REPORT NO.

269

सत्यमेव जयते

PARLIAMENT OF INDIA
RAJYA SABHA

DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE ON TRANSPORT, TOURISM AND CULTURE

TWO HUNDRED SIXTY NINTH REPORT

Cargo Handling at the Major Ports

(*Presented to the Rajya Sabha on 21st December, 2018*)
(*Laid on the Table of Lok Sabha on 21st December, 2018*)

Rajya Sabha Secretariat, New Delhi

December, 2018/ Agrahayana, 1940 (Saka)

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RAJYA SABHA SECRETARIAT
NEW DELHI

***December*, 2018/ Agrahayana, 1940 (Saka)**

C O N T E N T S

***To be appended at printing stage.**

COMPOSITION OF THE DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE ON TRANSPORT, TOURISM AND CULTURE (2017-2018)

(Constituted on 1st September, 2017)

1. **Shri Derek O'Brien - Chairman**

Rajya Sabha

2. Shri Ritabrata Banerjee
3. Dr. Prabhakar Kore
4. Shri Praful Patel
5. Kumari Selja
6. Shri Rewati Raman Singh
7. Shri Narendra Kumar Swain
8. Shri Vinay Dinu Tendulkar

* 9. Shri Sambhaji Chhatrapati

\# 10. Dr. L. Hanumanthaiah

Lok Sabha

11. Shri Subrata Bakshi
12. Shri Ramcharan Bohra
13. Shri Vinod Chavda
14. Shri Rajeshbhai Naranbhai Chudasama
15. Kumari Arpita Ghosh
16. Shri Rahul Kaswan
17. Shri Nimmala Kristappa
18. Shri P. Kumar
19. Shri Harish Chandra Meena
20. Shri Ram Charitra Nishad
21. Shri Rajesh Pandey
22. Shri Rajesh Ranjan
23. Shri Ponguleti Srinivasa Reddy
24. Shri Ram Kumar Sharma
25. Shri Prathap Simha
26. Shri Dushyant Singh
27. Shri Kunwar Haribansh Singh
28. Shri Rakesh Singh
29. Shri Shatrughan Sinha
30. Shri Manoj Tiwari
31. Shri K. C. Venugopal

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*Nominated on 2nd June, 2018

Nominated on 2nd June, 2018

COMPOSITION OF THE DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE ON TRANSPORT, TOURISM AND CULTURE (2018-19)

(Constituted on 1st September, 2018)

1. **Shri Derek O'Brien - Chairman**

Rajya Sabha

2. Shri Ritabrata Banerjee
3. Shri Sambhaji Chhatrapati
4. Dr. L. Hanumanthaiah
5. Dr. Sonal Mansingh
6. Shri Praful Patel
7. Kumari Selja
8. Shri Rewati Raman Singh
9. Shri Narendra Kumar Swain
10. Shri Vinay Dinu Tendulkar

Lok Sabha

11. Shri Subrata Bakshi
12. Shri Ramcharan Bohra
13. Shri Vinod Chavda
14. Shri Rajeshbhai Naranbhai Chudasama
15. Kumari Arpita Ghosh
16. Shri Parvatagouda Chandangouda Gaddigoudar
17. Shri Rahul Kaswan
18. Maj. Gen. Bhuwan Chandra Khanduri, AVSM (Retd.)
19. Shri P. Kumar
20. Shri Kristappa Nimmala
21. Shri Ram Charitra Nishad
22. Shri Rajesh Pandey
23. Shri Rajesh Ranjan (Pappu Yadav)
24. Shri Ponguleti Srinivasa Reddy
25. Shri Ram Kumar Sharma
26. Shri Dushyant Singh
27. Shri Kunwar Haribansh Singh
28. Shri Rakesh Singh
29. Shri Shatrughan Prasad Sinha
30. Shri Manoj Kumar Tiwari
31. Shri K.C. Venugopal

SECRETARIAT

Smt. Sunita Sekaran, Joint Secretary
Shri Swarabji B., Director
Shri Dinesh Singh, Additional Director
Smt. Monica Baa, Additional Director
Ms. Catherine John L., Under Secretary
Shri K.V. Ramana Rao, Committee Officer
Shri Gaurav Singh Gahlain, Assistant Committee Officer
Ms. Vunglunmoi Hangzo, Assistant Research Officer

INTRODUCTION

I, the Chairman, Department-related Parliamentary Standing Committee on Transport, Tourism and Culture, having been authorized by the Committee to present on its behalf, do hereby present this Two Hundred and Sixty Ninth Report on "Cargo Handling at the Major Ports".

2. The Committee heard the views of the Secretary, Ministry of Shipping; Chairmen, Kolkata Port Trust; Haldia Dock Complex; and Paradip Port Trust on the subject on 26th April, 2018. The Committee heard the views of the Secretary, Ministry of Shipping, Chairman, Mumbai Port Trust and Chairman-in-charge, Jawaharlal Nehru Port Trust on the subject on 22nd May, 2018. The Committee heard the views of the Secretary, Ministry of Shipping, Chairman, Chennai Port Trust; Chairman-in-charge, Cochin Port Trust; CMD, Kamarajar Port Limited; Chairman, V.O. Chidambaranar Port Trust; Chairman-in-charge, Deendayal Port Trust; Chairman, Mormugao Port Trust; Chairman-in-charge, New Mangalore Port Trust; and Chairman, Visakhapatnam Port Trust on the subject on 28th June, 2018.

3. The Committee wishes to express its thanks to the officers of Ministry of Shipping and the Ports for placing before the Committee, the material and information desired in connection with the subject and for clarifying the points raised by the Members.

4. The Committee considered and adopted the Report in its meeting held on the 19th December, 2018

(DEREK O'BRIEN)
Chairman,
Department-related Parliamentary Standing Committee on Transport, Tourism and Culture,
Rajya Sabha

NEW DELHI;
December 19, 2018
28 Agrahayana, 1940

ACRONYMS

BMCTPL	:	Bharat Mumbai Container Terminal Pvt. Ltd.
BOT	:	Build Operate Transfer
BPCL	:	Bharat Petroleum Corporation Limited
CFS	:	Container Freight System
CIDCO	:	City and Industrial Development Corporation
CONCOR	:	Container Corporation of India Ltd.
CRISIL	:	Formerly known as-Credit Rating Information Services of India Ltd.
CRZ	:	Coastal Regulatory Zone
CSF	:	Carrier Security Fee
CSL	:	Cochin Shipyard Limited
CTO	:	Chief Technology Officer
CZMP	:	Coastal Zone Management Plans
DFCC	:	Direct Freight Corridor Corporation of India
DG Shipping	:	Directorate General Shipping
DMICDC	:	Delhi-Mumbai Industrial Corridor Development Corporation
DPD	:	Direct Port Delivery
DPE	:	Direct Port Entry
DPI	:	Dubai Ports International
DPT	:	Deendayal Port Trust
DWT	:	Deadweight Tonnage
e-DO	:	Electronic Delivery Orders
EIA	:	Environment Impact Assessment
ELL	:	Electrical Level Luffing
ERP	:	Enterprise Resource Planning
EXIM	:	Export-Import
FACT	:	Fertilizers and Chemicals Travancore

FDI	:	Foreign Direct Investment
GDP	:	Gross Domestic Product
GRT	:	Gross Registered Tonnage
GTI	:	Gateway Terminals International
GTIPL	:	Gateway Terminals India Pvt. Ltd.
HDC	:	Haldia Dock Complex
HPCL	:	Hindustan Petroleum Corporation Limited
HTL	:	High Tide Line
ICD	:	Inland Container Depot
ICTT	:	International Container Transshipment Terminal
IFFCO	:	Indian Farmers Fertilizers Cooperative
IIT	:	Indian Institute of Technology
IOCL	:	Indian Oil Corporation Limited
ITT	:	Inter Terminal Transfer
JNPCT	:	Jawaharlal Nehru Port Container Terminal
JNPT	:	Jawaharlal Nehru Port Trust
JV	:	Joint Venture
KDS	:	Kolkata Dock System
KIOCL	:	Kudremukh Iron Ore Company
KoPT	:	Kolkata Port Trust
KPD	:	Kidderpore Dock
KSC	:	Korampallam Surplus course
LDB	:	Logistics Data Bank
LNG	:	Liquefied Natural Gas
LOA	:	Length Overall
LPG	:	Liquefied Petroleum Gas
LTL	:	Low Tide Line

MbPT	:	Mumbai Port Trust
MCA	:	Model Concession Agreement
MCF	:	Mangalore Chemical & Fertilizers
MHC	:	Mobile Harbors Cranes
MMT	:	Million Metric Tons
MoEF&CC	:	Ministry of Environment, Forest & Climate Change
MOT	:	Marine Oil Terminal
MoU	:	Memorandum of Understanding
MPB	:	Multi Purpose Berth
MT	:	Million Tonne
MTPA	:	Million Tonnes Per Annum
NCR	:	National Capital Region
NGT	:	National Green Tribunal
NH	:	National Highway
NHAI	:	National Highways Authority of India
NMPT	:	New Mangalore Port Trust
NPAR	:	Northern Port Access Road
NSD	:	Netaji Subhas Dock
NSICT	:	Nhava-Sheva International Container Terminal
NSIGT	:	Nhava-Sheva International Gateway Terminal
NTECL	:	NTPC Tamilnadu Energy Company Limited
OCR	:	Optical Character Recognition
ONGC	:	Oil and Natural Gas Corporation
PCS	:	Port Congestion Surcharge
PGA	:	Participating/Partner Government Agencies
POL	:	Petroleum and Oil Products
PPL	:	Paradeep Phosphates Limited

PPP	:	Public-Private-Partnership
PPPAC	:	Public Private Partnership Appraisal Committee
RFID	:	Radio Frequency Identification Data
RFP	:	Request for Proposal
RFQ	:	Request for Qualification
ROB	:	Road Over Bridge
ROCE	:	Return on Capital Employed
Ro-Pax	:	Roll on - Roll off Passenger
Ro-Ro	:	Roll on - Roll off
RPO	:	Renewable Energy Purchase Obligation
RTGC	:	Rubber Tyred Gantry Cranes
SEZ	:	Special Economic Zones
SOP	:	Standard Operating Procedures
SPAR	:	Southern Port Access Road
SPMs	:	Single Point Moorings
SPV	:	Special Purpose Vehicle
SQ	:	Southern Quay
TAMP	:	Tariff Authority at Major Ports
TEUs	:	Twenty-foot Equivalent Units
TRT	:	Turn Round Time
TT	:	Terminal Transfer
TTPS	:	Tuticorin Thermal Power Point
UPCL	:	Udupi Power Corporation Ltd
VOCPT	:	V.O. Chidambaranar Port Trust
VPT	:	Visakhapatnam Port Trust
VRC	:	Vessel Related Charges
VTMS	:	Vessel Traffic Management System

REPORT

Ports function as major hubs of international trade and accordingly, they are regarded as primary catalysts of local economic development in an era of globalization. Approximately, 90% of the international cargo is transported through ships as it is the cheapest means to do so. There are about 4,764 ports around the world handling more than 80 per cent of trade. Ports form avital link in the overall trading chain and consequently, their level of performance and efficiency determines to a large extent, the international competitiveness of a nation. The growth of a modern port system as a whole is dependent on a number of factors such as volume,composition, size and expansion of trade of a country.

2. India's coastline measures around 7,500 kms of which around 5,700km is along the mainland and 1,800 is around the islands. Ports in India are classified on the basis of ownership. The Government of India wholly owns the Major Ports.Eleven of the twelve Major Ports are governed by the Major Ports Trusts Act,1963with the exception of KamarajarPort (erstwhile Ennore Port), which is the only corporate port that is administered by provisions of the Companies Act,1956. The main functions of the Major Portsentail cargo handling which includes berthing of vessels, loading/ offloading of cargoetc. Ancillary to it are various other activities such as dredging, maintenance of navigational channels, pilotage, berthing, buoying, bunkering, dry docking including chipping and painting, maintenance of lighthouses etc. The varied activities of a port make it a dynamic organisation.

3. Developing countries such as China and India are major drivers for port development due to their high economic growth rates. Due to the changes in ports and in the port industry, most countries are making giant efforts to secure their ports as hubs brimming with economic activity by investing enormous funds on port facilities and by improving efficiency in port operations and management. Indian Ports have formulated ambitious plans for development of new ports.

These include augmentation of existing facilities, mechanization of ports, purchasing of modern cargo handling equipments and improvement in logistics to meet the challenges emerging from the anticipated growth in trade. The capacity at 12 Major Portsis likely to increase to 1,459,53 million tonnes by 2020 from the level of 679 metric tons in 2017- 18.

4. Given the significant relation between trade and GDP growth, ports need to ensure capacity expansion in keeping with cargo growth. However, capacity growth at Indian ports has not kept pace with cargo growth. Since port traffic is increasingly moving towards container and liquid bulk, the need for ensuring optimum efficiency in terms of cargo handling and management in our Major Ports is of prime importance. It is in this backdrop that the Department- related Parliamentary Standing Committee on Transport, Tourism and Culture decided to take up the subject 'Cargo Handling at Major Ports' for examination and report thereon.

5. In this connection,the Committee heard the views of the Chairmen of Kolkata Port Trust & Haldia Dock Complex along with Paradip Port Trust on 26th April, 2018;the Chairmen of Mumbai Port Trust & Jawaharlal Nehru Port Trust on 22nd May, 2018; and the Chairmen of Chennai Port Trust, Cochin Port Trust, V.O. Chidambaranar Port Trust,Deendayal Port Trust, Mormugao Port Trust, New Mangalore Port Trust, Kamarajar Port& Vishakhapatnam Port Truston 28th June, 2018. The Committee also heard therepresentatives of Employees' Unions of JNPT andMbPT on the subject 'Modernisation of Port Infrastructure' on 14th November, 2017during its study visit to Goa. The Committee further heard the Port users and representatives of MbPT; DG Shipping; JNPT; and Ministry of Shipping during this study visit.

6. The Committee was informed by the Secretary, Ministry of Shipping that the total cargo handled by the 12 ports rose by about 5 per cent in the previous year. It was 648 metric tonnes in 2016-17 and it rose to 679 metric tonnes in 2017-18. There has been a significant increase in the capacities in the Ports. The

capacities have risen by 66 per cent during this period. When compared to the preceding three years, it increased by 25 per cent. Capacity constraints, infrastructure constraints, where present, are very localized in nature. However, on the larger national scale, the Ports are well equipped to cater to double digit growth of cargo. The ports can now easily cater to anything above a ten per cent growth. ThePorts have largely seen good profit margins. The profit before tax which was Rs. 2743.79 crores in 2016-17 rose by about Rs. 669 crores to Rs. 3412.89 crores, which signifies a jump of about 24 per cent. This is a significant number in terms of growth achieved. The traffic was continuously on the decline for the last 15 years. This has, however, seen a turn in the last 3 years. The percentage of the total national cargo handled has increased and have now reached a figure of 52 percent which had previously dipped to 48 per cent. There has been an overall good performance by the Ports.

I. PARADIP PORT

i. PORT PERFORMANCE

7. The Chairman of Paradip Port deposed before the Committee that traffic handled at the Port has jumped to 102 million tonnes in 2017-18, from 56 million tonnes in 2012-13. This is more than 60 per cent growth in the last five years. In 2017-18, on a very high base of around 89 million tonnes, the Port has registered a growth of close to 15 per cent. The Port, in 2017-18, became the third port in the country which has clocked hundred million tonnes of cargo. The share of Petroleum product (POL) traffic is around 34 per cent. Coal is the main cargo of the Port and Paradip is now the largest coalhandling port in the country. The Port handles 65 million tonnes of dry bulk cargo and is also the largest dry bulk handling port in the country. The lack of containerized facilities has been catered to with the operationalization of a new clean cargo berth in March 2018.

8. The Committee was informed that upon completion of necessary procedural work, the berth was expected to be in operation by 2018. The Port, at present, has 16 berths and 3 Single Point Moorings (SPMs). These SPMs extend

upto 20 kms into the ocean and cater to large crude carriers carrying approximately 274 million tonnes of Crude oil for refineries in Paradip (Orissa), Barauni (Bihar), Bongaigaon (Assam) and Haldia(West Bengal). The utilization of these SPMs is set to increase in the coming years owing to the expansion of the abovementioned refineries.

9. With respect to Modernisation of Cargo handling mechanisms, the Port has two oil berths which are totally mechanized and equipped with state- of- the-art facilities comparable to global standards maintained in international ports. ThePort also has various modernization projects in the pipeline- the projects coming with an investment of over Rs. 3500 crores, which will result in an added capacity of around 55 million tonnes. The expected timeline of completion is 2019-2020.

10. The Committee was informed that berth management has improved in the Port over the recent period. The iron- ore berth is the oldest berth of the Port. It was the first berth on which the Port was started in 1966 and continues to operate till date. Apart from these, two fertilizer berths which cater to two major fertilizer plantsare Indian Farmers Fertilizers Cooperative (IFFCO) and Paradeep Phosphates Limited (PPL). In order to improve berthing facilities, several berthing projects have been taken up. These are:

- EasternQuay – I, II &III. It involves an investment of over 3,500 crores and is expected to add an additional capacity of 55 million tonnes. This hub is expected to be the hub port for all coal exports to South India with around 90- 100 million tonnes of coal for the upcoming plants in Southern India. The facility is under progress and its expected completion is December, 2019.

11. The Committee notes that in order to improve berthing facilities, Eastern Quay-I, II & III berthing projects have been taken up for capacity augmentation with an investment of Rs. 3500 Crores and execution timeline of December2019. The Committee is not aware of the initially approved cost of the project and original timeline for its completion. It has often been seen that infrastructure

development projects experience time and cost overruns. The Committee would therefore like to be apprised whether the Eastern Quay-I, II and III projects have witnessed any time overrun and concurrent cost escalation as compared to the initially estimated project costs.

12. The Committee also recommends that a stringent monitoring mechanism be put in place so that there are no instances of tardiness and inefficiencies inexecution and the project is executed within the approved cost and designated time-frame.

- Central Quay- I & II. These are currently handling general cargo imports and exports and it is expected to continue operating in its present state till 2020-21, after which the Port is looking to mechanize this facility. The same is the case for the Southern Quay (SQ) berth and the Multipurpose Berth (MPB).

13. Maintaining adequate draft is integral to maintain the operational functionality of ports. Maintaining draft levels has always been a hurdle for the ports and Paradip Port is no different. Due to the issue of draft levels, presently only Panama sized vessels of around 14.5 meters draft can call on the Port. However, thePort is looking to handle fully laden capes of around 180,000 – 200,000 Deadweight Tonnage (DWT). This would place the Port at par with some of the best ports in the country with the deepest draft. The project is expected to be taken up in January 2019, during which it is expecting to award the project subject to Environment Clearances.

14. The construction of the outer harbor is a mega project which entails an investment of around Rs. 10,000 crores with a capacity of 130- 140 million tonnes. However, this estimate was revised due to the fluctuating demand of coal in Southern India due to the popularity of renewable energy. Hence, this project has been placed on hold and the project has been reworked to focus on the increased optimization of the Port.

15. The Committee understands that the world is moving increasingly towards renewable energy and it is now popular practice to attempt to

reduce the dependency on fossil fuels and coal. Renewable energy is the call of the hour. Whilst applauding the efforts of industries to go green, its effect on cargo movement and traffic movement cannot be ignored. In this regard,the Committee desires that the ParadipPort must find a way to move away from old business models and try and cater to a new market that is garnered to creating and using clean and efficient energy.

16. The synergy of port modernization with the efficiencies is essential to ensure the optimal efficiency of the Port. To facilitate this, attempts are being made to create the right eco-system in and around the port area. Around 100 acres of land has been awarded to CONCOR to construct a State-of-the-art warehousing facility which will result in the creation of warehousing facilities measuring approximately 1.1 million sq. ft of warehousing in that area. Contract has been awarded for the creation of multi-modal logistics park. Similarly, in order to synchronize with the iron- ore terminal, land has been allotted for the development of a pellet plant to cater to the traffic for the berths that are being constructed.

17. The Committee takes note of the efforts made by the Paradip Port to create a synergized unit of economic activity in the Port. However, for the modernization to succeed, these must be completed within a stipulated timeframe and the economies of scale must also be considered in order to ensure the cost effectiveness for all the stakeholders involved. Connectivity is an issue which must be given utmost importance and must be taken into serious consideration. IncreasedState- Centre coordination,along with inter-Ministerial coordination, with the Ministry of Railways and Ministry of Road Transport & Highways is the need of the hour.

ii. CONNECTIVITY

18. The Chairman,Paradip Port informed the Committee that one of the key constraints is the issue of connectivity. The Port is connected by road and air.

There is a doubleline railway connecting Paradip to the East Coast main line at Cuttack. However, there is a bottleneck in the form of a surface crossing that takes place at Cuttack which reduces the capacities of the trains that come into the ports. To remedy this, a project 'Haridaspur – Paradeep Line' was sanctioned. It is close to 82 kms and was conceived as third line and exit from the Port. The pace of the project has however been quite slow. Stage 0-42 kms is in the advanced stages of completion. However, the stages that include 42- 82 kms have faced several failures and bottlenecks leading to repeated termination of contracts. The problems are largely on the State Government side, pertaining to land acquisition, local level administration problems etc.Attempts are being made to come to a resolution and ensure the smooth completion of the projects by December 2019.

19. The Committee was informed that the hinterland of the Port extends right up to Chhattisgarh near Korba area. Logistically, it has the shortest port by rail distances. A large portion of traffic gets diverted to Andhra Pradesh, Visakhapatnam and Gangavaram. This is due to the lack of doubling and electrification of the routes connecting Paradeep to Chhattisgarh. Work to remedy this has already been sanctioned. There is a critical area which extends from Angul to Sambalpur where doubling and electrification are required. Moreover, a third line has been constructed from Jharsuguda to Champa. These will prove to be advantageous in terms of aiding the evacuation of port traffic which is expected to reach another 30- 40 million tonnes by the end of 2023-24.

20. The Committee takes note of the steps taken by the Port to increase its evacuation capacities. Ports are integral to the increased economic activity of an area and play a major role in the prosperity of a region. In this respect, the connectivity of a port to and from the various industrial units in the hinterland is an issue of grave importance. The Committee recommends that the Ministry of Shipping should take up the issues pertaining to 42- 82 kms of Haridaspur- ParadeepLine with the State Government of Odisha and

Ministry of Railways for removing the local level obstacles. The Committee desires that a dedicated mechanism be put in place for coordination and expeditious completion of 42-82 kms of Haridaspur-Paradeep Railway Line. The Committee hopes that the Angul- Sambalpur Railway line doubling work will be completed on time.The Committee recommends that the Ministry of Shipping must strive for greater coordination between the State Government concerned and the Ministry of Railways to ensure seamless connectivity with regards to maintenance of the railway lines and regular upgradation of the lines.

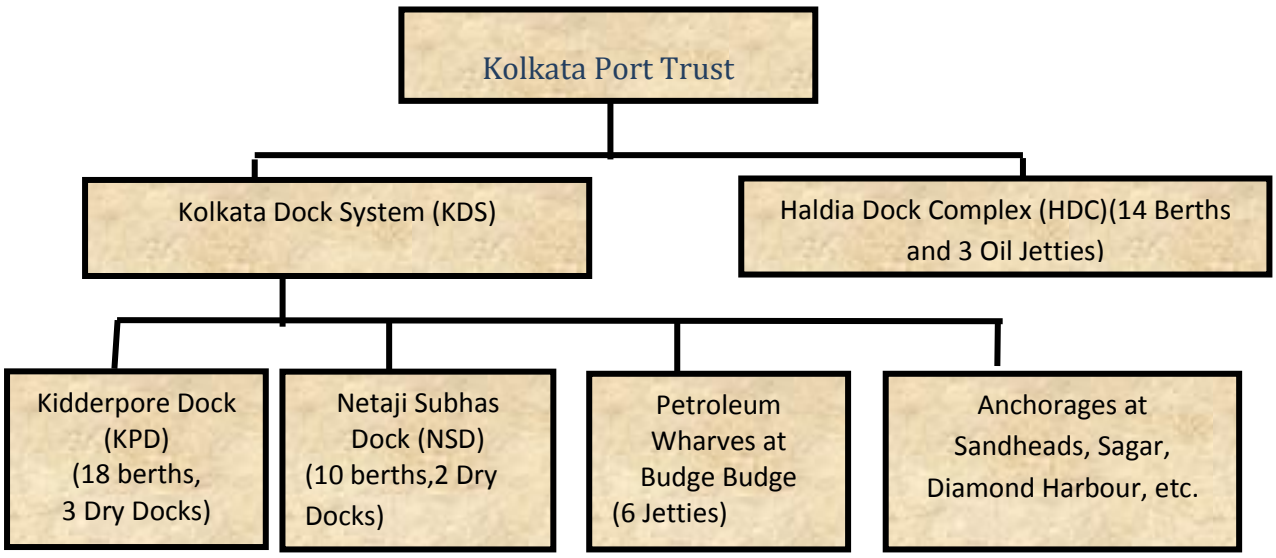
II. KOLKATA PORT and HALDIA DOCK COMPLEX

21. The Chairman, Kolkata Port & Haldia Dock Complex deposed before the Committee that Kolkata has a distinction of being the first major port in the country. It is the only riverine port and has a channel of 200 kms from the sea through the river Hooghly. While the Port is well connected by rail and road, Kolkata is also blessed with inland water connectivity. This is a terminal port and has the advantage of drydocking facility. Major commodities handled in this port are Coal, Vegetable Oils and containers. Kolkata Port as such, has the dock system which includes the Haldia Dock Complex. There are anchorages in the sea, chief of them being Sagar and Diamond Harbour. The Port also conducts lighterage operations for handling cargo commodities.

22. The Kolkata Dock System (KDS) is situated on the left bank of river Hooghly at a distance of 232 kms. from Sand Heads. Haldia Dock Complex (HDC), a modern dock complex of Kolkata Port Trust (KoPT), was set up in 1977 for handling larger vessels, carrying bulk cargo with optimum economy, keeping KDS primarily for handling break bulk cargo, container etc. The two dock systems of Kolkata Port *viz.*, KDS and HDC are complementary to each other. HDC is situated on the right bank of the river at a distance of 125 kms. from Sand Heads. In the Sea approaches of the Channel for about 90 kms,

remote assistance is provided to the ships through Vessel Traffic Management System (VTMS) and the Pilots board the vessels only after they enterthe river.

23. Kolkata Port has a vast hinterland, comprising the entire Eastern India including West Bengal, Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chattisgarh, Punjab, Haryana, Rajasthan, Assam, North Eastern States and the two landlocked neighboring countries of Nepal and Bhutan. The industrial development, commerce and trade of this vast hinterland are inseparably linked to the life and development of Kolkata Port and vice-versa.



24. The Chairman, Kolkata Port stated that the Port has unfortunately witnessed stagnancy in terms of growth. The Port has recorded a growth of 1.56 lakh MMT from 1 lakh MMT in the previous year. Kolkata Port is mainly concentrating on containers. There are 10 berths. Of them, one has a 200 tonne crane. This was the crane famously used to unload the first coach of Delhi Metro. There is a total of 5 berths dedicated to containers. Of these, 3 are mechanised. These are handled by way of mobile harbour cranes. Plans have been made to increase another berth on the mechanization side to fulfill the potential of handling more containers there. The other dock system under Kolkata is in Kidderpore which has 17 berths mainly catering to smaller barges.

25. Kolkata Port handled 57.886 million tonne(MT) [HDC– 40.496 mt + KDS– 17.39 MT] of traffic in 2017-18 creating an all-time record in the history

of the Port surpassing the previous highest of 57.329MT handled in 2007-08. KoPT registered a high growth of 13.61% over 50.951 MT handled in 2016-17 which was the 3rd highest among Major Ports.KoPT handled 7,96,210 TEUs in 2017-18 *vis-a-vis* 7,71,676 TEUs in 2016-17 – registering a growth of 3.18%. KoPT ranked 3rd amongst Indian Major Ports in terms of Container traffic in 2017-18. In 2017-18, KoPT handled rail-borne traffic of 27.67MT(KDS – 5.71MT, HDC – 21.96 MT) against 25.619 MT (KDS – 5.54 mt, HDC – 20.079 MT) in 2016-17, registering a growth of 8.01%. The financial position for KoPT during 2017-18 has improved as compared to 2016-17. The Operating Income (excluding Dredging Subsidy) increased to Rs.2046.09 crore during 2017-18, as against Rs.1778.26 crore in 2016-17 – a rise of 15.06%. Operating Surplus (excluding Dredging cost and subsidy) increased to Rs.838.05 crore in 2017-18, as against Rs. 659.27 crore in 2016-17 – an increase of 27.12%. Net deficit for 2017-18 is Rs.98.99 crore, as against a net deficit of Rs.169.02 crore in 2016-17.

26. Nepal, being a land locked country, routes its third- party export/import cargo mainly through Kolkata Port. Over the last 3 years, Kolkata Port handled the following cargo for Nepal, which shows an increasing trend:-

(in tonnes)

Year	KDS	HDC	KoPT
2015-16	11,19,097	4,01,912	15,21,009
2016-17	12,31,421	6,54,192	18,85,613
2017-18	14,77,857	9,24,642	24,02,499

i) DRAFT LIMITATIONS

27. The Committee was informed that the issue of draft is a major constraint that ails the Kolkata Port and the Haldia Dock System. The minimum depth required for draft is 3m, in order for docks to operate. However, being a riverine port, the Kolkata Dock System regularly suffers from heavy siltation which reduces the draft to less than 3m. Often this makes it unviable for large ships to

call on the Port.In order to bypass this constraint and to get the ships with higher loads, the Port has turned to lighteraging.The ships are handled at Sagar and Diamond Harbour because it has a draft advantage of one meter extra. Floating cranes and ship cranes are deployed from Sagar. Portions of the cargo are lighteraged on to barges. Upon lighteraging, the incoming cargo ships achieve the viable Kolkata Port Draft. The ships and the barges then move on to the Kolkata Port as well as Haldia. Barges are mainly handled in the Kidderpore dock.

ii) CONNECTIVITY

28. Kolkata Port, being a city port, suffers from the issue of traffic congestion. With the city limits expanding over the years, the Port has now become a part of the city, resulting in delayed traffic movement. It is therefore understood that 24 hours open road movement of trucks is not a possibility. The Port has a restriction of seven hours. Therefore, methods are being devised to ensure optimum utilisation of time. First being, through the modernisation of the railway network and the second being, the Ro-Ro projects.

29. The railway lines cannot handle a full rake container train because the length of the siding is not sufficient. The work for making two full rake container handling lines has been awarded and work has also started. It is expected to be completed by December, 2018. The Port can presently handle 1.5 rakes per day.This is expected to increase to 4 rakes per day with this capacity addition.

30. The roads leading to and from the Port are not exclusive to the Port, but are shared by the civilian population. The condition of the roads leave much to be desired and the Port has taken it upon itself to improve the condition of these roads. This is an essential activity as many trucks and trailers come and go from the ports. In this regard, projects worth Rs. 15 crores have been completed and projects amounting to Rs. 17 crores are in the pipeline. If all goes according to

plan, the work on critical roads is expected to be completed before the monsoon hits the east coast.

31. Another innovative solution to circumvent traffic congestion is the Ro-Ro service between Kolkata side and Howrah side. Owing to the seven-hour restriction on traffic coming to Kolkata Port, which also includes the restrictions for trucks and trailers to enter the city, the travel time between the Kolkata and Howrah side to load and travel back is three days. The Ro-ro service which is already operational on a trial basis will also be operating on the Botanical Garden side and another terminal has been planned at Sankrail. These Ro-ro vessels which carry around 20-40 trucks will ply between Kolkata side to Sankrail on the Howrah side, as Sankrail is out of the city limit and has no traffic restrictions. It is estimated that around 200-250 trucks can be taken off the road from Kolkata and then taken to the Howrah side.

32. In addition to the above, another project is to extend the gate of Kolkata Port Gate at Balagarh Island. The Port Trust has around 300 acres of land at Balagarh Island and the rest of the land is with the State Government and the Calcutta Electric Supply Corporation.Containers, as well as bulk traffic from barges, will be moved from Sagar and Diamond Harbor and directly to the Balagarh terminal. This land is also intended to be leased to industries so that they can set up units from where they can feed their goods to the Port.

33. The Port has two major dry docks at Netaji Subhash Dock. The Port has joined hands with Cochin Shipyard Limited (CSL) for developing ship-repairing facility at these two dry docks. This will be on a profit-sharing basis between CSL and Kolkata Port. The dry docks will be provided, under the present condition by KPT and investment into the plant and other infrastructure will be done by the CSL. The profit has been meant to be shared in the ratio of 60 per cent for CSL and 40 per cent by Kolkata Port Trust.

34. The lack of a proper parking bay for the trucks is also an area of concern as it leads to delayed transfer of cargo shipment. The Committee was informed that three parking terminals with a capacity for 400 trucks are being developed in and around the port area on Port owned- land as a solution to the problem of traffic congestion. Of the three, two have been completed and the third is nearing completion.

35. **Haldia Dry Dock** has 14 berths inside the dock with 3 oil jetties outside the lock gate. Eight berths are mechanized which include two container berths and four berths are reserved for handling liquid cargo. Mechanisation of one more berth is planned which will include complete silo loading facilities for coal. The tender for this work had already been floated. In order to improve the capacities of the Port, two quay cranes have been installed in two of the berths. Another crane is under procurement to further increase the efficiency and productivity of the container operations. A tender has been invited for the same.

36. Two outer terminals are being developed. One at Shalukhali and another close to Haldia. It has been named outer terminal 2 and this terminal has a draft of around 7.58 meters. These are being developed in order to handle liquid cargo. Work has been awarded for both the terminals and environmental clearance is under process. A floating jetty has also been constructed outside Haldia similar to that at Sagar island.This will further enhance the capacity of the Port to around 2 million tonnes.

37. With regard to connectivity, Haldia Dock connects to South- Eastern railway at Durgachak. At present, it consists of a single line which presents constraints on the number of trains the line can handle. In order to increase the capacity of the line, doubling of the line from Haldia to Durgachak is underway. In terms of road transport, a Railway ROB is under construction at Haldia just outside the Port in order to divert the traffic out of the Haldia township onto the main road/ National Highway.

38. Draft is a major constraint for the riverine port. The Committee could gather that a study was conducted by IIT Madras in collaboration with the Port Trust and it has been suggested thata new channel called 'Eden Channel' may be introduced. This channel was operationalized in 2016. This has resulted in a substantial reduction of the cost spent on dredging(approximately 250 crores). Moreover, the contracts were previously drawn on the quantity of silt dredged. However, as of now, the contracts are drawn not only on the silt dredged, but also on the completion of assured depth.

39. Lock – gates have become an issue that requires careful study and solution. The lock- gates at Kolkata and Haldia were constructed pre-independence. With the passage of time, the lock- gates have become an issue of concern as modern ships are much larger in size and the lock- gates are too small to ensure their smooth passage.

40. The Chairman of the Kolkata Port & Haldia Dock Complex informed the Committee that they were working with the IITs to find a solution to the Lock-gate constraints. As of now, there are two possible solutions. One is to provide another lock gate and the other is to breach this lock gate and to open it permanently. The study is underway and trials are expected to be conducted by the end of this year.

41. The Committee understands that these pre-independence era ports could not have envisioned the great strides in shipping during their inception. The infrastructure of the ports needs constant upgradation.Considering the fact that this was part of the mandate of modernisation of Major Ports in India, the Committee notes the efforts made by the Port authorities.The Committee, therefore, recommends that the Ports may be upgraded and modernized to suit the present needs, but with an outlook on future growth as well. The Committee hopes that work related to modernisation of rail network, Ro-Ro service between Kolkata and Howrah side, proposed ship repairing facility, development of parking

area, modernisation of container berths, development of outer terminals and the doubling of railway line between Haldia and Durgachak would be completed within the targeted time frame.The decision on the Lock- gates and other constraints must be taken up with urgency and trials must not be delayed. Moreover, the modernization projects must have fixed target dates and efforts must be made to complete them within the time frame. Failure to do so will lead to increased costs and also affect the productivity and growth of the Port.

III. MUMBAI PORT TRUST

42. The Chairman, Mumbai Port Trust stated before the Committee that the Port at Mumbai was established in 1873 and is the second oldest of the 12Major Ports of the country that has been providing its continued service to the nation. The Port handles a total of 62.38 MMT of break bulk, dry bulk, liquid bulk cargo. Of these, liquid cargo has the highest percentage share of cargo at 66 per cent of the total cargo handled by the Port. Containers are entirely handled by Jawaharlal Nehru Port (JNPT). Mumbai Port has a workforce of 8567 employees. Pilotageand other allied activities of the port are conducted entirely by the employees of the Port and are not outsourced.

The operating results for thePort are as follows:

	2017-18 PROVISIONAL
Operating income	1526.71
Operating Expenditure	1169.68
Net Surplus (Before tax)	(-) 418.00
Contribution to Superannuation fund	707.05

i) PORT INFRASTRUCTURE

43. The Committee was informed by the Chairman, MbPT that Indira Dock, commissioned in 1914, has 26 berths, with a minimum draft of 7.0 metres (23.0 ft). Prince's Dock and Victoria Dock are semi-tidal docks, with vessels docking and departing at high tide. Indira Dock has a lock-gate, enabling vessels to enter or depart at any time.The Port has four jetties on Jawahar Dweep, an island in the harbour, for handling Crude and petroleum and oil (POL) products. These jetties have a draft of 12.2 metres (40 ft). Liquid chemicals are handled from a jetty on Pirpau.Ballard Pier Extension has a passenger terminal, including immigration clearance facilities for crews and passengers of cruise liners.The Port has a total of 63 anchorage points.

44. The lock gate at Indira Port was constructed in 1942. The blueprint of the lock-gate, during its construction, did not consider the progress which would be made in terms of ship- design and also in the infrastructure of the Port. This has resulted in the gate being small in size for the present fleet of modern-day ships, resulting in the inability to efficiently utilise the 26 berths of the Indira Dock. Only small ships are able to call on the Port. The Port is equipped with fixed and mobile cranes with large storage capacity. The Indira Dock upgradation consists of 22 works which will improve the look of Indira dock which is the main cargo handling center of the Marine Oil terminal with capacity of 9MT. Estimated at a total cost of Rs. 55 Crore, the project is designed to enhance the capabilities of the prime cargo handling area of the Port.

45. Mumbai Port Trust has signed an MoU with Cochin Shipyard Limited to utilise the Indira Dock facility at the Mumbai Port to set up a professional ship repair ecosystem that will be beneficial to India’s commercial and defense ship repair. This MoU provides for expansion of the ship repair capacity within the Indira Dock that may include setting up a floating dry dock and upgrading the existing facility at Hughes Dry Dock, thereby, enhancing the existing ship repair capacity in the Mumbai area.

46. Jawahar Dweep Island is the main hub of Petroleum and Oil (POL) products of the Port. The crude oil from ONGC is unloaded and passed through the pipes on towards the refineries from this island. POL forms approximately 61 percent of the total cargo handled by the Port and as such, is a primary source of business for the Port. The Marine Oil Terminal has 5 Loading Arms. The berths are linked with submarine pipelines which lead to the refineries on the mainland and marketing centers. A Tank Farm project has been planned at Jawahar Deep. The tank farm will be built on reclaimed area. Dredged rock material by JNPT will be utilized by MbPT for reclaiming 13 Ha of land in Jawahar Dweep. After reclamation, the land will be used as a tank farm for the storage of Crude oil with an estimated capacity of 3.6 lakhs KL capacity (6x60,000KL), pegged at a cost of Rs. 31 crores.

47. Next, is the Chemical berth at old Pir Pau Jetty, a new Pir Pau Jetty and a secondchemical berth is now complete with a draft of 7- 11 meters. A floating storage and re- gasification unit through which Liquified Natural Gas (LNG) and gas will be made available in a manner that does not disturb the city.

ii) PORT PERFORMANCE

48. The Committee was informed that in terms of operating costs, the operating income is Rs. 1,526 crores; and operating expenditure is Rs. 1,169 crores and thereby, the operating profit is around 300 odd crores. But, because the Port is giving a contribution of Rs. 707 crores for pension funds, overall,the Port is making a loss of 418 crores. The actuarial value is around 12,000 crores. The Port has invested approximately Rs. 8,000 crores there. So, they are making efforts now to fill it up so that it reaches Rs. 12,000 crores after which they can begin to register profits.

49. **Bunkering** is the supplying of fuel for use by ships and includes the shipboard logistics of loading fuel and distributing it among available bunker tanks. The term originated in the days of steamships, when the fuel, coal, was stored in bunkers. Nowadays, the term bunker is generally applied to

the storage of petroleum products in tanks and the practice and business of refueling ships. Bunkering operations are located at seaports and they include the storage of "bunker" (ship) fuels and the provision of the fuel to vessels.MbPT is now successfully equipped with bunkering terminals to cater to the needs of the ships at sea. This is a major business in major shipping countries like Singapore, Hong Kong etc. With this terminal,MbPThas marked its presence in the lucrative business of providing refueling facilities to ships. The product capacity of proposed bunkering terminal – jetty No. 2 at Marine Oil Terminal (MOT) under MbPT is given as under:

- Upto 2019 - 0.636 MMTPA
- 2019 - 2024 - 1.065 MMTPA
- 2024 – 2034 – 1.925 MMTPA

50. Sassoon Dock Fishing Harbour is one of the seven major fishing harbours in the country. The Port has two fishing jetties at Sasson Dock and ferry Wharf for handling the fish traffic. The dock operates around 1,000 fishing vessels and lands an average of 48,000 tonnes of fish annually under the management of Mumbai Port Trust. The Committee was informedof the initiatives taken to modernise the fish handling facilities in order to improve the hygiene and sanitation standards in the harbour and develop a fully integrated fishing harbour with all modern amenities like ice plant, cold storage, modern auction hall etc. This would help in maintaining sea food export quality as per the international quality requirements and food safety standards. The old and new Sassoon Dock area is a major Fish Landing and marketing centre of Mumbai metropolis which caters to the needs of both Domestic and Export market. The Mumbai Port Trust (MbPT) would also be undertaking the work of dredging of the Sassoon dock basin at a cost of Rs.60.00 lakhs. MbPT has also taken theinitiative in developing the Sassoon Dock Complex and repairing of Gate House and clock tower. Setting up a Marine Food Park, Sea Food Restaurant and an Art Gallery in the premises has also been proposed. The total proposed

cost of the project is Rs. 52.17 Crore and will be funded in a convergence mode of implementation under SagarmalaProgramme of Ministry of Shipping and Central Sector Scheme on Blue Revolution: Integrated Development and Management of Fisheries of Department of Animal Husbandry, Dairying and Fisheries. The remaining 50% of the project cost will be funded by the State Government of Maharashtra.

iii) CONNECTIVITY

51. In terms of connectivity, the Port has its own railway system which is spread over a distance of 10 km, with 54 km of track length between the Docks and Wadala, the inter change point with the trunk railways. The Railway system has been upgraded by re-laying track length. The Port has Rail Container Depot for movement of containers to and from various ICD's. The dock trains suffer from constraints of traffic hours as the lines are shared by city railway lines. To circumvent this, the work on the construction of Wadala – Kurla railway link has commenced. This will ensure the 24 hour connectivity of the Port *via* rail.

52. Mumbai roads are extremely congested and travelling from East to West takes a lot of time. In order to reduce travel time, Ro- Pax [Roll on – Roll -off passenger]water transport has been started. This mode of water transport for Mumbai city on the Eastern side is going from Mumbai to Navi Mumbai to Nerul and from Mumbai to Mandwa. This will reduce travel time between Mumbai to Goa to two- and a- half to three hours. The terminals at both ends have been completed and we are currently awaiting the arrival of the ships, of which one is from Greece. The ship from Greece, upon arrival, will be able to ferry around 250 cars between Mumbai and Mandwa. The City and Industrial Development Corporation(CIDCO) terminal is yet to be completed. Once that is completed, the Eastern Water transport will start its operations. Due to issues of draft, initially the ships will only be ferrying passengers and not cars. It will have a capacity of approximately 200 passengers per trip.

53. Being a city port, the Mumbai Port also suffers from the issue of dock-road -space- congestion in terms of traffic aggravated by the city traffic. The existing connectivity to the Port suffers from the fact that vehicles pass through extremely congested city roads and are subjected to traffic restrictions to facilitate movement of normal traffic. To remedy this, a project is tendered to select an operator to provide a coastal movement of containers from JNPT to Mumbai instead of the containers coming by road to Mumbai *via*Bhiwandi. Furthermore, in order to ease the traffic congestion in the Port, a special drive for additional parking areas has begun at Mansion road, Cotton depot area etc., for parking slots for 400 trucks / trailers.

54.The Chairman of the MbPT stated that the Port was moving away from cargo handling and reinventing itself as an International Cruise Terminal. In the coming years, the Port would only cater to cargo meant for the domestic consumption of Mumbai City. Majority of Container operations would be re-directed towards JNPT.

55. The requirements of the island city will be served through the coastal route from JNPT to Mumbai. Upon arrival at Indira Dock, they will receive a green channel. Provisions for godown space has been made. From there, it can be distributed to the city. We are targeting about 72,000 TEUs per annum initially. If this is successful, further arrangements can be made for this. This will save around 200 trailers from going to JNPT from Bhiwandi per day and about 600 trucks travelling from Bhiwandi to Mumbai.

iv) DEVELOPMENT OF CRUISE TOURISM

56. It has been observed that major city ports in the world such as Singapore, Miami, Vancouver, Busan, Barcelona etc. have slowly reduced their cargo- handling activities and shifted towards placing emphasis on CruiseTourism. These ports have one thing in common with Mumbai Port- they are all city ports that are centered around the economic and commercial hub of

the region and they have since realigned their USP on cruise. A study was conducted which reported that Mumbai has a potential of handling 32 lakh passengers and 700 ships could call on the Port if the correct infrastructure was provided. This would include the construction of four terminals. Steps suggested by the study conducted and the report thereon concluded that Standard Operating Procedures (SOP) must be set in place andimmigration rules, Customs, Carrier Security Fee (CSF), port infrastructure etc. must be addressed in order to promote ease of business. A Monitoring Committee has been constituted to study the ease of doing business at 5 international cruiseports , in order to implement the same in Mumbai Port.

57. Infrastructure development is integral to the development of this port. Hence, the present international cruise terminal has been upgraded so that business can be initiated. The two godowns adjacent to the present terminal have been demolished in order to create an international terminal, the construction of which is underway. This is earmarked to become a very big cruise terminal inside the Mumbai Port. The representative of Mumbai Port Trust apprised the Committee that Ro-Ro facilities for automobiles with pre-dispatch inspection service is available at the port.

58. **The Committee understands the constraints of Major Ports that are centered around major cities and their limitations caused by various factors such as population, traffic etc. The Committee notes various modernisation projects initiated by the Mumbai Port Trust. The Committee recommends that a detailed and comprehensive study may be conducted to augment the cargo capacity of Mumbai Port while addressing the various constraints faced by the Mumbai Port at present.The Committee appreciates the efforts of the MbPTwith regardto moving to Cruise terminals due to their capacity constraints in cargo handling. The Committee notes that the country has great potential for cruise tourism. In this regard, the Committee recommends that the Ministry of Shipping must take steps to ensure that**

processes related to immigration, ease of business in terms of Cruise shipping, licenses etc. are simplified; Standard Operating Procedures (SOP), taxation etc. are in place and processes and permissions required in relation with PGA's are simplified. The Committee recommends that the Ministry of Shipping must pursue these with the Ministry of Home Affairs, Ministry of Finance etc. and every effort must be made to modernise and expand the cruise terminals.

59. **The Committee takes cognizance of the fact that MbPT has large land holdings which have been encroached upon. The Committee is of the opinion that these land holdings are prime real estate especially in a city like Mumbai which is subject to scarcity of space and such large holdings are rare. The Committee recommends that the MbPT should take affirmative steps to reposess the encroached land and utilise the said land holdings to construct schools, state- of – the – art hospitals and specialty hospitals etc., to cater to the employees as well as the general public.**

JAWAHARLAL NEHRU PORT TRUST

60. The Chairman of the Jawaharlal Nehru Port Trust stated before the Committee that JNPT is one of the youngest ports in the country and that it is the number one container port in India. They have 3,052 hectares of land (approx.). The Port has a 39.54 kms long main harbor channel with a draught of 14 kms. There are four dedicated terminals, of which one is run by the Port Authority itself, one is run by Dubai Ports International (DP World), one is run by Gateway Terminals International (GTI) and the fourth has been recently commissioned to the Singapore Authority Port. JNPT ranks 33rd among the top 100 container ports in terms of TEUsin the world (ANNEXURE I) and the vision is that in the next five years,JNPT should join the 10 million TEUs club. Then the rank will come to 15 or 16 globally. Primarily, they handle 90 percent containers, but they also handle liquid and other cargo.

61. The terminals/berths at JNPT include the JNPT Container Terminal (JNPCT), Nhava – Sheva International Container Terminal (NSICT), Gateway Terminals of India (GTI), Nhava – Sheva International Gateway terminal (NSIGT), Bharat Mumbai Container Terminal Phase – I (BMCTPL Phase- I), Shallow Berth and Liquid terminal. The total terminal capacity of all combined is re- rated at 118 MTP. The JNPCT is a Government – owned terminal. The terminal performance has debunked the theory that Government- owned operations donot perform well.

62. The Port will be undertaking dredging for deepening and widening of the existing channel from 14 mtrs. to 15 mtrs. at an estimated cost of US$ 313 Million (Rs. 1,993.17 Crore). The length of Navigational channel is 35 KMs and it is expected for completion by 31.03.2019. This project will ensure berthing of larger vessels. Further, JNPT is involved in development of Chabahar Port in Iran.

i) PORT PERFORMANCE

63. The Port handled a record cargo of 66 million tonnes of cargo in 2017-2018. This is the highest ever in the history of JNPT. With regard to container shipments, the Port handled 4.83 million TEUs in the fiscal year. Again, this is a record cargo handling since the inception of JNPT. The port grew by 7.41 percent in 2017-18. In terms of liquid cargo, the Port handled 7.19 million tonnes of liquid traffic and recorded a growth of 5.98 per cent. They also handled 0.95 million tonnes ofCement and other cargo with a registered growth rate of 13.28 per cent.

The performance of the Port for the year 2017-18 reads as per the following:

Sl. No.	**Performance parameter**	**Port Account TRT**	**Non- Port Account**
1.	Average Turn Round Time of Vessels	1.61 Days	0.63 Days

	(TRT):	(38.64 Hrs)	(15.12 Hrs)
2.	Average Turn Round Time (TRT) Container Vessels	1.30 Days (31.20 Hrs)	0.22 Days (5.28Hrs)
3.	Avg Turn Round Time (TRT) of Otherthan Container Vessels	2.27 Days (54.48 Hrs)	1.47 Days (35.28 Hrs)
4.	Average Pre Berthing Delay Overall:	0.37 Days (8.88 Hrs)	0.63 Days (15.12 Hrs)
5.	Avg Output per Ship Berth Delay Overall:	23,417 Tonnes	
6.	Container vessels	31,516 Tonnes.	

64. **The Committee notes the increased efficiency of the Port in terms of containers handled at 0.43 %and the increase in average output per ship Berth day overall at 1.50 % over the previous years. The Committee commends the efficient management of the Port authorities in improving the efficiency parameters of thePort in order to make it as competitive as some of the best ports in the world.**

65. The Port has achieved significant improvements in productivity parameters and is closing in on international best standards.

PERFORMANCEPARAMETERS	**PREVIOUS YEAR**	**PRESENT YEAR**
i) Average Import Dwell Time	75.8 Hrs in 2014-15	50.82 Hrs in 2017-18
ii) Average Export Dwell Time	91.4 Hrs in 2014-15	83.71 Hrs in 2017-18
iii) The Berth productivity	69.46 moves/Hr in 2015-16	78.81 moves/Hr in 2017-18.
iv) The Crane productivity	20.99 moves/Hr in 2015-16	23.42 moves/Hr in 2017-18
v) AveragePre-Berthing Detention Time on Port Account of Vessel	9.86 Hrs in 2014-15	8.88 Hrs in 2017-18
vi) Average Turn Round Time of Vessel	2.44 days in 2015-16	2.24 days in 2017-18

vii) Average Ship Berth per day Output	21,287 tonnes in 2015-16 To 23,417 tonnes in 2017-18.	23,417 tonnes in 2017-18

The reduction of TRT is significant as it has been achieved despite increase in parcel size.

66. The Ministry of Shipping has introduced various initiatives under 'Ease of Doing Business' to improve port eco- system efficiency parameters. JNPT has approached the matter *via* a three- pronged approach. These are broadly categorized under the following:-i) Improvement of Infrastructure; ii) Simplification of processes; and iii) Digitisation of activities. JNPT handled 66.00 million tonnes of total cargo during the financial year 2017-18. The containerized cargo was 57.87 million tonnes (87.67%), liquid cargo was 7.19 million tonnes (10.89%) & remaining 0.95 million tonnes (1.44%) was miscellaneous types of Dry Bulk Cargo (Cement) & Break Bulk.

67. **The Committee applands the steps taken to improve the infrastructure facilities of JNPT and would urge upon the Government to further upgrade and modernize the Port to assure improved performance benchmarking against global standards.**

ii) CONTAINER TRAFFIC

68. JNPT handled 4.83 million TEUs of container traffic during the financial year 2017-18, increased by 7.41% from the previous annual container handling of 4.50 million TEUs during the year 2016-17.The container handling at JNPT constitute about 52.91% of total container traffic handled by all the Indian Major Ports (9.14 million TEUs).

iii)IMPROVEMENT OF INFRASTRUCTURE

a) Increase in Parcel Size

69. The global trend is now shifting towards an increase in parcel sizes. Big ships now carry bigger parcel sizes, thereby, optimizing on the economies of scale, as bigger parcel sizes imply more efficient utilisation of cranes, reduces the berthing – unberthing time of ships etc. JNPT previously ailed from poor response time.Hence, more efficient shipping lines would not call on the Port which meant losing out on prime business opportunities. The increase in the response time of the Port has resulted in the shipping lines instilling confidence in the abilities of the Port. The increase in vacant hours made it possible to increase the parcel size of the Port. The Average Parcel Size has increased from 2,727 TEUs to an average of 6.77 per cent. The JNPT Terminal (Government Terminal) has recorded a parcel size of 3,532 TEUs (as per the last fiscal year 2017-18). The terminalis now the Port of call to some of the biggest shipping lines in the world.

b) Dry Port

70. Dry port/ Dry Dock is a unique concept which is being developed by JNPT. This will facilitate Cargo- aggregation in centers away from thePort. Wardha, Jalna, Nasik and Sangli(all in Maharashtra) have been identified as the four sites. These will serve to connect the Ports to the hinterland. Goods will be valued at the Dry docks and from there will be directly sent toJNPT for shipment. Easy connectivity by rail and road and dependence on JNPT is critical for the success of a Dry Port/ Dock. The land acquisition for the ports at Jalna and Wardha have been complete. Dry Ports as a concept aims to bridge the gap between the ports and the industrial hubs. This is essential in order to reduce the uncertainty that prevails in terms of transport and shipment of goods. The stuffing of cargo will be done at the dry port itself. This will ensure that time is saved on stuffing whilst at the same time, lead to a reduction on the cost of the transport of cargo to the docks. Once stuffed, the cargo will be brought to JNPT for export. They will be connected by both road and rail. This will go a

long way to resolve the hinterland connectivity issue which was highlighted by CRISIL as one of the most critical issues.

71. **The Committee appreciates the efforts of JNPT in increasing hinterland connectivity. The Committee strongly feels that this connectivity must also be extended to other States, especially the landlocked states in the North and North West of India and States in peninsular India for eg., Rajasthan, Madhya Pradesh and Chhattisgarh. This is integral to the 'Make in India' programme of the Government. The Committee emphasizes the need for ensuring connectivity of the hinterland to Major Ports in India*via* road and rail in a cost-efficient manner. This is made possible through dry ports and docks which act as aggregation sites of manufactured commodities. This will also promote economic activities throughout the country, instead of concentrating economic activities to a particular region. Dry docks are also a solution to the problem of transportation of perishable agricultural produce in the country. This will ensure increased economic activity in the remotest corners of the country. The Committee, therefore, recommends that the Ministry of Shipping, along with the JNPT, Ministry of Road Transport & Highways and the Ministry of Railways and the State Governments to work on increasing hinterland connectivity *via* Dry Docks. This will go a long way in increasing containerization and trade activities of the Port, all the while increasing employment opportunities in the hinterland.**

c) Railways

72. The rail share at JNPT has been declining over the past few years. The rail share with respect to the throughput handled at JNPT has consistently declined from 26% in 2009-10 to 15.16% in the current year 2017-18. In order to improve the rail share, JNPT has equalized the handling charges of road and rail. On a market survey, it was noted that the cost of moving of containers by

rail is on higher side compared to the cost of moving by road. In order to reverse the declining trend, Railways need to address the following issues:

a. A reliable and frequent connectivity to various inland destinations at ratewhich are competitive with that of road transport.

b. Reducing the dwell time of import containers in the Port by ensuring faster evacuation. In order to reduce the dwell time, the following action needs to be initiated by Railways:

i) In case of destinations with smaller volumes Railways need to introduce smaller rakes of 20 to 25 wagons.

ii) CONCOR along with private train operators need to come together to clubtheir cargo to cater to destinations with less volume.

iii) CONCOR and private train operators need to club three or more destinations with less volume on a single train.

73. The Committee was informed that the Railways is working on a slew of new initiatives like re- inventing the hub & spoke model, as the old model/ lines cannot carry the cargo load as the load on the rails have increased. This is a by-product of the increase in the load on the roads.

74. Direct Freight Corridor (DFCC) is estimated to reach JNPT by 2019. Capacity addition is the current need of the hour, in terms of cold storage and value addition industries. Vadhavan is a port is a proposed new port 140km north of Mumbai on the coast of Maharashtra. The port is to be built on 5000 acres of land reclaimed from the sea near the town of Dahanu, Palghar district. Envisioned as India's first foreshore port, the project is to be jointly administered by Jawaharlal Nehru Port Trust (JNPT), which has a 74% equity stake, and the Maharashtra Maritime Board, which holds the remaining 26%. The Committee was informed that construction of the port is almost at its final stages. This is a port with a natural draft of 20 meters and land reclamation is currently underway.

75. **The Committee notes that Railways have the widest range of connectivity in the country. The Committee feels that the Ministry of Shipping must make more concerted efforts with the Ministryof Railways and State Governments in order to ensure that Railway lines are upgraded to be able to carry the cargo load. Moreover, efficiency must be maintained in order to ensure client trust in the Railways. The Committee takes notes of the proactive efforts made by JNPT and the Ministry of Shipping in developing the Direct Freight Corridor.The Committee desires that there should be fixed completion date which must be adhered to. This is necessary in order to ensure the viability of the project and to prevent the project from running over the budget and ensure that the funding is sufficient.**

d) Development of Centralized parking Plaza

76. Previously, the terminals were serviced by one road which resulted in the choking of the road. Parking has since been allocated to respective terminals and it is now compulsory for the trucks to use the assigned parking lots. The rates have been fixed at Rs. 60/- for eight hours. Furthermore, Customs has been integrated into the parking spaces.Henceforth, the Customs verify and process the documents in the parking area after which they make their entry into the port area.

77. In addition to the existing parking areas at JNPT,a Centralized Parking Plaza, measuring 45 ha is being developed. The work of Centralized Parking Plaza commenced in March 2017. It is a 'state of the art' integrated facility which includes Customs clearance, parking for undocumented container trailers, dormitories for truck drivers and an Auto Repairs Zone.

e) Creation of Customs Processing Zones

78. JNPT created parking yards for undocumented export containers for all terminals of JNPT. These parking yards were converted to customs processing areas w.e.f. 05-12-2016 as facility for Customs clearance and port

documentation. The parking yard operation ensures that only containers that have received approval from Customs and are fully documented proceed to the terminal gate. This has brought in discipline at the port roads and contributed significantly in removing congestion and smooth entry for export containers.

f) Widening of Port Highways

79. To cater to the future traffic, JNPT signed a Special Purpose vehicle (SPV) with NHAI and CIDCO. It has awarded the work of widening of 43.9 kms length of NH 4B, SH 54 and Amra Marg Linkages to 6 / 8 lanes along with two lanes service roads. This project will be executed on Engineering Procurement and Construction mode in 4 civil packages. The work for all four packages was awarded in October 2015 and it is expected that the work will be completed by May 2019.

g) Procurement of e-RTGCs:

80. JNP Container Terminal has added 15 new electrical Rubber Tyred Gantry Cranes (RTGC's) by replacing its 6 old RTGCs. This will enhance JNPCT's yard productivity in terms of increase in Berth and Crane Productivity and reduction in Turn Round Time or otherwise, accommodate bigger parcel size windows / vessels with the same fleet.

h) Allotment of Lab and office space to Partner Government Agencies (PGAs)

81. In order to bring all regulators near port area, the Port has allotted the office space to PGAs like Animal Quarantine, Textile Commission and Asst. Drug Controller. Port has also allotted required land / space for setting up their offices and laboratories within JNPT limits.

ii) SIMPLIFICATION OF PROCESSES

82. Verification, documentation, checks and other procedural practices consume a huge chunk of transport time. The reduction in processing time would lead to greater and more efficient flow of transactions. The Port thus

introduced various measures to reduce and simplify the process of the various Partner Government Agencies (PGAs).

a) Inter Terminal Transfer (ITT) of Tractor Trailers

83. JNPT was infamous for congestion of trucks. However, the introduction of inter- terminal transfer of tractor trailers has been a monumental step in helping reduce the traffic. Most of the terminals on JNPT are standalone terminals and are not connected to each other. Previously, a truck would drop off an export container, exit and then wait in line at the other terminal to pick up an import container. Sideways movement was introduced, whereby, instead of exiting, a virtual gate was created- to pick up an import and then return- thus, essentially saving a distance of seven and a half kilometers. One truck does 2 transactions essentially. To date, 5,42,000 trucks have used their facility and have completed 6,72,000 transactions. Saving Rs. 250 crores in trade.

84. Inter-terminal transfers facilitate tractors trailers to move from one terminal to another laterally without exiting from first terminal. This ensures optimum use of TTs. This facility is used by 500 TTs every day. This initiative has reduced the load off from the road. Further, it has led to saving of fuel cost by avoiding about 7.5 km distance to enter from one terminal to adjacent terminal, reduce transportation and cost logistic cost, pollution, long queuing on terminal approach roads during last 2 years. Till April2018, 556,777 trucks availed this facility making 690,369 transactions. This has resulted a gain to the trade of Rs. 242 crores.

b) Direct Port Delivery (DPD)

85. JNPT was constructed to cater to the Container Freight System (CFS). In the CFS system, containers were disembarked and then immediately shifted to the CFSs. The CFSs would take about 8-10 days to complete the process. The costs would be escalated to above 10,000 to 20,000 per container. This resulted in prolonged delays of shipment, thereby, increasing the inventory cost as well.

86. Acting upon the recommendations of the 91st Report of this Committee on 'Modernisation of Ports', an initiative was taken in 2014-15 to overcome the

delays caused by CFSs. DPD was seen as a remedy to the CFS problem. Under DPD, the containers are moved directly to consignee's factory/warehouse without routing through CFSs. Port has waived theminimum volume criteria for taking DPD. A Special Cell was created for DPD, registration process was made online, abolition of deposits and awareness campaigns have increased the DPD clients and clearances. Direct Port Delivery of Import containers increased from 3% in November 2016 to 39% in April-2018. The importers are currently benefited by savings in cost of Rs.8,000/- to Rs.20,000/- and in time of average 5 days while clearing their containers under DPD instead of routing through Container Freight Stations (CFSs). With initiatives like the Transport solution to be implemented, the percentage of DPD will move towards 60%.

c) Direct Port Entry (DPE):

87. Direct Port Entry facilitates entry of factory stuffed containers into the Port without routing through CFSs. In JNPT, the percentage of Direct Port Entry of Export containers has increased from 60% to 80% in April2018. Every factory stuff container was earlier required to proceed to CFS to get customs approval and then proceed to terminal gates. Conversion of Parking Yards as Customs Processing Area from 05-Dec.-2016 and facilitation of Customs operation led to higher percentage of DPE. The exporters are currently benefitted by savings in cost of about Rs.2,000/- and in time of 1 to 2 days while resorting to DPE.

88. **The Committee appreciates the quantum leaps taken by JNPT in simplifying the processes of the Port and its functioning. These changes have been long pending and overdue. The Committee recommends that DPD and DPE related pending projects are completed within the given schedule. The systems employed by the Port may be carefully studied by the Ministry of Shipping for using the same as a base for pilots in other Major Ports in the country, after tailoring them to suit individual port's needs.**

(iii) Digitization of activities

89. Following the directives of the Ministry of Shipping, JNPT has implemented e- delivery, papers required for the delivery of orders (containers) have been moved to an electronic platform. Hence e- invoice, e- payment, e- delivery and this has been made mandatory. This is done to facilitate the early clearance of cargo and reduced processing costs. This has been further complimented with the creation of logistic data banks. JNPT has now become a paperless port, where documents are processed *via*a web- based portal. Furthermore, the customs for the Special Economic Zones (SEZ) has been integrated with the Port system to facilitate seamless communication of critical messages without the need for hard- copies. Tariffs for the shipping lines have also been listed on the Port website with links of the major shipping lines. The aim is to make the JNPT website a one-stop shop for all a customers' shipping requirements.

a. Introduction of E-form 13

90. Form 13 is the only document by which the entry of containers in the terminals are regulated. E-form 13 have been introduced to reduce gate transaction time and to avoid manual data feeding by customers.

b. RFID Based Terminal Gate transaction:

91. Introduction of RFID based Gate Automation System has ensured that the Gate transaction time is reduced from 10 minutes in April 2016 to 1 minute in March 2017.Every container that leaves the JNPT is tagged with an RFID tag and a monthly report is published on the same to ensure visibility of the movement of the shipment to the client. Thus, enabling him to track their and question authorities in the event of delay. The RFID provides high security profile and gives the client a sense of security with regards to the progress and safety of their shipments.

c. Container tracking introduced for the first time in India

92. JNPT in association with DMICDC has commenced the tracking of containers moving towards hinterland and cleared from the terminals of JNPT. Transit integrity is now ensured by tracking of containers. The importers /

exporters is now able to keep track of the container while in transit. The Project commenced on 11th July, 2016. The system provides a Data Bank on Destination-Source matrix for containers in transit. The project is started with western corridor coverage and from February, 2018 and has pan – India coverage.

d. e-Delivery Orders (e-DO)

93. In a major initiative to bring in ease of delivery of import containers, JNPT has ensured that delivery orders of all major Shipping Lines are fully online and integration with PCS is in progress. The E-do facilitates quick and easier and paperless delivery and tends to reduce cost and time in the import supply chain. The system is being upgraded to create e- invoicing and e-payment facility in customer transaction with shipping lines.

94. **The Committee lauds the effort of the JNPT towards digitisation of its activities. Lack of digitisation was a major bottleneck to the increased productivity of the Port and often cited as an area which needs greater implementation. The digitization of form 13, e- delivery, container tracking and RFID based gate – entry and exit has been integral to the success of the digitisation and the Port has reaped dividends stemming from this exercise. The Committee feels that the digitisation of Ports and its allied services is integral to ensure the growth of the sector and ensure the confidence of major ship- liners.**

IV. VISHAKHAPATNAM PORT

95. The Chairman of the Visakhapatnam Port stated before the Committee that the Port started its operations in 1933 and is presently, the deepest container terminal among all the Major Ports with 16.5 meters of draft. The Port is divided into the Inner harbor and Outer harbor. The Inner harbor is a natural harbor protected by two hills and does not require the construction of a

breakwater. The Outer harbor was commissioned in 1976 and has a draft of 18.1 meters. The Inner harbor presently has a draft of 14.5 meters. The inner harbor handles fully laden panamax vessels, while the Outer harbor is capable of handling super cape sized vessels.The Port caters to the hinterland comprising of Andhra Pradesh, Telangana, Odisha, Maharashtra, Jharkhand and Chhattisgarh and parts of northern India including NCR. The Port serves major sectors of Power, Steel, Petroleum, Mining, Fertilizer, Aluminum, Cement, Consumer goods (Container) etc.

96. The Government of India has a long- term contract with Japan and South-Korea for exporting the iron- ore, which is routed *via* Visakhapatnam Port. This has around 1,00,000 tonnes of loading capability per day. The Port has also been declared as the second Port of Call to Nepal. Till recently, land – locked Nepal could transact its trade only from Kolkata port. However, in 2016, the Centre had declared Visakhapatnam Port as the second gateway port for Nepal-bound cargo after Kolkata – Haldia.

i) PROFITABILITY

97. In terms of profitability, the total income of the Port in 2017- 18 has been registered at Rs 1,066 crores in 2017-18. The operating surplus is Rs. 511 crores. Profit before tax is Rs.249.69 crores. Profit after tax Rs.189.46 crores. The Port has 4000 workers and 13,000 pensioners on payroll and by the year end, expected to fund the pension fund in its entirety. [kindly note that a sentence has been deleted]

98. The Committee takes note of the profit after tax to the tune of Rs. 189.46 crores. However, in order to assess the operational efficiency of the Port and its competitiveness as also to suggest measures to improve its productivity, the Committee desires to be kept apprised of theReturn on Capital Employed (ROCE) for the Port.

ii) CARGO THROUGHPUT

99. Visakhapatnam Port is equipped to handle all types of cargoes *viz*., Crude oil, petroleum products, LP Gas, Coal, Iron Ore, Fertilizers, Alumina, liquid fertilisers, chemicals, cokes, Gypsum, Bauxite, Steel, Granite, containers etc. The Port handled a cargo volume of 63.54 million tonnes in 2017-18 as against 61.02 million tonnes of last financial year, thereby, achieving an incremental cargo of 2.52 million tonnes and a growth rate of more than 4%. The Port holds 4th position among Major Ports in terms of cargo volume. Principal commodity wise cargo volumes handled at the Port during last three years is as under:

(million tonnes)

S.No.	**Commodity**	**2015-16**	**2016-17**	**2017-18**
1	POL	16.94	16.61	16.05
2	Iron ore	5.98	11.42	10.65
3	Thermal coal – (coastal loading to TNEB)	3.39	3.47	2.95
4	Coking coal (Import)	5.08	4.33	5.76
5	Steam coal (Import)	8.02	4.06	5.84
6	Fertilizers & Raw	2.80	2.66	2.87
7	Containers Tonnage (Lakh TEUs)	5.15 (2.93)	6.43 (3.67)	6.83 (3.87)
8	Others	9.68	12.05	12.59
9	Total	57.03	61.02	63.54

iii) CONNECTIVITY

a) Road

100. Coming to road connectivity, the Port is connected to National Highway – 16 (formerly called as NH-5) by 4 lane link road of 12 kms developed and maintained by a SPV constituted by NHAI as a JV with VPT. The Port is contemplating augmentation of the connectivity into a 6-lane road. They have completed phase- I through a joint venture with National Highways Authority of India by investing Rs.114 crores in 2004. Phase- I, four- laning of 4.2 km balance length, was completed last year with an investment of around Rs.76. 93

crores. Almost 25 per cent of the cargo from the Port moves by pipelines. So, the road movement, to that extent is very limited. The Port has taken up the following projects for augmentation of road connectivity for hassle free movement of port traffic:

- Construction of Grade separator from H-7 area to Port connectivity road by-passing convent junction at an estimated cost Rs.59.91 under Sagarmala. Letter of Acceptance was issued to the selected bidder on 10.05.2018
- Development of 4 lane road connectivity from East Break Water to Convent junction. DPR is under preparation by NHAI.
- A proposal termed "Development of fly-over bridge from Sea Horses Junction area to Dock Area at Visakhapatnam Port" has been approved by the Cabinet. The fly over forms connectivity from outer harbor to East and West docks. Bids for consultancy service for preparation of DPR are invited by NHAI.

101. In accordance with the thrust of Bharatmala to improve the last mile connectivity to Port, following five projects have been envisaged by Port of Visakhapatnam to be included in the Bharatmala scheme and NHAI is taking up preparation of DPRs in respect of the following projects:

- Improvement/upgradation of four lane road to 6- lane road for the road connecting to the Port at Sheela Nagar junction
- Development of Outer Ring Road to Sheela Nagar.
- Development of Mindi Yard connectivity – Construction of Free On Board facility at Nathayyapalem on NH-16.
- Coastal road from Gangavaram Port to Visakhapatnam Port.
- Development of adequate road connectivity from Visakhapatnam port –Direct Link from Sheelanagar to Multimodel Logistic Park.

b) Railway Lines

102. With regard to railway lines, the Port has good railway connectivity. With a track length of 184 kilometers, this is the maximum length of the railway infrastructure within any major port. They have 15 sidings as well as 20 open terminals. The rail coefficient is 43 per cent, which is one of the highest in the port sectors. Above 43 per cent of our cargo moves by rail. Railway lines are a major constraint to the increased viability of the Port. The Railways has already sanctioned the project of doubling of the Vizianagaram- Raipur RV line. This is a critical line as our entire hinterland is predominantly Chhattisgarh, Odisha, parts of Madhya Pradesh and parts of Maharashtra. The entire cargo has to move on the RV line, about 90 percent of our rail cargo is on RV line, which is presently a single- unelectrified line. The project is likely to be completed by December next year. This will go a long way in resolving one of the major bottle-necks of the Port.

iv) ECO FRIENDLY INITIATIVES

103. This is the only port which runs entirely on solar energy. They have 100 percent solar energy and whatever surplus energy is produced, it is sold to PPP operators. All of the water requirement of thePort is taken from treated sewage water, except for potable water which is taken from municipal corporation. ThePort is ranked second in Swachhata Index. The Ministry of Shipping has commissioned an independent study by the Quality Council of India.

v) NEW INITITIATIVES

104. The Port has taken initiatives to promote trade competitiveness. Efforts have been made to reduce the logistics cost on various elements. This has been done in response to competition from a nearby private port. Cargo handling charges have been reduced and berth reservation scheme has been introduced. Levy has been reduced from 400 per cent to 150 per cent. Demurrage charges have also been reduced. Concessions have also been given to container vessels.

105. Their major challenge has been dust pollution and controlling the air quality as the Port is situated amidst a bustling and growing city, with a population of around 2 million. The Port is restricted by the proximity to the city in terms of pollution control and traffic.

106. **The Committee notes that Visakhapatnam Port faces intense competition from neighboring private ports like Gangavaram which employs predatory pricing and that it is an issue which needs careful study and consideration. Tariff for the services rendered at Major Ports and the terminals are regulated by the Tariff Authority at Major Ports (TAMP), where private ports are not bound by the same regulations and are thus free to determine their tariff rates. This robs the Major Ports of a level playing fieldin order to compete with the private ports. The Committee, therefore, recommends that Government shouldintervene to create a level playing field for the Major ports and a supportive environment must be created in order to ensure that our Major Ports like Vishakhapatnam Port can withstand the stiff competition.**

vi) MODERNISATION OF PORT FACILTIES

107. As far as cargo handling facilities are concerned, the Port has taken up close to 8 projects, under the Public- Private-Partnership (PPP) to modernize the ports by installing the latest state- of- the-art facilities. The Port has a rapid wagon loading system wherein one entire rake of 58 wagons can be loaded in 60minutes.

108. An Iron-ore facility has been developed under PPP which was refurbished by investing around Rs. 580 croresunder PPP. The Port is also equipped with a ship loader of 8,000 tonnes per day. They have demonstrated 1,00,000 tonnes per day of loading of iron ore as well as pellets.

109. In the last 5 years, the Visakhapatnam Port Trust has made an investment of around Rs.1,052 crores on new terminals and mechanization. For deepening

of channels and berths, an investment of around Rs. 510 crores have been made. Ongoing investments in the new terminals amount to Rs. 2,243 crores. Most of the projects are nearing completion. Logistical investments to the tune of Rs.341 crores have been made. Some are currently underway.

110. The Committee was informed that the VisakhapatnamPort authorities have sought to implement recommendations of this Committee with regards to the modernization of Ports in its 91st Report and that its facilities through the PPP mode, which is a self-sustaining recommendable mode investment and has proved to be successful for many Ports**.**

111. **The Committee is, however,constrained to note that the inflexible and rigid regulatory framework*viz.*,tariff and Concession Agreements in respect of the PPP projects do not facilitate adaptation with the changing market environment. There are no provisions to cater and adapt to measures such as changing the cargo profile, restructuring of tariffs at the PPP terminals etc. In this regard, the Committee feels that the atmosphere around PPP needs to be more conducive to this form of investment to encourage growth in terms of capital infrastructure without stressing on the Government resources. The Committee, therefore, recommends that an environment to nurture and encourage PPPs must be set in place. This is necessary to ensure that the Major Ports are able to come into their own as profitable units. Whilst there is legislation in place to encourage PPP, the present laws must be amended to keep room for changing circumstances in the shipping sector and in the global scene.**

vii) NAVIGATIONAL FACILITIES

112. The existing navigational facilities in the two harbours*viz*., inner quay and the outer quay are as under:

Description	Inner Harbour	Outer Harbour
Water spread (Hectares)	100	200
Permissible Draft (in mtrs.)	14.5	18.1

Permissible Length of Ship (inmtrs.)	230	300
Vessel Class	PANAMAX(up to80000DWT)	CAPE(up to2 lakh DWT)
No. of berths	18	6

viii) CARGO HANDLING FACILITIES

113. The Port has fully 53utilization facilities for handling coal, iron ore, crude, petroleum products, LPG, liquid cargo, Aluminum, and Containers. The Eastern Quay-6 and Eastern Quay-7 berths located in the inner quay are operated by the Port. These berths are capable of handling vessels of draft upto11 meters and 14.5 meters respectively. The berths are equipped with one 100 tonne Mobile cranes and four 20tonne Electric Level Luffing Wharf cranes.

114. The Western Quay-1 to Western Quay-5 berths located in the inner quay are operated by the Port. These berths are capable of handling Panamax vessels of draft up to 13 meters and equipped with Mobile Harbour Crane. The Port has developed two new berths viz., Western Quay-7 and Western Quay-8 in the inner quay through internal resources. The berths are capable of handling Panamax vessels of draft upto 14.5 meters.

115. Development of two regular quay berths in the inner quaycapable of handling Panamax vessels of draft upto 14.5 meters by reconstruction of the existing old and shallow berths in the EasternQuay -2, 3, 4 and 5 taken up by the Port is likely to be completed in the current financial year. Expression of Interest for operation of these berths for handling container cargo and clean cargo is invited.A project for improving the capacity of the OR-1 and OR-2 berths in the inner quay for handling petroleum products is taken up by the Port and the Letter of Intent was issued.

116. **The Committee is pleased to note the steps and initiatives taken by the VisakhapatnamPort in order to improve its efficiencies. Furthermore, being with sufficient draft, the Committee is of the opinion that the hinterland connectivity must be improved *via* dry docks/ ports, which will**

serve as assembly and stuffing units. The Committee also recommends that the Ministry of Shipping must encourage the State Government to create SEZs around these dry docks to promote an environment of creating manufacturing units with easy access to the Port. The Committee is also of the opinion thatthese are essential to encourage and promote the growth of trade and industry in the country and also a necessary input for the success of the 'Make in India' programme launched by the Government.

117. **The Committee notes that the Visakhapatnam Port is a city port. While the rapidly increasing city limits points to the rising economic prosperity of the city, it becomes a bottleneck for the growth of the Port and reduces its efficiency. In this regard, the Committee feels that adequate steps must be taken and a blueprint must be made to ensure that the growth of the city limits does not impinge on the Port and its capacities. Moreover, the Port must devise exit roads and inroads to service the Port, which are independent of city traffic. These are plans for the foreseeable future which must be envisioned in order to ensure that the Port is not encumbered by growing urbanization as is rampant in other major port cities.**

V. V.O. CHIDAMBARANAR PORT (TUTICORN)

118. The Chairman of V.O. Chidambaranar Port Trust (VOCPT) stated before the Committee that VOCPT is located at a vantage point close to all the international sea routes. Currently, most of the container traffic is trans-shipped at Colombo. From there, feeder services come into various ports in India. The Port has a rich history as a pearl fishing port, which is presently classified as Zone 'B'. Zone 'A' is the newer port which has been developed to handle modern ships and modern cargo profile.

119. The Port primarily aims to attract traffic through rate reduction, giving discounts and improving the quality of services being offered by the Port. The

goal is to ultimately reduce the cost for the customers and the shipping companies.

i) PORT CAPACITY

120. The Port has 15 berths and the channel is around 3.8 kilometers long. The Port is hampered by the small entrance of around 153 meters. The Port seeks to expand this or get it widened. The Port has a total capacity of 66 million tonnes and has handledclose to 36.6 million tonnes with an overall berth occupancy of around 56 per cent. The Port has a limited deep drought for berths at 13.2 m draft for handling multi cargo bulk vessel. In this regard, the Port has initiated action for deepening the dock basin for (-)16.5m depth and entrance channel to (-)17.2m depth to handle fully laden Panamax vessels and 80000 TEUs to 14,000 TEU container vessels. Upon completion of the dredging, berths 1-6, 7-9, NCB- I, II &III, CJ- I &II will have the capacity to handle 15.2 m draught vessels. The project was awarded in August 2018 and is scheduled to be completed in October 2020.

121. The main cargoes handled in the Port are coal and thermal coal. ThePort processed close to 13 million tonnes of thermal coal in 2016-17 and this dropped toaround 10-11 million tonnes in 2017-18. The primary reason for the decline in cargo could be attributed to the rise of renewable energy in Tamil Nadu, leading to reduced demand from thermal power stations this is evinced in the fact that earlier, the capacity utilization of the thermal power plants was upward of 70-80 percent. This dropped to around 60 per cent in 2017-18.

ii) TRAFFIC

122. The traffic to the Port is extremely sporadic which is necessitated only when there is a shortage of wheat in the country or shortage in stocks. These account for small traffic that comes and goes from the port which depends on various external factors.

123. **The Committee feels that the Port which was planned as a transhipment hub, to facilitate container shipment, has now been reduced to a port which deals with bulk cargo. It is disheartening to learnt that,at present,the Port subsists on the cargo of a small Company, the traffic of which is far below the potential of the Port.**

124. **Moreover, the Committee feels that the proximity of ports, both private and major, along the coast, cater to the same hinterland. The number of ports is far larger than the demand for them. The supply exceeds the demand and this has resulted in the underutilization of the economies of scale. The Committee fails to understand the lack of planning and foresight in the operation of this port and the neglect of the Port by the Ministry of Shipping and the State Government. The Committee, therefore, recommends that the Ministry of Shipping must focus its attention on the development of the Port as a transhipment hub. The Committee recommends that the Port must reduce its reliance on bulk cargo in terms of coal etc. and change its business model in order to attract more varied traffic.**

iii) CONTAINERIZATION

125. The Port has handled close to 6.98 TEUs in 2017-18 and this has been showing an upward trend. In line with this demand for containers and increased containerization, the Ministry is looking at developing VOCPT as an international transshipment hub to take away cargo from Colombo.

126. **The Committee notes that the Zone B in VOCPT was planned as a transshipment hub, given its favourable geographical position and deep draft levels. Moreover, being a coastal port, it does not face the challenges of silting and dredging which is a major drawback for most ports in the country. However, after careful study, the Committee is of the opinion that the Port has largely failed to attractcontainer cargo shipments.**

127. As stated by the Secretary, Ministry of Shipping, the Port specializes in bulk cargo while Chennai Port specializes in containerization. **The Committee, therefore, recommends that the Ministry ofShipping must go back to the drawing board and prepare a DPR for the future course of the Port. If it is intent on developing it as a transhipment hub, then it must look into the shortcomings of the Port with regards to a transhipment hub. If not, it must restructure itself as a bulk port or structure it otherwise. The Port is neither here nor there and the Committee strongly feels that this is a waste of the massive potential of the VOCPT as a major Port in India.**

iv) POLICY INITIATIVES

128. One of the major policy initiatives taken by the Ministry of Shipping was the relaxation of Cabotage Laws, wherein they have allowed foreign shipping lines to carry costal cargo and this is primarily limited to agricultural commodities and fertilizers. At present, a lot of cotton being produced in Maharashtra and Gujrat moves to Tuticorin *via*road. With the relaxation of Cabotage Laws, it is expected that this would start attracting traffic which primarily preferred road routes and divert them to the sea route.

v) CONNECTIVITY

129. The hinterland of the VOCPT can be divided into three segments:

i. **Immediate Hinterland -**this covers import centers catering to Madurai, Sivakasi, Dindigul, Tuticorin, Karur.
ii. **Common Secondary Hinterland -**this caters to import centers spread over Coimbatore, Tiruppur, Salem and Erode.
iii. **Distant Hinterland -**this caters to import centers spread in and around Bangalore, Chennai.

a) Road Connectivity

130. VOCPT has the advantage of good road connectivity and less traffic congestion. The Port is well connected by four-lane NH- 45B to Madurai

*via*Ettaiapuram, Aruppukottai and NH-7A to Tirunelveli. To improve on the connectivity of the Port, a request has been submitted to the National Highways Authority of India in December, 2017, to convert the existing four lane National Highway 7A to a six-lane one, as close to 90% of cargo from the Port is evacuated by road.

131. Furthermore, the Port has proposed to widen the road from Tuticorin Thermal Power Plant (TTPS) round about to link road round- about, which will include the widening of Korampallam Surplus Course (KSC) Bridge and Rail Over Bridge (ROB) over rail track. The work has been awarded and a completion date has been set for a period of 18 months from April 2018.

132. Railway fare for short distance operation is not viable for major users operating around the Port. The issue has been taken up with the Ministry of Railways to reduce the fare for Short Distance operation.**The Committee desires that necessary follow up action may be taken in this regard and the final outcome reported to the Committee in the Action Taken Reply.**

b) Rail Connectivity

133. A Broad-Gauge single line connects Madurai to Bangalore*via*Dindigul- Karur- Erode- Salem. The Port is also connected by a Broad-Gauge single line connects Madurai- Tiruchirapalli- Chennai.

134. The Chairman of the Committee informed the Committee that the Siding Agreement between VOCPT and Southern Railway is being framed under the EOL Concept and through the distance basis with the continuation of assisted / private siding.

135. **The Committee notes that the VOCPT is one of the betterconnectedMajor Ports in the country. The Committee hopes that the issues with regards to highway construction and broadening of existing roads are completed according to schedule and reinforces its suggestion that**

a timeline must be fixed for the same. The Committee feels that the Port must also envision the urbanization of its surrounding areas and must ensure the provision of planned evacuation channels. The Committee recommends that the issue of Short Distance Operation costs must be taken up on a priority basis with the Ministry of Railways.

vi) MODERNIZATON OF THE PORT

136. A truck parking terminal has been made functional with effect from March, 2018. A full – fledged RFID project to ease the movement of vehicles was commissioned in February, 2018. Harbour mobile cranes have now been deployed on the Port.

137. **Given the mandate of the Port and its strategic position, the Committee is dismayed at the level of modernization in the Port over the years. The Port is a far cry from its optimum utilization. The underutilization of this Port is a great loss tothe country. The Committee recommends that a detailed study must be conducted, to evaluate the needs and the requirements of the port in order to ensure that the Port is efficiently utilized. Keeping in view the restricted hinterland and the numerous ports that compete for the same cargo, it is essential that VOCPT should devise its own business strategies.**

VI. CHENNAI PORT

138. The Chairman of the Chennai Port Trust stated that the Chennai port has completed 137 years of commercial operations and is one of the oldest ports in India. It is the 3rd major port of the country and is the gateway to the Coromandel coast. The Chennai Port is a multi- cargo port, handling Containers, Liquid Bulk, Dry bulk and Break Bulk cargo. It comprisesof 24 berths in 3 docks. The present capacity of the Port is 133.6 MTPA.

139. The 3 distinct docks in the Port consist of Ambedkar Dock which has 8 berths for handling Ro-ro and general cargo. Next is the Jawahar Dock with 6

berths and Bharati Dock which has 3 berths. These seventeen berths are handled directly by the Port. In addition to the seventeen berths, there are seven berths which handle containers. Two of the terminals are on the PPP mode. The first is Chennai Container Terminal Private Limited, Terminal – 1, managed by Dubai Ports International (DPI). The second is Chennai International terminal Limited, Terminal- 2 which is managed by the Port of Singapore Authority. These 24 berths combined, handle an average of 52 million tonnes of cargo. [kindly note that a sentence has been deleted]

140. The automobile cargo of the Port is handled by Ro-Ro ships. The Port caters mainly to Hyundai, which has a manufacturing unit at Sriperumbudur. Their export is entirely done through thisport and at present they handle about 1.5 lakh cars in a year.

i) CONNECTIVITY

141. Chennai port being a city port, suffers from traffic congestion as a result of the city that has grown around the Port. There are 10 gates available for entry and exit of which only 4 gates are utilized for cargo and traffic of which only four gates are utilized for cargo traffic and of these four, only one is operated round the clock. The other gates are operable only at night due to the traffic restrictions put in place by the Chennai City traffic police. This has largely restricted cargo movement for the Port both in and out of the Port at certain point.

142. Steps have been taken to ensure that the congestion is mitigated. Inside the Port premises, roads have been widened, roads have been lane-d and stream-wise segregation cargo has been implemented broadly under containerized and non- containerized cargo, also the gate complex have been modernized. An 8 – lane gate complex at gate 1 has been commissioned to facilitate container traffic.

143. To further mitigate the external congestion, the Port has encouraged alternate modes of container transportation – through rail and sea. Chennai Port has completely waived railway terminal handling charges to improve the

container traffic from March, 2018. Seven Direct Port Delivery trains and one Direct Port Export trains were operated by CONCOR between Chennai Port and ICD/Tondiarpet.

ii) POLICY INITIATIVES

144. To encourage a modal shift from land to sea, Chennai Port has signed an MoU with the Government of Puducherry to develop the Puducherry Port as a Satellite port to Chennai Port and enable the transhipment of containers to and from the Puducherry Port. Trial runs from Chennai Port to Puducherry / Karaikal Ports was done in February, 2018.

145. **The Committee notes the efforts made by the Chennai Port and lauds the steps taken by them. The Committee feels that Puducherry Port must be developed as a Satellite portwhich can take over the load of the Chennai Port. Thismakes complete sense considering the rapid urbanization of Chennai City. Investments must be made in the infrastructure of the Port, with an eye for the future coastal traffic and development.**

146. The Chairman informed the Committee that a project was envisaged to have an elevated road from Maduravoyal. However, the work had come to a halt due to objections raised by the State Government. The State Government has since then recently issued a 'No objection Certificate' for the project and the work is proposed to be taken up by the NHAI. The 19 kilometers elevated road is proposed to be the lifeline of the Port. Another road, the Chennai EnnorePort Road Connectivity Project with a budget of 600 crore is currently underway and almost complete. A remaining segment measuring about 150 meters is proposed to be completed in a few months' time.

147. The Chennai Port is a very old port and the gates of the ports are closed because of the growth of the city. The Chairman informed that the proposed elevated corridors would take care of the maximum requirements. In addition to that, model shipment of cargo is underway. At present rail transit has been

incentivised and investments have been made to create rail facility inside the Port along with the development of the Puducherry Port. Transportation costs for short distances are dearer by rail than road. With this in mind, in order to make it lucrative for the transport of cargo by rail, the Port along with the Ministry of Shipping is in talks with the Ministry of Railways to reduce the cost cargo shipment for short distances.

148. **Chennai Port, given its location,is suitable for the purposes of tourism as it has been a gateway to the South. The Committee further recommends that the Port should follow the example of the Mumbai Port Trust and re-design and develop cruise terminals for tourists/ passengers.**

VII. KAMARAJAR PORT LIMITED

149. The Chairman of Kamarajar Port Limited stated before the Committee that Kamarajar Port is the 12th major port in the country and functions on the 'Land Lord' model. This implies that the Port is not involved in the operation itself but functions Public- Private- Partnerships. Initially, its work was to shift the 'dusty cargo' from Chennai Port, which comprised mostly of iron-ore and coal berth. This was therefore created as a satellite port of Chennai Port and was eventually made a separate entity,

150. The current capacity of the Port stands at 67.5 million tonnes and various capacity additions are in process. There are 8 terminals in operation. The cargo processed at the Port primarily consists of coal for the Tamil Nadu State Electricity Board with additions of liquid cargo, cars and a small proportion of general cargo. General Cargo includes automobiles and project cargo. This is an extremely lean organisation with an employee strength of less than a hundred.

Sl No.	PARAMETERS	Total from April 2017-Mar 2018	Total from April-June 2018
	Vessels handled (Nos.)	794	221

1			
2	Avg. Pre-berthing Time (Port a/c) (Hrs)	0.010	0.001
3	Avg. Pre-berthing Time (Non Port a/c) (Hrs)	13.601	4.994
4	Idle time at berth (percentage)	12.34	12.23
5	Avg. Turn Round Time (Port a/c) (days)	39.409	41.528
6	Avg. Total Turn Round Time (Port + Non Port a/c) (days)	52.858	46.423
7	Avg. Output per ship berthing (Tonnes)	24590	24,732

i) CARGO HANDLING MECHANISMS

151. Kamarajar Port has 8 terminals, of which 5 are BOT terminals, 2 are Captive user Terminals and one Port owned terminal for the export/import of automobiles. All terminals are equipped with state-of-the art infrastructure facilities with fully mechanized cargo- handline operations for faster evacuation and is pollution- free. The RoRo terminals meant for automobile export/import do not require any cargo handling equipments, since the automobiles are loaded/off-loaded to and from the vessels by the self-drive method.

ii) MODERNIZATION OF CARGO HANDLING FACILITIES

152. Construction projects of Linkage- Conveyer System at North Chennai Thermal Power Station and the replacement of the belt in the pipe Conveyer at NTECL plant has also been completed. Furthermore, commissioning of additional pipelines for liquid terminals is nearing completion.

iii) CONNECTIVITY AND EVACUATION

a) Rail Connectivity

153. The Port is connected by a dedicated rail at Attipattu and AttipattuPudunagar Stations located in the Chennai- Gudur section of the Southern Railway on the Chennai- Delhi/Kolkata route. Kamarajar Port Limited has undertaken the doubling of the existing railway siding, which is expected to increase its capacity from 22 rakes per day to 44 rakes. Rail connectivity issues are minimal with regards to this Port.

b) Road Connectivity

154. The Kamarajar Port was envisaged to handle large volumes of bulk commodities, automobiles and container traffic. A good network of capacity efficient roads is integral to support the movement of goods to and from the Port. The Port is connected to the hinterland *via* National Highways NH-5, NH-4& NH- 45. However, with the passage of time and the spread of urbanization, the roads are also getting choked up. In order to improve the connectivity of the Port, the Kamarajar Port Limited has initiated two projects, mainly, Proposed Southern Port Access Road (SPAR) and Proposed Northern Port Access Road (NPAR). [the spelling of Kamarajar has been corrected]

155. **The Committee is of the opinion that the development of infrastructure must be a joint effort of the State Governments, the Ports and the Ministry of Shipping, including the Central Government, as it is integral to the development and growth of the nation and integral to the economic prosperity to the States concerned and the nation at large. In view of this, the Committee applauds the efforts of the KPL authorities in bringing the various stakeholders to the table and is an example that must be followed by other Major Ports in developing their hinterland connectivity.**

VIII. COCHIN PORT TRUST

156. **Cochin Port** is a major port on the Arabian Sea - Laccadive Sea – Indian Ocean sea-route in the city of Kochi and is one of the largest ports in India.

ThePort lies on two islands in Kochi: Willingdon Island and Vallarpadam, towards the Fort Kochi river mouth opening onto the Laccadive Sea. The modern port was established in 1926 and has completed 91 years of active service. The International Container Transshipment Terminal (ICTT), Vallapardam, is the largest container transshipment facility in India. The Port is governed by the Cochin Port Trust (CPT), a government of India establishment.

157. The Kochi Port is one of a line of maritime-related facilities based in the port-city of Kochi. The others are the Cochin Shipyard, the largest shipbuilding as well as maintenance facility in India; the SPM (single point mooring) facility of the Kochi Refineries, an offshore crude carrier mooring facility; and the Kochi Marina.

158. At Ernakulam Wharf, the Port has 5 general cargo berths and one dedicated berth for fertilizer handling which is used by the Fertilizers and ChemicalsTravancore(FACT). At Mattacherry, the Port has eight berths. Of these, six are general cargo berths, one is a Liquid berth and is used by the Lakshadweep Administration.

159. Of the three-liquid terminal, the Cochin Oil Terminal is the main terminal which handles bulk of crude oil at the Cochin Port Trust. It has a draft of 12.5m. The second being the North tanker Berth and the South Tanker Berth have a draft of 9m. The LNG Terminal has a draft of 12.5 m draft and another single point mooring facility which is used by the BPCL with a draft of 22.5m.

160. A draft of 38 ft is maintained in the Ernakulam channel along with berthing facilities, which enables the Port to bring in larger vessels. In the Mattancherry channel a draft of 30 ft is maintained. The Port provides round-the-clock pilotage to ships subject to certain restrictions on the size and draft.Cochin Port handles Break and Dry Bulk Cargo (Steel Plates, Salt& Coal Etc) conventionally which forms 1.64% of the total volume of cargo.

i) PORT PERFORMANCE

161. The Chairman of the Cochin Port Trust informed the Committee that the Port has taken a U-turn since 2016-17, not only in terms of volume handled but also in terms of profit. In 2015-16 the volume of cargo handled was 22.5 MMT, which rose to 25.07 T against the set target of 24.5 MMT. Similarly, the volume of cargo handled was 29.38 MMT as against the target of 28.5 MMT. The Port has set its target as 32 MMT and the Port expresses confidence in ability to handle a volume of 32 MMT.

162. The Committee was informed that as against the Average pre-berthing time of 10.31 Hrs. in 2017-18, the Port has been able to achieve an average of 7.61 hours in 2018. In terms of the Average Turnaround time, the Port has been able to set an average of 1.46 days as against an average of 1.54 in 2017-18. The Port has also registered an Average Output per ship Berth of 23,3382 in 2018 tonnes as against 20,800 tonnes in 2017-18.

ii) MODERNIZATION OF CARGO HANDLING MECHANISM

163. The ICTT is equipped with 6 quay cranes and 15 rubber tyred gantry. The cranes can handle 30containers per hour which is at par with international standards. A truck enters the terminal and leaves theterminal after completing all its operations within 27 minutes. This is at par again with international standards. The terminal at Ernakulam is equipped with a mobile harbor crane which is capable of handling a load of 40 tonnes and is a port – owned crane. The Port is also equipped with marine unloading arms which is a fully mechanised facility along with quick release hooks.

164. At Petronet LNG, the Port is equipped with a state- of -the- art facility with a capacity of 5 MMT. As far as cement establishments are concerned, primary operators have equipped the docks with hydraulic suction facility as well as packaging facility. The mother client is situated in the north-west and the cement reaches there by ships and it is handled mechanically, packaged and thereafter sold in Kerala.

165. The construction of multi user liquid terminal for handling LPG, other liquid cargo etc. with a capacity of 4.10MMT including a barge berth at an anticipated cost of Rs.749 crores including investment by the PPP operator M/s IOCL.

166. Refurbishment and capacity enhancement of coastal liquid terminal at a cost of Rs.19.95 crores and was completed in October, 2017. Another refurbishment in the South Tanker Berth at a cost of Rs. 29.22 crores is scheduled.

iii) DIGITISATION OF THE PORT

167. RFID has been fully implemented at Ernakulum Wharf and the ICTT. Upon entering the Port, the driver need not get down from his truck. Everything is automated and the driver can complete all the operations and leave the Port from the comfort of the driver seat. This has reduced the handling time to 27 minutes. Installation of drive through scanners are underway at ICTT Vallarpadam and is scheduled for completion in July 2018. It is estimated that thescanner can scan around 60 trucks within an hour and trials are being conducted.

iv) CONNECTIVITY

a) Road

168. The Port is connected by National Highway 47 (544) and National highway 47- A (966B). the construction of a flyoverin front of ICTT at a cost of Rs.30crores was competed in march, 2017. Wellingdon Island is connected to National Highway -47 A(966B) through a 2- lane carriageway link of length 5.9 km.

b) Rail

169. The Ernakulam Wharf of the Port is well connected by rail. The route length of rail connectivity of ICTTT project site at Vallarpadam is 8.86km. National Highway connectivity to ICTT route length is 17.20km. Construction of a rail over bridge, which forms a part of the rail connectivity to ICTT replacing the

temporary level crossing at a cost of Rs.30 crores have been completed in April, 2018.

v) CRUISE TERMINAL

170. The Port is also equipped with a dedicated terminal at Mattancherry for cruise ships with the capacity to handle 160 m Length Overall (LOA). The Port is equipped with 20 dedicated immigration counters along with scanning facilities. The Port has a capacity of 2000 passengers at Samudrika, Mattancherry facility. A New Passenger Terminal is to be constructed at Ernaulam Wharf at an estimated cost of Rs.25 crores, with the capacity for ships up to 420 m LOA. The New Terminal will be spread over 2,285 square meters in terms of floor area with an estimated capacity of 3000-6000 passengers. The terminal will be equipped with 30 immigration counters and also a set of scanners and buggies. The terminal will be financed by the Ministry of Tourism with a grant of Rs.25 crores.

171. **The ICTT was described as a milestone in logistic infrastructure development. But what followed in the years to come has proven to be problems replete with negative consequences. The Committee feels that the terminal has not lived up to the perceived expectations which subsequently ran aground since the projections were so full of loopholes that they have failed to hold water. First and foremost was the inability of the terminal to accommodate large cargo vessels due to chronic siltation. At present, very little business is taking place at the ICTT, with the terminal functioning at 35% of its capacity. On the contrary, it has proved to be a drain on Cochin Port's exchequer which is already cash strapped with huge debts, running to the tune of over Rs.700 crore to be repaid.**

The Committee is pleased to note the steps taken by the Port in developing a passenger cruise terminal. This is a neglected aspect of shipping in India and is a major source of revenue in other nations. Cruise Tourism must be pursued with greater vigor and the Committee is pleased to know that the

Ministry of Tourism is cooperating with the Ministry of Shipping to develop Cruise Terminals.

IX. DEENDAYAL PORT TRUST (KANDLA PORT)

172. Deendayal Portis a seaport in the Kutch District of Gujarat state in western India, near the city of Gandhidham. Located on the Gulf of Kutch, it is one of the Major Ports on the west coast. Deendayal Port was constructed in the 1950s as the chief seaport to serve western India, after the partition of India.

173. Deendayal Port (DPT)is locatedsome 256 nautical miles southeast of the Port of Karachi in Pakistan and over 430 nautical miles north-northwest of the Port of Mumbai (Bombay). It is the largest port of India by volume of cargo handled. Kandla Port Trust, India's busiest major port in recent years, is gearing to add substantial cargo handling capacity with private sector participation. The west coast port handled 72,225 million tonnes of cargo in 2008-09, over 11% more than the 64,920 million tonnes handled in 2007-08.Much of this growth has come from handling of crude oil imports, mainly for Essar Oil's Vadinar refinery in Gujarat.The Port is also taking measures to boost non-POL cargo. Kandla Port was renamed as Deendayal Port under the Indian Port Act of 1908.

174. The Port has 14 nos. of Dry Cargo Berths, 6 nos. of Oil Jetties, 4 nos. of Moorings for mid- stream handling of cargo and 1nos. of Barge Jetty at Kandla. At

175. The Port is equipped with 12 Electrical Level Luffing Cranes (ELL) with a capacity of 12-25 tonnes capacity at berth no. 2,3,4 and 10. In addition, the Port has also procured 2 nos. Mobile Harbour Cranes of 64 tonnes in 2011 for Cargo Handling. Vadinar is small coastal town located in Devbhoomi Dwarka district of the state of Gujarat, India. The offshore oil terminal of the Deendayal Port Trust is located in Vadinar and contributes in a large way to the total earnings of this major port.

FINANCIAL PERFORMANCE

PARTICULARS	2015-16	2016-17	RE 2017-18	PROVISIONAL UPTO DEC,17
Cargo Handled (MMT)	100.051	105.44	109.5	81.12
No. of Vessels Handled(in NO)	2513.00	2568	2809	2081
Operating Income (in Cr)	982.14	1383.15	1500.18	1075.56
Operating Exp.(in Cr)	621.58	658.79	692.28	472.3
Operating Surplus(in Cr)	360.56	724.36	807.90	603.26
Operating Ratio(in %)	63.29	47.63	46.15	43.91

176. The Chairman, DPT informed the Committee that of the traffic handled at the Port, 60 per cent of the cargo is oil and 40 per centconstitutes general cargo. Recently, two berths have been given to JM Bakshi Group through Public PrivatePartnership. A study was conducted recently which shows the draft available is much better than before.

177. The total imports of the Port amounted to Rs.812 crore and the export is 811 crores. This has remained nearly stable. The exports have increased from 238 to 288.4 MMT as per last year. The imports largely consist of coal and timber. Timber is special because this is a timber hub. There are 2400 saw mills; the timber, both soft and hard is aggregated at the Port from where it is distributed all over the country.

i) MODERNIZATION OF CARGO HANDLING MECHANISM

178. As per the report of the Boston Consulting Group commissioned by the Ministry of Shipping, the issue of higher rake urn around time at Deendayal Port and measures to reduce the same were discussed during various inter-ministerial

meetings. The above initiative of reducing the fertilizer rake loading by way of mechanization was aimed to achieve a targeted turn round time of 6 hrs. The installation of an automated rake loading plant to reduce the rake turnaround time from 10-12 hours to 6 hours was recommended. It was reported that this would reduce the cost of handling to Rs.160/ton which is a reduction of Rs.45/ton. The mechanized bagging and rake loading facility at NG 34 of Deendayal port includes 20 nos. of bagging machines and 20 nos. wagon loaders with a design capacity to handle 1.4 MMTPA fertilizer cargo. This project is pegged at an estimated cost of Rs. 122 crores which includes a capital cost of Rs.14 crores, O&M cost of 8 years amounting to Rs. 108 crores. The work order for the same was issued to M/s Rishi Shipping Gandhidham in March 2017. All 20 units have been erected and testing and trials are underway.

179. As per the Master Plan devised by AECOM (construction company), full scale mechanization for handling fertilisers has been suggested in one berth to reduce the turn around time of ships, rake turnround time, etc. Currently, the process of handling fertilizer and cargo at Kandla, involves multiple movements and CFS for the unloading and delivery of cargo to the end users. The Port has undertaken the setting up of fully mechanized handling facility exclusively for fertilizer cargo (Urea, MOP, DAP) at the Deendayal Port. Under the proposed system, all cargo related activities from the unloading of bulk fertilizer cargo from ships to loading them into bagged fertilizer onto the wagons will be mechanized.

180. The project is estimated at a total cost of Rs. 338.51 crores, to be met from internal resources, with an estimated capacity of 4.5 MMTPA. The Chairman, DPT stated that the Ministry of Shipping has already approved the Standing Finance Committee Proposal. Tender documents are under scrutiny and the project is scheduled to be awarded during the 2018-19 Financial Year and completed by October 2020.

181. The project will feature 2 Mobile harbor cranes with mobile hoppers, a conveyer system up to the storage shed, with a shed measuring 38,500 Sq. mts, 40

bagging units and wagon loaders including 2 rakes, which can be handled simultaneously on either side of the shed. These will ensure efficient operation due to end to end mechanization. This will ensure minimal contamination of fertilizer cargo due to dedicated mechanization and closed Pre-Engineered Building Shed. This will eliminate the need for internal vehicular movement for transfer of cargo. This being automated will reduce the need for labour at the docks. A Mechanized Dust Suppressor will also be in place to ensure dust- control at the Port. [A slight change in the sentence has been made.]

182. In order to improve its overall efficiency, the port has procured 2 Nos. of Mobile Harbors Cranes (MHC's). The flexibility of the MMHC's enable faster handling of cargo at non- crane berths. The upgradation is pegged at an estimate cost of Rs.71 crores (excluding IGST) and O& M costs of Rs.20 crores for 5 years. The cranes have an estimated capacity of 3.5 MMTPA. The cranes have been commissioned in May, 2018 and are presently operational. These cranes have been deployed between berths no. 7 to 9 of the Deendayal Port.

ii) CONNECTIVITY

a) Road

183. The Port boasts of a fully developed network of roads in and around the port area to facilitate the efficient movement of cargo. Cargo Jetty complex has four gates. Of the four gates, NH – 8A extends right up to one of the gates and the remaining gates are also connected with the NH- 8A through four lane roads. Furthermore, the Oil Jetty Complex is also directly connected with the NH- 8A by a 4- laned road. Both the Oil jetty areas and the Cargo jetty area complex are connected with each other by a 4- laned road which bypasses the Gandhidham city. A 4 – lane road extends from Dry Khari Rohar Salt Junction to cargo Berth no. 16 at Kandla. The NH- 114 extends right up to the Port's main gates.

b) Rail

184. The Port is connected by broad gauge railway lines with Railways Sidings near the godowns to facilitate easy access and transportation. The total distance of the railway network inside the cargo jetty areas measures about 13kms in total.

FINANCIAL PERFORMANCE

Sl No.	PARAMETERS	2016-17	2017-18
1.	Traffic Handled (MMT)	105.44	110.9
2.	Operating Income(Rs.in crore)	1383.15	1475.35
3.	Operating Expenses(Rs. In crore)	658.79	677.99
4.	Operating Surplus (Rs. In crore)	724.36	797.36
5.	Operating Margin (%)	52.37	24.05
6.	Net Surplus (Rs. In crore)	693.86	546.45
7.	Net Margin (%)	44.14	31.47
8.	Cost per Ton (Rs.)	62.48	61.58

185. The Chairman of the DeendayalPort deposed before the Committee that with regards to financial performance, the traffic handled at the Port has been the highest till at 110.9 MMT as compared to 105 MMT in the previous year. The operating income has increased to Rs.1,475 crore from Rs.1,385 crore, while the operating surplus has increased from Rs. 724 crore to Rs. 797 crore. In five years, the Port has nearly doubled the profit and the operating income. The Net surplus shows lower than previous years due to the contribution to the Pension Fund.

186. The road from Dry Khari Rohar Salt Junction to Cargo Berth no. 16 needs to be converted into an 8- lane in order to reduce the congestion inside and outside the Port to ensure free access to cargo jetty no. 1 to 16.

ii) PROBLEMS AND BOTTLENECKS

187. The Chairman of Deendayal Port informed the Committee of the issue ofunavailability of sufficient number of rakes for the timely and efficient evacuation of cargo. He stated that since the Port was situated in a creek, it was prone to heavy siltation. Maintenance dredging is required at regular intervals throughout the year, which is a major hinderance to the optimum capitalization of the Port's facilities and becomes a hinderance in the efficient utilisation of the economies of scale as ships with big drafts cannot call on the Port, not to mention the burden on the Port's exchequer for the dredging requirements.

188. Being situated on the Gulf of Kutch, expansion projects of the Port face hurdles in term of licenses and permissions. The Port has been delayed in its expansions due to issues with environmental clearance for projects on un-used land area due to Coastal Regulatory Zone.

189. **The Committee takes note of the hurdles faced by the Portand desires that the Port must take up the issues of connectivity projects with the NHAI and the State Government in order to ensure that projects are completed on time without delays.**

190. **The Port, being on a creek, will suffer from issues of siltation. The Committee observes that this is an issue that the Port must deal with regularly in order to ensure the smooth functioning of the Port.**

191. **The Committee takes note of the issues of Environmental Clearance Certificates with regards to projects of the Port. The Committee feels that the developmental needs of the Deendayal Port should not be ignored while considering Coastal Regulations. The Committee recommends that the required concessions and permissions may be given to the Port as it is in the larger economic interest of the nation and its people.**

X. NEW MANGALORE PORT TRUST

192. New Mangalore Port is adeep-water,all weather Port at Panambur, Mangalore in Karnataka State in India which is the deepest inner- harbor on the west coast. It is the only major port of Karnataka and is operated by the New Mangalore Port Trust (NMPT). It is to the north of confluence of Gurupura (Phalguni) river to Arabian sea. It is 170 nautical miles (310 km) south of Mormugao Port and 191 nautical miles (354 km) north of Kochi Port. The Port serves the hinterland of Karnataka state and to some extent the State of Kerala. The major commodities exported through the Port areiron ore concentrates and pellets, iron ore fines, manganese, granite stones, coffee, cashew and containerized cargo. The major imports of the Port are crude and petroleum products, LPG, wood pulp, timber logs, finished fertilizers, liquid ammonia, phosphoric acid, other liquid chemicals, and containerized cargo.

193. The Chairman of the New Mangalore Port Trust informed the Committee that over the years, the Port has grown from handling less than a lakh tonnes of traffic to 42.05 million tonnes handled during the last financial year 2017-18. The major commodities imported through the Port are POL Crude for MRPL(Mangalore Refinery and Petrochemical Limited), wooden logs, bentonite powder, Cement, coal, fertilizer, edible oil, liquid chemicals, containerized cargo etc. and the major export cargo are Iron Ore Pellets, granite stone, Maize, POL products, containerized cargo like coffee, cashew kernels, etc. The Port alsohandles the cargo of mega Industries like MRPL-ONGC(Oil and Natural Gas Corporation), KIOCL (Kudremukh Iron Ore Company), Elf Gas Limited, MCF(Mangalore Chemical & Fertilizers), HPCL(Hindustan Petroleum), IOC(Indian Oil Corporation), UPCL(Udupi Power Corporation Ltd (***UPCL***) etc. The Port is also the first port in India to introduce Electronic Delivery Order (e-DO) in the port sector for bulk and liquid cargo.

194. The Chairman, New Mangalore Port Trust (NMPT) deposed before the Committee that the Port in the previous year had an operating income of Rs. 504 Crores and a net surplus of Rs. 190 Crores. The Port handled 42 million tonnes

of cargo as against 40 million tonnes in the previous year. Further, the Committee was informed that the Port had set a target of 44 million tonnes, which the Port is confident it will achieve. With regard to container traffic, the Chairman of the Mangalore Port deposed before the Committee that for the past 4 years, the Port has witnessed a year-on year growth of almost 23 per cent. In the past four years container cargo have gone up from 28,000 TEUs to 1,15,000 TEUs. The projected container traffic is 1.6 lakh TEUsfor the upcoming fiscal year.

195. In reply to a pointed query on the cost of the solar plant at the Port, the Chairman NMPT replied that the land-based 4MW solar plant cost Rs. 24 crores and the roof top with 1.2 MW is pegged at Rs. 6 crores, adding to approximately Rs. 30 crores, against which the Port saves about Rs. 4 crores per annum in terms of power bills.

i) MODERNSIATION OF CARGO HANDLING MECHANISM

196. The New Mangalore Port, in its endeavor to meet international standards and increase cost effectiveness, plans to develop its infrastructure in a phased manner by giving importance to logistics. In order to provide economies of scales to the user,the Port has to look forward for the cost-effective developments. The main objective of the logistics is to ensure that customers should have a competitive advantage through superior logistic services, live up to their expectations and service levels through dedicated professionals with knowledge, experience and effective communication skills.

197. The present capacity of the Port stands at 68.90 MTPA. The commissioning of mechanization of Berth. No.18 which is now under construction, will add another 5 Million tonnes.The Chairman of the New Mangalore Port trust (NMPT) informed the Committee that a dedicated Coal Berth (Berth No. 15) with a modern state-of-the-art unloading facility, with conveyors, stacker cum reclaimers, wagon loading system etc. was established under Captive

Basis on Build, Own, Operate and Transfer Basis on PPP Mode. The Project was commissioned and commercial operations started during the year 2012.The Committee was informed that the Port had taken up modernization and implementation of infrastructure projects and cargo handling equipments on thePPP mode.

198. The Chairman of the NMPT apprised the Committee that the Port is also taking up various projects towards improving port facilities, like increasing the covered storage area for general cargo and liquid bulk, storage area for containers, outsourcing of equipment's, flotillas, etc. in order to attract more cargo to the Port. Presently, it has 15 fully operational berths of which 9 are general cargo berths, 5 oil berths, 1 coal berth(fully mechanized) and one SPM. All the oil berths are provided with mechanical loading/unloading arms. Berth No.15(Coal berth) is equipped with unloading arms. In addition to the above, Berth Nos.4&5 are equipped with unloading arms for unloading liquid ammonia and bulk cement respectively. Berth No.8(KIOCL) berth is also provided with loading arms for handling iron ore.

199. The status of completion of infrastructure Modernisation Projects undertaken by the NPMT is stated in the table below:

	Infrastructure Modernisation Project	**Status**
1.	Construction of State-of-the art Vessel Traffic Management System(VTMS) to ensure safe navigation facilities for the vessels calling on the Port.	Completed.
2.	Construction of Sewage Treatment Plant(STP) for recycling and re-use of the waste water for optimum utilization of the sewage generated by the Port.	Nearing Completion

3.	Mechanisation of bulk cargo handling facilities at the newly constructed berth(No.18) with environment safety measures for handling coal.	Work in Progress
4.	Green Port Initiatives like planting tree saplings and maintains 33% of the port area as green belt. As part of generating non-conventional energy, 5.19 MW solar power is commissioned and 95% of the Port's power requirement is met from it.	Work in Progress
5.	Construction of Sewage Treatment Plant(STP) for recycling and re-use of the waste water for optimum utilization of the sewage generated by the Port.	Work in Progress
6.	In order to provide adequate storage facility both covered and open, the Port has recently added 4 covered sheds inside the Port and added additional container stack yards. In addition to the above, 30 acres of the land inside the Port is being converted as stackyard for storage of Ro-Ro cargo.	NearingCompletion

200. **The Committee takes note of the efforts taken by the NMPT to improve and modernize the infrastructure of the Port in order to increase the efficiency of the Port. The Committee understands that the infrastructure projects of the Port such as creating additional storage area got affected due to limited land availability within the specified area of the Port.**

201. **The Committee understands that the Port has a draft restriction which becomes a major cause of concern with regard to handling new generation vessels. Deep drafts with a minimum depth of 14 meters is the prescribed global standards. The Committee, therefore, recommends that**

the NMPT, along with the Ministry of Shipping, must work together to ensure that the Draft level is maintained, if not improved upon, in order to ensure that the Port maintains its viability.

202. **The Committee was also informed that the limited water front is an impediment to the future expansion of the Port. The Port, with a total land area of 2,290 acres, presently has a capacity of 15 berths and one SPM is already saturated. This greatly limits the ability of the Port to expand in terms of infrastructure. The Committee recommends that studies must be conducted to find a solution to the logistical and infrastructural bottlenecks that the Mangalore Portfaces,to ensurethat the future growth and expansion of the Port is done in a scientific and systematic manner.**

ii) ROAD CONNECTIVITY

203. The Chairman,NMPT informed that great strides were taken in the development of road connectivity to and from the Mangalore Port.The Port is connected with 3 National Highways.

iii) CRUISE TERMINAL

204. The Committee takes note of the fact that the Ministry of Shipping has taken serious steps to promote Cruise Tourism in India. At New Mangalore Port, a full- fledged cruise terminal is functioning with facilities for customs, immigration, port health, banking services, facilitation centers, duty- free shops and boutiques etc. Foreseeing the growth in cruise traffic, the Port has constructed a modern cruise passenger lounge neat the berth with an area of 2150 sq. meters and is operational with facilities like money exchange, locker room, medical officer room duty free shops, cafeteria, conference hall etc. The Ministry of Shipping has provided for 10 counters in the Immigration halls of five ports to facilitate e-visa.

205. **The Committee notes the steps taken by the Port to augment the facilities in terms of Cruise tourism. Mangalore, with its beautiful coast**

and pristine beaches, is ideal as a cruise destination. The Committee recommends that more must be done to fulfill the potential of the Port as a major cruise terminal and a gateway to Peninsular India. In terms of infrastructure, draft levels must be maintained to facilitate the participation of major cruise liners. The Committee further recommends that the Ministry of Shipping and the NMPT should work together with the Ministry of Tourism, tour operators and the respective State Tourism Boards to promote New Mangalore Port as a cruise terminal. Simultaneously, the Ministry of Shipping and NMPT must ensure that the facilities at the passenger terminals must be at par with global standards.

206. **Nestled amidst the Western Ghats in peninsular India, construction of roads and railway lines to connect the Port, is fraught with geographical obstacles. As a result, this has reduced the popularity of the Port due to the relatively high transportation costs and time taken. The Committee recommends that given the availability of advanced technology, new technology and research must be harnessed to devise a way to circumvent the geographical bottlenecks that ail the Port.**

207. **While most Major Ports in India are suffering from congestion, the New Mangalore Port is struggling to achieve even 50 per cent of its capacity utilization. The only lifeline between the New Mangalore Port and its hinterland is the rail line provided by the Hassan- Mangalore Rail Development Company Ltd. (HMRDC). Rail cargo has remained consistent at 7 lakh MT in the last two financial years, indicating a case of stagnancy. The Committee recommends that the Government may consider improving rail connectivity with NMPT.**

208. **Karnataka has 8 minor ports- Kundapura, Honnavar, Belekeri, Tadri, Bhatkal, Hangarakatta, Malpe and Padubidri. These are located on the State's 300 km coastline. Hence, coastal shipping would and should be an ideal alternative to the lack of proper road connectivity. However, the**

shared hinterland implies competition for the same cargo. Also, this mode of transportation continues to remain unexplored. Coast-to-coast mode of transportation can change the fortunes of Indianmarine logistics. It is a pity that its potential remains untapped. The example of China may be studied, where the Chinese Government is using its coastline to connect one city to another. This mode of transportation has proven to be cost effective and can result in faster movement of consignments.

XI. MORMUGAO PORT TRUST

209. One of India's natural harbours, the Mormugao port is a premier hub of maritime trade in Goa. With its location at the mouth of the Zuari River, the Mormugao port is a crucial component in the flourishing export industry of the State. The origin of the Port dates back to the Portuguese era and isa result of the Treaty of Lisbon in 1878 between the British and the Portuguese Governments.

210. Ever since it was accorded the status of a Major Port in 1963, the Mormugao Port has contributed immensely to the growth of maritime trade in India. It is the leading iron ore exporting port of India with an annual throughput of around 24.50 million tonnes of iron ore traffic. The Mormugao Port accounts for about 32% of India's iron ore export.

211. The Chairman of the Mormugao Port Trust informed the Committee that at present, the Mormugao Port has 9 berths and 6 mooring dolphins at its disposal for handling different commodities. Till 2010-11, iron ore was the major commodity handled with about 80% share. However, due to a ban imposed on extraction, transportation and export of iron ore by the Hon’ble Supreme Court in the year 2012, the Port switched to other general commodities.

212. The Port has acquired two Harbour Mobile cranes, one owned and the other ona hire/lease basis with a capacity of 100 tonnes and above. The Port also has setup two additional rail lines, Line no. 7 and 8, with cargo landing space for EXIM cargo. A dedicated berth is earmarked for cruise berth facility with a LOA of 294 meters and berthing draft capacity of 8.5mts. The Chairman stated that the Mormugao Port has two berths leased on 30 years concession, on a Public Private Partnership basis for the coal handing operated by M/s. South West Port Limited (6A) and M/s. Adani Murmugao Port Terminal Private Limited (Berth No.7).In addition, one General Cargo Berth (5A) is also operated by M/s South West Port Ltd. on PPP basis. The handling of coal at these berths is carried out mechanically with the help of quay cranes, dust free hoppers, closed conveyors, stackers, reclaimers and silos. The coal from the ship is unloaded by the quay cranes and loaded in the hoppers, the coal is further transferred from the hoppers to stackyards by closed conveyors. The stacks are covered temporarily till they are further transported to the destination by rail or road. The online wagon handling system is in place. The loading of the cargo is carried out by reclaimers connected to the closed conveyors and further connected to silos for loading into the wagons. The truck loading is also done for small quantities which are to be transported within the State. Mormugao Port railway yard is equipped with efficient sidings supporting the transportation of cargo to the hinterland destinations and is provided with Distributed Electronic Interchange (DEI) supported signaling system.

213. The Committee was informed that the whole operation of loading/unloading the coal is supported by the efficient dust suppression system right from the hopper till the stackyards. The roads in the vicinity are swept and watered regularly to minimize the dust emission.Wind shields are also provided to reduce the dust emission from the stackyards. The loading of wagon at berth No.6 operated by M/s SWPL & berth 7 operated by M/s Adani is done through SILOs having capacity of 4000 MTH each.

i) PERFORMANCE

214. The Committee understood that the suspensionof iron ore mining in Goa has resulted in a loss of almost 20 million in terms of cargo throughput and consequently the coal imports have also been drastically reduced (4.8+4.8MTPA = 9.6 Metric Tonnes Per Annum) due to restrictions imposed by Goa State Pollution Control Board on the quantityof coal that can be handled. The Chairman of the Mormugao Port Trust informed the Committee that the financials and performance of the Port have suffered due to the fact that iron ore leases have been cancelled in Goa by the Hon'ble Supreme Court *vide* its judgment dated February 7th, 2018.

The financial and traffic figures for the Mormugao Port are as under:

Particulars	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19 (Projected)
Traffic(million tonnes)	14.71	20.78	33.18	26.90	18.00
Operating Income (Rs Cr)	286.75	342.85	443.59	425.67	391.47
Operating Expenses (Rs Cr)	246.95	239.23	267.98	273.84	295.48
Operating Surplus (Rs Cr)	39.80	103.62	175.61	151.83	95.99
Operating margin (%)	13.88	30.22	39.59	35.67	24.52
Net surplus before tax (Rs Cr)	-33.73	5.69	59.12	2.21	-32.72

215. **The Committee notes the efforts of the MPT in increasing the efficiency of the Port, given the constraints imposed on the Port. The Committee understands the need for development of infrastructure of the port. The Committee was informed by various stakeholders of the shipping industry in Goa that there is an urgent need for improvement in the rail and road connectivity in MPT in order to ensure faster evacuation of cargo, better connectivity to the hinterland and avoid the movement of vehicles carrying cargo through congested city roads. They emphasized the need to make the amenities given to cruise tourists at par with global standards. They stressed on the need for doubling of railway line in**

Mormugao Port. The stakeholders also highlighted the need to compensate the Port for any monetary loss that the Port might incur for the grant of any concessional tariff for the promotion of cruise tourism. They impressed upon the need to ensure that the facilities provided with regards to Cruise Tourism are made world class so as to imprint a good image of Goa in the minds of the tourists.

216. **Given the popularity of Goa as an international tourist destination, the Committee recommends that the MPT should realign its focus at developing itself as a Passenger Port, catering to Cruise Ships. Tours and Packages for the same must be worked out with the Ministry of Tourism and the Ministry of Shipping. Necessary infrastructural requirements must be developed in order to harness the full potential of the Port as a Passenger Port. This will ensure that the Port is maintained as a profitable and viable venture whilst ensuring the preservation of the environment in keeping with the orders of the Supreme Court.**

MAJOR ISSUES AILING CARGO MANAGEMENT IN THE MAJOR PORTS

I. CAPACITY UTILIZATION

217. Given the sluggish growth in term of cargo handled at Major Ports, and addition of capacity in recent years, the capacity utilisation at India's Major Ports have fallen steadily from 85% in 2010-11 to 67% in 2014-15 and 56% in 2016-17. Capacity Utilisation at India's Major Ports was in excess of 90% between the years2004-05 to 2009-10 leading to port congestion. The capacity utilisation measured as the ratio of cargo handled to designed capacity for the major port shows great variation during 2016-17. As stakeholders seek alternative cargo transportation gateways, a spill- over of cargo from Major Ports to medium-sized, non- Major Ports is taking place. These non- Major Ports tend to be better placed in terms of infrastructure and capacity. This has resulted in non- Major Ports in

Gujarat, mainly Mundra and Pipavav to absorb excess cargo traffic. The capacity of Major Ports in 2016-17 was1066 MTPA.

	2014-15			2015-16			2016-17		
	Cargo	Capacity	CU	Cargo	Capacity	CU	Cargo	Capacity	CU
Kolkata	46.29	70.85	65.34	50.29	86.99	57.81	50.31	96.10	52.30
Paradip	71.01	119.80	59.27	76.39	126.94	60.18	89.0	143.44	62.0
Visakhapatnam	58.00	96.76	59.94	57.03	107.75	52.93	61.00	110.75	55.1
Kamarajar	30.25	37.00	81.76	32.21	45.00	71.58	30.00	57.00	52.7
Chennai	52.54	86.04	61.06	50.06	93.44	53.57	50.2	93.44	53.70
Chidambaranar	32.41	44.55	72.75	36.85	59.26	62.18	38.5	65.90	58.4
Cochin	21.60	49.66	43.50	22.10	49.66	44.50	25.0	56.37	44.20
New Mangalore	36.57	77.77	47.02	35.58	77.77	45.75	39.90	87.63	45.60
Mormugao	14.714	43.76	33.62	20.77	48.79	42.57	33.20	50.04	66.3
Mumbai	61.66	44.53	138.47	61.11	49.33	123.88	63.00	62.33	96.50
JNPT	63.80	79.37	80.38	64.03	89.37	71.65	62.2	89.37	69.60
Kandla	92.50	121.43	76.18	100.05	131.06	76.34	105.40	150.26	64.48
Overall	581.34	871.52	66.70	606.47	965.36	62.82	647.80	1065.83	60.80

II. CONTAINER TRAFFIC

218. Indian ports handled more than 10 million (mn) TEU container traffic in 2016-17. Container traffic has grown at 8 percent over the past decade as the level of containerization has increases from 60 percent in 2004-05 to 67 percent in 2013-14. Going forward, it is estimated that container traffic will grow at the rate of 6.5 percent under “business as usual” and reached 21.5 mn TEU by 2025. Including the impact of programs like “Make in India” and development of industrial corridors, the estimated container traffic has an approximate growth potential of 24-25 mn TEU. In addition, the Committee was informed that thefinal report for Sagarmala Vol I (FRS I) has identified two sources of additional growth, the first beingaround 3-5 mn TEU growth from improved competitiveness of industries in the hinterland due to lower cost and reduced export time. The second, around 4-6 mn TEU growth due to setting up port-based, export- oriented manufacturing clusters for industries like electronics, apparel, footwear, automotive and auto- parts.

Particulars	2018-2019 (Revised)	2018-2019 (RFD)	2018-2019 (B.E.)	2018-2019 Actuals
Traffic (Million Tons)	18.00	19.00	37.50	26.90
Operating Income	391.47	398.00	545.33	425.67
Operating Expenditure	295.48	295.00	321.45	273.83
Operating Surplus	95.99	103.00	223.88	151.84
F&M Income	20.00	20.00	10.30	26.61
F&M Expenditure	148.71	165.00	165.71	176.24
Net Surplus/Deficit	32.72	42.00	68.47	2.21
Operating Cost per Tonne	164.16	155	85.72	101.80

219. **The Committee is of the opinion that existing and new ports should align their capacity expansion in line with the projected increase in coastalshipping volumes. Provision of a dedicated berth for coastal shipping should also be looked into in order to promote coastal shipping.**

III. DRAFT LIMITATIONS

220. Indian ports are on an average quite small- most lack the necessary draft to handle cape sized vessels. The relatively low draft level at Indian ports does not meet International standards. The average size of container vessels calling at Indian ports is around 5,000 TEUs where China maintains draft levels of 12,000 TEUs. At JNPT- India's biggest container port- the draft is 14 metres, while a cape sized vessel requires upwards 16 metres. Around25 percent of India's container cargo is transshipped through international transshipment ports. The inadequate draft at Indian Ports results in elevated costs and increased transport time as cargo, both inbound and outbound is routed through transshipment ports like Columbo and Singapore. As vessels keep getting bigger, Indian ports need deeper drafts which call for increased investments on capital dredging.

221. Dredging capacity and adequate turning circles are increasingly important to port access. Vessel draft is only one aspect of the technological changes to ships that affect port infrastructure requirements. Additional aspects are ship length and breadth. The former determines the quay length and berth layout

required to accommodate ships. The latter is a key indicator for superstructure requirements in ports, especially the reach of ship-to-shore- cranes. Indian ports need to adjust the available draft levelto 15m and above against the currently prescribed minimum draft level of 14m upto 17m.

222. The Committee was informed that a minimum draft availability of 14 meters in Major Ports was targeted for achievement by the end of the 12th plan period. Most Major Ports already have a minimum draft of 14 meters and the remaining Major Ports have plans to achieve this level. In view of the draft limitations, at present, Visakhapatnam Port can handle all types of vessels/ ships with a draft level of up to 18.1 meters. Chennai Port is handling tankers which require a draft of 17 meters during high waters at Bharathi Dock and Kandla Port has the capacity to handle ships that require 17 meters of draft at Tuna Tekra Terminal and at Vadinar. The table showing existing and proposed draft availability of vessels is attached at ANNEXURE II.

223. **The Committee has observed that the relatively low draft at Indian ports do not measure upto internationally set standards. Presently, vessels greater than 11,000 TEU are in service. The movement towards larger ships is driven by economies of scale. It follows that in case of containership for 1,000 TEU capacities, the average draft is 8.3 metres, which increases to 15.5 metres for ships above 11,000 TEU capacities. Container vessels with a capacity of 4,000 TEU requires a minimum draft of 12.5 metres.**

224. **The Committee feels that there is a need tomaximizethe utilization of these vessels, which will in turn lead to reduction in the number of port calls on major routes and push for the development of global mega ports served by fully integrated global network. Most Major Ports in India have minimum draft under 12m, except for a few of the younger ports which have draft of more than 14m. Insufficient draft at Indian Ports leads to increased costs and time taken as cargo originating from and those that are bound for India gets routed through transshipment ports like Colombo and**

Singapore. The Committee feels that as vessels keep getting bigger, Indian ports need deeper drafts, which call for increased and greater investments in capital dredging.

225. **The Committee recommends that new terminals at Tuticorin, Ennore etc. must be developed with a renewed zeal and vigour in a careful and strategic manner, so that they will act as active competitors to operational container ports in Sri Lanka.**

IV. ROLE OF TARIFF REGULATIONS AT INDIA'S MAJOR PORTS

226. The Committee was informed that during its existence, TAMP had developed five sets of guidelines(1998, 2005, 2008, 2013 and 2015). The first guideline was based on fixing Scales of Rates during the period 1998-2005, under which a normative cost, plus assured rateassured rate of Return on Equity (RoE) of 20% was permitted. Under the guidelines of 2005, applicable for a five-year period, the assured rate of return was based on a return on capital employed (RoCE) of 16% (pre-tax, current). For projects bid before July 2003, royalty quoted by the next highest bidder was allowed as a pass-through cost, with the balance to be borne by the operator from the operating surplus. Also, efficiency gains are mopped up for 50% in the subsequent review period (after three years) under the 2005 guidelines. This in one way does not reward (but rather penalizes) operational efficiency. As tariff is based on the estimated number of volumes of cargo handled, measures that would help the terminal increase its throughput could result in lowering of the tariffs during the next revision. A tariff based on the estimated number of TEUs/cargo handled which increase over time could result in lowering of the tariffs in the next revision. There are multiple guidelines in operation which are applicable to different terminals/ports.Depending on their date of commercial operation which results in terminals in a given major port being subject to different tariff rules giving different tariffs e.g., container terminals at the JNPT.

227. **The Committee feels that the Port sector in India is facing certain tariff- related uncertainties due to multiplicity of regimes. The non-Major Ports do notcome under any tariff jurisdiction and price their services based on market and competition. But the major ones (including private terminals therein) fall under the jurisdiction of a regulator*viz.*, Tariff Authority for Major Ports (TAMP). This anomaly and the lack of a level playing field have long been a debated issue.** [A slight modification has been done in the sentence.]

228. The Committee notes that the objective of tariff regulation is to limit monopoly profits through regulation of price and rate of return. However, in the current Indian situation, where the key challenge is to increase port capacity, this may not be the right approach. The primary objective of regulation is development of new port and terminal infrastructure through greater public-private participation with optimal risk sharing and to ensure that terminal operators meet minimum performance standards through provisions in the concession agreements. Not only is the notion of tariff regulation by a central authority unsuitable for development of the Port sector, but the methodology followed for tariff setting also needs to be re-examined.

229. **In view of the considerable loss of business opportunities for the Major Portsdue to the provision of certain tariff related uncertainties as ascertained by TAMP, the Committee recommends that the anomalies in the TAMP rules must be made reasonable in order to make it lucrative for ships to call on Major Ports against private ports. The Committee further recommends that the role of the TAMP must be redefined and that a strategic and market oriented system of tariff must be set in place.**

V. EFFICIENCY OF THE PORT SECTOR OPERATIONS

230. It has been noted that Indian ports are short on many performance parameters against international ports. Benchmarking Indian ports against

Chinese and US ports shows that India lags behind significantly in port infrastructure. Seven of the top 10 ports (cargo & container) in the world today (by throughput) are Chinese, while no Indian ports figure in the top 20 (ANNEXURE III). Most Indian ports don't have the draft to handle cape sized vessels. The average size of a container vessel calling at Indian ports is around 5,000 TEUs while for China it is around 12,000. At JNPT—India's biggest container port—draft by volume is 14 m while a cape size vessel requires upwards of 18 m. Around 25 per cent of India's container cargo is transshipped through international transshipment ports due to the lack of infrastructure to handle larger vessels at Indian ports. Average turnaround time at Indian ports is muchhigher- 4.5 days as compared to just one day in China.

231. **The Committee feels that low productivity and high vessel turnaround time at Indian ports are due to: (i) Low level of mechanisation and insufficient draft; (ii) Skewed handling capacity for different types of cargo; and (iii) Infrastructure constraints in hinterland connectivity. It has been observed that lagging behind other countries on performance parameters pushes up the cost of trade and renders Indian ports less competitive. Non-Major Ports have fared well, ensuring quicker turnaround by investing in the infrastructure to handle larger vessels. Considering the strategic location of India's Major Ports and their importance to trade, there is an opportunity to improve their performance to meet global benchmarks. Most of the Major Ports have high Turnaround Times even while the utilisation level is low and only a few have the ability to handle bigger cape-size vessels. The shipping industry is moving towards cape-size vessels. So, it is important that India develops cape handling capability at its key ports to ensure economies of scale for the trade.**

a) **Vessel turn-round time**

232. Primary measures of port performance are the average turnaroundtime per ship, and the tonnage handled per ship-day in port. This is the time needed for loading, discharging and servicing a vessel from berthing until its departure. The main parties involved in vessel turnaround are the Port authority and the terminal operators. Seamless communication between these parties and the ship operators is essential for a quick vessel turnaround process. Important drivers of vessel turnaround time are the amount of traffic to be loaded or unloaded, distance from anchor point to berth, efficiency of port authority in pilotage/tugging and the efficiency of terminal operator in handling the vessel.

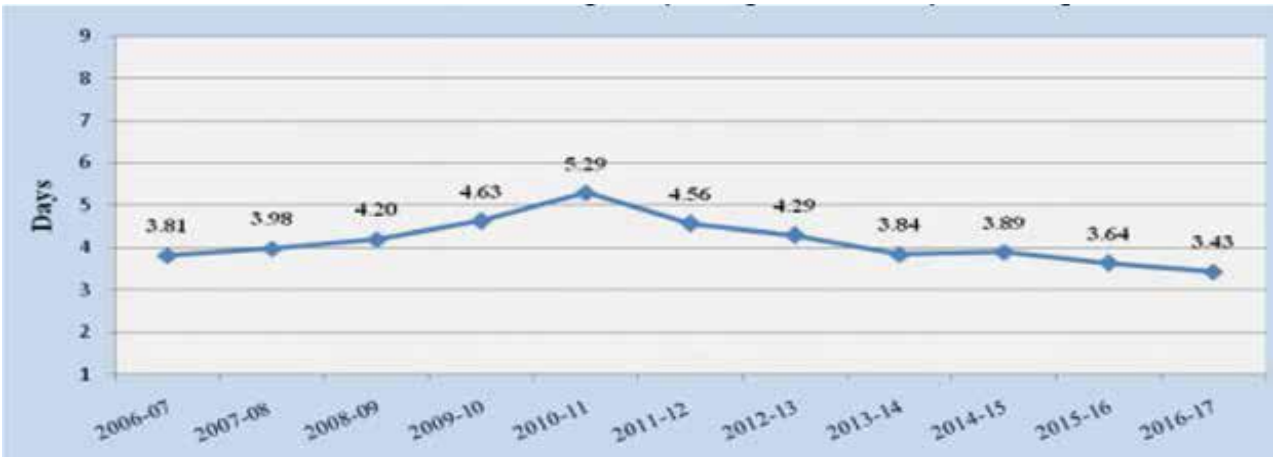
233. The ship turnaround reflects the rate at which cargo is handled and the duration that cargo stays in port prior to shipment or post discharge. It is calculated from the time of the ship's arrival to the time of its departure. Traditionally expressed in days, it is now common to find turnaround time in hours across best performing ports. The average turnaround time per ship is determined by dividing the total hours by the total number of ships calling at the Port. In its basic form, ship turnaround time does not mean much, as the length of stay is influenced by a number of factors: the volume of cargo, the facilities made available, and the composition of the cargo itself. Thus, it becomes necessary for the Port to further break down the basic ship turnaround time according to type of ship: tankers, bulk carriers, container vessels, and general cargo vessels. These may be subdivided further into domestic trade, regional trade, and oceangoing vessels. In compiling data to determine ship turnaround time or the tonnage handled per ship-day (or ship-hour), a port would normally split total time in port into "time at berth" and "time off the berth." Within each of these and for each service activity, the amount of delay (idle time) would be recorded as well as the reasons for the delay. In particular, the ratio between waiting time for berth and the time spent at berth, known as the waiting rate, is a significant indicator of possible congestion status. Indian ports have huge potential to reduce the average time a vessel spends in the Port as compared to

international best practices. To a certain extent, scale plays a role here. But even ports of the scale of JNPT and Chennai have 50 to 100 per cent higher turnaround times than international best practice ports like Singapore and Rotterdam.

234. **The Committee feels that the seaports are the interface between two modes of transport*viz.*, land and sea and recommends that its efficiency is directly related to the connectivity covering both the modes of transport and as such, Container terminals should provide rapid transit facilities for containerized cargo (similar to an Airport where passengers arrive and depart with ready luggage / cargo). This would enable the Ports to plan and utilize land optimally for the benefit of the ships and not for storage for which CFS / ICD are planned.**

b) **Average turn-round time**

235. The Committee observes that this parameter has improved significantly during the past oneand half decades for all the Major Ports. Average TRT for all Major Ports improved from 8.10 days in 1990-91 to 3.63 days in 2005-06. Thereafter the TRT has increased steadily to 5.29 days in 2010-11 after which it declined to 3.43 during 2016-17. However, the TRT varied in the range between 1.99 days at Cochin Port to 4.99 at Paradip Port during 2016-17. Amongst the 12 Major Ports, improvement in TRT during 2016-17 in comparison to the year 2015-16 is discernible for most of the Major Ports except Kolkota, Haldia DC, Paradip, Chidambarar and Marmugao. Average TRT (in days) reported during 2016-17: Kolkata (4.7), Haldia (3.4), Paradip (5.0), Chidambarar (4.4), Visakhapatnam (3.8), Ennore-Kamarajar (2.7), Chennai (2.5), Cochin (2.0), New Manglore (2.4), Marmugao (4.5), JNPT (2.0), Mumbai (3.3) and Kandla (4.4). Average Turn Round Time at Major Ports for select years since 2010-11 to 2016-17 is presented in the figure given below:



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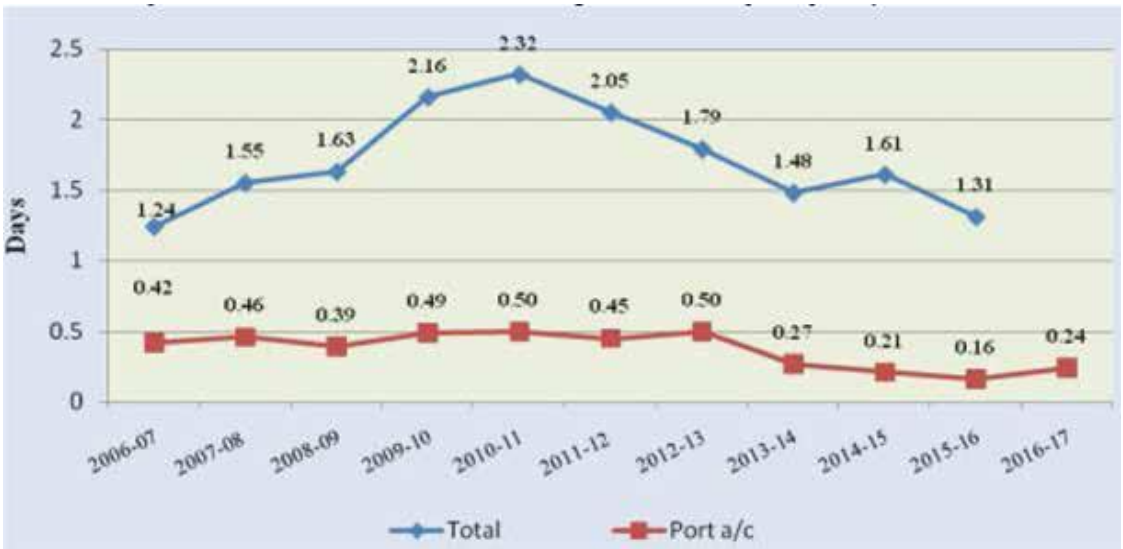
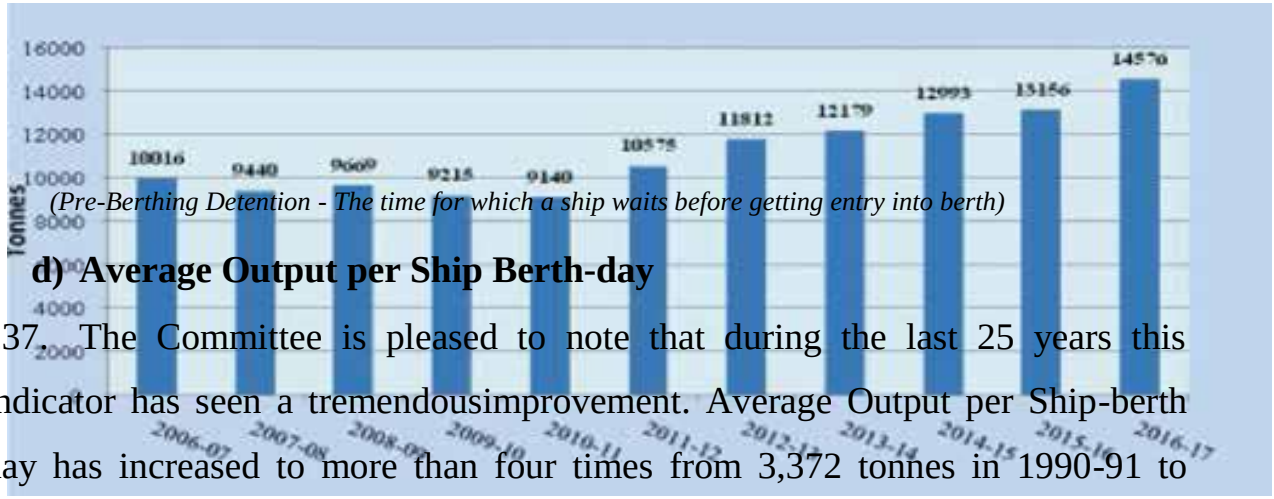
Major Ports Average Turn Round Time

c) Average Pre Berthing Detention Time

236. The average overall pre-berthing detention timefor all Major Ports fell continuously from 2.3 days in 2010-11 to 1.5 days in 2013-14 and edged upto 1.6 days in 2014-15 and then resumed its downward course to 1.3 days in 2015-16. The Average PBDT on port account has seen a steady decline from 0.50 day in 2012-13 to 0.16 day in 2015-16, but edged up to 0.24 in 2016-17. However, overall improvement in PBD (on port account) is marked with greatly reduced variation across Major Ports during 2016-17. This is now nil at Kamarajar& Chennai, 0.9 day at Haldia,0.6 day at Paradipand around 0.4 days at JNPT and Mormugao. The trajectory of weighted average of pre berthing detention time at Major Ports- total and on port since 2010-11 is shown in the figure given below:





(Pre-Berthing Detention - The time for which a ship waits before getting entry into berth)

d) Average Output per Ship Berth-day

237. The Committee is pleased to note that during the last 25 years this indicator has seen a tremendousimprovement. Average Output per Ship-berth day has increased to more than four times from 3,372 tonnes in 1990-91 to 14,576 tonnes in 2016-17. However, the average output per ship berth day during 2016-17 is marked by substantial variation across Major Ports ranging from a high 23,727 tonnes in case of Paradip port to a low of 4,200 tonnes at Kolkata Dock System.

This variation reflects the type of cargo being handled, level of mechanization and labour practices. Amongst the 12 Major Ports, improvement in average output per ship berth-day during 2016-17 over 2015-16 was posted in all the ports, except Kamarajar, Mormugao and Haldia. The average output per ship-berth-day for the selected years between 2010-11 to 2016-17 is presented in the figure given below:

VI. AUTOMATION / DIGITISATION OF PORT MANAGEMENT

238. TheCommittee is of the opinion that Ports are required to provide a wide range of services, from the movement of ships in the port to the movement of cargoes to and from ships, the onwardmovement by various modes of transport

and the compliance with custom and Phyto-sanitary procedures. Ports must be able to efficiently allocate berths, terminals and jetties, monitor, track and trace cargo movement/containers. There is need to explore the use of information technology for meeting the challenges facing India's port sector. These include, amongst others, the fully integrated use of Port Community Systems (PCS) with all stakeholders, both for Major Ports and for Non-Major Ports; Vessel Traffic Management Systems (VTMS) for all ports handling import and export cargoes, advanced security systems in the Ports with surveillance and Closed-Circuit Television (CCTV), Radio Frequency Identification Data (RFID) and Optical Character Reading (OCR).

239. The Committee understands that Port Community Systems (PCS) integrate the electronic flow of information between all the stakeholders and has inherent major advantages, such as saving time and money, improving the speed of services and offering gains in tracking of shipments and service visibility. The development of the IT Strategy and Programme Management by JNPT have set examples that all Indian ports should follow to upgrade their services to meet upcoming technological changes. Shipping efficiency can be enhanced through the use of technologies that track vessels and manage traffic flow and by improving systems for collecting and disseminating real-time data on tides, currents and other environmental conditions. European ports have invested heavily in these shore-based surveillance and communications systems. But Indian investments have fallen short in this aspect.

240. The Committee notes that Commercial Operation of Logistics Data Bank (LDB) Project has been operationalized at JNPT since July, 2016 on a pilot basis. The logistics Data Bank Service would bring efficiency in the current Logistics & Supply Chain environment through use of information technology that would be helpful for tracking and viewing the movement of containers across the Port. This will provide visibility and transparency in EXIM containers movement and will help in reducing overall lead time of the

container movement across the western corridor and lower the transaction cost incurred by the shippers and consignees as a result of predictability and optimization achieved through Logistics Data Bank (LDB) services Each container is tagged with RFID tag at JNPT and the same can be tracked through different RFID readers installed at different locations. This will provide visibility and transparency in EXIM container movement. This would also help in reducing overall lead time of the container movement across the western corridor and lower the transaction cost incurred by the shippers and consignees as a result of predictability and optimization achieved through Logistics Data Bank (LDB) services.

241. **The Committee feels that traffic congestion at port gates is another critical problem as it presently has little or no automation. The entry and exit of vehicles and drivers through the gates of container terminal should be automated. In this regard, the Committee recommends that Optical Character Recognition (OCR) system can be installed at the terminal gates and driver's biometric identity and their authentication documents could be stored in a smart card which he can flash at the counter to gain entry. Furthermore, it would also be useful to implement Enterprise Resource Planning (ERP) solutions which are driven by an integrated suite of software that supports the basic internal business process of any organisation. More importantly, a Port Community System (PCS), in terms of a single technology-based platform, which will bring together all stakeholders and shares information is essential. An 'e-custom' solution could also be developed later. While implementation of PCS has been already initiated, its rollout has not been very successful. Thus, before embarking on such plans, focus should be on building the foundation and developing stakeholder capabilities.**

242. The Committee is pleased to note the progress of the Logistics Data Bank project, to bring efficiency in the current Logistics and supply chain

environment through the use of information technology that will enable tracking and viewing the movement of containers across the Port to the ICD and to the end users. The Committee applauds the cooperative partnership between the Delhi-Mumbai Industrial Corridor Development Corporation (DMICDC) and NEC Corporation, Japan, jointly working on the projectnamely, DMICDC, which will provide RFID tag on each container and the same will be tracked through different RFID readersinstalled at different locations. The logistic data bank service will provide the visibility and transparency of the EXIM container movement starting from the Port and covering the entire movement through rail or road till the ICDs and CFSs. This project will help in reducing overall lead time of the container movement across the western corridor and lower the transaction cost incurred by the shippers and consignees as a result of predictability and optimization achieved through Logistics Data Bank (LDB) services. Jawaharlal Nehru Port Trust (JNPT) has entered into an agreement with DMICDC logistics Data Service Ltd. The Logistic Data Bank project will cover all the four-existing terminal at Jawaharlal Nehru Port namely Jawaharlal Nehru Port Container Terminal (JNPCT), Nhava Sheva International Container Terminal (NSICT), Nhava Sheva (India) Gateway Terminal (NSIGT) and Gateway Terminals India Pvt. Ltd (GTIPL) and any other new terminal that will come up at Jawaharlal Nehru Port. All Major Ports have undertaken the process of completion of RFID system. Implementation of RFID system will eliminate manual checking of documents at port gate and will facilitate real time tracking of movement of vehicles, personnel and materials. This would reduce congestion and also cost of operations at Ports. JNPT, Cochin, Ennore and Mormugao ports have already made the system operational.

VII. EMERGING CONSTELLATION OF CONTAINER TERMINALS IN SOUTH INDIA

243. The Committee was informed of the proposal to establish a Container Transshipment Port at Colachel in Tamil Nadu. Vizhinjam near Thiruvananthapuram (16 Kms away from Thiruvananthapuram) is another

container transshipment port under construction located at about 105 nautical miles south of Vallarpadam Container Transshipment Terminal. Colachel will be the third container transshipment terminal to come up about 27 nautical miles south from Vizhinjam. In other words, all the three container transshipment terminals will come up within a radius of about 130 nautical miles from Vallarpadam (Jose Paul). The proposed Vizhinjam port (owned by State Government of Kerela) is just 10 nautical miles from the International Shipping Lane. The Vizhinjam port is endowed with a natural seawater depth of 20 m as close as one nautical mile from the seacoast. Due to this natural depth, Vizhinjam can attract the largest container vessels currently operating in, also the future mega container carriers. The Vizhinjam port is a Greenfield port.

244. Cochin Port which is located around 50 nautical miles from the international shipping routes between (i) Europe and Far East /Australia and (ii) Gulf and Far East/Australia, has the potential to attract international transshipment cargo traffic. The International Container Transhipment Terminal (ICTT) at Vallarpadam under Cochin Port is the world's fourth biggest container port operator majority owned by the Dubai government. To make the Terminal successful, the Government has created supportive infrastructure in terms of a 17.2 km 4 lane road for container trucks to reach the terminal from the National Highway (NH) 47, and NH 17 without getting into the city roads. Also, the terminal is connected by 8.6 km long railway link line connecting the terminal to the national grid. The Terminal handled 491000 twenty-foot equivalents units (TEUs) in the year 2016-17, the highest since starting operations in February, 2011 compared with 420,000 in 2015-16. ICTT, Vallarpadam was conceived as a transshipment hub, into which smaller feeder vessels bring cargo which then gets loaded onto larger ships for transportation to final destinations. Larger vessels bring about economies of scale, and lower the cost of operations for shipping lines, which then translates into lower freight rates for exporters and importers. Vallarpadam was designed to cut India's

dependence on neighboring hub ports such as Colombo in Sri Lanka, Singapore, Salalah and Jebel Ali in Dubai, Tanjung Pelepas and Port Klang in Malaysia to send and receive container cargo, thus saving time and cost for exporters and importers.About 2 million standard containers originating in and destined for India gets transshipped at Sri Lanka's Colombo port every year.

245. **The Committee is of the view thatmore ports do not necessarily bring in more cargo. The extent of a country's EXIM trade is a function of its policies and its openness to international commerce. A cost-effective way of augmenting port capacity to meet demand is to upgrade capacity of existing ports. Certainly, public investment is needed to augment port capacity. But, a careful choice needs to be made in choosing investment between major and non-Major Ports.**

246. **Investment in smaller new ports in India can yield much better returns as they would service vessels on coastal and inland waterway. The Committee feels that the three ports coming up within a distance of about 130 nautical miles, need to be developed and strategised in such a mannerthat all the three receive sufficient cargo to ensure profitable operations. The Committee thus recommends that infrastructure development of one port should not be at the cost of the development of another neaby port.**

247. **The Committee recommends that efforts must be concentrated on the development and expansion of infrastructure that would make water transport more attractive, instead of prioritizing road transport and turn already over-crowded highways into death traps. More emphasis must be placed on the coast route and inland waterways as a mode of transport for hinterland cargo connectivity and its development must be made a priority.**

VIII. CARGO EVACUATION FROM INDIAN PORTS IN TERMS OF TRANSPORT MODE

248. The Committee is of the view that Ports are nodes of interchange amongst various modes of transport and a vital element in the global logistics chain. It is, therefore, critical to provide connectivity and other infrastructure to enable quick evacuation within the ports as well as to the external hinterland and toenable the commodity to reach the consumer from the source of production in the shortest possible time and in the most cost-effective manner. Connectivity to a port can be through all three modes—rail, road and inland waterways. To a limited extent, inland waterway connectivity exists in Kolkata, Mormugao and Kochi. Ideally, each Major Port should have a four-lane road and double-line rail connectivity within a fixed timeframe. Four-lane road connectivity has already been achieved or is in an advanced stage of completion at JNPT, Paradip, Tuticorin, Kochi, New Mangalore, Kandla and Haldia. At Mumbai, Vishakapatnam, Chennai and Ennore, four-laning is in progress. At Mormugao, certain sections of the planned stretch remain to be four-laned, but work has been stuck. Kolkata is the only port where four-lane connectivity has not been provided. Overall, all Major Ports have reasonable road connectivity linking various highways. However, special focus is needed on the reorganization/overhauling of approach roads of Mumbai and Kolkata ports and their linkage with the national highway network.

249. In this regard, the Committee notes that JNPT, Vishakapatnam, Tuticorin, Haldia, Chennai, and Paradip Ports are connected to double-line rail tracks, whereas at Kandla and Cochin, the doubling work is underway. Although Mumbai, Ennore and Kolkata ports are linked by double-line rail tracks, the lines require doubling, New Mangalore and Mormugao ports are connected only to single-line rail tracks. A serious effort is needed to improve hinterland connectivity, especially by rail. The Committee is of the view that an efficient and modern intermodal system is crucial to any port’s success. This requires transfer between ship, rail and truck as seamless as possible.

250. **The Committee, in this regard, recommends that ports must continuously take measures to help their shipping lines and other partners within the port system to battle increased competition and adjust to new trends in world trade. Dedicated Freight Corridors hold key to intermodal transport and hence need to be completed on priority basis. Moreover, the inland waterways system needs to be renovatedas cargo evacuation by water is cheaper and cleaner, which reduces costs and port congestionand brings in efficiency. The shifting of cargo from road to train and waterways will be environment-friendly and will also help to lower carbon emissions.**

251. **The Committee recommends that the Ministry of Road Transport & Highways and the Ministry of Railways should ensure that all the projects linked to port connectivity be given the highest priority and projects should be executed within the scheduled time period to make the port operations viable and profitable.**

252. **Furthermore, the Committeerecommends that evacuation of cargo to and from the port areas have to be properly synchronized so that the inter-modal network functions smoothly. Road and rail connectivity form an integral part of the port infrastructure as inefficient evacuation of cargo can undermine the entire operation of a port. In particular, containerization of cargo presupposes a seamless link with the road and rail network in an 'end to end' transport system. Congestion at ports results in delayed evacuation of cargo due to inadequate road and rail capacity. This adversely impacts the competitiveness of Indian industry. Port connectivityhas ramifications that go beyond the operation of a port *per se.***

253. **There is a need to allocate the regional distribution of cargo to different modes of land transport. Though in certain cases of bulk cargo, it is easy to identify the mode for a particular cargo at a particular port and**

assumptions regarding percentage split have to be made in respect of cargo such as POL, LPG, fertilizer, fertilizer raw material, other bulk cargo, containers and break-bulk cargo. These assumptions need to be made depending upon the features of the respective regions, nature of cargo, quantum of cargo and the spread of hinterland.

IX. CONTAINERIZATION

254. The Committee notes that as stated by theChairmen of the various Ports, a major bottleneck that shipping faces in India is the subject of lesser containerization. Lesser containerization may be attributed to the fact most industries are predominantly small and middle scale. The Chairman, JNPT stated before the Committee that in terms of agriculture, our farmers have small land holdings, hence overall quantities are lesser in comparison – hence we are unable to harness the benefits of economies of scale.

255. There is a need to increase containerization, but this must be accompanied by increasing the capacity of terminals from 14 million at present to 30- 40 million. JNPT has not indulged in any capacity addition project in the past 6-7 years.

256. Total containerized cargo volume for the whole of India's Major Ports was estimated at close to 8.5 million TEUs. India has just two ports which handled cargo beyond 100 MT, viz, Kandla (105 MT) and Mundra (110 MT).

257. The Committee understood that in addition to the above, Indian ports record the higher rate of empty containers shipped out. This reflects three main factors that characterize the Indian shipping industry:- (i) high volumes of unprocessed exports which do not require containerization; (ii) low volume of manufactured exports; and (iii) its heavy dependence on manufactured imports. This reflects a fundamental trade imbalance for the Continent.

258. The Committee feels that the use of containers is imperative to promote multi modaltransportation. These containers can travel across all modes. Moreover, Containers serve as both transport and logistics units and save handling costs when freights must be transferred from one mode to another (e.g., from ships to trucks or truck to rail); this calls for cost effective models with ready infrastructure.Spurred by the growth in containerized cargoes, the need forports to offer increased berth size and state-of-the-art container-handling activity has expanded. Most Indian ports cannot receive ships exceeding 4,500 TEUs, even though ships of up to 15,000 TEUs are now sailing the major international routes. Most of the Major Ports in India function well below international benchmarks for container movements per hour (40 per hour in the region), turnaround time, dwell time, etc. which in turn affects the cost competitiveness of the port.

259. **The Committee, therefore, recommends that the need of the hour is to have infrastructure that can support seamless movement of cargo across all modes without any delay. We need to create common user facilities where these models can be executed efficiently at a competitive price. To harness the full potential of inter modal transport, a legal framework and financial/regulatory incentives need to be put in place.**

X. CABOTAGE LAWS

260. As per the Cabotage Laws, India's coastal trade (shipping cargo between different local ports) is reserved for ships registered in India and foreign ships can be hired only when Indian ships are not available after taking permission from the country's maritime regulator. This restriction was one of the main factors that discouraged mainline foreign vessels from calling at Vallarpadam ICTT. The Committee was informed thatin September 2012, the cabotage policy was eased for the terminal by allowing foreign registered vessels to ship export-import (EXIM) containers out or in through the ICTT in order to help it emerge as an international transshipment hub. The primary objective of

relaxation in cabotage policy was to attract cargo destined for Indian ports to ICTT which were being transshipped at Colombo and other foreign ports. However, of the total volumes handled at ICTT, the transshipment volumes are still in the range of a paltry 7-8 per cent. Capacity utilization of the terminal is still running below 50%.

261. **The Committee recommends that a study must be conducted on the effects of Cabotage Laws in the shipping sector of the country. The Committee feels that research must be conducted as to why, given the reduction of the Cabotage laws, the Ports have witnessed a paltry level of transhipment. The policy of the Ministry in this regard must be scientifically monitored and solutions to the same must be devised. The Committee extends its full cooperation in this matter as it feels that the success of transshipment hubs in the country is essential for the growth of Ports in India.**

XI. ENVIRONMENTAL ISSUES WITH REGARDS TO COASTAL REGULATORY ZONES (CRZ) AND NATIONAL GREEN TRIBUNAL (NGT)

262. The Committee was informed of the various impediments faced by the Major Ports in developing and expanding port activities and its infrastructure due to various policy measures which are regulated by the Coastal Regulatory Zone and the National Green Tribunal. The Chairmen of various Ports, while deposing before the Committee, stated that various Port projects for infrastructure augmentation & development involve CRZ/ Environmental Clearances before their execution. The Major Ports have been obtaining CRZ clearances from the concerned State Governments/ Union territories for their related projects. The National Green Tribunal order dated 22.11.2017 directed that environmental clearance would not be granted until States without default and delay submit the Coastal Zone Management Plans (CZMP) to the Ministry of Environment, Forest & Climate Change (MoEF&CC) to respective States for fixation of hazard line and CZMP covering the entire coastal area.

263. The Ministry of Shipping submitted to the Committee that the expansion of Port capacity through well-conceived infrastructure projects remains the highest priority of the Ministry of Shipping. The above-mentioned order can pose as great obstacles in the case of Port projects which are on the verge of acquiring environmental clearance. As part of the EIA studies, ports also undertake studies on shoreline changes, High Tide Line (HTL) and Low Tide Line (LTL) demarcation. Many of the proposed projects are within the short operational area itself and falls in CRZ III and CRZ IV areas where such developments are permitted. Therefore, a blanket restriction may not be advisable as delays lead to time and cost overruns particularly for PPP projects where there is a danger of the PPP operator abandoning the project. The Ministry has collated a list of 25 ports projects which would adversely get affected as a result of the aforesaid NGT order.

264. **The Committee feels that the development of Port infrastructure is necessary to the economic health of the nation. Steps need to be taken to obviate the adverse impact of the order of NGT on the port projects pending approval of the Coastal Zone Management Plan of the States by the MoEF&CC. The Committee further recommends that the MoEF&CCmust take steps to ensure that the States/ Union Territories must take it upon themselves to prioritise the CZMPs and submit the same to the MoEF&CC at the earliest, in order to ensure that necessary rules and regulations may be instituted for the same.**

265. **The Committee recommends that an advisory be issued by the MoEF&CC to the States/ UTs that have not yet submitted their CZMPs to the MoEF&CC, impressing upon them to submit them immediately and get the same approved. The Ministry of Shipping may also take it upon itself to ensure that it keeps a track of the same and impress upon the respective State Governments and their corresponding ports to submit their plans at**

the earliest. The delay may cost huge economic loss to the country's Shipping sector and such policy related delays should be avoided.

266. The Committee, however, feels that the issue of Coastal Regulation is an important and sensitive issue and much thought and consideration must be put into it. Our coastal ecosystems provide protection from natural disasters such as floods and tsunamis to the 250 million people who live in our coastal areas. Coastal waters are a source of primary livelihood to 7 million households and any changes made to the coastal regions would directly or indirectly affect them. Most importantly, our marine ecosystems are a treasure trove of biodiversity, which we are only beginning to discover and catalogue.

267. **The Committee, however, feels that coastal infrastructural projects involving wetlands include various players whose interests will be affected in one way or another. The Committee, in this regard, recommends that the stages included by the MoEF&CC whilst granting environmental clearance, eg: Expert Appraisal Committee, Public hearings, Term of Reference etc. are speeded up to ensure that ports are getting necessary clearances without hinderances. Given the development in science and technology, the Committee is of the opinion that effective solutions can be found for the developmental needs of the Ports.**

268. The Committee was informed that an issue in Environments Compliance and Enforcement in Major Ports was that there is no uniform procedure/ process for enforcement of environmental compliance in Ports by the State Pollution Control boards. Various State Pollution Control Boards adopt different mechanisms/ standards and there is no one established Standard Operating Procedure (SOP) that has been laid down which Ports can adhere to neither are there any penal provisions for its non- compliance. This often leads to a comparison with the wrong standard, or a standard not prescribed by the Centre, resulting in a skewed interpretation and does not reflect the true picture.

269. **The Committee is of the opinion that many of the Major Ports are suffering due to the absence of a Standard Operating Procedure. The Committee is dismayed to note that many of the projects of the Major Ports have been stalled due to the same reason, while operations in some Ports have been shut down as a result of Court orders, which could have been avoided had these guidelines been set in place. The Committee recommends that the Ministry of Shipping must coordinate with the concerned States, the respective State Pollution Control Boards and the MoEF&CC to formulate a set of procedures/ processes that are largely uniform across all the States, keeping room for modifications according to the special requirements that are State or Region specific.**

270. Furthermore, it was observed that there is no proper Standard Operating Procedure for the Consent to Operate for Port operations similar to the one issued for industries. It has come to the knowledge of the Committee that the Ports are using the form prescribed for the CTO renewal of industries as there are no prescribed formats for CTO applications in case of the Port Sector.

271. **The Committee is of the opinion that this a major shortcoming in the port sector. The Consent to Operate for Ports is a necessary instrument. With the expansion of the Sagarmala Project, this will be a necessity for small riverine docks that will come up as result of this project. This is a flaw that must be remedied at the earliest as it leaves the Ports vulnerable to unnecessary litigation and law suits. The Committee, therefore, recommends that the Ministry of Shipping must coordinate with the concerned Ministries & Agencies and format a 'Consent to Operate' specifically for Ports at the earliest.**

XII. PUBLIC PRIVATE PARTNERSHIPS (PPP)

272. The Committee understood thatwith the liberalization of the Indian Economy, the Government of India has allowed for Private participation in the

Major Ports to infuse funds, induct latest technology, improve management practices and for addition of capacity. The Government has been encouraging private sector participation since 1996. These include construction of cargo handling berths, container terminals and warehousing facilities, installation of cargo handling equipment, construction of dry docks and ship repair facilities, etc. The preferred route for private sector participation is through open competitive bidding.

273. In this regard, the Committee was informed that a number of initiatives have been taken to encourage foreign investors as well as domestic investors to facilitate investment in port projects. These include:

(i) Bidding documents like Request for Qualification (RFQ), Request for Proposal (RFP) and model Concession Agreement (MCA) have been standardized.

(ii) Up to 100% Foreign Direct Investment (FDI) under the automatic route allowed for Port Development projects.

(iii) Income tax incentives allowed under the Income Tax Act, 1961. Income tax exemption of 100% available for a period of 10 years. However, it is expected that the removal of Tax Exemptions after alignment to the GST will not affect the PPP projects as they are joint financing models and they have no nexus with GST exemptions.

(iv) A Public Private Partnership Appraisal Committee (PPPAC) under the Chairmanship of the Secretary, Department of Economic Affairs and the Ministry of Finance to appraise the proposals under the PPP mode has been constituted.

(v) Tariff Setting Mechanism has been modified with the tariffs being set upfront by the TAMP before the projects are bid upon, on a revenue sharing model.

(vi) Land policy has been reviewed and fresh guidelines have also been issued.

(vii) Security Clearance Guidelines have been streamlined.

(viii) Major Port Trust, 1963 is being redrafted to give more autonomy and flexibility to the Major Port Authorities.

274. The Committee was appraised by the Ministry of Shipping that the Model Concession Agreement (MCA), 2008 has been revised and approved by the Government in January, 2018. At present, there are 41 PPP projects operational and 16 PPP projects which are under construction/ implementation.

Stage	**No. of Projects**	**Investment (Rs. in crores)**	**Capacity (MTPA)**
Operationalized	41	20822.91	368.05
Under Construction	16	20577.88	219.83
Total	**57**	**41400.79**	**587.88**

275. The table above states the preset status of PPP in the Shipping sector in the country, as submitted by the Ministry of Shipping.

276. **The Committee notes the efforts of the Ministry of Shipping towards the development of port infrastructure through the PPP model. The Committee recommends that as far as possible, the same model must be utilised in all the Major Ports to ensure the development of Port infrastructure in the country. Steps must be taken in tandem with the State Governments concerned in order to ensure smooth and speedy implementation of the PPP projects.**

XIII. DEVELOPMENT/ PROMOTION OF CRUISE FACILITIES AT PORTS

277. Cruise vessels visit five Major Ports in India *viz.*, Mumbai Port, Mormugao Port, New Mangalore Port, Cochin Port and Chennai Port. The status of construction of terminals at these ports is given below:

i) Cruise terminal at Chennai was developed with ultramodern facilities and
completed on 31.7.2017.

ii) Mormugao Port has constructed state of the art, three storied new cruise terminal building having the facility for Custom, immigration, Duty free shop for passengers and was inaugurated on 22.12.2016.

iii) Mumbai Port has also taken initiative to upgrade the existing terminal to match the International standard and work has started which will cost Rs. 197 crores approximately and is likely to be completed by December, 2019.

iv) It is proposed to upgrade the cruise terminal in Cochin at Ernakulum wharf at a cost of Rs.25.72 crores with central financial assistance from the Ministry of Tourism. The project consists of construction of an international cruise terminal building of approximate area 2253 m2 with all connected facilities. It is proposed to construct a new terminal building by March, 2019.

v) At New Mangalore port a full-fledged cruise terminal is in function with facilities for customs, immigration, port health, banking service, facilitation centers, duty free shop and boutique. Foreseeing the growth in cruise traffic, the Port has constructed a modern cruise passenger lounge near the berth with an area of 2150 sq. mtrs. and put into operation with facilities like money exchange, locker room, medical officer room duty free shops, cafeteria, conference hall etc.

vi) The Ministry of Shipping has provided 65 counters at five ports in the immigration halls of the ports to facilitate e-visa (15 each for Mumbai, Cochin and Goa and 10 each for Mangalore and Chennai).

vii) Costa Neo Classica cruise ship for the first time made Mumbai Port as home port involving embarkation and disembarkation of approx. 1400 passengers per voyage in 2016. Seven voyages were done once in every fortnight with the 1st voyage on 22nd December, 2016 to 7th

voyage on 18h March, 2017. The Costa Neo Classica ship was deployed again for Homeporting in 2017-18. For 2018-19, bigger cruise ship is proposed to be deployed by Carnival Corporation Limited.

278. The Committee understood that the following measures have been undertaken to promote cruise tourism in India:

i) A task force was constituted in November, 2015 with the Secretary (Tourism) as the Chairman and Secretary (Shipping as the Co – chairman to create a conducive eco- system for the development of cruise tourism in India.

ii) Foreign- flag vessels carrying passengers have been allowed to call on Indian Ports with effect from 6th February,2009 for a period of 10 years without the need for licenses from the Director General of Shipping. This facility has been further extended or a period of 5 years upto 5th February, 2024.

iii) Standardized Operating Procedures (SOP's) for cruise vessels have been revised and operationalized *w.e.f* November, 2017 at all Major Ports.

iv) E- visa facility has been extended to five sea ports namely*viz.*Mumbai, Goa, Mangalore, Chennaiand Cochin. Immigration counters have been set up at 5 Major Ports visited by cruise ships.

v) The port charges have been reduced and all Major Ports are to charge a single uniform rate of $0.35 per Gross Registered Tonnage (GRT) for first 12 hours of stay. Ports will not charge any other rate like berth hire, port dues, pilotage, passenger fee etc. from cruise liners. The above rate has been made effective from 3rd November, 2017 and will remain in force for a period of three years.

vi) The Ports do not levy any priority/ousting/shifting charges for berthing the cruise vessel

(vii) Walk-in berthing/preferential berthing to homeport cruise without the burden of permits and paperwork.

(viii) To address manpower, coordination and logistic issues for handling cruise vessels at ports, Port Level Committees with chairman of the respective Major Port Trust as Chairman, Secretary Tourism of the concerned state Vice-Chairman and Regional Director of the respective region of Ministry of Tourism as Convener have been constituted.

279. **The Committee is pleased to note the proactive steps taken by the Ministry of Shipping in tandem with the Major Ports to promote Cruise tourism in the nation. With the growing population and infrastructure constraints especially in city based Major Ports, the Committee is of the view that Cruise Shipping is an important and viable alternative to help promote the growth of the economy by way of tourism in the country. The Committee further recommends that given the nascent stage of its development, the policies with regards to Cruise Shipping in the country must be regularly updated and modified to keep in tune with the changing global economic scenario. The Committee further recommends that taxation policies in this regard must be formulated in a manner which helps facilitate its growth.**

280. **The Committee was informed that charging cruise ships on the basis of their tonnage, rather than on the number of passengers, is a dampner. The Committee recommends that cruise terminals may be developed in all the city based ports to attract foreign licenses and promote cruise tourism.**

XIV. PROMOTION OF RO-RO OPERATIONS

281. The Committee was informed that the Ministry of Shipping has taken following steps to promote Ro Ro shipping in the country:

(i) Cabotage Law has been relaxed for specialized vessels such as RO-RO, Ro-PAX, Hybrid Ro-Ro, Pure Car carriers, Pure Car and Truck carriers, LNG,

vessels and Over-Dimensional cargo or Project cargo carriers for 5 yearswith effect from 2nd Sept., 2015.

(ii) In order to promote coastal Ro-RO ship service at Major Ports, it hasbeen decided that all Major Ports will provide 80% discount for two years onVessel Related Charges(VRC) and Coastal Related Charges for coastaltransportation of vehicles through RO-RO ships vide order No.16(88)/2016-PD-VII dated 20h September, 2016. To make the discount sustainable, thePorts may carry out intensive marketing exercise for demand generation.

(iii) To bring thrust in the transportation of automobile cargo throughwaterways, apart from relaxing cabotage for Roll-on-Roll-off vessels, thewharfage charges on per unit basis, instead of on *ad volarem* basis, have been introduced in Major Ports.

282. **The Committee appreciates the efforts of the Ministry of Shipping in developing RoRo operations and services in the country. The Committee,however, feels that more needs to be done as RoRo services are integral to the economic prosperity of the nation and serve as a wonderful means of transport by utilizing the inland waterways in the country. In this regard, the Committee recommends that the Ministry must pick up the speed of the Sagarmala Project in order to make it viable and operational in the country. This will go a long way in improving the hinterland connectivity, reducing transport costs and reducing travel time in terms of cargo management in the country.**

XV. PROMOTION OF SOLAR ENERGY GENERATION

283. The Committee could understand from newspaper reportsthat the Green Port Initiative launched by the Government has been widely implemented in the Major Ports of the country. The funds required for the development of the solar plants will be arranged by the Ports from their own resources, with no contribution from the overnment.

284. The Committee feels that the initiative would also offset the cost of purchasing power from the grid, and would help to meet the Renewable Energy Purchase Obligation (RPO), set by the government, mandating a certain percentage of renewales into the total energy mix. In addition, installing solar PV (module) at ports will help states to meet the government's Renewable Purchase Obligations (RPOs), which are State-specific targets for the uptake of renewable energy.

285. The Committee was informed that Indian Ports, mainly in Visakhapatnam, Mumbai, Chennai, Kolkata, and New Mangalore, have already set up a capacity of 6.84 MW, and a further 16 MW of capacity in the pipeline is expected for commissioning by March of next year.ThePort plans are a part of the Green Port Initiative undertaken by India's Shipping Ministry, which aims to cut the cost of purchasing power from the grids.

286. **The Committee, therefore, recommends that the Major Ports should make use of the large tracts of unused land available to them in order to ensure the implementation of the Green Port Initiative. Apart from being an efficient way of utilizing the space available, the income generated from the sale of the energy generated can be used to further augment the development of the Port and its ancillary services.**

XVI. ECOLOGICAL CONSIDERATIONS

287. **The Ports also have a certain responsibility to ensure the sustainability of the ecological resources that surround them. The Committee strongly feels that it is the responsibility of the Port Authorities and the Ministry of Shipping by extension to nurture and preserve the environment. The recent reports of recurrent oil spills are a cause of concern for the flora and fauna and the environment in general. The Committee, therefore, recommends that the Ministry of Shipping must ensure that the Ports have set guidelines to prevent incidents of oil spills in**

the future and steps must be taken to ensure that the oil spills are cleaned up. Promotion of eco- friendly business is the need of the hour and must be considered an important parameter when considering the annual performance of a port. This must also extend to the private and small ports as well, as a matter of policy.

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RECOMMENDATIONS/OBSERVATIONS- AT A GLANCE

PARADIP PORT

Port Performance

The Committee understands that the world is moving increasingly towards renewable energy and it is now popular practice to attempt to reduce the dependency on fossil fuels and coal. Renewable energy is the call of the hour. Whilst applauding the efforts of industries to go green, its effect on cargo movement and traffic movement cannot be ignored. In this regard,the Committee desires that the ParadipPort must find a way to move away from old business models and try and cater to a new market that is garnered to creating and using clean and efficient energy.

(Para 15)

The Committee takes note of the efforts made by the Paradip Port to create a synergized unit of economic activity in the Port. However, for the modernization to succeed, these must be completed within a stipulated timeframe and the economies of scale must also be considered in order to ensure the cost effectiveness for all the stakeholders involved. Connectivity is an issue which must be given utmost importance and must be taken into serious consideration. Increased State-Centre coordination, along with inter- Ministerial coordination, with the Ministry of Railways and Ministry of Road Transport & Highways is the need of the hour.

(Para 17)

Connectivity

The Committee takes note of the steps taken by the Port to increase its evacuation capacities. Ports are integral to the increased economic activity of an area and play a major role in the prosperity of a region. In this respect, the connectivity of a port to and from the various industrial units in the hinterland is an issue of grave importance. The Committee recommends that the Ministry of Shipping should take up the issues pertaining to 42- 82 kms of Haridaspur-Paradeep Line with the State Government of Odisha and Ministry of Railways for removing the local level obstacles. The Committee desires that a dedicated mechanism be put in place for coordination and expeditious completion of 42-82 kms of Haridaspur-Paradeep Railway Line. The Committee hopes that the Angul-Sambalpur Railway line doubling work will be completed on time.The Committee recommends that the Ministry of Shipping must strive for greater coordination between the State Government concerned and the Ministry of Railways to ensure seamless connectivity with regards to maintenance of the railway lines and regular upgradation of the lines.

(Para 20)

KOLKATA PORT and HALDIA DOCK COMPLEX

The Committee understands that these pre-independence era ports could not have envisioned the great strides in shipping during their inception. The infrastructure of the ports needs constant upgradation. Considering the fact that this was part of the mandate of modernisation of Major Ports in India, the Committee notes the efforts made by the Port authorities. The Committee, therefore, recommends that the Ports may be upgraded and modernized to suit the present needs, but with an outlook on future growth as well. The Committee hopes that work related to modernisation of rail network, Ro-Ro service between Kolkata and Howrah side, proposed ship repairing facility, development of parking area, modernisation of container berths, development of outer terminals and the doubling of railway line between Haldia and Durgachak would be completed within the targeted time frame. The decision on the Lock- gates and other constraints must be taken up with urgency and trials must not be delayed. Moreover, the modernization projects must have fixed target dates and efforts must be made to complete them within the time frame. Failure to do so will lead to increased costs and also affect the productivity and growth of the Port.

(Para 41)

MUMBAI PORT TRUST

The Committee understands the constraints of Major Ports that are centered around major cities and their limitations caused by various factors such as population, traffic etc. The Committee notes various modernisation projects initiated by the Mumbai Port Trust. The Committee recommends that a detailed and comprehensive study may be conducted to augment the cargo capacity of Mumbai Port while addressing the various constraints faced by the Mumbai Port at present. The Committee appreciates the efforts of the MbPTwith regard to moving to Cruise terminals due to their capacity constraints in cargo handling. The Committee notes that the country has great potential for cruise tourism. In this regard, the Committee recommends that the Ministry of Shipping must take steps to ensure that processes related to immigration, ease of business in terms of Cruise shipping, licenses etc. are simplified; Standard Operating Procedures (SOP), taxation etc. are in place and processes and permissions required in relation with PGA's are simplified. The Committee recommends that the Ministry of Shipping must pursue these with the Ministry of Home Affairs, Ministry of Finance etc. and every effort must be made to modernise and expand the cruise terminals.

(Para 58)

The Committee takes cognizance of the fact that MbPT has large land holdings which have been encroached upon. The Committee is of the opinion that these land holdings are prime real estate especially in a city like Mumbai which is subject to scarcity of space and such large holdings are rare. The Committee recommends that the MbPT should take affirmative steps to reposes the encroached land and utilise the said land holdings to construct schools, state- of – the – art hospitals and specialty hospitals etc., to cater to the employees as well as the general public.

(Para 59)

JAWAHARLAL NEHRU PORT TRUST

Port Performance

The Committee notes the increased efficiency of the Port in terms of containers handled at 0.43 %and the increase in average output per ship Berth day overall at 1.50 % over the previous years. The Committee commends the efficient management of the Port authorities in improving the efficiency parameters of the Port in order to make it as competitive as some of the best ports in the world.

(Para 64)

The Committee applauds the steps taken to improve the infrastructure facilities of JNPT and would urge upon the Government to further upgrade and modernize the Port to assure improved performance benchmarking against global standards.

(Para 67)

Improvement of Infrastructure

The Committee appreciates the efforts of JNPT in increasing hinterland connectivity. The Committee strongly feels that this connectivity must also be extended to other States, especially the landlocked states in the North and North West of India and States in peninsular India for eg., Rajasthan, Madhya Pradesh and Chhattisgarh. This is integral to the 'Make in India' programme of the Government. The Committee emphasizes the need for ensuring connectivity of the hinterland to Major Ports in India *via* road and rail in a cost-efficient manner. This is made possible through dry ports and docks which act as aggregation sites of manufactured commodities. This will also promote economic activities throughout the country, instead of concentrating economic activities to a particular region. Dry docks are also a solution to the problem of transportation of perishable agricultural produce in the country. This will ensure increased economic activity in the remotest corners of the country. The Committee, therefore, recommends that the Ministry of Shipping, along with the JNPT, Ministry of Road Transport & Highways and the Ministry of Railways and the State Governments

to work on increasing hinterland connectivity *via* Dry Docks. This will go a long way in increasing containerization and trade activities of the Port, all the while increasing employment opportunities in the hinterland.

(Para 71)

The Committee notes that Railways have the widest range of connectivity in the country. The Committee feels that the Ministry of Shipping must make more concerted efforts with the Ministry of Railways and State Governments in order to ensure that Railway lines are upgraded to be able to carry the cargo load. Moreover, efficiency must be maintained in order to ensure client trust in the Railways. The Committee takes notes of the proactive efforts made by JNPT and the Ministry of Shipping in developing the Direct Freight Corridor. The Committee desires that there should be fixed completion date which must be adhered to. This is necessary in order to ensure the viability of the project and to prevent the project from running over the budget and ensure that the funding is sufficient.

(Para 75)

Simplification of Processes

The Committee appreciates the quantum leaps taken by JNPT in simplifying the processes of the Port and its functioning. These changes have been long pending and overdue. The Committee recommends that DPD and DPE related pending projects are completed within the given schedule. The systems employed by the Port may be carefully studied by the Ministry of Shipping for using the same as a base for pilots in other Major Ports in the country, after tailoring them to suit individual port's needs.

(Para 88)

Digitization of activities

The Committee lauds the effort of the JNPT towards digitisation of its activities. Lack of digitisation was a major bottleneck to the increased productivity of the Port and often cited as an area which needs greater implementation. The digitization of form 13, e-delivery, container tracking and RFID based gate – entry and exit has been integral to the success of the digitisation and the Port has reaped dividends stemming from this exercise. The Committee feels that the digitisation of Ports and its allied services is integral to ensure the growth of the sector and ensure the confidence of major ship- liners.

(Para 94)

VISHAKHAPATNAM PORT

New Initiatives

The Committee notes that Visakhapatnam Port faces intense competition from neighboring private ports like Gangavaram which employs predatory pricing and that it is an issue which needs careful study and consideration. Tariff for the services rendered at Major Ports and the terminals are regulated by the Tariff Authority at Major Ports (TAMP), where private ports are not bound by the same regulations and are thus free to determine their tariff rates. This robs the Major Ports of a level playing field in order to compete with the private ports. The Committee, therefore, recommends that Government should intervene to create a level playing field for the Major ports and a supportive environment must be created in order to ensure that our Major Ports like Vishakhapatnam Port can withstand the stiff competition.

(Para 106)

Modernisation of Port Facilties

The Committee is, however, constrained to note that the inflexible and rigid regulatory framework *viz.*, tariff and Concession Agreements in respect of the PPP projects do not facilitate adaptation with the changing market environment. There are no provisions to cater and adapt to measures such as changing the cargo profile, restructuring of tariffs at the PPP terminals etc. In this regard, the Committee feels that the atmosphere around PPP needs to be more conducive to this form of investment to encourage growth in terms of capital infrastructure without stressing on the Government resources. The Committee, therefore, recommends that an environment to nurture and encourage PPPs must be set in place. This is necessary to ensure that the Major Ports are able to come into their own as profitable units. Whilst there is legislation in place to encourage PPP, the present laws must be amended to keep room for changing circumstances in the shipping sector and in the global scene.

(Para 111)

Cargo Handling Facilities

The Committee is pleased to note the steps and initiatives taken by the Visakhapatnam Port in order to improve its efficiencies. Furthermore, being with sufficient draft, the Committee is of the opinion that the hinterland connectivity must be improved *via* dry docks/ ports, which will serve as assembly and stuffing units. The Committee also recommends that the Ministry of Shipping must encourage the State Government to create SEZs around these dry docks to promote an environment of creating manufacturing units with easy access to the Port. The Committee is also of the opinion that these are essential to encourage and promote the growth of trade and

industry in the country and also a necessary input for the success of the 'Make in India' programme launched by the Government.

(Para 116)

The Committee notes that the Visakhapatnam Port is a city port. While the rapidly increasing city limits points to the rising economic prosperity of the city, it becomes a bottleneck for the growth of the Port and reduces its efficiency. In this regard, the Committee feels that adequate steps must be taken and a blueprint must be made to ensure that the growth of the city limits does not impinge on the Port and its capacities. Moreover, the Port must devise exit roads and inroads to service the Port, which are independent of city traffic. These are plans for the foreseeable future which must be envisioned in order to ensure that the Port is not encumbered by growing urbanization as is rampant in other major port cities.

(Para 117)

V.O. CHIDAMBARANAR PORT (TUTICORN)

Traffic

The Committee feels that the Port which was planned as a transhipment hub, to facilitate container shipment, has now been reduced to a port which deals with bulk cargo. It is disheartening to learnt that, at present, the Port subsists on the cargo of a small Company, the traffic of which is far below the potential of the Port.

(Para 123)

Moreover, the Committee feels that the proximity of ports, both private and major, along the coast, cater to the same hinterland. The number of ports is far larger than the demand for them. The supply exceeds the demand and this has resulted in the underutilization of the economies of scale. The Committee fails to understand the lack of planning and foresight in the operation of this port and the neglect of the Port by the Ministry of Shipping and the State Government. The Committee, therefore, recommends that the Ministry of Shipping must focus its attention on the development of the Port as a transhipment hub. The Committee recommends that the Port must reduce its reliance on bulk cargo in terms of coal etc. and change its business model in order to attract more varied traffic.

(Para 124)

Containerization

The Committee notes that the Zone B in VOCPT was planned as a transshipment hub, given its favourable geographical position and deep draft levels. Moreover, being a coastal port, it does not face the challenges of silting and dredging which is a major drawback for most ports in the country. However, after careful study,

the Committee is of the opinion that the Port has largely failed to attract container cargo shipments.

(Para 126)

The Committee, therefore, recommends that the Ministry of Shipping must go back to the drawing board and prepare a DPR for the future course of the Port. If it is intent on developing it as a transhipment hub, then it must look into the shortcomings of the Port with regards to a transhipment hub. If not, it must restructure itself as a bulk port or structure it otherwise. The Port is neither here nor there and the Committee strongly feels that this is a waste of the massive potential of the VOCPT as a major Port in India.

(Para 127)

Connectivity

The Committee desires that necessary follow up action may be taken in this regard and the final outcome reported to the Committee in the Action Taken Reply.

(Para 132)

The Committee notes that the VOCPT is one of the better connected Major Ports in the country. The Committee hopes that the issues with regards to highway construction and broadening of existing roads are completed according to schedule and reinforces its suggestion that a timeline must be fixed for the same. The Committee feels that the Port must also envision the urbanization of its surrounding areas and must ensure the provision of planned evacuation channels. The Committee recommends that the issue of Short Distance Operation costs must be taken up on a priority basis with the Ministry of Railways.

(Para 135)

Modernizaton of the Port

Given the mandate of the Port and its strategic position, the Committee is dismayed at the level of modernization in the Port over the years. The Port is a far cry from its optimum utilization. The underutilization of this Port is a great loss to the country. The Committee recommends that a detailed study must be conducted, to evaluate the needs and the requirements of the port in order to ensure that the Port is efficiently utilized. Keeping in view the restricted hinterland and the numerous ports that compete for the same cargo, it is essential that VOCPT should devise its own business strategies.

(Para 137)

<u>CHENNAI PORT</u>

Policy Initiatives

The Committee notes the efforts made by the Chennai Port and lauds the steps taken by them. The Committee feels that Puducherry Port must be developed as a Satellite port which can take over the load of the Chennai Port. This makes complete sense considering the rapid urbanization of Chennai City. Investments must be made in the infrastructure of the Port, with an eye for the future coastal traffic and development.

(Para 145)

Chennai Port, given its location, is suitable for the purposes of tourism as it has been a gateway to the South. The Committee further recommends that the Port should follow the example of the Mumbai Port Trust and re-design and develop cruise terminals for tourists/ passengers.

(Para 148)

KAMARAJAR PORT LIMITED

The Committee is of the opinion that the development of infrastructure must be a joint effort of the State Governments, the Ports and the Ministry of Shipping, including the Central Government, as it is integral to the development and growth of the nation and integral to the economic prosperity to the States concerned and the nation at large. In view of this, the Committee applauds the efforts of the KPL authorities in bringing the various stakeholders to the table and is an example that must be followed by other Major Ports in developing their hinterland connectivity.

(Para 155)

COCHIN PORT TRUST

The ICTT was described as a milestone in logistic infrastructure development. But what followed in the years to come has proven to be problems replete with negative consequences. The Committee feels that the terminal has not lived up to the perceived expectations which subsequently ran aground since the projections were so full of loopholes that they have failed to hold water. First and foremost was the inability of the terminal to accommodate large cargo vessels due to chronic siltation. At present, very little business is taking place at the ICTT, with the terminal functioning at 35% of its capacity. On the contrary, it has proved to be a drain on Cochin Port's exchequer which is already cash strapped with huge debts, running to the tune of over Rs.700 crore to be repaid.

The Committee is pleased to note the steps taken by the Port in developing a passenger cruise terminal. This is a neglected aspect of shipping in India and is a major source of revenue in other nations. Cruise Tourism must be pursued with greater vigor and the

Committee is pleased to know that the Ministry of Tourism is cooperating with the Ministry of Shipping to develop Cruise Terminals.

(Para 171)

DEENDAYAL PORT TRUST (KANDLA PORT)

The Committee takes note of the hurdles faced by the Port and desires that the Port must take up the issues of connectivity projects with the NHAI and the State Government in order to ensure that projects are completed on time without delays.

(Para 189)

The Port, being on a creek, will suffer from issues of siltation. The Committee observes that this is an issue that the Port must deal with regularly in order to ensure the smooth functioning of the Port.

(Para 190)

The Committee takes note of the issues of Environmental Clearance Certificates with regards to projects of the Port. The Committee feels that the developmental needs of the Deendayal Port should not be ignored while considering Coastal Regulations. The Committee recommends that the required concessions and permissions may be given to the Port as it is in the larger economic interest of the nation and its people.

(Para 191)

NEW MANGALORE PORT TRUST

The Committee takes note of the efforts taken by the NMPT to improve and modernize the infrastructure of the Port in order to increase the efficiency of the Port. The Committee understands that the infrastructure projects of the Port such as creating additional storage area got affected due to limited land availability within the specified area of the Port.

(Para 200)

The Committee understands that the Port has a draft restriction which becomes a major cause of concern with regard to handling new generation vessels. Deep drafts with a minimum depth of 14 meters is the prescribed global standards. The Committee, therefore, recommends that the NMPT, along with the Ministry of Shipping, must work together to ensure that the Draft level is maintained, if not improved upon, in order to ensure that the Port maintains its viability.

(Para 201)

The Committee was also informed that the limited water front is an impediment to the future expansion of the Port. The Port, with a total land area of 2,290 acres, presently has a capacity of 15 berths and one SPM is already saturated. This greatly limits the ability of the Port to expand in terms of infrastructure. The

Committee recommends that studies must be conducted to find a solution to the logistical and infrastructural bottlenecks that the Mangalore Portfaces, to ensure that the future growth and expansion of the Port is done in a scientific and systematic manner.

(Para 202)

The Committee notes the steps taken by the Port to augment the facilities in terms of Cruise tourism. Mangalore, with its beautiful coast and pristine beaches, is ideal as a cruise destination. The Committee recommends that more must be done to fulfill the potential of the Port as a major cruise terminal and a gateway to Peninsular India. In terms of infrastructure, draft levels must be maintained to facilitate the participation of major cruise liners. The Committee further recommends that the Ministry of Shipping and the NMPT should work together with the Ministry of Tourism, tour operators and the respective State Tourism Boards to promote New Mangalore Port as a cruise terminal. Simultaneously, the Ministry of Shipping and NMPT must ensure that the facilities at the passenger terminals must be at par with global standards.

(Para 205)

Nestled amidst the Western Ghats in peninsular India, construction of roads and railway lines to connect the Port, is fraught with geographical obstacles. As a result, this has reduced the popularity of the Port due to the relatively high transportation costs and time taken. The Committee recommends that given the availability of advanced technology, new technology and research must be harnessed to devise a way to circumvent the geographical bottlenecks that ail the Port.

(Para 206)

While most Major Ports in India are suffering from congestion, the New Mangalore Port is struggling to achieve even 50 per cent of its capacity utilization. The only lifeline between the New Mangalore Port and its hinterland is the rail line provided by the Hassan- Mangalore Rail Development Company Ltd. (HMRDC). Rail cargo has remained consistent at 7 lakh MT in the last two financial years, indicating a case of stagnancy. The Committee recommends that the Government may consider improving rail connectivity with NMPT.

(Para 207)

Karnataka has 8 minor ports- Kundapura, Honnavar, Belekeri, Tadri, Bhatkal, Hangarakatta, Malpe and Padubidri. These are located on the State's 300 km coastline. Hence, coastal shipping would and should be an ideal alternative to the lack of proper road connectivity. However, the shared hinterland implies competition for the same

cargo. Also, this mode of transportation continues to remain unexplored. Coast-to-coast mode of transportation can change the fortunes of Indian marine logistics. It is a pity that its potential remains untapped. The example of China may be studied, where the Chinese Government is using its coastline to connect one city to another. This mode of transportation has proven to be cost effective and can result in faster movement of consignments.

(Para 208)

MORMUGAO PORT TRUST

The Committee notes the efforts of the MPT in increasing the efficiency of the Port, given the constraints imposed on the Port. The Committee understands the need for development of infrastructure of the port. The Committee was informed by various stakeholders of the shipping industry in Goa that there is an urgent need for improvement in the rail and road connectivity in MPT in order to ensure faster evacuation of cargo, better connectivity to the hinterland and avoid the movement of vehicles carrying cargo through congested city roads. They emphasized the need to make the amenities given to cruise tourists at par with global standards. They stressed on the need for doubling of railway line in Mormugao Port. The stakeholders also highlighted the need to compensate the Port for any monetary loss that the Port might incur for the grant of any concessional tariff for the promotion of cruise tourism. They impressed upon the need to ensure that the facilities provided with regards to Cruise Tourism are made world class so as to imprint a good image of Goa in the minds of the tourists.

(Para 215)

Given the popularity of Goa as an international tourist destination, the Committee recommends that the MPT should realign its focus at developing itself as a Passenger Port, catering to Cruise Ships. Tours and Packages for the same must be worked out with the Ministry of Tourism and the Ministry of Shipping. Necessary infrastructural requirements must be developed in order to harness the full potential of the Port as a Passenger Port. This will ensure that the Port is maintained as a profitable and viable venture whilst ensuring the preservation of the environment in keeping with the orders of the Supreme Court.

(Para 216)

MAJOR ISSUES AILING CARGO MANAGEMENT IN THE MAJOR PORTS

Container Traffic

The Committee is of the opinion that existing and new ports should align their capacity expansion in line with the projected increase in coastal shipping volumes. Provision of a dedicated berth for coastal shipping should also be looked into in order to promote coastal shipping.

(Para 219)

Draft Limitations

The Committee has observed that the relatively low draft at Indian ports do not measure upto internationally set standards. Presently, vessels greater than 11,000 TEU are in service. The movement towards larger ships is driven by economies of scale. It follows that in case of containership for 1,000 TEU capacities, the average draft is 8.3 metres, which increases to 15.5 metres for ships above 11,000 TEU capacities. Container vessels with a capacity of 4,000 TEU requires a minimum draft of 12.5 metres.

(Para 223)

The Committee feels that there is a need to maximize the utilization of these vessels, which will in turn lead to reduction in the number of port calls on major routes and push for the development of global mega ports served by fully integrated global network. Most Major Ports in India have minimum draft under 12m, except for a few of the younger ports which have draft of more than 14m. Insufficient draft at Indian Ports leads to increased costs and time taken as cargo originating from and those that are bound for India gets routed through transshipment ports like Colombo and Singapore. The Committee feels that as vessels keep getting bigger, Indian ports need deeper drafts, which call for increased and greater investments in capital dredging.

(Para 224)

The Committee recommends that new terminals at Tuticorin, Ennore etc. must be developed with a renewed zeal and vigour in a careful and strategic manner, so that they will act as active competitors to operational container ports in Sri Lanka.

(Para 225)

Role of Tariff Regulations at India's Major Ports

The Committee feels that the Port sector in India is facing certain tariff- related uncertainties due to multiplicity of regimes. The non-Major Ports do not come under any tariff jurisdiction and price their services based on market and competition. But the major ones (including private terminals therein) fall under the jurisdiction of a regulator *viz.*, Tariff Authority for Major Ports (TAMP). This anomaly and the lack of a level playing field have long been a debated issue.

(Para 227)

In view of the considerable loss of business opportunities for the Major Ports due to the provision of certain tariff related uncertainties as ascertained by TAMP, the Committee recommends that the anomalies in the TAMP rules must be made reasonable in order to make it lucrative for ships to call on Major Ports against private ports. The Committee further recommends that the role of the TAMP must be redefined and that a strategic and market oriented system of tariff must be set in place.

(Para 229)

Efficiency of the Port Sector Operations

The Committee feels that low productivity and high vessel turnaround time at Indian ports are due to: (i) Low level of mechanisation and insufficient draft; (ii) Skewed handling capacity for different types of cargo; and (iii) Infrastructure constraints in hinterland connectivity. It has been observed that lagging behind other countries on performance parameters pushes up the cost of trade and renders Indian ports less competitive. Non-Major Ports have fared well, ensuring quicker turnaround by investing in the infrastructure to handle larger vessels. Considering the strategic location of India's Major Ports and their importance to trade, there is an opportunity to improve their performance to meet global benchmarks. Most of the Major Ports have high Turnaround Times even while the utilisation level is low and only a few have the ability to handle bigger cape-size vessels. The shipping industry is moving towards cape-size vessels. So, it is important that India develops cape handling capability at its key ports to ensure economies of scale for the trade.

(Para 231)

The Committee feels that the seaports are the interface between two modes of transport *viz.*, land and sea and recommends that its efficiency is directly related to the connectivity covering both the modes of transport and as such, Container terminals should provide rapid transit facilities for containerized cargo (similar to an Airport where passengers arrive and depart with ready luggage / cargo). This would enable the Ports to plan and utilize land optimally for the benefit of the ships and not for storage for which CFS / ICD are planned.

(Para 234)

Automation / Digitisation of Port Management

The Committee feels that traffic congestion at port gates is another critical problem as it presently has little or no automation. The entry and exit of vehicles and drivers through the gates of container terminal should be automated. In this regard, the

Committee recommends that Optical Character Recognition (OCR) system can be installed at the terminal gates and driver's biometric identity and their authentication documents could be stored in a smart card which he can flash at the counter to gain entry. Furthermore, it would also be useful to implement Enterprise Resource Planning (ERP) solutions which are driven by an integrated suite of software that supports the basic internal business process of any organisation. More importantly, a Port Community System (PCS), in terms of a single technology-based platform, which will bring together all stakeholders and shares information is essential. An 'e-custom' solution could also be developed later. While implementation of PCS has been already initiated, its rollout has not been very successful. Thus, before embarking on such plans, focus should be on building the foundation and developing stakeholder capabilities.

(Para 241)

Emerging Constellation of Container Terminals in South India

The Committee is of the view that more ports do not necessarily bring in more cargo. The extent of a country's EXIM trade is a function of its policies and its openness to international commerce. A cost-effective way of augmenting port capacity to meet demand is to upgrade capacity of existing ports. Certainly, public investment is needed to augment port capacity. But, a careful choice needs to be made in choosing investment between major and non-Major Ports.

(Para 245)

Investment in smaller new ports in India can yield much better returns as they would service vessels on coastal and inland waterway. The Committee feels that the three ports coming up within a distance of about 130 nautical miles, need to be developed and strategised in such a manner that all the three receive sufficient cargo to ensure profitable operations. The Committee thus recommends that infrastructure development of one port should not be at the cost of the development of another nearby port.

(Para 246)

The Committee recommends that efforts must be concentrated on the development and expansion of infrastructure that would make water transport more attractive, instead of prioritizing road transport and turn already over-crowded highways into death traps. More emphasis must be placed on the coast route and inland waterways as a mode of transport for hinterland cargo connectivity and its development must be made a priority.

(Para 247)

Cargo Evacuation from Indian Ports in Terms of Transport Mode

The Committee, in this regard, recommends that ports must continuously take measures to help their shipping lines and other partners within the port system to battle increased competition and adjust to new trends in world trade. Dedicated Freight Corridors hold key to intermodal transport and hence need to be completed on priority basis. Moreover, the inland waterways system needs to be renovated as cargo evacuation by water is cheaper and cleaner, which reduces costs and port congestion and brings in efficiency. The shifting of cargo from road to train and waterways will be environment-friendly and will also help to lower carbon emissions.

(Para 250)

The Committee recommends that the Ministry of Road Transport & Highways and the Ministry of Railways should ensure that all the projects linked to port connectivity be given the highest priority and projects should be executed within the scheduled time period to make the port operations viable and profitable.

(Para 251)

Furthermore, the Committee recommends that evacuation of cargo to and from the port areas have to be properly synchronized so that the inter-modal network functions smoothly. Road and rail connectivity form an integral part of the port infrastructure as inefficient evacuation of cargo can undermine the entire operation of a port. In particular, containerization of cargo presupposes a seamless link with the road and rail network in an 'end to end' transport system. Congestion at ports results in delayed evacuation of cargo due to inadequate road and rail capacity. This adversely impacts the competitiveness of Indian industry. Port connectivity has ramifications that go beyond the operation of a port *per se.*

(Para 252)

There is a need to allocate the regional distribution of cargo to different modes of land transport. Though in certain cases of bulk cargo, it is easy to identify the mode for a particular cargo at a particular port and assumptions regarding percentage split have to be made in respect of cargo such as POL, LPG, fertilizer, fertilizer raw material, other bulk cargo, containers and break-bulk cargo. These assumptions need to be made depending upon the features of the respective regions, nature of cargo, quantum of cargo and the spread of hinterland.

(Para 253)

Containerization

The Committee, therefore, recommends that the need of the hour is to have infrastructure that can support seamless movement of cargo across all modes without any delay. We need to create common user facilities where these models can be executed

efficiently at a competitive price. To harness the full potential of inter modal transport, a legal framework and financial/regulatory incentives need to be put in place.

(Para 259)

Cabotage Laws

The Committee recommends that a study must be conducted on the effects of Cabotage Laws in the shipping sector of the country. The Committee feels that research must be conducted as to why, given the reduction of the Cabotage laws, the Ports have witnessed a paltry level of transhipment. The policy of the Ministry in this regard must be scientifically monitored and solutions to the same must be devised. The Committee extends its full cooperation in this matter as it feels that the success of transshipment hubs in the country is essential for the growth of Ports in India.

(Para 261)

Environmental Issues with regards to Coastal Regulatory Zones (CRZ) and National Green Tribunal (NGT)

The Committee feels that the development of Port infrastructure is necessary to the economic health of the nation. Steps need to be taken to obviate the adverse impact of the order of NGT on the port projects pending approval of the Coastal Zone Management Plan of the States by the MoEF&CC. The Committee further recommends that the MoEF&CCmust take steps to ensure that the States/ Union Territories must take it upon themselves to prioritise the CZMPs and submit the same to the MoEF&CC at the earliest, in order to ensure that necessary rules and regulations may be instituted for the same.

(Para 264)

The Committee recommends that an advisory be issued by the MoEF&CC to the States/ UTs that have not yet submitted their CZMPs to the MoEF&CC, impressing upon them to submit them immediately and get the same approved. The Ministry of Shipping may also take it upon itself to ensure that it keeps a track of the same and impress upon the respective State Governments and their corresponding ports to submit their plans at the earliest. The delay may cost huge economic loss to the country's Shipping sector and such policy related delays should be avoided.

(Para 265)

The Committee, however, feels that coastal infrastructural projects involving wetlands include various players whose interests will be affected in one way or another. The Committee, in this regard, recommends that the stages included by the MoEF&CC whilst granting environmental clearance, eg. Expert Appraisal Committee, Public hearings, Term of Reference etc. are speeded up to ensure that ports are getting

necessary clearances without hinderances. Given the development in science and technology, the Committee is of the opinion that effective solutions can be found for the developmental needs of the Ports.

(Para 267)

The Committee is of the opinion that many of the Major Ports are suffering due to the absence of a Standard Operating Procedure. The Committee is dismayed to note that many of the projects of the Major Ports have been stalled due to the same reason, while operations in some Ports have been shut down as a result of Court orders, which could have been avoided had these guidelines been set in place. The Committee recommends that the Ministry of Shipping must coordinate with the concerned States, the respective State Pollution Control Boards and the MoEF&CC to formulate a set of procedures/ processes that are largely uniform across all the States, keeping room for modifications according to the special requirements that are State or Region specific.

(Para 269)

The Committee is of the opinion that this is a major shortcoming in the port sector. The Consent to Operate for Ports is a necessary instrument. With the expansion of the Sagarmala Project, this will be a necessity for small riverine docks that will come up as result of this project. This is a flaw that must be remedied at the earliest as it leaves the Ports vulnerable to unnecessary litigation and law suits. The Committee, therefore, recommends that the Ministry of Shipping must coordinate with the concerned Ministries & Agencies and format a 'Consent to Operate' specifically for Ports at the earliest.

(Para 271)

Public Private Partnerships (PPP)

The Committee notes the efforts of the Ministry of Shipping towards the development of port infrastructure through the PPP model. The Committee recommends that as far as possible, the same model must be utilised in all the Major Ports to ensure the development of Port infrastructure in the country. Steps must be taken in tandem with the State Governments concerned in order to ensure smooth and speedy implementation of the PPP projects.

(Para 276)

Development/ Promotion of Cruise Facilities at Ports

The Committee is pleased to note the proactive steps taken by the Ministry of Shipping in tandem with the Major Ports to promote Cruise tourism in the nation. With the growing population and infrastructure constraints especially in city based Major Ports, the Committee is of the view that Cruise Shipping is an important and viable

alternative to help promote the growth of the economy by way of tourism in the country. The Committee further recommends that given the nascent stage of its development, the policies with regards to Cruise Shipping in the country must be regularly updated and modified to keep in tune with the changing global economic scenario. The Committee further recommends that taxation policies in this regard must be formulated in a manner which helps facilitate its growth.

(Para 279)

The Committee was informed that charging cruise ships on the basis of their tonnage, rather than on the number of passengers, is a dampner. The Committee recommends that cruise terminals may be developed in all the city based ports to attract foreign licenses and promote cruise tourism.

(Para 280)

Promotion of Ro-Ro Operations

The Committee appreciates the efforts of the Ministry of Shipping in developing RoRo operations and services in the country. The Committee, however, feels that more needs to be done as Ro-Ro services are integral to the economic prosperity of the nation and serve as a wonderful means of transport by utilizing the inland waterways in the country. In this regard, the Committee recommends that the Ministry must pick up the speed of the Sagarmala Project in order to make it viable and operational in the country. This will go a long way in improving the hinterland connectivity, reducing transport costs and reducing travel time in terms of cargo management in the country.

(Para 282)

Promotion of Solar Energy Generation

The Committee, therefore, recommends that the Major Ports should make use of the large tracts of unused land available to them in order to ensure the implementation of the Green Port Initiative. Apart from being an efficient way of utilizing the space available, the income generated from the sale of the energy generated can be used to further augment the development of the Port and its ancillary services.

(Para 286)

Ecological Considerations

The Ports also have a certain responsibility to ensure the sustainability of the ecological resources that surround them. The Committee strongly feels that it is the responsibility of the Port Authorities and the Ministry of Shipping by extension to

nurture and preserve the environment. The recent reports of recurrent oil spills are a cause of concern for the flora and fauna and the environment in general. The Committee, therefore, recommends that the Ministry of Shipping must ensure that the Ports have set guidelines to prevent incidents of oil spills in the future and steps must be taken to ensure that the oil spills are cleaned up. Promotion of eco- friendly business is the need of the hour and must be considered an important parameter when considering the annual performance of a port. This must also extend to the private and small ports as well, as a matter of policy.

(Para 287)

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