architecture and Ocean Engineering) – 2 years.

(d) M.Tech (Dredging and Harbour Engineering) – 2 years.

(e) Post Graduate Diploma in Marine Engineering – 1 year.

Ph.D Programmes

Post 14.11.2008. Only in the Visakhapatnam Campus - in Naval Architecture and Ocean Engineering.

4.67 IMU has switched over from the pen-and-paper mode of Common Entrance Test (CET) to the Computer-based Online CET from 2014 onwards. A pass in the CET is mandatory for admissions to various Programmes in IMU Campuses as well as Affiliated Institutes.

4.68 IMU has also switched over from the physical mode of Counselling to Computer-based Online Counselling from 2014 onwards. Admissions to IMU Campuses and to those Affiliated Institutes which voluntarily surrender their seats are done through IMU's Online Counselling.

4.69 In IMU the Academic Year is from 1st August to 31st July of the next year. The Admission details for the Academic Years 2009-10 to 2015-16 are as shown below at **Table 16**.

4.70 There has been almost 50% reduction in student admissions between 2009-10 and 2014-15. This is due to the prolonged recession/ slowdown in the global shipping industry since 2009 which is yet to bottom out.

4.71 The Programme-wise admission details for the Academic Year 2015-16 in IMU Campuses is as shown below at **Table 17.**

Table 16 - Admission Details - Academic Year-wise

2009-10		2010-11		2011-12		2012-13		2013-14		2014-15		2015-16	
IMU	AI	IMU	AI	IMU	AI	IMU	AI	IMU	AI	IMU	AI	IMU	AI
1361	2289	1222	2355	1353	2364	785	1928	982	1402	740	1198	804	1775

IMU = IMU's Campuses; AI= Affiliated Institutes.

Table 17 - Admission details in IMU Campuses - Programme-wise

Programme	Sanctioned Strength	No. of Candidates Admitted
UG		
Diploma in Nautical Science Leading to B.Sc (Applied Nautical Science)	200	78
B.Sc (Nautical Science)	305	201
B.Sc (Maritime Science)	40	14
B.Sc (Ship Building & Repair)	40	25
B.Tech (Marine Engineering)	366	331
B.Tech (Naval Architecture & Ocean Engineering)	40	40
Total	**991**	**689**

PG		
MBA (Port & Shipping Management)	60	14
MBA (International Transportation & Logistics Management)	90	50
M.Tech (Naval Architecture & Ocean Engineering)	20	8
M.Tech (Dredging &Harbour Engineering)	20	12
PG Diploma in Marine Engineering	160	31
Total	**350**	**115**

4.72 In order to provide opportunities for maritime education and employment, seats have been reserved in UG Courses in IMU Campuses for candidates native to or domiciled for at least 5 years in Andaman & Nicobar Islands (20 seats), Lakshadweep & Minicoy Islands (10 seats), the 8 North Eastern States (40 seats) and Jammu & Kashmir (10 seats).

4.73 As a student-friendly initiative, IMU has introduced (in December 2015) about 200 performance based rewards per year at the rate of Rs.1 lakh per semester for the toppers and Rs.75,000 per semester for the top ten percentile of students of each batch of each Programme of study.

4.74 3 new Boards - Board of Research Studies (to deal with all Ph.D-related matters); School of Naval Studies (to promote academic interaction with Indian Navy); School of Allied Studies (to develop modular courses) have been set up in 2015.

FINANCE

4.75 The Ministry of Shipping sanctioned Plan Funds to the tune of Rs.294.19 crore for the period from 2014-15 to 2018-19 on 19.2.2015.

Table 18 - Year wise sanction of Plan funds

Year	2014-15	2015-16	2016-17	2017-18	2018-19	Total
	22.39	107.12	99.68	58.10	6.90	294.19

Table 19 - Campus wise sanction of Plan funds

Particulars	Total (Rs. in crore)
IMU Headquarters	29.00
Chennai Campus	37.65
Mumbai Campus	81.05
Kolkata Campus	61.34
Visakhapatnam Campus	64.30
Kochi Campus	20.85
Total	**294.19**

Table 20 - Item-wise sanction of Plan funds

Particulars		Total (Rs. in crore)
I) Works		
Hostels	60.39	
Classrooms	55.88	164.60
Workshops & Labs	21.73	
Others	26.60	
II) Equipment for Labs & Workshops		100.55
III) IT Hardware & Software		16.50
IV) Library		12.54
Total		**294.19**

4.76 Sanction for Non-Plan funds @ Rs.40 crore per year for the 4 years from 2015-16 to 2018-19 was obtained from Department of Expenditure, Government of India in May 2015. A sum of Rs.30 crore was released in August 2015. This has solved one of IMU's most pressing problems since inadequate sanction of Non-Plan funds was the main reason why IMU was perceived as a non-starter in its first 5 years.

4.77 IMU will introduce M.Tech (Marine Engineering) and M.Sc (Shipping Operations & Finance) as new P.G. courses from the Academic Year 2016-17 and preparatory work for this has been done in 2015.

CHAPTER – V

SHIPBUILDING AND SHIP REPAIR

5.1. The nodal responsibility of formulating policy measures for the promotion of Indian Shipbuilding and Ship-repair Industry vests with the Ministry of Shipping.

5.2. A strong and diverse shipping fleet is very important for securing energy requirements of the country. China has decided to engage Chinese built and flagged fleet of oil tankers capable of hauling up to three-quarters of Chinese oil imports by 2020. South Korea has similarly announced in 2014 that "Korean LNG transportation is to be done using Korean Flag vessels" and 7 large LNG vessels have been ordered to be built in South Korea. As far as Japan is concerned, the Japanese shippers support Japanese shipping companies for all their transportation requirements even without any formal policy direction or measure. It is a well-known fact that 100% of Japanese LNG and almost 90% of their crude is transported in Japanese ships. Even USA has adopted special measures like "Military Sealift Command" to ensure energy security for the nation. Thus to reduce dependence on foreign countries, India needs to carry its transportation requirements on its own built ships. Moreover, Indian Navy has embarked on an ambitious defence indigenisation programme which needs to be implemented through Indian shipyards.

5.3. There are 27 Shipyards in the country, 6 under Central Public Sector, 2 under State Governments and 19 under private Sector. The

breakup of the government owned, controlled shipyards is as under:

(a) Under Ministry of Shipping, Government of India

- Cochin Shipyard Limited, Kochi
- Hooghly Dock and Port Engineers Limited, Kolkata

(b) Under Ministry of Defence, Government of India

- Mazagaon Dock Limited, Mumbai
- Garden Reach Shipbuilders and Engineers Limited, Kolkata
- Goa Shipyard Limited, Goa
- Hindustan Shipyard Limited, Visakhapatnam

(c) Under the control of State Governments

(i) Under Government of Gujarat

- Alcock Ashdown Co. Ltd.

(ii) Under Government of West Bangal

- Shalimar Works Limited , Kolkata.

5.4 There are 35 registered Ship Repair Units (SRUs) in the country.

SHIPBUILDING

5.5 Ship-building is a mother-manufacturing industry endowed with the unique feature of having nearly 65 percent value addition coming from other technology/ancillary industries. Another characteristic feature of ship-building is that unlike other manufacturing industries which pre-dominantly follow make-to-stock inventory model, shipbuilding is an order-driven industry where each vessel is custom built on receipt of the ship-building order. Thus, building an order book is essential for growth and sustenance of the shipbuilding industry. Order book growth for commercial ships is largely driven by the growth in world trade and commerce, which spurs demand for new ships. The evolving environment-friendly international regulations also trigger demands for replacement of old ships. Ship-repair service, a supplementary service provided by most of the shipyards, is also a labour-intensive activity that utilizes the existing ship-building infrastructure to provide additional returns on the capital invested.

5.6 A robust and vibrant domestic ship-building industry is important for the following reasons:-

(a) Nearly 65% value of the built ship is contributed by heavy engineering industry such as steel, electronics, engineering and electrical equipment, port infrastructure as well as trade and shipping services. Promotion of shipbuilding industry develops these ancillary industries.

(b) Due to its dependence on a number of industries, this industry has huge multiplier effect on investment, employment and turnover (being 11.6, 6.4 and 4.2 respectively as per KPMG's 2007 'Report on Shipbuilding: Economic Benefits and Benchmarking Government Support across Countries') similar to that of industries in the 'infrastructure' sector and hence has been a starting point of industrialization for countries around the world including Japan, South Korea and China.

(c) The shipbuilding industry is labour intensive and this works in favor of countries like India with large and relatively cheap workforce. In India this industry employs over 30,000 people directly. However, over the years, the industry has developed a large number of ancillary units and subcontractors around them employing lakhs of people. Without

supporting the industry, the employed workforce would soon lose its skills as well as its means of livelihood.

(d) Since this industry is primarily based in coastal areas, its promotion or neglect, is strongly linked to the prosperity of the poor and rural populations residing therein.

(e) The freight bill of India amounting to around USD 56 billion justifies ownership of Indian flag ships. Similarly, the requirement of ships would justify indigenous building of ships. In 2014 alone, as per UN COMTRADE database, India imported ships and other floating structures worth USD 4.9 billion from various countries. Promotion of indigenous shipbuilding industry would help conserve precious foreign exchange.

(f) The infrastructural facilities developed till date in our shipyards primarily cater to shipbuilding including design set up, huge fabrication and assembly shops, CNC machines, hydraulic presses etc. which cannot be used for any other purposes. Discontinuation of shipbuilding would be a huge waste of the resources and skill sets.

(g) It promotes indigenous development of complex design and engineering skills which are essential for sustenance and growth of indigenous defence capabilities. Without establishing a competitive shipbuilding capability, India cannot become a maritime force.

5.7 On account of the above positive spin-offs of the shipbuilding industry, it has been identified as one of the four key sectors of strategic importance (in addition to Defence, Aero-space and Capital Goods) in the "Manufacturing Plan – Strategies for Accelerating Growth of Manufacturing in India in the 12th Five Year Plan and Beyond" by the erstwhile Planning Commission and is most eminently suited for consideration under 'Make in India' initiative of the Government of India.

5.8 Shipbuilding is primarily an order-driven industry and each vessel is built-to-order. Most of the shipyards also utilize the existing ship-building infrastructure to offer ship-repair services to generate additional returns on the invested capital. Globally, the shipbuilding industry is dominated by three countries - South Korea, China & Japan, which together have more than 90% share of the shipbuilding market. Major shipbuilding nations support their industry through various means such as the following:-

- **Financing:** Loans and loan guarantees at favorable conditions (low interest rate, high leverage ratio) are provided to shipyards to finance their ongoing operations, and to ship buyers to finance their orders. Also export guarantee is provided.

- **Subsidies:** Subsidies are provided on procurement or import of raw materials at cheaper costs as well as on building specific categories of ships including for domestic market. Steel (30% of total ship cost) is usually provided at subsidized cost in many countries.

- **Fiscal incentives:** Tax concessions are provided on import of key components and equipment, for vessel export, domestic shipbuilding; accelerated depreciation; income tax concession for investment in shipbuilding and in M & A activities; tax credit on R&D undertaken.

- **Investments:** Countries provide investment in R&D on futuristic ship designs and advanced technology and equipment as well as participate in shipbuilding to promote the sector (e.g., Italian Government has a participation in

Fincantieri, French Government owns 30% of shares of STX in St. Nazaire).

5.9 India has a number of advantages when it comes to shipbuilding industry. These include:

- Vast coastline.
- Lower labor cost and abundance of labor.
- Leadership position in IT and ITeS Sector.
- Availability of technical knowhow, knowledge base and technically qualified manpower.
- Growth in global trade.
- Market potential for inland waterway transportation.
- Increased containerization.
- High potential for dredging vessels.
- Requirement of specialized vessels.
- Replacement requirement of ageing Indian fleet.
- Proximity to International Trade lanes (promotes ship repair).
- Large number of domestic vessels (promotes ship repair).

5.10 Government has been implementing a shipbuilding subsidy scheme for Central Public Sector Shipyards since 1971 with some gaps and modifications from time to time. The scheme was extended, for both export and domestic orders, to all the Indian Shipyards including private sector shipyards on October 25, 2002 and was valid till August 14, 2007. The broad features of the scheme were:

(a) 30% subsidy to be paid for all export orders irrespective of size and type, but limited to sea going merchant vessels of and over 80 meters in length for domestic orders.

(b) Prices to be determined by the global tender in case of domestic orders.

(c) In case of export orders obtained on price negotiation a "Price Reasonableness Certificate" to be issued by DG (Shipping) as basis for grant of subsidy.

(d) In case of Public Sector Shipyards, subsidy is payable on stage payments received by the shipyard while in case of Private Sector Shipyards, subsidy is payable after the delivery of the vessel.

5.11 The above scheme had expired on August 14, 2007 but Government decided to honour the subsidy claims upto March 31, 2014 in respect of shipbuilding contract signed upto validity of the scheme i.e. August 14, 2007.

5.12 The scheme was quite successful and resulted in Indian shipyards securing ship-building orders worth 1.24% of global commercial ship-building orders in 2007. The shipyards received direct subsidy of Rs. 1,483.08 crore from the Government between 2002-2014 while the shipyards have paid more than Rs. 1,800 crore in various taxes to the Government, as per a rough estimate. Subsequently, many Indian shipyards borrowed funds and invested in new capacity addition.

5.13 However, the global economic meltdown in 2008-2009 started contracting EXIM trade, thereby creating a slump in the global shipping market resulting in fall of demand for new ships. The timely completion of vessels under-construction suffered due to inability of the buyers to make the scheduled stage-wise payments resulting in delayed delivery of vessels. Also, the vessel prices dropped giving rise to customers either re-negotiating the prices or deferring deliveries and even cancelling the contracts. As a result, cash flows of the Indian shipyards from orders in hand were adversely affected. Invocation of bank guarantees arising

out of cancelled orders and default in repayment of long term loans led to freeze on working capital limits thus crippling the financial health of the industry. In 2014, the order book of Indian shipbuilding industry stood at paltry 0.1%, which is same as its share in pre-2002 period. The Indian Shipbuilding industry still remains under acute financial stress and hence being focused under the 'Make in India' initiative.

5.14 Certain elements of monetary policy of RBI have also impacted the sector. The industry requires a substantial amount of capital investment with the shipyards requiring long term loans (say up to 20-25 years) to build the required capacity. However, the Indian banks and financial institutions are constrained in their ability to grant such long term loans and only sanction loans of tenure ranging from 5 to 7 years. Therefore, the shipyards have to start repayment of loans much before the infrastructure being created, is even operational, leading to structural imbalances. This is the reason why despite 100% FDI, not enough foreign investment has come into the sector.

5.15 Even though ship-building is a cyclical industry with a typical global cycle of 5 years, it is for the first time that the slump in global market has continued beyond six years thereby hurting the fortunes of global shipbuilding industry badly. Unlike India, other countries have continued to support their shipyards directly and indirectly. Two countries least affected from the crisis, China and Brazil, have provided significant financing and investment support. In China, in December, 2013, "special funds" were offered that gives shippers subsidies of around USD 235 per GT to replace old vessels. In South Korea, financial support worth USD 22 Billion had been offered to the industry in 2013. In Japan, financial support worth USD 4.3 Billion had been offered to the industry in 2011. Russia is investing between USD 500 million to USD 1 billion to restructure its state-owned OSK shipyard conglomerate. In contrast, post the subsidy scheme of 2007, there has been a lack of any concerted support to the industry from the Indian government. This has further aggravated the financial position of the shipyards.

5.16 In contrast, in the transport sector, most of the funding in our country has been towards the railways and road and highways sectors. Against a total expenditure of Rs. 7.32 lakh crore for the entire transport sector (roads, railways, shipping and ports and civil aviation in the period) from the Fifth Five Year Plan till the Eleventh Five Year Plan, the expenditure in railways has been Rs. 3.77 lakh crore (i.e. around 51.33% of total expenditure in transport sector), while the expenditure in the same period on roads and highways has been Rs. 2.38 lakh crore (i.e. around 32.5% of the total expenditure in transport sector). The expenditure in the civil aviation sector has been Rs. 69,290 Crore (i.e. around 9.5% of the total expenditure in transport sector). Compared to these sub-sectors, the expenditure in the shipping sector comprising of shipping, ports and inland waterways has been Rs. 47,391 Crore (i.e. around 6.5% of the total expenditure in transport sector) in the same period through central government's budgetary support. While the importance of roads and railways in the economy is undeniable, there is also a greater need to encourage the maritime sector to enable it to achieve its full potential.

5.17 Due to this lack of public investment and supportive ecosystem, over a period of time, the industry has been facing a number of challenges on a number of fronts, which include:

- Lack of competitive advantage due to heavy subsidies being provided by other shipbuilding countries to their shipbuilding industry.
- Lack of economies of scale due to small order-book and due to lack of dedicated domestic shipbuilding orders.
- Lack of cheaper and long term flexible financing support from the domestic

banking system for infrastructure investment and modernization.

- Lack of access to cheaper working capital (including that available globally) due to restrictive External Commercial Borrowing norms.
- Lack of support to restructure/refinance non-performing assets, resulting from cancellation of orders, through cheaper long term loans.
- Lack of import tariff protection for procurement of fully built ships in the domestic market.
- Lack of supportive tax structure, which discourages manufacture for domestic market.
- Lack of competitive and domestic ancillary industry in the domestic industry due to small size and scale of the domestic shipbuilding industry thereby depending more on imports of shipbuilding components and equipments as well as reducing bargaining power on procurement of inputs.
- Lack of capital infusion in the sector due to subdued investor confidence and pessimistic domestic outlook.

5.18 As per the XII Plan Working Group Report on Shipbuilding and Ship-repair, all the above challenges translate into Indian shipyards facing cost disadvantages of about 20%-35% in comparison to foreign shipyards primarily due to fiscal and monetary policies of the government. The break-up of the cost disadvantages is as under:

Table 20

S. No.	Cost Elements	% Cost Differential versus Competition
1.	Taxation and Duties	4% - 10%
2.	Freight Charges	2% - 3%
3.	Bulk Discount	5% - 10%
4.	Design	2% - 4%
5.	Interest Costs	5% - 6%
6.	Other Costs	2% - 3%
Total Cost Disadvantage		**20% - 35%**

5.19 Ship-building and Ship-repair are also essential components for the success of the flagship 'Sagarmala' project of the Government which aims to bring about port-led development by focusing on setting up Coastal Economic Zones (CEZs) and developing connectivity along the long coastline of India through a network of roads, rails and the waterways (including coastal and inland waterway network) between CEZs and hinterland. All this will be possible through a larger number of vessels, which would, in turn, require design and development of vessels catering to the specific requirements of the coastal areas and the economic regions along the coast. Such an objective can be achieved through a strong shipbuilding and ship-repair industry.

SHIP REPAIR

POTENTIAL OF SHIP-REPAIR INDUSTRY

5.20 We have a sizable number of costal ships in India. We can also focus in the following categories:

(i) Commercial ships visiting Indian Ports

(ii) Coastl vessels / service crafts

(iii) Dredgers operating in Indian Coast

(iv) Offshore rigs

(v) Naval and Coast Guard ships.

5.21 India is located strategically on the international trade route, whereby it can attract ships plying from west to east in the trade route for its ship-repair activity. This represents increasing market potential for the ship-repair business, as ship owners prefer to repair their ships without deviating from their trade routes as much as possible.

5.22 The number of vessel calls to major Indian Ports was analyzed for the year 2010. According to that study the total number of vessel calls to major Indian Ports was as follows: East Coast Ports: 4370 vessels and West Coast Ports: 4304 vessels. As many of the vessels called the ports, multiple times, the number of unique vessel calls was picked out. The number of unique vessel calls was as follows: East Coast Ports: 2446 unique vessel calls and West Coast Ports: 2335 unique vessel calls. The unique vessel call list was further analyzed to arrive at the number of vessels that arrived only once, that called on Indian Ports 2-4 times a year and vessels that called more than 5 times in a year. The underlying assumption for the above analysis was that vessel that called more than 5 times in a year would present a higher potential for repairs in India, than the one that called less than 5 times in a year. Vessels that called on Indian Ports only once a year present a low potential for carrying out repairs in India. Thus the Ship repair potential for India is as follows:

Table 21

S. No.	Vessel for repairs	East Coast	West Coast
1	High Potential	117	112
2	Medium Potential	567	541
3	Low Potential	1764	1684
4	Offshore vessels	188	122
5	Navy and Coast Guard	100	100
	TOTAL	**2736**	**2559**

Excluding the vessels under Low potential category would yield the following numbers for ship repair: East Coast: 972 vessels and West Coast: 875 vessels. Thus there is ample potential for ship repair in India.

5.23 The strengths of Indian ship repair industry are as under:

(a) **Geostrategic location of India.** A long coast line with number of all weather ports which are not subjected to severe weather conditions and naturally protected is the primary advantage. With strategic location in the trade route of tanker/bulk carrier traffic on east & west and ready availability of trained workforce, there are tremendous opportunities for huge revenue generation.

(b) **Abundance of labour.** All the resources required for the Ship Repair Units to function efficiently are available and there is a huge untapped potential. The ship repair industry promises relatively continuous flow of revenue and employment for all segments of labour class (from highly skilled to unskilled). Most of the existing and new ship repair yards in India concentrate on new building and providing services to naval and coastal vessels.

(c) **Competitive labour rates.** The subcontract labour rates for steel work, pipe work, blasting and painting, mechanical and electrical works are very cheap in India and are comparable to labour rates in Indonesia and Vietnam. In fact it is 10 to 15% lower than subcontract labour rates of Indonesia and 25% lower than Philippines.

(d) **Quality of work.** The speed of execution and quality of work is comparable to that of Indonesia, Philippines and Vietnam who have a significant presence in the world ship repair industry.

5.24 Ship repair, both globally and locally, is an evergreen industry. Though historically India was largest Ship Repairer in Asia, over the years we lost this business to neighboring countries like Singapore, Sri Lanka, China, UAE, Bahrain and Turkey.The weaknesses of Indian ship repair industry are as under:

(a) Higher waiting times. Tendering process of government owned shipyards for ship repair activity is too long in case of India and it is not commercially viable for the ship owners to keep their vessels waiting for that long.

(b) Non-uniform processes and Reliance on sub-contractors. India possesses the requisite skills for undertaking ship repairs except in 2 areas: (i) Ship repair planning and project management, and, (ii) Safety Management Systems. While the Public Sector yards are burdened with a tedious decision making process, private sector ship repair yards are relying entirely on sub-contractors and each yard follows its own style of execution. The success of Singapore shipyards is largely due to a uniform project management and safety management systems. A ship owner dry-docking his vessel in Singapore, would notice that while the people and subcontractors may be different, the repair process and management is uniform across all the repair yards.

(c) Domestic Taxation. Currently Service Tax, Sales tax of centre and state governments are applicable. Leading ship repairing nations in Singapore and GCC countries do not charge any tax on their service. If India has to attract foreign vessels or foreign going Indian vessels, then the Ship repair yard must get a level playing field. Waiver of tax for foreign vessels will greatly improve India's competitiveness.

(d) Tedious Customs bonding process. Most of the ship repair units are set up in a customs bonded area. Sometimes it becomes necessary to take some items from a vessel undergoing repairs for reconditioning at specialist workshop such as Main Engine parts for reconditioning; Samples from vessel for ordering replacement; Other equipment from vessel for reconditioning; Lifeboats for servicing as well as PCBs from vessel for repairs. Ship repair yards get to import vessel under bond-to-bond transfer scheme. Imported spares are kept in the shipyard's bond store and delivered to the vessel. Signature of the Master of the vessel is taken for closing out the bond transfer. From the point of view of customs authorities, vessels arriving in for repair are under bond and any part of the vessel cannot be taken out of the bonded area for repairs, unless specific permissions are sought. Vessel repair durations are extremely short for the quantum of job and for repairs to be effective, every hour counts. Present system for taking out ship's parts requires the signature of the Custom officer who is not normally available in the shipyard. This procedure sometimes results in delay which is detrimental to timely completion. In Singapore and UAE too, shipyards import materials for vessel's repairs under custom duty exemption. They remove and send vessel's parts for repairs under a self certification scheme that is signed by both the shipyard and the ship owner. In Singapore, violation of this facility results in huge penalty and cancellation of repairer's license.

RECENT INITIATIVES IN THE SECTOR

5.25. Realizing the stress prevailing in the sector while at the same time appreciating the potential strategic, employment and investment benefits that may accrue from a robust indigenous shipbuilding sector, Hon'ble Finance Minister has, in the 2014-2015 Budget Speech, highlighted the promotion of Indian ship-building industry as a priority thrust area of the Government. Hon'ble Prime Minister has also stated on August 6, 2014 that the government desires to actively promote ship-building industry in India. Consequentially, ship-building is one of the key

sectors identified by the Government under its 'Make in India' initiative.

5.26 To counter the aforesaid cost disadvantages of Indian shipyards vis-à-vis foreign shipyards and to promote shipbuilding and ship repair industry in the country, Government of India has recently taken the following steps:-

(i) Financial assistance policy for Indian shipyards has been approved by the Government of India on December 9, 2015. As per the policy, financial assistance is to be granted to shipyards equal to 20% of the lower of the "Contract Price" or the "Fair Price" (as assessed by three international valuers) of each vessel built by them for a period of at least ten years commencing from 2015-16. This rate of 20% will reduced by 3% every three years.

(ii) Revision of domestic eligibility criteria has been approved by the Government of India on December 9, 2015 to ensure that all the government departments or governmental agencies such as CPSUs procuring vessels for governmental purposes or for own purposes shall undertake bulk tendering for their vessel related requirements with deliveries starting from 2017-2018 and will grant a Right of First Refusal (RoFR) for Indian shipyards for such orders till 2025. From 2025 onwards, only Indian-built vessels are to be procured by them for governmental purpose or for own purpose. Similar relaxation/benefit will be applicable for repair of their vessels.

(iii) 10th Meeting of the Institutional Mechanism on Infrastructure held on December 21, 2015 has recommended grant of infrastructure status to the shipyards involved in shipbuilding and ship repair.

(iv) With a view to counter the cost disadvantage to Indian shipyards and to promote indigenous shipbuilding industry as part of the 'Make in India' initiative, the Ministry of Shipping had taken up this issue for redressal with the Department of Revenue, Ministry of Finance. Ministry of Finance has exempted Customs and Central Excise Duties on inputs utilized for the purpose of manufacture of ships vide General Exemption Notification Nos. 54/2015-Customs, 55/2015–Customs, 44/2015-Central Excise and 45/2015-Central Excise, with effect from November 24, 2015.

5.27 In the Union Budget 2014-15, ship repair industry has been given boost as the activity/ service of repair of foreign vessel in India has been made non-taxable in terms of General Exemption Notification No. 14/2014–ST dated July 11, 2014, provided such vessel are not put to use in India for any other purpose.

5.28. As a step towards creating a climate of ease of doing ship repairing business in the country, the procedure for registration of Ship Repair Units has been simplified by dispensing with the requirement for their registration with the Director General of Shipping, Mumbai with immediate effect. This would encourage establishment of more ship-repair units which would maximise employment potential.

COCHIN SHIPYARD LIMITED

5.29 Cochin Shipyard Ltd, Kochi in the State of Kerala was incorporated in the year 1972 and is the largest shipyard in the country. Cochin Shipyard can build ships upto 1,10,000 DWT and repair ships upto 1,25,000 DWT. The yard has built varied types of ships including tankers, bulk carriers, port crafts, offshore vessels, tugs and passenger vessel.

OPERATING ENVIRONMENT AND BUSINESS REVIEW

Shipbuilding business

5.30 The Global Industry scenario in shipbuilding continued to witness lower ordering levels, even though the order book had slightly improved in the year 2014. As per published reports the total ship deliveries around the world during the year 2014 was 86.2 million DWT as compared to 101 Million DWT in 2013. In India the Defence shipbuilding continued to hold immense prospect especially with the thrust on 'Make in India". A large number of defence projects are in the pipeline which has whetted the appetite of the industry. The Landing Platform Dock (LPD) ships, Anti Submarine Corvettees, The Project 75 (India) submarines, the new Aircraft Carrier are some of the orders being closely watched by industry. Again, in the commercial shipbuilding sector, the government's initiatives to boost the industry is expected to give rich dividend.

LNG SHIPBUILDING

5.31 The government has mandated that a third of the LNG ships for transportation of LNG from USA to India as required by M/s. GAIL are to be built by Indian Shipyards. The building of the LNG ships in Indian yards would bring in niche technology both in shipbuilding as well as in the containment system required to store the LNG at cryogenic temperatures. This project would be a challenge to Indian yards as they would have to develop the necessary infrastructure and the skill sets required to build these ships in the country.

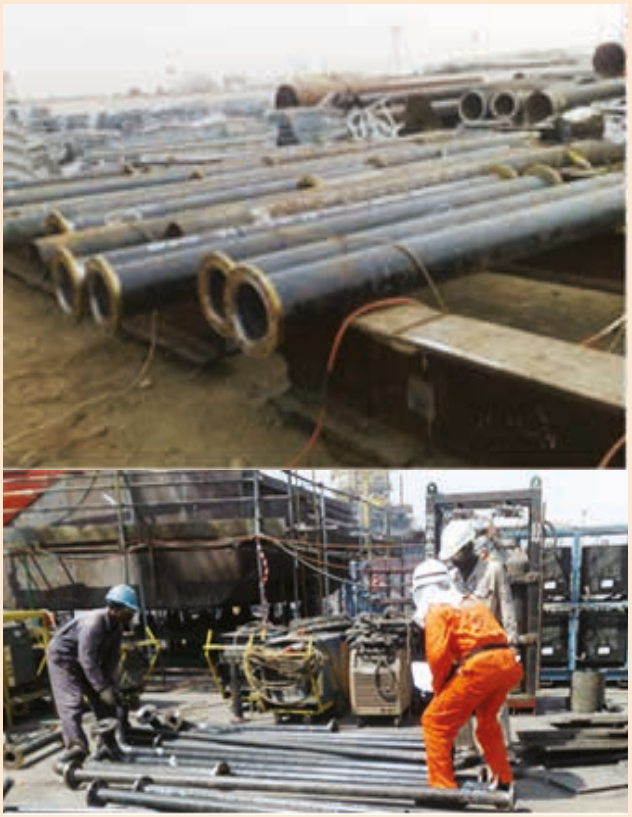
5.32 In this respect CSL became the first Indian shipyard to be licensed by the world leader in Containment Technology viz M/s. GTT, France. The license was granted on 21 December 2015. This achievement on the part of Cochin Shipyard is a significant step towards our "Make in India" initiative. Cochin Shipyard Limited has signed a TSA with Samsung Heavy Industry for its maiden foray into liquefied natural gas (LNG) ship-building.

DREDGER BUILDING

5.33 Cochin Shipyard Limited (CSL) has entered into a MoU with M/s. IHC Holland for manufacturing Cutter Suction Dredgers of 500 mm suction discharge pipe capacity and Trailing Suction Hopper Dredgers of 10,000 m3 hopper capacity. This will enable CSL to tap the huge dredger market potential within the country and

will help in building robust and made-for-India dredgers in India under the "Make in India" initiative.

SHIP REPAIR BUSINESS



5.34 The Indian share in the global ship repair market continued to be low as there were very few capacity addition during the year. Indian ship owners continued to rely on overseas repair facilities owing to insufficient capacity and lack of government incentive. The applicability of service tax on ship repair carried out in Indian yards continued to affect the competitiveness of the Indian ship repair companies.

FINANCIAL PERFORMANCE

5.35 The Performance of Cochin Shipyard Limited continued to be excellent during the year 2014-15 and the half year ended 2015-16 is as under:

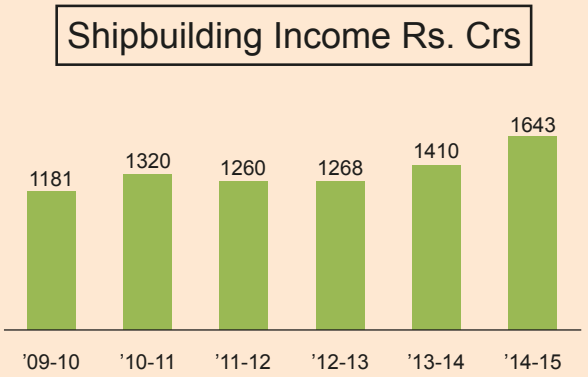
(a) The turnover for the year 2014-15 was 1859.51 crore as compared to Rs.1652.66 crore in the year 2013-14. The net profit for the year 2014-15 was Rs.235.07 crore as compared to Rs.194.24 crore for the previous year.

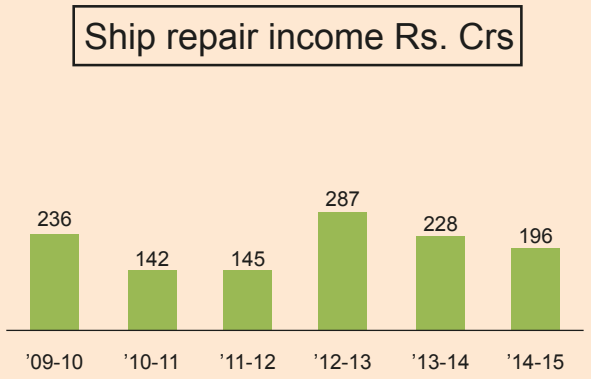
(b) The turnover for the half year 2015-16 upto 30th September, 2015 was Rs. 716.14 crore as against Rs. 864.77 crore achieved during the half year ended 30th September, 2014. The net profit for the half year ended on 30 September, 2015 was Rs 136.47 crore as against that of the previous half year ended of Rs. 123.08 crore. This performance is creditable considering the continuing recessionary conditions in the shipping and shipbuilding sectors.

OPERATIONAL HIGHLIGHTS

5.36 In the year 2014-15 the company achieved a total shipbuilding income of Rs 1643 crore as against Rs 1409.56 crore in 2013-14. During the year 2014-15, the yard delivered six ships i.e. five Fast Patrol Vessels (FPC) for the Indian Coast Guard and one Platform Supply Vessel for an international owner. The Fast Patrol Vessel project is progressing at a very fast pace. As on March 2015 eleven ships were delivered in 17 months making it one delivery in almost 1.5 months as against the contractual requirement of one delivery in three months. The last few of the 20 Fast Patrol Vessels are expected to be delivered significantly ahead of the scheduled delivery dates.

5.37 In the ship repair front, the company achieved a total ship repair income of Rs 195.95 crore in 2014-15 as compared to Rs 227.88 crore during the financial year 2013-14. The fall in the ship repair income was due to the occupancy of the repair dock by the IAC and hence the docking of repair ships had to be undertaken in the building dock. The key repair projects undertaken during 2014-15 include INS Guldar, INS Cheetah, ICGS Sanmar etc.





INITIATIVES FOR CAPACITY ADDITION

5.38 CSL has taken over about 42 acres of land including the existing ship repair facility of Cochin Port Trust for a lease period of 30 years in order to set up an International Ship Repair Facility (ISRF). This would comprise of shiplift, transfer system & allied facilities. Lease deed for the land and water area (Phase I) was executed on 12 April 2013. Since then, the dry dock and existing facilities in the leased area has been made operational. Repair activities of several vessels has been completed during the financial year 2014-15 in the existing small dry dock in the area. The Detailed project report has been drawn up and the company is in the process of obtaining environmental clearance for the project.

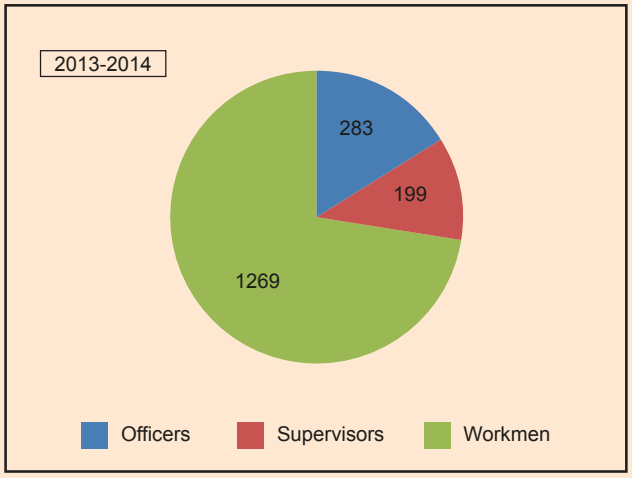
5.39 The company has also conceived a project for constructing an additional dry dock of tentative size 320x75x13M to enable the yard to build large ships viz LNG vessels, large container vessels, new generation Aircraft Carrier etc. Further, the large dry dock would enable CSL to undertake repairs of vessels like LNG carriers, semi- submersibles, drill ships etc within CSL premises. The Ministry of Shipping has accorded in principle approval to proceed with the preparation of Detailed Project Report, which is underway.

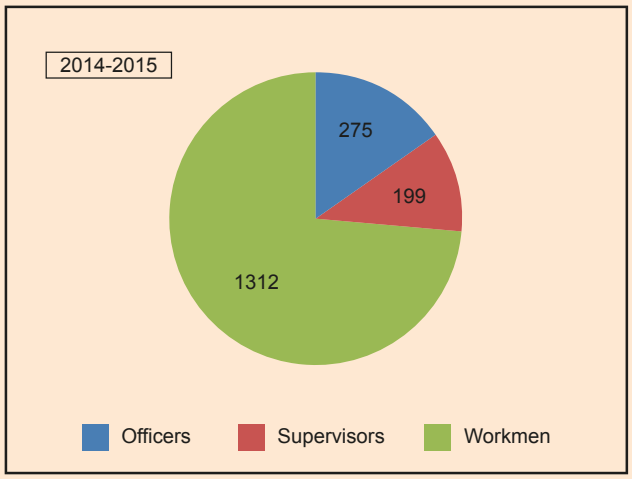
HUMAN RESOURCE

5.40 The manpower strength of the Company as on 31 March 2014 and 31 March 2015 is as follows:-

Table 22

Category	Number of Employees	
	2013-14	2014-15
Officers	283	275
Supervisors	199	199
Workmen	1269	1312
Total	**1751**	**1786**





CHAPTER VI

DIRECTORATE GENERAL OF LIGHTHOUSES & LIGHTSHIPS

6.1 In the vast ocean, a mariner is not sure of his position unless he is guided by some signal from the land/space. DGLL provides service to enable the mariners to know their position with respect to a fixed point on the land with the help of Visual Aids to Navigation such as lighthouses, light vessels, buoys, beacons and Radio Aids to Navigation like Differential Global Positioning System (DGPS), Radar Beacons (Racons), Vessel Traffic Service (VTS) & Automatic Identification System (AIS) etc.

ORGANIZATION AND MANAGEMENT

6.2 The Director General of Lighthouses & Lightships advises the Government of India in the matters relating to Lighthouses and Marine Aids to Navigation. He is assisted by five Dy. Director Generals.

6.3 Headquarter of the Directorate, situated at Noida, is headed by the Director General of Lighthouses & Lightships. All policy matters concerning administration, development, planning etc. are decided at headquarter in consultation with Ministry of Shipping. For the purpose of effective superintendence of Lighthouses and other Aids to Marine Navigation, the Indian coast is divided into nine regional Directorates known as Lighthouse Districts with their headquarters at Gandhidham, Jamnagar, Mumbai, Goa, Cochin, Chennai, Visakhapatnam, Kolkata and Port Blair. Regional Lighthouse Directorate is headed by a Director, who reports on the technical matters to the Deputy Director General and who finally report to the DGLL. A team of qualified Engineers, Technical and Ministerial staff assists the Director in effective superintendence and management of lighthouses and Marine Aids to Navigation.

DEVELOPMENT PLANS

NATIONAL MARITIME DEVELOPMENT PROGRAMME (NMDP)

6.4 The Directorate is implementing seven schemes at a total cost of Rs 500 crore as part of the NMDP Programme of the Ministry of Shipping.

MARITIME AGENDA

6.5 DGLL has projected schemes under Maritime Agenda (Vision 2020) of Rs.1594 crore to deliver reliable, accurate, efficient, State of the Art matrix of Aids to Marine Navigation Service, for the mariners, plying in the Coastal and Exclusive Economic Zone (EEZ) Waters.

12TH FIVE YEAR PLAN

6.6 The 12th plan outlay (2012-17) of the Directorate is Rs 515 crore consisting of 22 spill over and 26 new projects.

ANNUAL PLAN 2015-2016

6.7 An outlay of Rs. 90 crore is approved during the current financial year 2015-16. Important schemes under implementation are given in table below:

Table 23

Sl. No.	Name of the Schemes	Status
1.	Replacement of M.V. Pradip Light House Tender Vessel	The Vessel Indira Point has been delivered and commissioned in April, 2015
2.	Establishment of National Navtex Network	The National Navtex Network has been established and is under trial run.
3.	Establishment of Office Building at Vishakhapatnam	Super structure work has been completed. Finishing & other peripheral works are in progress.
4.	Establishment of new Lighthouses at Vembar	Works in progress.
5.	Promotion of Tourism at Lighthouses	i) RFQ for Tourism at 8 lighthouses have been opened on 8/1/2016. ii) EOI for Tourism at 70 lighthouses have been received and opened on 30/12/2015.
6.	Recapitalization of DGPS Phase-I	Tenders have been received and evaluation has been carried out.
7.	Taping of Solar Energy (Green Energy)	Directorate is establishing around 500 KW of Solar Power, on the Roof-Top of Various Directorate buildings and various Lighthouses.

INFRASTRUCTURE

AIDS TO NAVIGATION

6.8 There were 17 lighthouses at the time of Independence. As on date, the details of Aids to Navigation maintained by the DGLL are as shown below:

Table 24

Sl. No.	Aid to Navigation	Nos.
1.	Lighthouses	193
2.	Lightship	01
3.	DGPS Stations	23
4.	Racons	64
5.	Deep Sea Lighted Buoys	21
6.	Wreck Marking Buoys	05
7.	National Automatic Identification System (AIS) Physical Shore Stations (PSS)	87
8.	Vessel Traffic Service - Gulf of Kachchh (9 Radar +4 AIS Base Stations & 2 Direction finder)	01
9.	Lighthouse Tender Vessels (one vessel is under disposal at Port Blair)	04
10.	National Navtex Chain (7 Tx. Stations, 7 Monitoring Stations & Navtex Control Centre at Mumbai &Vizag.)	01

6.9 For proper maintenance of Lighthouses in the islands and floating Aids to Navigation, 4 Lighthouse Tender Vessels are also in the inventory of DGLL. These are also used to monitor performance of AToNs in the Indian waters, established by the DGLL.

LIGHTHOUSES

6.10 A Lighthouse is a structure on land, close to the shore line or in the water. The Lighthouse tower serve as a day mark with its colour scheme, and a powerful light with a specific character serve the mariners during the night.

6.11 A lighthouse may be used to indicate dangerous Shoals, Sand Bank, Rock etc to obtain a Line of Position and to indicate Landfalls, Headlands, entrance to estuaries/ports etc.

6.12 The Directorate has embarked into a policy of utilization of solar and wind energy so that consumption of fossil fuel are almost insignificant. In this process, about 25 KW solar energy is being generated to power 63 lighted beacons and 13 island lighthouses. The Directorate has established 5 KW solar- wind hybrid energy at False Point. The solarisation work at Bhadreshwar, Vanku & Harudi VTS repeater stations has been completed. The Directorate is also in the process of tapping Green Energy & establishing grid connected solar plants at the stations where the land is available. DEEP Bhawan Noida has also been solarized, with 20KW solar power plant.

LIGHTSHIP

6.13 A Lightship serves the same purpose as lighthouse and is positioned in the sea, where it is not feasible to construct a lighthouse. DGLL maintains a lightship “PERIGEE” off the Bhavnagar coast, in Gujarat.

DIFFERENTIAL GLOBAL POSITIONING SYSTEM

6.14 It is a Satellite based system, where errors in Global Positioning System (GPS) are accurately calculated at a fixed surveyed point and then corrections are transmitted by MF Beacon (283.5 to 325 KHz Marine band). In the coverage area, which is generally 100 - 150 NM, the position can be fixed by the mariners to an

accuracy of better than 5 meter. It is a state-of-the- art Aid for the modern day Navigation.

Concept of DGPS

RACON (RADAR BEACON)

6.15 Racon operates on Microwave frequency. It responds to a Radar pulse by sending a characteristic pulse thereby indicating range, bearing and identification information on Radar Screen of the vessel. It is an all-weather Aid to Navigation. It does not need any additional equipment on board and is a versatile aid, during Coastal Phase of Navigation.

Racon along with display of its Character on a Radar screen

NATIONAL AIS NETWORK

6.16 Automatic Identification System (AIS) is a ship to ship and ship to shore based data broadcast system, for maritime safety and collision avoidance.

6.17 DGLL has established National AIS Network with 87 Physical Shore Stations (PSS), which seamlessly provides radio coverage up to a minimum distance of 25 Nautical Miles from the coast including Islands of Andaman & Nicobar and Lakshadweep thus all SOLAS and other vessels equipped with AIS Transponders are tracked. Two Coastal Control Centers at Mumbai and Vishakhapatnam have been established, in addition, to a National Data Centre at Mumbai. For coastal safety and security, terminals are also provided at Directorate General of Shipping, Joint Operation Centre (JOC) Mumbai, Joint Operation Centre (JOC) Vishakhapatnam, Indian Navy Delhi and Indian Coast Guard Delhi.

Map showing NAIS coverage

DEEP SEA LIGHTED BUOYS

6.18 Buoys are floating aids used for marking of channel in the deep sea with a character of light. Colour scheme of the buoy serves as a day mark to the mariners. Buoys are used to indicate dangerous shoals, sand bank, submerged rock etc to obtain a line of position, to indicate Landfalls, Headlands, entrance to estuaries / ports etc.

Deep Sea Lighted Buoys

NATIONAL NAVTEX NETWORK

6.19 The Directorate General of Lighthouses & Lightships has established a National NAVTEX Network along the coastline of India in order to meet the International Maritime Organization (IMO), Global Maritime Distress and Safety System (GMDSS) requirement by establishing 07 Transmitting Stations on West Coast, East Coast and in Andaman and Nicobar Islands, at a cost of Rs. 20.25 crore.

6.20 The NAVTEX Network envisages broadcast of Maritime Safety Information (i.e. Weather Forecast, Weather Warning, Navigation warnings & SAR messages). The data are provided at NAVTEX Centre by the Indian Metrological Department (IMD), National Hydrographic Office Indian Coast Guard (ICG) and Directorate General of Shipping at Mumbai from where it is relayed to various transmitting stations.

Map showing NAVTEX coverage ● Navtex Transmitting Stations

VESSEL TRAFFIC SERVICE - GULF OF KACHCHH

6.21 A VTS is a service implemented by a Competent Authority, designed to improve safety and efficiency of vessel traffic and to protect the environment. The service should have the capability to interact with the traffic and to respond to traffic situations developing in the VTS area.

6.22 VTS-Gulf of Katchchh has been established in February, 2013. In terms area of coverage, VTS-GoK is one of the largest VTS systems of the world with a set up of 9 Radars, 4 AIS Base stations, 2 Direction Finders in addition to Hydro and Meteorological Sensors at suitable locations with Master Control Station at Kandla. It is catering to requirement of 6 Ports, with the capability of extension to 10 Ports.

6.23 VTS Monitoring System have also been provided to the Indian Navy at Okha and Indian Coast Guard at Okha & Jakhau for monitoring the movements of vessels, plying in GoK waters, to enhance maritime security in the Gulf of Kachchh.

Map showing VTS-GOK coverage area

LIGHTHOUSE TENDER VESSELS

6.24 To cater to the need of maintenance of Lighthouses in the islands and for maintaining the channel marking buoys in the Gulf of Kachchh and Gulf of Khambat, the Directorate is maintaining three ocean-going vessels Sagardeep-II, Deepstambh-II and Indira Point.

Indira Point

REVENUE GENERATION AND EXPENDITURE

6.25 The funding pattern of the Directorate is based on cost recovery system and it does not burden the taxpayers. All expenditure on management and development (plan and non-plan) is met out of the revenue collected by levy of light dues and thus the Directorate is a self-sustaining organization. The Central

Government, as per the provisions of the Lighthouse Act, levies light dues on all the foreign going ships arriving at or departing from any port in India. The light dues are charged at the rate of Rs. 92/- per TEU for container vessels and at the rate of Rs 8/- per ton on NT basis once in 30 days for other foreign going vessels. In order to encourage coastal shipping, the coastal ships have been exempted from the purview of light dues, since October, 2000.

DEVELOPMENT OF TOURISM

6.26 Lighthouses, due to its natural and scenic locations, have tremendous tourist potential. The DGLL is promoting tourism at lighthouses in phased manner. In order to give impetus to promote tourism at Lighthouses, the Ministry has identified 78 lighthouses for development of tourism, on PPP mode. Out of 78 lighthouses 34 lighthouses are in Islands and 44 are from mainland.

CHAPTER - VII

INLAND WATER TRANSPORT

7.1 The Inland Water Transport (IWT) mode is widely recognized as a fuel efficient, environment friendly and cost effective mode, especially for bulk goods, over dimensional cargo and hazardous goods. Navigable inland waterways comprising of rivers, lakes, canals, creeks, backwaters etc. extend to about 14,500 km including about 5600 km for navigation by mechanized vessels. The primary requirement for making this mode commercially viable is development of IWT infrastructure (fairway, terminals and navigation aids) and at the same time creating an enabling environment for augmentation of IWT fleet, primarily by the private sector. IWAI is now focused on declaring and subsequently developing more National Waterways in order to create IWT Network across the country to supplement already congested road and rail networks. As a first step in this direction, 106 more waterways spread over 24 States have been proposed to be declared as National Waterways. The "National Waterways Bill, 2016 was passed by the Lok Sabha in December 2015 and by the Rajya Sabha on 9th March 2016.

INLAND WATERWAYS AUTHORITY OF INDIA (IWAI)

7.2 The IWAI was set up on 27th October 1986 vide Inland Waterways Authority of India Act, 1985, for regulation and development of inland waterways for the purposes of shipping and navigation, and is interalia responsible for development, maintenance and regulation of National Waterways (NWs). The development and regulation of waterways which are not declared as NWs remain under the domain of the respective State Governments.

NATIONAL WATERWAYS(NWS)

7.3 There are five NWs at present as given below:-

Table 25

National Waterways	Waterway Stretch	Length (km)	Year of declaration
NW-1	The Ganga-Bhagirathi-Hooghly river system from Haldia to Allahabad	1620	1986
NW-2	The Brahmaputra river from Dhubri to Sadiya	891	1988
NW-3	The West Coast Canal from Kottapuram to Kollam alongwithUdyogmandal and Champakara canals	205	1993
NW-4	The Kakinda-Puducherry stretch of Canals and the Kaluvelly Tank, Bhadrachalam-Rajahmundry stretch of River Godavari and Wazirabad-Vijayawada stretch of River Krishna.	1078	2008
NW-5	The Talcher-Dhamra stretch of river Brahmani-Kharsua-Dhamra river system, Geonkhali-Charbatia stretch of East Cost Canal, Charbatia-Dhamra stretch of Matai river and Mangalgadi-Paradip stretch of Mahanadi delta rivers.	588	2008

NATIONAL WATERWAYS 1, 2 & 3

7.4 IWAI has undertaken development and maintenance of IWT related infrastructure facilities (fairway, terminals and navigation aids) on first three NWs since their declaration as National Waterways. Various projects for developing and maintaining following infrastructure on these NWs have been completed/ are in progress.

Table 26

a)	Fairway with 3 m/2.5m/2 m/1.5 m depth in NW-1, 2.5m/2m/1.5 m depth in NW-2 and 2 m depth in NW-3, including Vessels (dredgers, survey launches, tugs etc.) for developmental works
b)	A combination of fixed and floating terminals at strategic locations with mechanical handling facilities and access and egress by road/rail.
c)	Facilities for day and night navigation with DGPS connectivity and River Information Service (RIS) on NW-1 , 2 and 3

FAIRWAY DEVELOPMENT

7.5 On NW-1 and 2 which are alluvial rivers, dredging and bandalling are to be carried out every year during post monsoon period on shallow areas (called shoals) to maintain targeted Least Available Depth (LAD). On the other hand, in NW-3 being a tidal canal with predictable tidal variation of water levels, once the desired depth is provided by capital dredging, it can be maintained for a number of years by carrying out nominal maintenance dredging. IWAI has deployed 9 Cutter Suction Dredgers (CSD), 1 Hydraulic Surface Dredger (HSD) and 1 Amphibian Dredger (AD) in NW-1, 2 CSDs, and 2 HSD in NW-2 and 4CSDs(3 CSDs Departmental + 1CSD on contract) and 2 ADs in NW-3. With these 20 dredgers, IWAI aims to provide higher LAD in NW-1 and 2, [3 m in Haldia-

Farakka, 2.5 m in Farakka–Barh, 2 m between Barh and Ghazipur for 330 days in NW-1 and 2.5 m between Dhubri and Dibrugarh in NW-2] and assured 2.0 m in entire NW-3. In NW-3, out of 205 km of total length, capital dredging has been completed resulting in availability of 2.0 m LAD in the entire length. However, widening of navigational channel in a small length of about 4 km remains to be done and is in progress now. With these assured depths, IWT on NW-1, 2 and 3 is expected to increase substantially.

TERMINALS

7.6 On NW-1, IWAI has constructed low and high level jetties of permanent river terminal at Patna and GR jetty 2 area of Kolkata. Fixed terminals also exist at Pakur and Farakka. Acquisition of land for terminal construction at Varanasi, Sahibganj and Haldia has been undertaken and substantial steps have been taken towards award of work for construction of fixed terminals at these places in 2016-17.On NW-2, low and high level jetties have been provided at Pandu (Guwahati). Pandu terminal has also been provided with broad gauge railway connectivity and is being developed as a multimodal transport hub for North-Eastern sector. An MoU has been signed with Central Rail side Ware House Company Ltd. for utilization of warehouse and railway connectivity at this terminal. Jogighopa is also planned to be developed as a coal handling terminal for which bank protection activity has been completed in the current year through the Water Resource Department, Govt. of Assam. At Dhubri, construction of a fixed Ro-Ro terminal has started in 2014-15 and the progress achieved is 60% by December, 2015.

7.7 On NW-3, permanent terminals have been constructed at Kottapuram, Aluva, Maradu, Cherthala, Kayamkulam, Vaikom, Trikkunnapuzha and Kollam while construction of terminal at Alappuzha is in near completion with 99% of the work completed by December, 2015. Two Ro-Ro jetties, constructed at Bolghatty and Willingdon islands for seamless connectivity of NW-3 with Vallarpadam Container Transshipment Terminal for container transportation are successfully under operation.

7.8 Floating pontoon jetties are also available at various places on NW-1 [Haldia, Kolkata (BISN, Botanical garden), Shantipur, Swaroopjanj, Hazardwari, Katwa, downstream Farakka, upstream Farakka, Rajmahal, Sahibganj, Bateshwarsthen, Bhagalpur, Munger, Semaria, Buxar, Ghazipur, Varanasi (Rajghat) and Allahabad]and on NW-2 [Dhubri, Jogighopa, Tejpur, Silghat, Vishwanathghat, Neamati, Bogibil, Panbari, Dibrugarh and Oriumghat]. These floating pontoons can be shifted to/placed at any other location depending on demand.

NAVIGATION AIDS

7.9 IWAI has provided 24 hrs navigation aids from Haldia to Varanasi (1383 km) on NW-1, from Dhubri to Silghat (442km) on NW-2 and entire 205 km in NW-3. Besides, day navigation marks are maintained in balance length of NW-1 and NW-2. To provide state-of- the art computer based navigation aids, IWAI has constructed and commissioned four Differential Global Positioning System (DGPS) stations at Swaroopganj, Bhagalpur, Patna and Varanasi on NW -1 and four DGPS stations at Dhubri, Jogighopa, Silghat and Dibrugarh on NW-2.

7.10 A state of art world class River Information Services (RIS) system in the Sagar- Farakka stretch of NW-1 has been commissioned. Projects for extension of RIS in Farakka- Patna and Patna – Varanasi stretches have also been approved and are being undertaken. The RIS would exchange the information between waterways operators and users and also give information like, wind speed, fog conditions, danger areas, depth information route details between operators and vessel masters. This would also facilitate enhancement of inland navigation safety in ports and rivers and optimize the resource management of the waterborne transport chain which will enhance of the efficiency

of inland navigation. IWAI has published navigational charts, navigational atlas and developed a real time navigation software which are being used on NW-1, 2, 3 and Sunderbans waterways for safe navigation. In addition, IWAI provides river pilots on NW-1 and NW-2 on need basis.

NATIONAL WATERWAYS 4 AND 5

7.11 Preparations of Detailed Project Reports (DPR) for the NW-4 & 5 were completed in 2010. As the possibility of developing commercially viable stretches under PPP mode as advised by the Planning Commission was not found feasible, efforts are now being made to develop these waterways in a phased manner with budgetary support.

7.12 To start the developmental works in NW-4, detailed hydro graphic survey for assessing hydro-morphological conditions of the waterway has been completed for selected stretches. The tender floated for dredging in the stretch of Sholinganallur- Kallapakkam stretch of South Buckingham Canal (SBC) at an estimated cost of Rs. 123.40 crore during Jan 2015, was cancelled due to the delayed response of Govt. of Tamil Nadu for land survey for making available the land required for widening, dumping of dredge material & other assistance. The consultancy work on the development of preliminary design & drawing for the navigational locks, bridge, as well as the techno economic feasibility study for extension of the SBC to Chennai city up to Thiruvanmiyur has been completed. Action for obtaining necessary clearance of environment and CRZ as per the requirement of MoEF is in progress.

7.13 State Government of Andhra Pradesh has awarded the work for conducting delineation survey and assessment of the land required for widening, construction of terminal etc., for developing the existing canal system for navigation on NW-4. Action has been initiated for obtaining the environment and CRZ clearance before the commencement of developmental activities.

7.14 To start the developmental works in NW-5, a MoU (Memorandum of Understanding) with Government of Odisha, Paradip Port and Dhamra Port Company Ltd. was signed by IWAI on 30th June, 2014 for developing the commercially viable stretch of 332 km in two phases. During Phase-1, it is proposed to take up the development of 201 km stretches of Pankopal/Jakodia to Paradip and Dhamra. The 131 km stretch between Talcher and Pankopal/Jakodia and East Coast Canal stretch (Dhamra – Charbatia – Geonkhali) will be taken up in the 2nd Phase.

7.15 Agreements have been signed with contractors for carrying out the dredging operation in the non-tidal stretch between Erada to Padanipal. Action is being taken for acquisition of 10 acres of land on lease basis for setting up of the temporary terminal facility at Erada. Work order has also been issued for procurement of pontoon. With regard to the development of the tidal stretch between Padanipal to Dhamra and Paradip, tender for EIA and EMP study for obtaining the environment, CRZ, wild life and forest clearances has been issued. IIT, Guwahati has been assigned to undertake a mathematical model study for Brahmani River Delta system for obtaining the basic design parameters for the construction of barrages and other cross structures for development of a fairway with LAD of 3.0 m.

7.16 The consultancy work awarded to M/s Feedback Infra Pvt. Ltd., for development of National Waterways – 4&5 in PPP mode is an advanced stage and draft report in this regard is expected by mid February, 2016. Action for short listing the consultants for the feasibility & detailed engineering study of NW-5 in two phases under the World Bank assistance has also been initiated based on the assurance for meeting expenditure in this regard from the Jal Marg Vikas Project of NW-1.

JAL MARG VIKAS PROJECT

7.17 'Jal Marg Vikas' (National Waterway-1) for developing of NW -1 between Allahabad and

Haldia at an estimated cost of Rs 4,200 crore, to be completed in about six years was announced in Finance Minister's Budget Speech 2014-15. This project aims for capacity augmentation of National Waterway -1 to enable commercial navigation by at least 1500 ton vessels. A Project Management Unit and a Project Oversight Committee to provide critical guidance and evaluation of the Project with representatives from the stakeholder State Governments of UP, Bihar, Jharkhand and West Bengal and also from Central Water Commission (CWC) have been established.

7.18 The project is being developed with technical and investment support of the World Bank. The World Bank informed its readiness to support the pragramatic approach starting with an initial loan of US $ 50 million, including the technical assistance. Based on the suggestions of the Scoping Mission of the World Bank, Phase-1 is planned from Haldia to Varanasi with Loan-1 of about US$ 300 million. Phase-2 is planned from Varanasi to Allahabad and would be developed later.

7.19 In order to assess the interventions required for capacity augmentation of NW-1, three studies namely (i) Detailed Feasibility Study and Detailed Engineering for Ancillary works on National Waterway -1; (ii) Environmental and Social Impact Assessment (ESIA), Environmental Management Plan (EMP) and Resettlement Action Plan (RAP); and (iii) IWT Sector Development Strategy and Market Development Study are being undertaken by three global consultants. The work is going on as planned.

PROPOSED NEW NWS

7.20 As the existing road & rail networks in the country have choked to their limits, a need was felt to develop supplementary mode of transport. The IWT which is widely recognized as environment friendly and cost effective mode, particularly for transportation of bulk cargo, is an ideal mode to off load some quantities of cargo from rail and road networks. Accordingly, Central Government planned to develop nationwide IWT network by declaring 101 more waterways, in various States, as National Waterways. As a first step towards this goal, the National Waterways Bill, 2015 was introduced in the Budget Session of the Parliament in 2015. The Bill was referred to the Department Related Parliamentary Standing Committee on Transport, Tourism & Culture for examination. The Committee examined the Bill in consultation with all the stakeholders, including the State Governments and submitted its report recommending declaration of 106 waterways in 24 states with some suggestions and modifications.

7.21 Based on the recommendations of the Committee, a "National Waterway Bill 2016" for declaration of 106 new waterways as National Waterways has been passed by the Lok Sabha during the Winter Session of 2015 and by the Rajya Sabha on 9th March, 2016. The proposed Bill envisages declaration of 106 new waterways as National Waterways in addition to already declared 5 National Waterways, making the National Waterways Network of 111 waterways in the country.

7.22 In the meanwhile, the IWAI has taken up Pre-feasibility and Techno – Economic Feasibility studies on all the waterways proposed to be declared as NWs. These reports are expected to be submitted by the consultants engaged for this propose from end March 2016 onwards. Depending on the outcome and recommendation in these reports, a suitable action plan will be chalked out to be develop these waterways in a time bound manner.

COAL MOVEMENT ON NWS

7.23 A project for transporting 3 MMT per annum (MMTPA) of imported coal to Farakka Super Thermal Power Station (STPS) of NTPC Ltd has been implemented by Jindal ITF Ltd. The transportation of coal had commenced in October, 2013 and is going on smoothly. This is the first ever such project of regular transportation of coal on IWT in the country. IWAI and NTPC propose to develop another such project for

transportation of 3 MMTPA of coal from Bay of Bengal (Sandheads/ Kanica Sands) to Barh STPS of NTPC Ltd through NW-1 over a distance of more than 1100 km for at least 10 years. Bids for this project were invited with last date for receipt of tenders as 22nd June, 2015. As no bidders responded, a revised RFP has been proposed and the matter is being pursued with the NTPC.

KALADAN MULTIMODAL TRANSIT TRANSPORT PROJECT

7.24 This project was conceptualized by the Ministry of External Affairs (MEA) to provide an alternative connectivity of Mizoram with rest of India through Kaladan River in Myanmar. The project envisages road transport from Mizoram to Paletwa (Myanmar), thereafter from Paletwa to Sittwe (Myanmar) by IWT and from Sittwe to Haldia or any other part of India through maritime and coastal shipping. The project is piloted and funded by the MEA which appointed IWAI as their Project Development Consultant (PDC) for port and IWT component of the project. Based on IWAI's recommendation, MEA had awarded the work to the successful bidder [M/s Essar Projects (I) Ltd] for construction of port and IWT components at a cost Rs 342 cr. The construction work at Sittwe and Paletwa was started in December, 2010 and is in progress. Physical and Financial progress up to December 2015 is 87% and 80.7 % respectively. The entire work is targeted to be completed by May / June, 2016.

NATIONAL INLAND NAVIGATION INSTITUTE (NINI)

7.25 NINI was constructed by IWAI at Patna and has been functional from February, 2004. Induction courses for deck and engine ratings, preparatory courses for Serang and engine drivers, basic and advanced dredging courses, refresher courses for hydrographic surveyors, courses for repair and maintenance of vessels, etc. are conducted in NINI regularly. So far, over 5043 candidates (till 31st, December, 2015) have been trained at NINI. A scheme for placement of NINI trained candidates on board IWAI vessels under Apprentice Act has also been implemented. An "Inland Vessel Maneouvering Simulator" has been setup and commissioned in March, 2010.

7.26 With the approval of DG Shipping, following courses are also being conducted in NINI:

a) Elementary First Aid (EFA),
b) Fire Prevention and Fire Fighting (FPFF),
c) Personal Survival Technique (PST),
d) Personal Safety and Social Responsibility (PSSR)

7.27 The administration and management of the Institute has been outsourced by IWAI to M/s ARI, New Delhi. NINI has got ISO 9001:2008 certifications during February, 2010 and the same is being renewed annually.

7.28 As per an MoU signed between IWAI and M/s ARI, a "Marine Simulator Centre" has been set up at NINI on 50:50 revenue sharing basis. The first course under this initiative commenced on 15th April, 2012. This Centre conducts following courses:

a) Radar Observer Simulator Course (ROSC)
b) Automatic Radar Plotting Aid (ARPA)
c) Ship maneuvering Simulator (SMS)
d) Liquid Cargo Handling Simulator (LCHS)
e) Electronic Chart Display & Information System (ECDIS)

7.29 The institute has also assisted Govt. of Bihar in drafting and adopting Boat Rules 2010 and Inland Vessels Rules. The approval process of Diploma Program in IWT from Department of Education & Training (DOET), Ministry of Human Resource Development is also in progress.

CENTRAL SECTOR SCHEME FOR IWT SECTOR FOR NORTH EASTERN STATES

7.30 During the 10th Plan, (2002 – 2007) there was a Centrally Sponsored Scheme for IWT development by the States, but it was discontinued from 1-04-2007 and a new Central Sector Scheme only for NER was operationalized in the 11th Plan. Two projects, one in Mizoram and one in Assam have been completed, while two projects (one each of Tripura and Assam) are in progress under this scheme.

RIVER CRUISE/TOURISM

7.31 River cruise/ tourism has been a regular feature on National Waterways 1 & 2 since the last five years. Various companies namely M/s. Heritage River Cruises Pvt. Ltd., M/s. Vivada Inland Waterways, M/s. Assam Bengal Navigation Co.; Brahmaputra Cruises, operate their cruise vessels on NW-1 and Sunderban waterways. M/s Assam-Bengal Navigation Company and M/s Far Horizons are also operating cruise vessels on NW-2. River tourism on NW-3 is already popular among domestic and foreign tourists. In short, it can be said that river cruise on NW-1, 2 and 3 has gained momentum and is likely to flourish more in future.

INDO-BANGLADESH PROTOCOL ON INLAND WATER TRANSIT AND TRADE

7.32 An Inland Water Transit and Trade Protocol exists between India and Bangladesh under which inland vessels of one country can transit through the specified routes of the other country. The existing protocol routes are (i) Kolkata – Silghat-Kolkata, (ii) Kolkata – Karimganj-Kolkata, (iii) Rajshahi – Dhulian-Rajshahi and (iv) Silghat – Karimganj-Silghat. For inter-country trade, five ports of call have been designated in each country. These are; Haldia, Kolkata,Pandu, Karimganj and Silghat in India and Narayanganj, Khulna, Mongla, Sirajganj and Ashuganj in Bangladesh. This Protocol is recently extended up to 30.06.2020. During 2015 - 2016, 16.55 lakh tonnes of cargo (fly ash and etc.) has been transported between Kolkata/Haldia and Bangladesh till December 2015. Significant Progress has also been made on inclusion of passengers and tourists movement through IWT mode between India and Bangladesh under this Protocol.

CARGO TRANSPORTATION BY INLAND WATERWAYS

7.33 The details of cargo moved on NW-1, 2 and 3 during 2012-13, 2013-14, 2014-15 and 2015-16 (upto Dec 2015) are given below:

(In lakh tonne)

Table 27

	2012-13	2013-14	2014-15	2015-16 (upto Dec. 2015)
National Waterway – 1	27.16	33.49	41.23	21.67
National Waterway – 2	24.26	24.75	5.19	4.44
National Waterway – 3	12.36	10.66	9.65	7.75
Total	63.78	68.90	56.07	33.86

MOVEMENT OF OVER DIMENSIONAL CARGO BY IWT MODE

7.34 There have been many successful movements of Over Dimensional Cargo (ODC) on NW-1, 2 and 3 in the last two years. IWAI has upgraded the IWT infrastructure on NW-1, 2 and 3 and based on interaction with various project promoters and logistics operators, it is expected that ODC movement on NWs will increase substantially in the coming years. ODC movement on NW -2 is also likely to increase when construction of hydro electric power plants in Arunachal picks up. Transportation of ODC on NW-1 has gone up from 672 tonnes in 2008-09 to 3,807 tonnes in 2015-16 (till December, 2015).

CHAPTER - VIII

CHARTERING WING

8.1 Chartering Wing (Transchart) in the Ministry of Shipping in accordance with the Government policy/procedure has been responsible for making shipping arrangements for transportation of Government owned/ controlled cargoes against FOB/FAS imports of Government. The shipping arrangements were centralized with the Chartering Wing. The services of the wing were also open to the private sector.

8.2 The Chartering Wing made shipping arrangements at internationally competitive freight rates with the consent and prior approvals of the concerned Govt. department/ PSUs and in the process gave cargo preference/ support to Indian Vessels without giving any price preference. This Wing also advised the concerned Indenting Government Departments/ PSUs/Projects on various aspects of shipping and post shipping matters.

8.3 The Cabinet has since decided to decentralize chartering services. All Ministries/ Departments/PSUs were informed about the decision on 8th September, 2015 so as to organize their own chartering arrangements as the services of Chartering Wing of the Ministry of Shipping were available during transition period only until 31st December, 2015. Accordingly, Chartering Services provided by Shipping Ministry now cease to exist. The importing Government Department/PSUs are now free to make their own shipping arrangements without the need to route their requirement through Chartering Wing of Ministry of Shipping.

HIGHLIGHTS OF 2015-2016

8.4 During the period under report from 1st January, 2015 to 31st December, 2015, a total number of 231 vessels were chartered by the Chartering Wing for shipment of total quantity of approx. 173.33 lakh MT of cargo on Government's account. Out of 231 ships chartered, 109 were Indian ships which carried approx. 89.48 lakh MT i.e. approx. 51.62% of the total quantity. The main cargoes for which shipping arrangements were made during the year included crude oil, coking coal, fertilizer, fertilizer raw material, limestone and iron ore, etc. besides project/container/ break bulk cargoes.

8.5 The Chartering Wing successfully made shipping arrangements for shipments of Urea from the port of Sur (Oman) to India from M/s. OMIFCO on account of Department of Fertilizers fully meeting their requirement and finalized Contract of Affreightment (COA) from last seven years (year to year). Chartering Wing

also finalized a COA for one year for shipments of limestone on account of Visakhapatnam Steel Plant (VSP).

8.6 The option for specialized vessel which was chartered for three seasons for Indian Antarctica Research Expedition was exercised for season 2015-16 as per the requirement of the National Centre for Antarctic & Ocean Research (NCAOR), Ministry of Earth Sciences.

8.7 The statement indicating the quantities of Government owned/controlled cargoes for which the shipping arrangements were made by this Wing during the year 2014 and 2015 is placed at **Annexure-III**.

CHARTERING SERVICE CHARGES

8.8 An amount of Rs. 6.17 crore on account of 1% chartering service charge was collected during 2015. The chartering service charge at the rate of 1% on freight / dead freight/demurrage / charter hire earned by Indian companies on vessel fixed through Chartering Wing (Transchart) for carriage of import / export cargoes was made applicable from February, 1993. Since then the amount collected/received on this account have totaled up to Rs. 162.80 crore (up to 31.12.2015) which has been deposited in the Consolidated Fund of India.

FREIGHT MARKET

8.9 The Baltic Dry Index (BDI) measures the average cost of transporting by ocean, raw materials like iron ore, coal, grain, fertilizers etc. Unlike some other economic indicators, it provides real time picture of raw materials and infrastructure demand. It is one of the leading economic indicators

8.10 The BDI opened the year 2015 at 771 on 2nd January, 2015 and slowly reached to a level of 1222 on 5th August, 2015 and arrived at an all-time low level of 471 on 16th December, 2015. i.e. BDI remained weak with sudden up-move for some days during the entire year.

8.11 The main reason for collapse in market rates was slowdown in the trade in certain parts of world thereby requiring fewer raw materials. The increase in the size of the global fleet also impacted and kept the freight market levels on the lower side.

8.12 The weakness in freight rates persisted for the entire first half of the year with 1st quarter and 2nd quarter BDI averaging at 614 and 632 respectively. The freight market exited this recessionary trading range and gained strength in middle of the year due to pick up in Cape size iron-ore activity and the prolonged South American grain season with ensuing port congestion. This resulted in 54% rise during 3rd quarter in BDI to 974. However, the flurry was short lived. After peaking in August, 2015, the BDI declined in November and with freight rates lowered to levels of January, 2015, it hit a new all time low of 471 in December, 2015 .

8.13 The Baltic Dirty Tanker Index (BDTI) which track freight rates for dirty liquid cargoes opened the year at 885 on 2nd January, 2015 as against 1021 on 2nd January, 2014. Thereafter, with slight fluctuations, BDTI moved up slowly and reached a level of 1088 on 23rd June, 2015 and came down to the lowest level of the year at 869 on 24 December, 2015.

8.14 During 2015, the dirty tanker market remained firm in owners favour throughout the year with the rates peaking around mid June to end June, 2015. The voyage returns in 2015 remained high among all segments. The factors, such as increases of ton per miles due to more cargoes being lifted from Caribbean, South America and West Africa to east markets including India, berthing / discharging delays in Chinese ports resulting in bunching up of ships in China etc. contributed to this firm market. Though the above factors favoured the market to remain stable throughout 2015 with occasional spurts in the rates, the single most important factor resulting in high returns to the owners across all segment was weaker bunker prices during 2015 against the back drop of 2015 World scale flat rates which were based at much higher bunker price.

CHAPTER IX

TRANSPORT RESEARCH

9.1 The Transport Research Wing (TRW) renders research and data support to the Ministry of Shipping for policy planning and formulation. TRW is the nodal agency for collection, compilation and dissemination of information and data on Ports, Shipping, Ship-building & Ship-repairing industry and Inland Water Transport (IWT) at the national level. Apart from collection, compilation and publication of transport data pertaining to ports, shipping and inland waterways, it also scrutinizes and validates data received from various primary/ secondary sources for consistency and comparability. TRW is associated with review meetings on policy issues pertaining to Port and IWT Sectors.

9.2 Apart from publications, Transport Research Wing coordinates with various other organizations like Ministry of Finance, Ministry of Commerce, Niti Aayog, Ministry of Statistics & Programme Implementation, Central Statistical Organization, National Sample Survey Organization and State Governments etc.

9.3 The following publications have been released during 2015-16

(i) Basic port Statistics of India –2013-14

(ii) Half-Yearly update on Indian Port Sector for period ending 31st March, 2015 and 30th September 2015

(iii) Statistics of Inland Water Transport - 2014-15

(iv) Manual on Port Statistics

9.4 The work relating to the preparation of publications “Basic Port Statistics- 2014-15”, “Indian Shipping Statistics 2015”, “Statistics of India’s Ship-building & Ship-repairing Industry 2014-15” is under progress.

9.5 The Ministry of Shipping had set up a Working Group on “Strengthening of Major Port Statistics” under the Chairmanship of Senior Adviser (TR), Transport Research Wing (TRW), M/o Shipping, Road Transport & Highways. The recommendations of the working Group are being implemented. As a follow up of implementation of recommendations of the Working Group a manual on Port Statistics has been prepared for uniform compilation of Port Statistics by Ports. Action has been initiated for collecting data from major ports for compilation of Port Service indices

9.6 The details of overseas cargo handled during 2014-15 by ports is at **Annexer - IV**

CHAPTER-X

INTERNATIONAL COOPERATION

COOPERATION WITH MULTILATERAL ORGANIZATIONS

10.1. India became a member of the International Maritime Organization (IMO) in 1959, which is the global standard setting authority for the safety, security and environmental performance of shipping and ensures that such standards are fair and effective and are universally adopted and implemented. India has been an active participant at the IMO. In fact, participation of India in the functioning of IMO has helped India to voice its developmental concerns to the international maritime community. India has been a member of the IMO Council and has again got re-elected as Member of the IMO Council under Category 'B' representing nations with the largest interest in international seaborne trade for biennial 2016-17.

10.2. Out of 56 Conventions/ Protocols of International Maritime Organization (IMO), India has already ratified/acceded to/signed 34 Conventions/Protocols. Out of the remaining 22 Protocols/Conventions, the status is as under:

- International Convention on Control of Anti-fouling Systems on Ships, 2001 has been acceded by India on April 24, 2015 by way of deposition of instrument of accession signed by the President of India to IMO.

- Proposal for amendment of Merchant Shipping Act, 1958 and subsequent accession to International Convention on Civil Liability for Bunker Oil Pollution Damage 2001 has been approved by the Union Cabinet on June 10, 2015 and a Bill on the subject is under consideration of the Parliament.

- Proposal for amendment of Merchant Shipping Act, 1958 and subsequent accession to International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (Ballast Water Management Convention) has also been approved by the Union Cabinet on April 29, 2015.

- Ratification of Protocol on preparedness Response and Cooperation to Pollution incidents by Hazardous and Noxious Substances, 2000 and the Hong Kong Convention for Safe and Environmentally Sound Recycling of Ships 2009, is under consideration.

- Conventions related to International Labour Organization (ILO) viz. Maritime Labour Convention (MLC), 2006 and Convention on Seafarer's Identity Document (SID) have also been acceded to by India on October 9, 2015 by way of deposition of an instrument of accession to the ILO.

10.3 Apart from IMO, India has been contributing significantly to the other multilateral organizations/agreements such as Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC); India, Brazil and South Africa (IBSA); Indian Ocean Rim-Association for Regional Cooperation(IORA); International North South Transport Corridor (INSTC), etc.

MARITIME TRANSPORT COOPERATION INSTRUMENTS/ARRANGEMENTS

A. Unilateral Recognition Agreements.

10.4. For recognition of training and certificates of India Seafarers, India has unilateral agreements with St. Vincent and the Grenadines, Dominica, Georgia, Vanuatu, Liberia, Marshal Islands, Bahamas, Qatar, Barbados, Netherlands, Maldives, Isle of Man, Malta, Norway, Denmark, Ireland, Ghana, Latvia, Antigua and Barbuda, Vietnam and Belgium.

B. Bilateral cooperation arrangements.

10.5. India has entered into cooperation instruments/arrangements with other maritime countries and regional groupings by way of Agreements or MoUs to foster growth of Indian maritime sector as well as to safeguard India's maritime interests.

A brief list and status of these cooperation arrangements is as under, namely:-

Table 28

Sr. No.	Name of the Country (Year of signing)	Areas of Cooperation
1.	Hashemite Kingdom of Jordan (October 11, 2015)	Cooperation between the shipping organizations and enterprises; exchange and training of staff and students; exchange of information to expedite transportation of commercial goods at sea and at ports; joint ventures in the fields of maritime transportation, shipbuilding and ship repairs, maritime training, maritime information technology including development of simulators, port facilities and related maritime activities.
2.	Republic of Korea (May 18, 2015)	Cooperation in maritime transport and logistics, including training of seafarers; joint ventures in the fields of maritime transport and logistics; construction of logistics infrastructure linking land-based transport with maritime transport; utilization, development and management of domestic and overseas ports.
3.	Vietnam (May 24, 2013)	Cooperation between the shipping organizations and enterprises; exchange and training of staff and students; exchange of information to expedite transportation of commercial goods at sea and at ports; joint ventures in the fields of maritime transportation, shipbuilding and ship repairs, maritime training, maritime information technology including development of simulators, port facilities and related maritime activities.
4.	Austria (October 3, 2012)	Cooperation on shipping infrastructure in particular by promoting safe, efficient and cost effective shipping and ports infrastructure development as well as operation and maintenance; exchange of information concerning shipping and ports infrastructure as well as benefits from the opportunities offered in the shipping and ports infrastructure sector; expansion of plans in the shipping and ports infrastructure sector and realization of special projects in this area; recognition of the projects in the field of "Maritime Communication Solutions".
5.	Sri Lanka (January 7, 2011)	Passenger services between the ports of Tuticorin and Colombo and between Rameshwaram and Thalaimannar.

Table 28		
Sr. No.	**Name of the Country (Year of signing)**	**Areas of Cooperation**
6.	The Netherlands (February 12, 2008) (Renewed on May 10, 2011 and May 11, 2014)	Research and Development; shipbuilding; innovation and sustainability; safety and security; port planning and development; simulation of cargo flows between the two countries; government policies; Ports; Maritime transport and logistics.
7.	South Africa (March 23, 2006)	Cooperation between the shipping organizations and enterprises; exchange and training of staff and students; exchange of information to expedite transportation of commercial goods at sea and at ports; joint ventures in the fields of maritime transportation, shipbuilding and ship repairs.
8.	United States of America (April 14, 2015 and April 8, 2015)	Shipping and intermodal operations; Maritime safety and security; Port Management; Dredging and Dredger construction; Ship Recycling; Maritime Training and Education; Technological Development related to Maritime sector; Inland Water Transport and other fields of mutual interest.
9.	Morocco (February 22, 2000)	assistance and advice on merchant shipping and other related matters.
10.	China (November 29, 1996)	Cooperation in the field of Maritime Transport.
11.	Iran (January 3, 1995)	Maritime transport and port affairs; multimodal transport for transit cargo between the ports of Iran in the Persian Gulf and Caspian Sea through the Asian countries; transit of goods to the third countries through territory of one another; shipping agents and forwarding companies; ship building and ship repair.
12.	Singapore (January 24, 1994)	Maritime Transport.
13.	Russian Federation (December 23, 1994)	Participation of vessels in the carriage of all cargoes between the ports of the two countries; elimination of obstacles that hamper the development of sea trade between the port of their countries; cooperation between the shipping companies, charterers and shippers.
14.	Federal Republic of Germany (June 15, 1966)	Maritime Transport.
15.	Denmark (February 6, 1965)	Recognition of tonnage certificates of Merchant Ships.
16.	Finland (February 20, 1963)	Recognition of tonnage certificates of Merchant Ships.
17.	Poland (June 27, 1960)	Strengthen and develop cooperation in maritime transport.

Table 28		
Sr. No.	**Name of the Country (Year of signing)**	**Areas of Cooperation**
18.	Pakistan (December 14, 2006)	Protocol on Resumption of Shipping services between India and Pakistan signed on 15 January 1975 to improve direct shipping service between the two countries on the basis of sovereign equality and mutual benefit.
19.	IBSA (Trilateral agreement between India, Brazil and South Africa) (September 13, 2006)	Promote transportation of goods and passengers along the International "North-South" Transport corridor, and, access to the international market through rail, road, sea, river and air transport; assistance in increasing the volume of international transport of passenger and goods; security of travel, safety of goods as well as environmental protection according to the international standards; harmonization of transport policies as well as legal and legislative frameworks.
20.	Belgium (September 24, 1997) (Renewed on September 14, 2012) [MoU]	Maritime transportation and Port development; Promotion of each other's ports through inclusion of promotion material in port exhibitions and by continuous exchange of information/documents; Tailor-made Training programmes.

MARITIME ENGAGEMENTS IN THE YEAR 2015

10.5. 2015 has been a very active year where the visits of dignitaries focused on a number of maritime issues. A list of such visits held by the dignitaries of India and those of foreign as well as the major areas of discussion during the visits is as under:

OUTGOING VISITS

Table 29			
S. No.	**Country**	**Areas of Cooperation**	**Dignitary and Dates of Visit**
1.	Seychelles	Agreement on Hydrographic survey; MoU on Blue Economy.	Hon'ble Prime Minister (March 10-11,2015)
2.	Mauritius	MoU on Ocean Economy; MoU for the improvement in Sea and Air transportation facilities at Algalega Island of Mauritius.	Hon'ble Prime Minister (March 11-12, 2015)
3.	Sri Lanka	MoU on Ocean Economy.	Hon'ble Prime Minister (March 13-14, 2015)
4.	Iran	MoU on Chahbahar Project	Hon'ble Minister of Shipping&RTH (May 5-7, 2015)
5.	Korea	MoU in the fields of Maritime Transport and Logistics.	Hon'ble Prime Minister (May 18, 2015)

Table 29			
S. No.	**Country**	**Areas of Cooperation**	**Dignitary and Dates of Visit**
6.	China	Sister-Port Relationship between Mundra Port and Guangzhou Port.	Hon'ble Prime Minister (May 16, 2015)
7.	Bangladesh	Agreement on Coastal Shipping; Renewal of Protocol on Inland Waterways Transit and Trade (PIWTT); MoU on use of Chittagong and Mongla Ports for movement of goods to and from India; MoU on Blue Economy and Maritime Cooperation in the Bay of Bengal and the Indian Ocean; MoU between the Coast Guards of India and Bangladesh.	Hon'ble Prime Minister (June 6, 2015)
8.	Egypt	Participation in the inauguration ceremony New Suez Canal	Hon'ble Minister of Shipping&RTH (August 5-7, 2015)
9.	United Arab Emirates	Joint Statement on strengthening maritime security in the Gulf and the Indian Ocean region.	Hon'ble Prime Minister (August 16-17, 2015)
10.	United States of America	Joint Strategic Vision for the Asia- Pacific and Indian Ocean Region; Joint Statement on peaceful use of the oceans, freedom of navigation, and protection of the ocean ecosystem, exploration of a new Oceans Dialogue to promote sustainable development of the blue economy.	Hon'ble External Affairs Minister (September 22, 2015)
11.	Jordan	Agreement on Maritime Transport.	Hon'ble President (October 10-12, 2015)
12.	United Kingdom	Joint Statement on establishment of an annual senior official South Asia dialogue covering security including terrorism, connectivity and maritime issues.	Hon'ble Prime Minister (November 12-14, 2015)
13.	Singapore	Operationalization Document for Operationalization of the Technical Agreement on sharing White Shipping Information between the Indian Navy and the Republic of Singapore Navy signed on 21st July 2015; Joint Statement on Strengthening Maritime Cooperation, including in capacity building and the sharing of best practices.	Hon'ble Prime Minister (November 23-24, 2015)

INCOMING VISITS

Table 30

S. No.	Country	Areas of Cooperation	Dignitary and Dates of Visit
1.	United States of America	Joint Strategic Vision for the Asia-Pacific and Indian Ocean Region.	President of USA (January 25-27, 2015))
2.	Netherlands	Agreement between Cochin Shipyards Limited (CSL) of India and Dutch Shipbuilder Royal IHC to jointly build dredgers in India, including transfer of technology from IHC to CSL as a significant collaborative initiative towards "Make in India" in a priority sector.	Prime Minister of Kingdom of Netherlands (June 5, 2015)
3.	Tanzania	MoU for Cooperation in the field of Hydrography & Protocol on exchange of Hydrographic Data.	President of United Republic of Tanzania (June 17-21, 2015)
4.	Seychelles	Protocol on framework of cooperation in the field of Blue Economy.	President of the Republic of Seychelles (August 25- 27, 2015)
5.	Philippines	Joint Statement on strengthening defense and security cooperation in the areas of maritime domain awareness and White Shipping.	Secretary of Foreign Affairs, Philippines (October 13- 15, 2015)

Status of Maritime Cooperation with nearby countries.

Progress has been made on various areas of cooperation with nearby countries in 2015. The status of cooperation is as under:

SRI LANKA

10.6 Ferry Service between Tuticorin and Colombo: The Ferry Service, which was started on June 13, 2011, was discontinued due to some technical reasons. Efforts are being made to revive and bring the service back in operation.

10.7 Ferry Service between Rameswaram and Talaimannar: A dialogue is on between Sri Lankan Government and Indian Government regarding development of infrastructure in both countries to make this service operational.

10.8 Long Range Identification Tracking (LRIT) service: LRIT services are extended to Sri Lanka in terms of IMO guidelines with effect from October 8, 2014.

BANGLADESH

10.9 India-Bangladesh Shipping Service: An agreement has been entered with Bangladesh on coastal shipping through sea & inland waterways of both the countries on June 6, 2015. A Standard Operating Procedure (SOP) to actionize the said agreement has also been signed on November 15, 2015. The agreement will facilitate an easy movement of cargo from East Coast of India to North Eastern States of India and also between the two countries through River Sea Vessels (RSV).

10.10 Protocol on Inland Water Transit and Trade: In pursuance of the Trade Agreement between Government of Bangladesh and the Government of India, a Protocol on Inland Water Transit and Trade is in existence since 1972 which is renewed by the two countries from time to time. Last such extension for 5 years has been signed on June 6, 2015. Under this Protocol inland vessels of one country can transit through the specified routes of the other country. One country will provide the facilities of "Ports of Call" to the vessels of the other country engaged in inter-country trade and number of such ports of call will be equal in both countries. Accordingly, Narayanganj, Khulna, Mongla, Sirajganj and Ashuganj in Bangladesh and Kolkota, Haldia, Karimganj,

Pandu and Silghat in India are identified as Ports of Call.

10.11 MoU for use of Chittagong and Mongla Ports for movement of goods to and from India. An MOU was signed between India and Bangladesh on June 6, 2015 to allow India to use Chittagong and Mongla Ports of Bangladesh for movement of goods to and from India.

SINGAPORE

10.12 A video conference was held on September 3, 2015 with the Singapore authorities to discuss modalities of the proposed Maritime Conference with three broad themes: Port Management and Operations; Cruise and Coastal Shipping; and, Ship Registration and certification. The India-Singapore Maritime Conference is likely to be held in early 2016.

MYANMAR

India- Myanmar Direct Shipping Service

10.13 Shipping Corporation of India Limited (SCI) started the India-Myanmar Direct Shipping Service on October 2, 2014 from Chennai with necessary financial assistance from the Ministry of External Affairs.

10.14 During the last one year from October 2014 to September 2015, SCI has carried 5,762 TEUs from Indian Subcontinent to Yangon and 5,923 TEUs from Myanmar to Indian Subcontinent, thus, totaling 11,685 TEUs on India-Myanmar Service.

TRILATERAL COOPERATION ARRANGEMENTS

10.15 A trilateral cooperation framework is under progress between India, Sri Lanka and the Maldives to finalize an Agreement for Trilateral Cooperation between India, Sri Lanka and the Maldives on maritime security for information exchange to enhance Maritime Domain Awareness, training, pollution control, joint exercises and capacity building. Director General of Shipping has extended the Long Range Identification and Tracking (LRIT) facility to Sri Lanka and is in communication with Maldives to offer the same facility within the guidelines of IMO and International Maritime Satellite Organization (IMSO).

OTHER RELEVANT ISSUES

Redrawal of High Risk Area (HRA)

10.16 Piracy off the coast of Somalia in the Gulf of Aden/Horn of Africa (East Africa) had surged significantly from 2008 to 2012, leading to innumerable attacks and hijackings of merchant vessels and their crew. These vulnerable areas, characterized by piracy attacks or hijackings, were identified as High Risk Area (HRA) and defined as such by the industry.

10.17 In 2008, the HRA line in the Indian Ocean region was designated at 65°E which was quite far away from India's West Coast. However, in 2011, the HRA was extended to 78°E, which was very near the west coast of India.

10.18 This stretching of the HRA had serious implications for India. Additional War Risk Premium (AWRP) on movement of merchant ships in this area was imposed by insurance providers, which escalated the cost of transportation of Indian EXIM cargo by about Rs. 3,600 Crore per year during 2008 to 2012 thereby resulting in huge financial burden for Indian EXIM trade and Indian consumer.

10.19 Since 2011, India has been consistently taking up the issue of the restoration of the said HRA geographical coordinate from its existing position of 78°E to 65°E in several global fora, such as International Maritime Organization (IMO) and the Contact Group on Piracy off the Coast of Somalia (CGPCS). In view of the efforts put in by India, the international bodies (International Chamber of Shipping and others) agreed to retract HRA from 78°E to 65°E on October 8, 2015 and it came into effect from December 1, 2015.

10.20 This shall result in huge savings for India's EXIM trade and consumers on account of reduced insurance premium and consequently freight costs. It shall improve safety of fishermen and fishing boats and the improvement in the security along India's coastline.

CHAPTER – XI

ADMINISTRATION AND FINANCE

ADMINISTRATION

11.1 Administration Wing of the Ministry of Shipping is headed by Joint Secretary (Administration) who is assisted by Chartering Officer (Administration), Under Secretary (Administration) supervising the work of Establishment Sections, General Administration Section and Cash Section. The Establishment-1 Section is entrusted with the service and administrative matter of 301 regular employees of (Group A, B, and C) of the Ministry. This includes the management of the various Cadres such as Central Secretariat Service (CSS), Central Secretariat Stenographers Service (CSSS), Central Secretariat Clerical Service (CSCS), Development Wing and Chartering Wing. Establishment Section implements all administrative orders issued by Department of Personnel and Training, Department of Pension & Pensioners' Welfare, Ministry of Finance, Union Public Service Commission, Central Information Commission, Central Vigilance Commission etc.

11.2 Special efforts have been made by the Ministry to ensure compliance of the orders issued from time to time from reservation for SC/ ST/ OBC to filling up vacant posts in Chartering Wing and Development Wing of this Ministry. Information with regard to the total number of Government Servants, separately for Secretariat and Non–Secretariat side (Group wise) and representation of SC/ ST employees in the Ministry is given in **Annexure – V**.

WELFARE

11.3 In the Ministry of shipping various welfare measures in respect of welfare of women employees of the Ministry were undertaken. A Complaint Committee on Sexual Harassment has been set up to look after the grievances of women employees relating to sexual / gender based harassment.

11.4 To oversee the implementation of the Prohibition of Smoking in Public Places' Rules, 2008 in the Central Govt. Offices/ Buildings, the Ministry of shipping has constituted a Committee for surprise checking in the Ministry. The Ministry of Shipping is one of the few Ministries which has successfully completed online APARs of IAS officers through SPARROW. The Biometric Attendance System has also been implemented in this Ministry.

11.5 Important Days of national importance viz. Anti – Terrorism Day, Communal Harmony Day, Sadbhavana Diwas, Swachhta Diwas, Constitution Day, Vigilance Awareness Week, Red Cross Day, Red Cross Raffle Draw, etc. were observed and "Pledge" taken by the employees of the Ministry of Shipping. Contributions were also raised and collected towards "Flag Day". The essay competitions both in Hindi and English were conducted during Harmony Communal Week / Vigilance Awareness Week. The Participants are rewarded for participating in these events.

E-OFFICE

11.6 E-Office software has been developed by NIC for all the officers and their supporting staff in the Ministry and e-office is presently operational.

WEBSITE

11.7 Website (http://shipmin.nic.in) of the Ministry is operational. The website has been redesigned and is updated from time to time.

DEPARTMENTAL ACCOUNTING ORGANIZATION

11.8 The Accounts and Budget wings of the Ministry of Shipping are functioning under the Pr. Chief Controller of Accounts. The office of the Pr. Chief Controller of Accounts is inter-alia responsible for making all authorized payments of the Ministry, compilation of Monthly and Annual Accounts, conduct of internal audit of all the units under the Ministry to ensure compliance of the prescribed Rules, rendering technical advice to the Ministry on Financial and accounting matters, cash management and coordination with the Controller General of Accounts, C&AG, Finance Ministry and other related agencies.

11.9 The Pr. Chief controller of Accounts organization comprises of Pr. Chief Controller of Accounts, one Controller of Accounts, one Deputy Controller of Accounts, Six Pay & Accounts Officers of whom 3 are located in Delhi, 1 in Kolkata, 1 in Mumbai and 1 in Noida. The Budget Section consists of one Under Secretary (Budget).

11.10 The Pr. Chief Controller of Accounts office is primarily responsible for the following major tasks:-

Payments

- Making Sanctioned Payments on behalf of the Ministry after conducting pre-check of bills as per approved Budget.
- Release of authorization to other Ministries to incur the expenditure on behalf of the Department.

Receipts

- Budgeting, accounting and reconciliation of the receipts of Ministry of Shipping.
- Monitoring the repayment of loans and interest thereof received from State Governments and other PSU's. The payment on account of Grants-in-Aid, Loan, Subsidy and equity to Public Sector Undertakings, Port Trusts and International Maritime Organization.

Submission of Accounts and Reports

- Preparation of monthly accounts, Finance Accounts Annual Appropriation Accounts, and Statements of Central Transactions and their submission to the Controller General of Accounts, Ministry of Finance, Department of Expenditure, Government of India.
- Monitoring of Internal Extra Budget Resources (IEBR) and its submission to office of the CGA.
- Monitoring and submission of mandatory information as per Fiscal Responsibility and Budget Management (FRBM) Act and Rules.
- Preparation of Management Information Reports based on accounting, budget & audit data for submission to various authorities.
- Preparation of financial statistics on monthly basis regarding receipts and expenditure for upload on Ministry's website.

Budget

- Preparation and submission of Annual Budget Estimates and Revised Estimates, re-appropriation of funds of the Department of Shipping, Ministry of Shipping, Road Transport and Highways. Coordination with Ministry of Finance and other Departments in all the budget matters.
- Monitoring/disposal of all the Audit Paras and Observations made by the C&AG of India (civil and commercial) and coordination with Monitoring Cell of the Department of Expenditure, M/o Finance for the 'Action Taken Note'.

Internal Audit

- The Internal Audit Wing in the Pr. CCA organization of Ministry of Shipping has been established as an effective tool for identifying the systematic errors/lapses in the functioning of various departments in the Ministry and advising the management for necessary action/rectification. This has proved to be as immense management tool to bring about objectivity and financial proprietary in day to day functioning and by bringing greater sensitivity for financial prudence.

- The Officers of the Internal Audit Wing as well as officers posted in other sections have been imparted various trainings related to Internal Audit in the past. This year three AAOs have been imparted training in Risk Bases Audit.

- Consequent upon the effective utilization of Internal Audit mechanism during the past few years by the PrCCA's organization, there has been a significant improvement in maintenance of Accounts in all offices of the Ministry of Shipping.

- Audit paras which involve major irregularities/deficiencies are brought to the notice of Head of Departments and matter perused for settlement on paras and review meeting are also arranged by Pr. CCA office to take stock of the outstanding paras.

IMPORTANT AUDIT OBSERVATION

11.11 The summary of important audit observations, appearing in the most recent Audit reports of the year ended March, 2014 is at **Annexure-VI.**

COMPUTERISATION OF ACCOUNTS

11.12 With a view to eliminate the delay in compilation of Accounts and to provide the information on expenditure accounts, on timely, accurate basis, the office of Pr. Chief Controller of Accounts at present is implementing various software packages like COMPACT, E-Lekha, PFMS and GePG etc.

COMPACT

11.13 Comprehensive software package for Expenditure Accounts covering major accounting functions i.e. pre-check, GPF, Budget, Pension and Compilation.

E-LEKHA

11.14 A Web based application for generating daily/monthly reports of MIS of Accounting information. All the PAOs are uploading data daily on E-lekha. Pr. Account office is submitting the monthly account through E-lekha.

PFMS

11.15 In 2008-09 Hon'ble Finance Minister announced the establishment of Central Plan Schemes Monitoring System (CPSMS), which is now known as Public Financial Management System (PFMS), to provide comprehensive Decision Support and Management Information to various Scheme managers responsible for administering Plan Schemes. Since then the scope of PFMS has been enlarged to cover direct payment to beneficiaries both under selected Plan and non-Plan Schemes. Today several Scheme managers are using PFMS to directly credit the bank accounts of implementing agencies and beneficiaries.

11.16 PFMS has operationalized an active interface with 90 banks (26 Public Sector Banks, 59 Regional Rural Banks and 5 major Private Sector Banks) to provide immediate validation of bank accounts, prompt electronic credit to the

beneficiary's bank account and bank reconciled expenditure statements to the implementing agencies with 139 Centrally Sponsored Schemes (CSS) and more than 800 Central Sector Schemes (CSS), along with State Plans and Additional Central Assistance (ACA), the CPSMS is managing funds in excess of Rs.3,00,000 crore annually. The system is geared for fund management and e-payments for Plan/non-Plan Schemes of the Government of India and report utilization under these schemes at different levels of implementation on a real time basis.

GEPG

11.17 The Government e-Payment Gateway (GePG) is envisaged to provide a payment gateway for the Civil Ministries and departments with the specific objective of leveraging the existing IT capabilities of the Core Banking Systems and application software functionalities of the CGA's organization towards the development of an integrated payment and accounting system for all levels of usage with seamless interface and data communication. This would result in the elimination of physical cheque processing system and traditional issues associated with it, which would ensure major cost savings for the department by greatly enhancing the overall payment processing efficiency; Online reverse file (payment scroll) giving MIS on unique e-Authorization ID for all e-payment fund transfers; Online auto-reconciliation to facilitate major savings in time and efforts and speed up the compilation of accounting processes; and ensuring a secure single point data capture of transaction data thereby eliminating duplication of work and data inconsistency.

GRANT NO. 89 – MINISTRY OF SHIPPING.

11.18 The position of savings/excess in respect of above mentioned Grant No. 89 for the year 2015-16 and actual expenditure for the year 2015-16 (upto 31st December, 2015) has been reflected in **Annexure-VII**. The Head-wise Details of Receipts as per the Statement of Central Transaction (SCT) for the last three years have been reflected in **Annexure –VIII**. Head wise details of expenditure for 2013-14 to 2015-16 (upto 31st December, 2015) is given in **Annexure – IX**. Profile of actual Expenditure in 2015-16 (upto 31st December, 2015) is at **Annexure – X**.

11.19 The Ministry of Shipping is maintaining two funds viz. Depreciation Reserve Fund and General Reserve Fund for providing certain services required to develop transportation facilities in the country. Details are at **Annexure-XI**.

Right to Information Act

- Detailed information relating to obligations listed in Section 4 of the RTI (Publications of Manuals) has been uploaded / hosted in the websites of the concerned organizations.
- For the implementation of the RTI Act, Ministry of Shipping has exclusively created a new cell and an Information and Facilitation Counter (IFC) at the Reception for the convenience of the public who come personally.
- In the Ministry of Shipping (Main Sectt.), we have appointed/designated 26 CPIOs and 16 Appellate Authorities based on the Divisions, who are in the rank of US, Deputy Secretary and Director and equivalent respectively. Notifications/ Orders indicating the appointment of CPIOs/ Appellate Authorities under the Act have been published and uploaded/hosted on the website of the Ministry of Shipping i.e. www.shipping.nic.in.
- Whenever a request is received from the public/citizen by the CPIO/IFC, the same is passed/transferred to the RTI Cell, where after the application is registered after ensuring that fee has been deposited, thereafter the request is sent to the

concerned CPIOs/Appellate Authorities to provide online information to the public as well as disposal of First Appeal and the monthly statement is sent to DoP&T.

- Copies of the RTI Act and circulars received from DOPT on RTI are being circulated promptly to all the organizations for compliance.

- Useful guidance material/guidelines are also being supplied to CPIOs/Appellate Authorities.

- An internal procedure has been established and circulated to all the concerned CPIOs/ Appellate Authorities and all Sections for guidance, while dealing with the requests/ appeals from public seeking information.

- All the useful records are duly maintained.

- During the year a total of 707 applications and 53 appeals were received either directly or by transfer and handled satisfactorily.

VIGILANCE

11.20 The Vigilance Wing of the Ministry coordinates and supervises the vigilance activities within the Ministry as well as the PSUs and autonomous bodies under its administrative control. The Wing is headed by the Chief Vigilance Officer (CVO) of the rank of Joint Secretary appointed with the approval of Chief Vigilance Commission.

11.21 There are 27 attached/subordinate/PSU/ autonomous bodies under the Ministry and each organization has either a part-time or full-time CVO. The part-time CVOs are appointed from amongst the officers of the concerned organization in consultation/concurrence with the CVC. The full-time posts of CVOs, wherever such posts exist, are filled-up by officers of organized services through DoP&T.

11.22 The emphasis has been laid on the role of preventive vigilance by taking prompt administrative actions and ensuring transparency including simplification of procedures and use of e-technology etc. Special emphasis was laid on the strengthening of vigilance machinery in various organizations under the Ministry of Shipping particularly the Port Trusts. Punitive action has been taken wherever required in consultation with CVC against the delinquent officials.

11.23 As a result of active monitoring and follow-up, a large number of cases were finalized during the year.

11.24 During the Vigilance Awareness Week, a pledge was administered to the staff and officers of the Ministry. The banners, posters were displayed at the prime locations of the building and Notice Board of the Ministry.

11.25 Vigilance activities in various organizations under this Ministry are being reviewed periodically through their reports/returns and also through interactions with CVOs/Head of the Organizations.

GRIEVANCE REDRESSAL SET-UP

11.26 The set-up is headed by Advisor as 'Public Grievances Officer'. Periodical review is carried out for early redressal of the pending grievances.

CPGRAMS

11.27 In consonance with the thrust on transparency in the functioning of the government, a cost effective monitoring software, namely Centralized Public Grievances Redressal and Monitoring System (CPGRAMS), for monitoring and disposal of Public Grievances cases has been functoning in this Ministry. It has been implemented in almost all the Attached/ Subordinate offices of this Ministry to closely monitor and evaluate the quality of disposal of Public Grievances regularly and minimize the delays in decision making.

CHAPTER – XII

USE OF OFFICIAL LANGUAGE HINDI

12.1 Keeping in view the Annual Programme issued by the Department of Official Language, Ministry of Home affairs, for implementation of the Official Language Policy of the Government, the Ministry of Shipping continued its efforts towards greater use of Hindi in official work during 2015-2016. The work pertaining to the progressive use of Hindi in the Ministry is under the administrative control of Adviser (Economic), assisted by Assistant Director (OL). The Hindi Section consists of one Assistant Director (OL), two Senior Translators, one Junior Translator and one Stenographer. Hindi Section helps in the implementation of official language(Hindi) policy in the Ministry as well as in all subordinate and attached offices under its administrative control.

IMPLEMENTATION OF SECTION 3(3) OF THE OFFICIAL LANGUAGE ACT 1963

12.2 In pursuance of the Official Language Policy of the Govt. of India, all documents covered under section 3(3) of the Official Language Act, 1963 are being issued both in English and Hindi.

Efforts are also being made to reply the letters in Hindi which are received in English from region 'A' & 'B'.

OFFICIAL LANGUAGE IMPLEMENTATION COMMITTEE (OLIC)

12.3 There is an Official Language Implementation Committee (OLIC) under the

Chairmanship of Adviser (Economic) in the Ministry. This Committee regularly reviews the progress made in the use of Hindi in the Ministry, its Subordinate and Attached Offices. It gives appropriate suggestions and recommends measures to be taken for the effective implementation of the Official Language Policy. The last meeting of O.L.I.C was held on 08.03.2016 under the Chairmanship of Advisor (Economic).

Apart from implementing the Official Language Policy and Programme of the Govt., Hindi Section arranges training of the staff in the use of Hindi, Hindi Typing and Hindi Stenography, preparation of bilingual documents and translation from English to Hindi and vice-versa.

INSPECTIONS TO PROMOTE USE OF HINDI

12.4 In pursuance of Official Language Policy in the Ministries/Departments and their Attached/ Subordinate Offices etc. of Central Government, Shipping Corporation of India, (Port Blair), DGLL(Port Blair & Cochin), Cochin shipyard Limited and Cochin Port Trust were inspected during 2015.Ten Sections/Divisions of the Ministry were also inspected.

ORGANISATION OF HINDI PAKHWARA (FORTNIGHT) AND HINDI WORKSHOP

12.5 In order to encourage the use of Hindi in official work 'Hindi Pakhwara' was organized in the Ministry from 01-09-2015 to 15-09-2015. During the Pakhwara various competitions were held. A workshop was also conducted during this period. Prize distribution function was organized on 13.10.2015 and prizes were awarded by Secretary (Shipping) to the winners of competitions held during Hindi Pakhwada .

INCENTIVE SCHEMES

12.6 Under this scheme of Department of Official Language, officers/employees of all categories who write at least twenty thousand words in Hindi in a year in region A and B and ten thousand words in Region C are eligible to participate in the Scheme. Under this Scheme, First, Second and Third prizes are given. Details of the Scheme for the year 2015-16 has been circulated.

IN HOUSE MAGAZINE "NAUTARNI"

12.7 A book named "Hong Kong Samjhouta, 2009 Pot Parichakran Nidhi, Ek Protsahen Yojana" won a prize under the original book writing scheme of the Ministry is under the process of being published as a special edition of the Ministry's in house magazine "Nautarni". Articles received for the next edition of Nautarni are being reviewed.

BOOK WRITING AWARD SCHEME

12.8 "Award Scheme for the books written on the subjects relating to Indian Ports and Shipping originally in Hindi" and "Award Scheme for book translated from other languages in Hindi on the subject relating to Indian Ports and Shipping" has been instituted. The advertisement of the same has been uploaded on the website of the Ministry.

HINDI SALAHAKAR SAMITI

12.9 With a view to render advice for effective implementation of the Official Language Policy of the Government, the Hindi Salahkar Samiti (Advisory Committee) of the Ministry of Shipping has been reconstituted after the constitution of the 16th Lok Sabha and a meeting was held on 6.1.2016 under the Chairmanship of Hon'ble Minister of Shipping, Road transport and Highways.

PRATI DIN EK SHABD

12.10 The scheme named 'Prati Din Ek Shabd' is being run in the Ministry. Under this scheme, one

word/phrase in Hindi and its English equivalent is being displayed on the board installed near reception floor of the Transport Bhawan. These words/phrases are generally of administrative and technical in nature which are used in day-to-day official work.

12.11 A list of words used in Government work has been prepared which has been circulated among all the officers and sections of the Ministry. This list is also uploaded on the website of the Ministry.

Annexure - I
(Para - 1.5)

MINISTRY OF SHIPPING

I. THE FOLLOWING SUBJECTS WHICH FALL WITHIN LIST 1 OF THE SEVENTH SCHEDULE TO THE CONSTITUTION OF INDIA

1. Maritime shipping and navigation; provision of education and training for the mercantile marine.

2. Lighthouses and lightships.

3. Administration of the Indian Ports Act, 1908, (15 of 1908) and the Major Port Trusts Act, 1963 (38 of 1963) and ports declared as major ports.

4. Shipping and navigation including carriage of passengers and goods on inland waterways declared by Parliament by law to be national waterways as regards mechanically propelled vessels, the rule of the road on such waterways.

5. Ship-building and ship-repair industry.

5A. Ship breaking.

6. Fishing vessels industry.

7. Floating craft industry.

II. IN RESPECT OF THE UNION TERRITORIES

8. Inland waterways and traffic thereon.

III. IN RESPECT OF THE UNION TERRITORIES OF THE ANDAMAN AND NICOBAR ISLANDS AND THE LAKSHADWEEP:

9. Organisation and maintenance of mainland islands and inter-island shipping services.

IV. OTHER SUBJECTS WHICH HAVE NOT BEEN INCLUDED UNDER THE PREVIOUS PARTS:

10. Legislation relating to shipping and navigation on inland waterways as regards mechanically propelled vessels and the carriage of passengers and goods on inland waterways.

11. Legislation relating to and coordination of the development of minor and major ports.

12. Administration of the Dock Workers (Regulation of Employment) Act, 1948 (9 of 1948) and the Schemes framed thereunder other than the Dock Workers (Safety, Health and Welfare) Scheme, 1961.

13. To make shipping arrangements for and on behalf of the Government of India/Public Sector Undertakings/State Governments/ State Government Public Sector Undertakings and autonomous bodies in respect of import of cargo on Free on Board/ Free along Site and export on Cost and Freight/Cost Insurance and Freight basis.

14. Planning of Inland Water Transport.

15. Formulation of the privatisation policy in the infrastructure areas of ports, shipping and inland waterways.

16. The Development of township of Gandhidham.

17. Prevention and control of pollution:

(a) Prevention and control of pollution arising from ships, shipwrecks and abandoned ships in the sea, including the port areas;

(b) Enactment and administration of legislation related to prevention, control and combating of pollution arising from ships; and

(c) Monitoring and combating of oil pollution in the port areas.

V. SUBORDINATE OFFICES:

18. Directorate General of Shipping.

19. Andaman Lakshadweep Harbour Works.

20. Directorate General of Lighthouses and Lightships.

21. Minor Ports Survey Organisation.

VI. AUTONOMOUS BODIES:

22. Tariff Authority for Major Ports (TAMP).

23. Port Trusts at Kandla, Mumbai, Jawaharlal Nehru, Mormugao, New Mangalore, Kochi, V.O. Chidambaranar (Tuticorin), Chennai, Visakhapatnam, Paradip and Kolkata

24. Dock Labour Boards at Kolkata

25. Inland Waterways Authority of India.

26. Seamen's Provident Fund Organisation.

27. Seafarers Welfare Fund Society

28. Indian Maritime University

29. National Shipping Board

VII. ASSOCIATIONS:

30. Indian Ports Association

VIII. PUBLIC SECTOR UNDERTAKINGS:

31. Shipping Corporation of India.

32. Cochin Shipyard Limited.

33. Central Inland Water Transport Corporation Limited.

34. Dredging Corporation of India.

35. Hooghly Dock and Ports Engineers Limited.

36. Kamarajar Port Limited.

37. Sethusamudram Corporation limited

IX. INTERNATIONAL ASPECTS:

38. International Maritime Organisation.

X. ACTS:

39. The Indian Ports Act, 1908 (15 of 1908).

40. The Inland Vessels Act, 1917 (1 of 1917).

41. The Dock Workers (Regulation of Employment) Act, 1948 (9 of 1948).

42. The Merchant Shipping Act, 1958 (44 of 1958).

43. The Major Port Trusts Act, 1963 (38 of 1963).

44. The Seamen's Provident Fund Act, 1966 (4 of 1966).

45. The Inland Waterways Authority of India Act, 1985 (82 of 1985).

46. The Multimodal Transportation of Goods Act, 1993 (28 of 1993).

Annexure II
(Para - 1.15)

Annexure III
(Para - 8.7)

STATEMENT SHOWING THE QUANTITIES OF CARGOES FOR WHICH SHIPPING ARRANEMENTS WERE MADE BY CHARTERING WING, MINISTRY OF SHIPPING FOR THE YAER 2014 & 2015.

PARTICULARS	FOR THE 2014 (01-01-2014 TO 31-12-2014)						FOR THE 2015 (01-01-2015 TO 31-12-2015)					
	NOS OF VSLS			QTY IN LAKH MT			NOS OF VSLS			QTY IN LAKH MT		
NAME OF CARGO	IND	FGN	TOTAL	IND	FGN	TOTAL	IND	FGN	TOTAL	IND	FGN	TOTAL
A- IMPORTS												
a) DRY CARGO												
FERTILIZER	29	5	34	10.64	1.8	12.44	45	9	53	17.66	3.33	20.99
ROCKPHOS	1	3	4	0.33	1.03	1.36	1	2	3	.35	.68	1.03
C.COAL/M.COAL	15	153	168	11.25	129.15	140.40	0	49	49	0	45.66	45.66
LIMESTONE	1	15	16	0.45	7.5	7.95	0	16	16	0	8.00	8.00
MOP	0	4	4	0	1.32	1.32	1	4	5	.41	1.43	1.84
TOTAL (a)	**46**	**180**	**226**	**22.67**	**140.80**	**163.47**	**47**	**80**	**127**	**18.42**	**59.10**	**77.52**
PERCENTAGE				13.87	86.13					23.76	76.24	
B) LIQUID CARGOES												
CRUDE OIL	52	3	55	53.22	3.48	56.70	60	20	80	70.53	24.03	94.56
TOTAL (b)	**52**	**3**	**55**	**53.22**	**3.48**	**56.70**	**60**	**20**	**80**	**70.53**	**24.03**	**94.56**
PERCENTAGE				93.86	6.14					74.59	25.41	
TOTAL IMPORT (a+b)	**98**	**183**	**281**	**75.89**	**144.28**	**220.17**	**107**	**100**	**207**	**88.95**	**83.13**	**172.08**
PERCENTAGE				34.47	65.53					51.69	48.31	
B) LINER CARGOES	0	0	0	1.35	0.15	1.50	0	22	22	0	0.72	0.72
TOTAL	**0**	**0**	**0**	**1.35**	**0.15**	**1.50**	**0**	**22**	**22**	**0**	**0.72**	**0.72**
PERCENTAGE				90.00	10.00					0	100	
C) COASTAL MOVEMENT												
IRON ORE	3	16	19	1.37	7.45	8.82	2	0	2	0.53	0	0.53
TOTAL	**3**	**16**	**19**	**1.37**	**7.45**	**8.82**	**2**	**0**	**2**	**0.53**	**0**	**0.53**
PERCENTAGE				15.53	84.47					100		
TOTAL (A+B+C)	**101**	**199**	**300**	**78.61**	**151.88**	**230.49**	**109**	**122**	**231**	**89.48**	**83.85**	**173.33**
PERCENTAGE				34.11	65.89					51.62	48.38	

Annexure IV
Provisional
(Para - 9.6)

Overseas Cargo handled during 2014-15 by Ports

Type of Cargo	Cargo Handled					
	Indian Lines			Foreign Lines		Total
		Qty ('000 tonnes)	% Share	Qty ('000 tonnes)	% Share	Qty ('000 tonnes)
General Cargo						
	Loaded	4209	20.9	15912	79.1	20121
	Unloaded	2200	5.3	39379	94.7	41579
	Total	**6409**	**10.4**	**55291**	**89.6**	**61700**
Container						
	Loaded	858	1.1	76814	98.9	77672
	Unloaded	919	1.1	80814	98.9	81733
	Total	**1777**	**1.1**	**157628**	**98.9**	**159405**
Dry Bulk						
	Loaded	901	2.5	34833	97.5	35734
	Unloaded	26951	8.5	288852	91.5	315803
	Total	**27852**	**7.9**	**323685**	**92.1**	**351537**
POL/Product & Other Liquids						
	Loaded	2961	4.5	62348	95.5	65309
	Unloaded	26545	11.0	215067	89.0	241612
	Total	**29506**	**9.6**	**277415**	**90.4**	**306921**
Grand Total						
	Loaded	8929	4.5	189907	95.5	198836
	Unloaded	56615	8.3	624112	91.7	680727
	Total	**65544**	**7.5**	**814019**	**92.5**	**879563**

Source: Major Ports and State Maritime Boards

Annexure V
(Para - 11.2)

TOTAL NO. OF EMPLOYEES IN THE MINISTRY OF SHIPPING (MAIN SECTT) AND NUMBER OF SCHEDULED CASTES, SCHEDULED TRIBES AND O.B.C. (SECRETARIAT SIDE).

S. No.	Class	Sanctioned strength	Total No. of employees in position	No. of SC employees	% to total employees	No. of ST employees	% to total employees	No. of OBC employees	% to total employees
1	2	3	4	5	6	7	8	9	10
1.	Group 'A'	37	34	03	8.10	02	5.40	03	8.10
2.	Group 'B' (Gaz)	45	35	04	8.88	05	11.11	08	17.77
3.	Group 'B' (Non-Gaz)	76	60	17	22.36	02	2.63	08	10.52
4.	Group 'C' (including Peon, Daftery, Safaiwala/ Frash)	113	64	11	9.73	04	3.53	0	--

TOTAL NO. OF EMPLOYEES IN THE MINISTRY OF SHIPPING AND NUMBER OF SCHEDULED CASTES, SCHEDULED TRIBES AND O.B.C. (NON - SECRETARIAT SIDE).

S. No.	Class	Sanctioned strength	Total No. of employees in position	No. of SC employees	% to total employees	No. of ST employees	% to total employees	No. of OBC employees	% to total employees
1	2	3	4	5	6	7	8	9	10
1.	Group 'A'	17	13	01	5.88	-	-	-	-
2.	Group 'B' (Gaz)	09	01	-	-	1	11.11	--	--
3.	Group 'B' (Non-Gaz)	04	03	-	-	--	--	--	
4.	Group 'C'	-	-	-	-	-	-	-	-
5.	Group 'D' (including Safaiwala/ Frash)	-	-	-	-	-	-	-	-

Annexure-VI
(Para - 11.11)

IMPORTANT AUDIT OBSERVATIONS

The summary of important audit observations, appearing in the following most recent Audit report for the year ended March, 2014 are given below:

1. Report No.18 of 2015 Union Government (Civil), Compliance Audit Observations

(i) Mormugao Port Trust invested Rs. 24.28 crore in construction of a berth without a detailed feasibility study report which resulted in creating a facility which is yet to give any commensurate returns.

2. Report No.49 of 2015 Union Government, Ministry of Shipping (Performance Audit)

(i) Jawaharlal Nehru Port Trust (JNPT) entered into an agreement with Nhava Sheva International Container Terminal (NSICT) (July 1997) wherein royalty was fixed on per Twenty Foot Equivalent Unit (TEU) basis which progressively increased from `47 per TEU (1999-2000) to `2670 per TEU (2014-15). Due to high royalty rate, the project became progressively less remunerative to the operator and threatened the viability of the project. After 18 years of operation, JNPT now proposes to migrate from royalty to revenue sharing mode.

(ii) While planning for PPP projects in the pre-Model Concession Agreement (MCA) period, the ports and the Ministry failed to standardize the charges to be shared by the Private partner, resulting in total revenue of `467.95 crore not being shared by the private partner at four ports.

(iii) Cochin Port Trust (CoPT) extended concessions valuing `40.23 crore to Dubai PortInternational (DPI) (concessionaire for International Container Transshipment Terminal (ICTT)) due to deviations from Request for Qualification (RFQ) terms. ICTT continued to operate at 35 per cent capacity since its commissioning in 2011 and the port has not reaped any additional return by extension of concession.

(iv) The implementation of PPP projects suffered from delays between FFQ and signing of CAs on account of protracted time taken for finalization of tenders, security clearances, litigations etc. Delays in implementation of Projects was also observed due to non-fulfillment of obligations by port authorities relating to appointment of independent engineers, obtaining environment clearances, delay in handing over of project sites; non provision of committed drought etc. Delays up to 455 days were observed on account on non-fulfillment of Conditions Precedent by Concessionaries.

(v) Though guidelines for monitoring PPP projects issued by GoI envisaged Setting up PPP Performance

Review Unit (PRU) headed by an officer not below the rank of the level of the Central Ministry/ State Government/Statutory Entity, Ministry of Shipping (MoS) intimated (February 2015) that as an interim arrangement Joint Secretary (Ports) in addition to his normal duties, functioned as head of PPP-PRU with one PPP expert since October 2012. A full-fledged PPP Cell has now been set up in the MoS.

(vi) Audit compared the operational efficiency of PPP berths with that of the berths at four paras in respect of performance parameters but did not notice significant improvement in the quality of service after introduction of PPP model.

(vii) MCA prescribes the maintenance of Escrow account by the concessionaire. However, as per the order of priority for withdrawal and appropriation of funds payment of revenue share was considered only after concessionaire's expenses related to operation and management of project. This led to arrears of revenue share to the extent of 41.32 crore in respect of Berth 13 and 15 and Kandla Port Trust.

Annexure-VII
(Para - 11.18)

GRANT OF THE MINISTRY OF SHIPPING
FOR THE FINANCIAL YEAR 2015-2016 (upto 31/12/2015)

(Rs in crore)

Grant No. & Name		Original	Supplementary	Total Budget	Actual Expenditure	Saving
Grant No. 89	Revenue Account	1393.71	0.00	1393.71	1072.69	NA
	Capital Account	386.08	0.00	386.08	244.29	
Total		1779.79	0.00	1779.79	1316.98	

Source: Appropriation Accounts

Annexure-VIII
(Para - 11.18)

HEADWISE DETAILS OF RECEIPTS AS PER THE STATEMENT OF CENTRAL TRANSACTION (SCT) FOR THE LAST THREE YEARS

(Rs. in Crore))

REVENUE RECEIPTS

	MAJOR HEAD	2013-14	2014-15	2015-16 (upto 31.12.2015)
1.	0021-Taxes on Income other than Corporation Tax	9.13	9.21	6.82
2.	0045-Other Taxes & Duties on Commodities & Services	4.25	5.57	7.70
3.	0049- Interest Receipts	22.55	21.20	14.15
4.	0050-Dividends & Profits	61.42	87.59	87.20
5.	0070-Other Administrative Services	0.00	0.00	0.00
6.	0071-Contribution & Recoveries towards Pension & Other Retirements Benefits	6.05	8.05	9.13
7.	0075-Miscellaneous General Services	0.00	0.00	0.00
8.	0210-Medical & Public Health	0.18	0.20	0.16
9.	0216-Housing	0.23	0.27	0.22
10.	1051-Ports and Light Houses	225.03	222.28	187.49
11.	1052-Shipping	71.78	82.61	80.57
12.	1056-Inland Water Transport	0.00	8.02	9.14
13.	1475 - Other General Economic Services	0.00	0.32	0.02
A	**REVENUE RECEIPTS ***	**400.62**	**445.32**	**402.60**

CAPITAL RECEIPTS

	MAJOR HEAD	2013-14	2014-15	2015-16 (upto 31.12.2015)
1.	4000- Miscellaneous Capital Receipts	0.00	0.00	0.00
2.	6858- Loans for Engineering Indst.	0.00	11.70	0.00
3.	7051- Loans for Port & Light Houses	45.73	50.00	1.76
4.	7056-Loans for Inland Water Transport	0.00	0.00	0.00
5.	7601-Loans & Advances to State Govt.	0.00	0.00	0.00
6.	7610- Loans to Govt. Servants	0.41	0.25	0.27
	CAPITAL RECEIPTS **	**46.14**	**61.95**	**2.03**

Annexure - IX
(Para - 11.18)

Ministry of Shipping
HEADWISE DETAILS OF EXPENDITURE FOR THE LAST THREE YEARS i.e. FROM 2013-14 TO 2015-16 (upto 31/12/2015)

(Rs. in Crore)

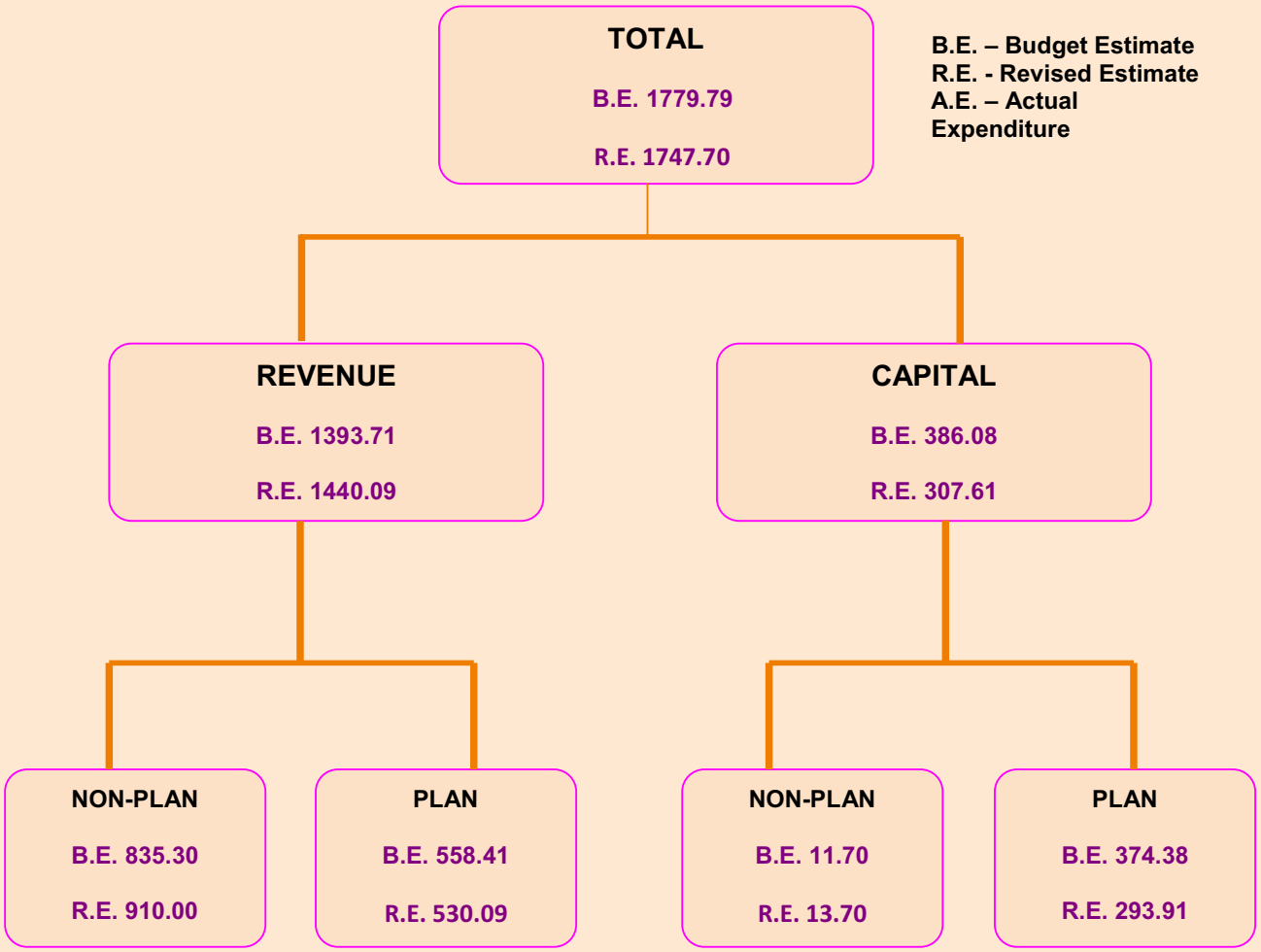
PARTICULARS	2013-14			2014-15			2015-16 (Upto31/12/2015)		
	Plan	N.PLAN	Total	Plan	N.PLAN	Total	Plan	N.PLAN	Total
REVENUE EXPENDITURE									
2049-Interest Payment	--	15.52	15.52	--	16.64	16.64	--	0.13	0.13
2071-Pension Payment	--	15.70	15.70	--	16.99	16.99	--	13.24	13.24
2075-Mislaneous General services	--	--	--	--	--	--	--	--	--
2235-Social, Security & Welfare	--	0.03	0.03	--	0.07	0.07	--	0.01	0.01
2245-Releief on account of natural calamities	--	--	--	--	--	--	--	--	--
2852-Industries	1.27	434.85	436.12	0.99	54.44	55.43	2.83	7.16	9.99
3051-Ports&Lighthouses (Gr. No.88)	3.92	639.17	643.09	11.28	632.89	644.17	96.29	484.50	580.79
3051-Ports&Lighthouses (Gr. No.98)	0.00	13.15	13.15	0.49	91.42	91.99		10.79	10.79
3051-Port&Lighthouses (Gr. No.102)	0.00	2.50	2.50	111.80	72.54	184.34	--	1.61	1.61
3052-Shipping	1.48	68.55	70.03	--	29.09	29.09	75.79	77.28	153.07
3056-Inland Water Transport	128.86	185.32	314.18	1.06	--	1.06	275.74	20.07	295.81
3451-Economic Services	--	25.86	25.86	--	--	--		31.03	31.03
3601-Grant-in-aid to State Government	1.22	--	1.22	--	--	--	2.00	0.00	2.00
3605-Technical & Economic Cooperation with other Countries	--	--	--	--	--	--	--	--	--
TOTAL (Revenue Exp.)	136.75	1400.65	1537.40	125.62	914.08	1039.78	452.65	645.82	1098.47
CAPITAL EXPENDITURE									
4405-Capital outlay on fisheries	5.80	--	5.80	--	--	--	6.61	--	6.61
4406-Capital outlay on forestry & wildlife	0.44	--	0.44	4.50	--	4.50	--	--	--
4801-Capital outlay on Power Proj	--	--	--	--	--	--	1.02	--	1.02
5051- Capital outlay on Ports & Lighthouses (Gr.No.89)	246.84	(-)99.13	147.71	290.90	-78.04	212.87	225.06	- 4.81	220.25
5051- Capital outlay on Ports & Lighthouses (Gr.No.98)	29.52	0.00	29.52	0.30	--	0.30	15.65	--	15.65

5052-Capital outlay on Shipping (Gr.No.88)	56.40	0.00	56.40	--	--	--	--	--	--
5052-Capital outlay on Shipping (Gr.No.98)	2.59	0.00	2.59	3.27	--	3.27	1.66	--	1.66
5053-Capital Outlay on Civil Aviation	0.30	--	0.30	--			--	--	--
5075-Other Transport Services	1.00	--	1.00	3.02	--	3.02	2.73	--	2.73
5452-Capital outlay on tourism (Gr.No.98)	--	--	--	0.05	--	0.05	0.25	--	0.25
6858-Loans for Engineering Industries	--	11.87	11.87	--	11.70	11.70	--	8.78	8.78
7051-Loans for Ports & Light Houses	50.00	--	50.00	50.00	--	50.00	7.72	--	7.72
7610-Loans to Govt. servants	--	0.27	0.27	--	0.25	0.25	--	0.12	0.12
TOTAL (Capital Exp.)	392.89	(-)86.99	305.90	352.04	-66.09	285.95	260.70	4.09	264.79
Grand Total (Rev.+Cap.)	**529.64**	**1313.66**	**1843.30**	**477.66**	**847.99**	**1325.73**	**713.35**	**649.91**	**1363.26**

Annexure - X
(Para - 11.18)

PROFILE OF ACTUAL EXPENDITURE IN 2015-16 (upto 31/12/2015)

(Rs. in crore)



Source:- Appropriation Accounts

Annexure-XI
(Para - 11.19)

MINISTRY OF SHIPPING

DEPRECIATION RESERVE FUND (8115)	Rs in crore
Opening Balance as on 01.04.2015	191.88
Receipt during Apr-December 2015	19.00
Payment during Apr-December 2015	0.00
Closing Balance as on 31.12.2015	210.88
GENERAL RESERVE FUND (8121)	
Opening Balance as on 01.04.2015	613.91
Receipt during Apr-December 2015	50.00
Payment during Apr-December 2015	0.00
Closing Balance as on 31.12.2015	663.91

Source: Classified Consolidated abstract Account

सत्यमेव जयते

MINISTRY OF SHIPPING
GOVERNMENT OF INDIA
www.shipmin.gov.in

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