

NEW MANGALORE PORT TRUST

MECHANIZATION OF BERTH NO. 14 FOR HANDLING CONTAINERS AND OTHER CLEAN CARGO ON DESIGN, BUILD, FINANCE, OPERATE & TRANSFER (DBFOT) BASIS

MEMORANDUM FOR APPROVAL OF STANDING FINANCE COMMITTEE

ANNEXURE - I MEMORANDUM FOR STANDING FINANCE COMMITTEE

S1. No.	Item	Response	
1.	General		
1.1	Name of the Project	Mechanization Of Berth No. 14 For Handling Containers And Other Clean Cargo On DBFOT Basis At New Mangalore Port Trust	
1.2	Type of PPP (BOT, BOOT, BOLT, OMT etc.)	Design, Build, Finance, Operate and Transfer (DBFOT).	
1.3	Location (State/District/Town)	State : Karnataka , Dist. : Dakshina Kannada, Town : Mangalore	
1.4	Administrative Ministry / Department.	Ministry of Shipping Department of Shipping (Ports Wing).	
1.5	Name of Sponsoring Authority	New Mangalore Port Trust (The Authority)	
1.6	Name of the Implementing	New Mangalore Port Trust Through	
	Agency	DBFOT mode	
2.	Project Description		
2.1	Brief description of the project	The proposed project is about Mechanization of Berth No.14 for Handling of Containers and Other Clean Cargo at New Mangalore Port on Public Private Partnership (PPP) Mode. The project will be taken up in two phases: Phase 1 in 2020 and Phase II within 18 months of achieving 1.80 lakh TEUs or within 7 years of commencement of commercial operation of Phase I whichever is earlier.	
		Berth No.14 is a deep draft and multipurpose berth operated by the Port for handling various commodities like dry bulk and general cargo. The berth has a length of 350 metres, width of 35 metres,	

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		draft of 14.0 metres, and depth of 15.1 metres. It is estimated that the expected traffic for Container Cargo in the first year shall be 140,000 TEUs, while that for Other Cargo shall be 0.64 MTPA. Based on these expected traffic, the share of cargo between Container Cargo and Other Clean Cargo comes to 75%:25%. Mechanical Equipments proposed in Phase -1 are, 2 nos Mobile cranes of 100 T Capacity,6 nos Reach stackers,1 no empty container handler and 2 Mobile hoppers. Additional Mechanical Equipments proposed in Phase –II are, 1 no Mobile cranes of 100 T Capacity, 3 nos Reach stackers and 1 no empty container handler.
		The successful Developer for the project would develop, operate and maintain the berth for a period of 30 years. The Developer would be responsible for bringing in the required finances, carrying out development of berth and backup area by providing mechanical equipments and other development work. In addition to this, the Developer would also operate and maintain the terminal as per applicable laws and adhere to environmental and safety norms, in accordance with the Concession Agreement.
2.2	Justification for the project	New Mangalore Port is the gateway port to Karnataka. The modernization of Berth No.14 in the port to handle large

S1. No.	Item	Response
		numbers of container cargo would not only enhance the overall capability of the port but the 'Port induced cargo traffic' may also justify the investment in the port which could lead to substantial development of the region and thus strengthening further the state economy.
		The Traffic forecast for New Mangalore Port has been made for the period of 25 years from base year 2013 and is estimated to be 50 MMT by the year 2018 and growing upto 120 MMT by 2038.
		The container traffic in NMPT is observed to be increased with an average CAGR of 19% for period from 2013 to 2018.
		Presently 95,000 TEUs of Container Cargo is being handled at the Port and it is forecasted that there would be a demand to handle 4,00,000 TEUs by 2046. In view of increased demand in the future, Berth No 14 is proposed to be modernized to handle the same. The Port also proposes to shift container traffic from other berths to Berth No. 14. The berth is having draft of 14.00 meters and the available Quay length is in the order of 350 meters.
		In order to provide support in viability to prospective bidder during initial project phases, NMPT permits handling of other cargo (Fertilizer, Limestone, Gypsum, Dolomite) for the purpose of providing a stop gap arrangement for the PPP operator in the initial years in the event of a slowdown in realization of container

S1. No.	Item	Response
NO.		cargo
		cargo.
2.3	Possible alternatives, if any	Nil
0.4	D .: . 1 .: . 1	
2.4	Estimated capital costs with	Estimated total project cost (base cost
	break-up under major heads	2017-18) is Rs. 280.71 crores (Rs. 127.48
	of expenditure. Also indicate	crores for phase-I and Rs. 153.23 crores
	the basis of cost estimation.	for phase-II) consisting of:-
		Phase -1 Basis Rs in
		Crs
		Civil Structure DPR 8.36
		Mechanical DPR 96.60
		Equipments
		Communication 2% of Civil & 2.10
		and IT Mechanical Infrastructure cost as per
		DPR
		Contingency 5% as per 5.35 DPR
		Preoperative & 3% (3.21
		Financing cost assumption)
		Escalation(Base 3% as per 8.88 2017-18) DPR
		Interest during SBI MCLR+ 2.98
		Construction 2% as on date
		Total Project 127.48
		Cost to the
		Concessionaire Supporting 0
		Infrastructure in
		the scope of
		NMPT
		Grand Total 127.48
		(Phase-I)
		Phase -II Basis Rs in
		Civil Structure DPR 60.54
		Mechanical DPR 49.10
		Equipments 5.10

S1. No.	Item	Response	
		Communication 2% as per and IT DPR Infrastructure	2.19
		Contingency 5% as per DPR	5.59
		Preoperative & 3% (Financing cost assumption)	0
		Escalation 3% p.a as per (base 2017-18) DPR	35.81
		Interest during SBI MCLR+ Construction 2% as on date	0
		Total Project Cost to the Concessionaire	153.23
		Supporting Infrastructure in the scope of NMPT	0
		Grand Total (Phase-II)	153.23
2.5	Phasing of investment	The detailed Cost Estimate and of the Project is presented in App The project shall be implemente	endix B
2.6	Project Implementation Schedule (PIS)	phases. Project will be implemented by through DBFOT mode as per PPI at a cost of Rs 280.71 crores period of 1 year from date of sthe phases.	scheme within a
3.	Financing Arrangements	•	
3.1	Sources of financing (equity, debt, mezannine capital etc.)	The project will be implemented PPP mode and finance shall be by the concessionaire.	
3.2	Indicate the revenue streams of the Project (annual flows over project life). Also indicate the underlying assumptions.	Revenue stream consist of: 1. Container handling charges 2. Ground rent & Storage cha 3. Miscellaneous charges re containers 4. Other cargo handling charge Under lying assumptions and	rges elated to ges

S1. No.	Item	Response
		flows over the project life is placed at Chapter 13 of the DPR prepared on 2018 and the Supplementary Report.
3.3	Indicate the NPV of revenue streams with 12% discounting	NPV of revenue streams with 12% discounting is Rs. 808.05Crores.
3.4	Who will fix the tariff / user charges? Please specify in detail.	NMPT has submitted Tariff proposal to TAMP for necessary approval and the same will be incorporated in the RFP document.
3.5	Have any FIs been approached? If yes, there response may be indicated.	No. Funds will be arranged by the concessionaire.
4.	IRR	
4.1	Economic IRR (if computed)	Not separately computed
4.2	Financial IRR, indicating various assumptions (attach separate sheet if necessary)	Project IRR is 13.44 % (for considering overall project cost) Other Key assumptions are: 1. Debt Equity ratio- 70:30 2. Start of concession: FY 2019-20 3. Operations start from FY 2020-21 4. Overall contingency: 5% 5. Interest rate: 10.75% (SBI MCLR +2%) 6. Tax Rate: MAT 21.34% as applicable 7. Corporate Tax: 34.61% 8. Construction period: 1 year each for both phases 9. WPI at 3% 10. Opex charges have been linked to TAMP Norms and escalated as per WPI
		The IRR and NPV calculation for Concessionaire is presented at Appendix D
5.	Clearance	
5.1	Status of environmental clearance	Environmental, CRZ clearance and forest clearance have already been obtained by Concessioning Authority.

S1. No.	Item	1	Response
5.2	Clearance required from the State Government and other local bodies.	The Concession required under following Applica	the Applicable Laws, the
		ACTIVITY	GRANTING AUTHORITY
		Environmental Laws	State Pollution Control Board for CFE/CFO
		Plot Plan approval	Dock safety Inspector / OISD guidelines
		Electrical Installations	Department of Electrical Inspectorate, Government of Karnataka
		Fire Fighting Installation	Chief Fire Officer, Bangalore OISD guidelines or Applicable international codes / practices
		Customs notification Fire safety	Commissioner of Customs Port Fire Office for hot
		clearances Concessionaire to obtain all oth clearances requi the Project and required to be of under this Agree Concessionaire independently clearances/appr provided above	the above mentioned and permits, the shall also be responsible er necessary permits and red for implementation of which are not explicitly obtained by the Authority ement. In this regard, the will have to ascertain the applicable permits/ovals apart from what is that are required for of the Project during the od.

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		The Environmental Clearance for the project has been obtained by the Concessioning Authority. However, in case the Concessionaire decides to go for additional dredging and strengthening of berths to cater to deeper drafted vessels, the responsibility for obtaining the required approvals and clearances including Environmental Clearance from MoE&F shall be that of the Concessionaire.
5.3	Other support required from	Nil
	the State Government	
6.	Govt. of India Support	
6.1	Viability Gap Funding, if required	Not applicable
6.2	GoI guarantees being sought, if any	No
7.	Concession Agreement	
7.1	Is the Concession Agreement based on MCA?. If yes, indicate the variations, if any, in a detailed note (to be attached)	Yes, the Concession Agreement is based on the approved MCA. The deviation statement detailing out the variations with supporting justification is enclosed at Appendix C.
7.2	Details of Concession Agreement (Attached at Appendix-A)	Attached
8.	Criteria for short-listing	
8.1	Is short listing to be in one stage or two stages?	Pre-qualification of the bidders will be carried out in two stages viz. Request for Qualification (RFQ) - 1st stage and Request for Proposal (RFP) - 2nd stage. Pre-qualification of the bidders will be based on the revised Model RFQ as per the Guidelines of the Ministry of Finance, File No 24 (1)/PF-II/2006, Department of Expenditure (PF-II Section) dated May 18, 2009 read with Ministry of Shipping letter No. PD-24018/12/2014 SCC dated 12-

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		02-2016 and subject to fulfillment of security clearance.
8.2	Indicate the criteria for short listing (attach separate sheet if necessary)	Kindly refer Appendix E for detailed information of Eligibility Criteria.
9.	Others	
9.1	Remarks, if any	New Mangalore Port Trust has issued an RFQ with Application Due Date on 16 th August 2018. The following 5 bidders have technically qualified:-
		M/s. JSW Infrastructure Limited, Mumbai
		2. M/s Chettinad Builders Pvt. Ltd – M/s Chettinad International Coal Terminal Private Limited., Chennai
		3. M/s. Adani Ports and Special Economic Zone Limited, Ahmedabad
		4. M/s. Kakinada Seaports Limited - Bothra Shipping Services Pvt. Ltd., Hyderabad
		5. M/s. International Cargo Terminals and Infrastructure Pvt. Ltd., Mumbai
		Sl. No. 1 to 4 are already having security clearance from the Ministry and Sl. No. 5 security clearance from the Ministry is awaited

Appendix - A

BRIEF PARTICULARS OF THE CONCESSION AGREEMENT

A. Sponsoring Ministry : Ministry of Shipping.

Department of Shipping (Ports Wing)

B. Name and location of the Project: Mechanization Of Berth No. 14 For Handling

Containers And Other Clean Cargo On DBFOT Basis At New Mangalore Port Trust

State: Karnataka,

Dist.: Dakshina Kannada (DK),

Town: Mangalore

C. Legal consultant : M/s Gianender and Associates, New Delhi

D. Financial Consultant : M/s Gianender and Associates, New Delhi

S1. No.	Item	Description
I.	General	
1.1	Scope of the Project (Please state in about 200 words)	The proposed project is about Mechanization of Berth No.14 for Handling of Containers and Other Clean Cargo at New Mangalore Port on Public Private Partnership (PPP) Mode. The project will be taken up in two phases: Phase 1 in 2020 and Phase II within 18 months of achieving 1.80 lakh TEUs or within 7 years of commencement of commercial operation of Phase I whichever is earlier. Berth No.14 is a deep draft and multipurpose berth operated by the Port for handling various commodities like dry bulk and general cargo. The berth has a length of 350 metres, width of 35 metres, draft of 14 metres, and

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		depth of 15.1 metres. It is estimated that the expected traffic for Container Cargo in the first year shall be 140,000 TEUs, while that for Other Cargo shall be 0.64 MTPA. Based on these expected traffic, the share of cargo between Container Cargo and Other Clean Cargo comes to 75%:25%. Mechanical Equipments proposed in Phase -1 are, 2 nos Mobile cranes of 100 T Capacity,6 nos Reach stackers,1 no empty container handler and 2 Mobile hoppers. Additional Mechanical Equipments proposed in Phase -II are, 1 no Mobile cranes of 100 T Capacity, 3 nos Reach stackers and 1 no empty
1.2	Nature of Concession to be granted.	container handler. DBFOT basis (Design, Build, Finance, Operate and Transfer)
1.3	Period of Concession and justification for fixing the period.	30 years. Period of concession is as per the approved MCA wherein 30 years is the maximum period for such a BOT.
1.4	Estimated capital cost	Total capital cost for the development of the Project in two Phases to be approximately Rs. 280.71 Crores. Cost to be borne by the Concessionaire.
1.5	Likely construction period	Phase-1 12 (Twelve Months) Phase -II 12 (Twelve Months)
1.6	Conditions precedent, if any, for the concession to be effective.	Conditions precedent that needs to be satisfied by the Concessioning authority and the concessionaire are detailed out in Article - 3 of Concession Agreement.
1.7	Status of land acquisition	Land to be allotted belongs to New Mangalore Port Trust and hence no acquisition has to be done.

S1. No.	Item	Description
II.	Construction and O & M	
2.1	whether an independent agency / engineer is contemplated.	Yes. Please refer to Article -5 of Concession Agreement.
2.2	Minimum standards of Operation and Maintenance	Relevant Indian standards, ISO/OISD standards, as applicable will be followed. Please refer to Appendix-4 of Concession Agreement.
2.3	Penalties for violation of prescribed O & M standards	Failure of concessionaire to perform or discharge any of its obligations will allow Concessioning authority to terminate the agreement without any prejudice to any other rights & remedies available to it under this agreement.
2.4	Safety related provisions	Safety standards are detailed out in Appendix-4 of Concession Agreement.
2.5	Environment related provisions	Procurement of MOEF clearance for the Project is one of the conditions precedents to be satisfied by the Concessioning authority. However, in case the Concessionaire decides to go for additional dredging and strengthening of berths to cater to deeper drafted vessels, the responsibility for obtaining the required approvals and clearances including Environmental Clearance from Ministry of Environment & Forest (MoEF) shall be that of the Concessionaire.
III.	Financial	
3.1	Maximum period for achieving financial close	180 days
3.2	Nature and extent of capital grant / subsidy contemplated	NIL

S1. No.	Item	Description
3.3	Bidding parameter (capital subsidy or other parameter)	"Royalty" on "per TEU only" to be quoted by the Bidder which would be indexed to the variations in the WPI annually. Also The rate of royalty for other cargo shall be calculated based on the proportionate royalty quoted for Container Cargo against the average SoR for Container Cargo as per the clause 2.1.6 of RFP.
3.4	Provisions for change of scope and the financial burden thereof	
3.5	Concession fee, if any, payable by the concessionaire	Licence fee as per Article 9.1 of the Concession Agreement as consideration for the use as a bare licensee of the project site.
3.6	User charges / fee to be collected by the Concessionaire	NMPT has submitted Tariff proposal to TAMP for necessary approval and the same will be detailed out in Appendix-12 of Draft Concession Agreement.
3.7	Indicate how the user fee is to be determined; the legal provisions in support of user fee (attach the relevant rules / notification); and the extent and nature of indexation for inflation	As per Section 47(A) of Major Port

S1. No.	Item	Description
		from time to time."
3.8	Provisions, if any, for mitigating the risk of lower revenue collection.	Non achievement of minimum guaranteed cargo given under Appendix 14 in Draft Concession Agreement will be a concessionaire event of default and dealt as per the provisions available under Article 15 of the Draft Concession Agreement.
3.9	Provisions relating to escrow account, if any	Yes. As per Appendix 16 of Draft Concession Agreement.
3.10	Provisions relating to insurance	Provision relating to insurance requirement is detailed out in Article 12.1 (C) of Draft Concession Agreement.
3.11	Provisions relating to audit and certification of claims	Provision relating to audit and certification of claims are covered under Article 9.4 of Draft Concession Agreement.
3.12	Provisions relating to assignment / substitution rights relating to lenders	Provisions are covered under Appendix 3 of Draft Concession Agreement.
3.13	Provisions relating to change in law	Provisions relating to change in law are covered under Article 13 of Draft Concession Agreement.
3.14	Provisions, if any for compulsory buy back of assets upon termination / expiry.	Provisions are covered under Article 17 of Draft Concession Agreement.
3.15	Contingent liabilities of the government	
	(a) Maximum Termination Payment for Government/ Authority Default	Covered under Article 17.1 (c) of Draft Concession Agreement.
	(b) Maximum Termination Payment for Concessionaire Default	Covered under Article 17.1 (b) of Draft Concession Agreement.
	(c) Specify any other penalty compensation or payment contemplated under the agreement	Compensation for termination due to force Majeure Event is covered under Article 17.1 (a) of Draft Concession Agreement.

S1. No.	Item	Description
		Liquidated damages for delayed completion of work in the construction phase is covered under Article 6.9 of Draft Concession Agreement. Liquidated damages for shortfall in performance during the commercial operations is covered in Appendix-15 of Draft Concession Agreement.
IV.	Others	
4.1	Provisions relating to competing facilities, if any	Covered under Article 12 of Draft Concession Agreement.
4.2	Specify the proposed Dispute Resolution Mechanism	
4.3	Specify the proposed governing law and jurisdiction	
4.4	Other remarks, if any	None

Appendix B

Detailed Cost Estimates & Phasing

A. Civil Structures Cost

Cost Head	Amount Rs. in Crores (Phase-I)	Amount Rs. in Crores (Phase-II)
Land Preparation for the desired level including cutting, filling, removal of buildings, trees, coal heaps, bushes and all other debris	0.30	5.24
Stack yard area development including pavement for service roads and container stacking area	6.05	30.00
Weigh Bridge	0.00	0.30
Civil works including Canopy, Security Booth, Road Furnitures, compound wall etc	0.00	3.00
Road lighting, marking etc	0.00	1.00
Control buildings, operational, customs, canteen, first aid etc	1.00	5.00
Drainage & Sewerage System- With Underground Drainage System and Heavy Duty Grattings under Container Stackyard, Hea	0.00	5.00
Electrical, firefighting and water supply	1.00	6.00
Environment Protection and monitoring system	0.00	5.00
Total Civil Structures Cost	8.36	60.54

B. Mechanical Equipments Cost

Cost Head	Amount Rs. in Crores (Phase-I)	Amount Rs. in Crores (Phase-II)
Mobile Harbour cranes of 100 T capacity	72.00	36.00
Reach Stackers	21.00	10.50
Empty container handlers	2.60	2.60
Mobile hoppers	1.00	0.00
Total Mechanical Equipments Cost	96.60	49.10

C. Communication and IT Infrastructure cost:

Phase-I: 2% of Civil and Mechanical cost (i.e. 2.10 crores) Phase-II: 2% of Civil and Mechanical cost (i.e. 2.19 crores)

D. Preoperative & Finance Charge:

Cost Head	Amount Rs. in Crores (Phase-I)	Amount Rs. in Crores (Phase-II)
1. Pre-operative Expenditure		
Site studies	1%	NIL
Design & other consultancy charges		NIL
Mobilization expenses		NIL
ROC expenses		NIL
Total Pre-Operative Expenses		NIL
2. Finance Charge		
Capital Raising Charges	2%	NIL
Appraisal Fee		NIL
Loan Documentation Fee		NIL
Stamp Duty & other Charges		NIL
Total Finance Charge		NIL
Total Preoperative & Finance Charge:	3.21	NIL

Summary of Major Cost Heads

Capex Head	Amount Rs. in Crores (Phase-I)	Amount Rs. in Crores (Phase-II)
Civil Structures	8.36	60.54
Mechanical Equipments	96.60	49.10
Electrical Equipments & IT	2.10	2.19
Infrastructure		
Total Head Capex	107.06	111.83
Escalation due to Inflation	8.87	35.81
Contingency	5.35	5.59
Pre-operative and Financing Charges	3.21	0.00
Interest During construction	2.99	0
Total Project Cost to the	127.48	153.23
concessionaire		
Grand Total	280.71	

Appendix C

Deviations in the DCA compared to MCA

S.	Clauses	As per Model Concession	As per Draft Concession
No.		Agreement	Agreement
1.	Clause	"Completion Certificate"	"Completion Certificate" shall
	1.1	shall have the meaning	include Completion Certificate
	Definitio	assigned to it under Article	Phase I and Completion Certificate
	n	6.3	Phase II individually or collectively
			as the case may be.
			-
			"Completion Certificate Phase I"
			shall have the meaning assigned to
			it under Article 6.3 (a).
			"Completion Certificate Phase
			II" shall have the meaning
			assigned to it under Article 6.3 (b).
2.	Clause	"Construction Phase"	"Construction Phase" means the
	1.1	means the period from the	period from the Date of Award of
	Definitio	Date of Award of Concession	Concession to the Date of
	n	to the Date of Commercial	Commercial Operation Phase I.
		Operation.	•
3.	Clause	"Date of Commercial	"Date of Commercial Operation
	1.1	Operation " means the date	Phase I" means the date on which
	Definitio	on which the Concessionaire	the Concessionaire receives the
	n	receives the Completion Certificate in accordance	Completion Certificate Phase I in
		with the provisions of this	accordance with the provisions of
		Agreement/ MPT Act.	this Agreement/ MPT Act.
		8 3 3 4	"Date of Commercial Operation
			Phase II" means the date on which
			the Concessionaire receives the
			Completion Certificate Phase II in
			accordance with the provisions of
			this Agreement/ MPT Act.
4.	Clause	"Operations Phase" means	"Operations Phase" means the
	1.1	the period from the Date of	period from the Date of
	Definitio	Commercial Operation to the	Commercial Operation Phase I to
	n	expiry/termination of the	the expiry/termination of the
		Concession Period.	care expiry/ communication of the

S. No.	Clauses	As per Model Concession Agreement	As per Draft Concession Agreement
			Concession Period.
5.	Clause 1.1 Definitio n	"Project Capacity" means the capacity of the Project Facilities and Services to handle [•units] of [cargo] 7 per annum	"Project Capacity" means the capacity of the Project Facilities and Services to handle 2,39,148 TEUs (3.58 MMTPA) for Phase-I and 3,58,722 TEUs (5.38 MMTPA (including Phase-I) for Phase-II container and 0.64 MMTPA (for Other Cargo (Fertilizer, Limestone, Gypsum, Dolomite).
6.			
7.	Clause 1.1 Definitio n	"Scheduled Project Completion Date" means [•]	"Scheduled Project Completion Date Phase I" means the day following completion of 12 (twelve) months from the Date of Award of Concession. "Scheduled Project Completion Date Phase II" means the day following completion of 12 (twelve) months after commencement of 18 months of achieving 1.80 lakhs TEU's or within 7 years of commencement of commercial operation of Phase-I, whichever is earlier.
8.	Clause 1.1 Definitio n	"Tariff Notification" means the notifications no. [] setting out inter alia the Tariff and shall include any amendments, revisions or replacements thereof carried out or new guidelines in accordance with the Applicable Tariff Guidelines.	"Tariff Notification" means the Notification/order No. TAMP/69/2018-NMPT dated 18.01.2019 duly indexed published by TAMP, setting out inter alia the Tariff and shall include any amendments, revisions or replacements thereof carried out or new guidelines in accordance with the Applicable Tariff

	As per Model Concession Agreement	As per Draft Concession Agreement
	3	Guidelines
Clause 1.1 Definitio		"GST" means Goods and Services Tax
	The Independent Engineer selected pursuant to the aforesaid process shall be appointed for a period commencing from the Date of Award of Concession to [the date of expiry of 6 (six) months from the Date of Commercial Operations]. The scope of work of the Independent Engineer shall be substantially as set out in Appendix 7. Work of certification of Performance Parameters as stipulated in this Agreement shall be done by Indian Ports Association during the remaining concession period (During the Operations period).	The Independent Engineer selected pursuant to the aforesaid process shall be appointed for a period commencing from the Date of Award of Concession to the date of expiry of 6 (six) months from the Date of Commercial Operations Phase II. The scope of work of the Independent Engineer shall be substantially as set out in Appendix 7. Work of certification of Performance Parameters as stipulated in this Agreement shall be done by Indian Ports Association during the remaining concession period (During the Operations period). Notwithstanding anything contained in this sub-clause (b), the Concessioning Authority may extend the term of the Independent Engineer for further period or terminate the contract after commissioning of Phase I and engage new Independent Engineer for Phase II and/or during the replacement of the used equipment with new equipment as may be decided.
Clause 6.3 (a)	The Concessionaire shall promptly commence and complete the works, including installation of equipment in accordance with the Project Schedule	The Concessionaire shall promptly commence and complete the works, including installation of equipment in accordance with the Project Schedule and shall also obtain from the Independent
	1.1 Definitio n Clause 5.1 (b)	Clause 1.1 Definitio n Clause 5.1 (b) The Independent Engineer selected pursuant to the aforesaid process shall be appointed for a period commencing from the Date of Award of Concession to [the date of expiry of 6 (six) months from the Date of Commercial Operations]. The scope of work of the Independent Engineer shall be substantially as set out in Appendix 7. Work of certification of Performance Parameters as stipulated in this Agreement shall be done by Indian Ports Association during the remaining concession period (During the Operations period). Clause 6.3 (a) The Concessionaire shall promptly commence and complete the works, including installation of equipment in accordance

S.	Clauses	As per Model Concession	As per Draft Concession
No.		Agreement	Agreement
	Clause 6.3 (b)	the Independent Engineer a certificate as to completion of construction of Project Facilities and Services in accordance with the provisions of this Agreement ("Completion Certificate") not later than [•] Months from the date of commencement of the Concession Period. Concessionaire shall be entitled to approach Concessioning Authority for permission to use the assets handed over to it by Concessioning Authority, for handling cargo during the period between handing over of assets and achievement of Commercial Operation date which shall be allowed as per terms and conditions given in Concession Agreement subject to no extension of construction period on this account	completion of construction of Project Facilities and Services in accordance with the provisions of this Agreement ("Compeltion Certificate") ("Completion Certificate Phase I") not later than 12 (twelve) months from the date of commencement of the Concession Period. The Concessionaire shall promptly commence and complete the works, including installation of equipment in accordance with the Project Schedule and shall also obtain from the Independent Engineer a certificate as to completion of construction of Project Facilities and Services in accordance with the provisions of this Agreement and as set out in Appendix 4 ("Completion Certificate Phase II") 12 (twelve) months after commencement of 18 months of achieving 1.80 lakhs TEU's or within 7 years of commencement of commercial
			operation of Phase-I, whichever is earlier
13.	Change of Scope Clause 6.8 (a)	The Concessioning Authority may, notwithstanding anything to the contrary contained in this Agreement, require the provision of additional works and services which are not included in the scope of the Project as contemplated by this Agreement ("Change of Scope"). Provided no such Change of Scope shall be	The Concessioning Authority may, notwithstanding anything to the contrary contained in this

S.	Clauses	As per Model Concession	As per Draft Concession
No.		Agreement	Agreement
		made in the Construction Phase if it is in the reasonable judgment of the parties hereto likely to delay the completion of the Project such that the Project cannot be completed on the Scheduled Project Completion Date. Provided further, the cost of implementing a single Change of Scope shall not exceed a sum corresponding to [5% (five percent)] of the Estimated Project Cost and during the Concession Period the cumulative cost of implementing orders pertaining to Change of Scope shall not exceed a sum corresponding to [20% (twenty percent)] of the	the parties hereto likely to delay the completion of the Project such that the Project cannot be completed on the Scheduled Project Completion Date Phase I or Scheduled Project Completion Date Phase II. Provided further, the cost of implementing a single Change of Scope shall not exceed a sum corresponding to 5% (five percent) of the Estimated Project Cost and during the Concession Period the cumulative cost of implementing orders pertaining to Change of Scope shall not exceed a sum corresponding to 20% (twenty percent) of the Estimated Project Cost;
14	Clause 6.9 (Liquida ted Damage s)	Estimated Project Cost; Subject to any of the provisions of this Agreement providing for extension of time for performance or excuse from performance, as the case may be, of any of the obligations of the Concessionaire under this Agreement, the Concessionaire shall pay to the Concessioning Authority liquidated damages at the rate of [0.1% (zero point one percent)] of the Performance Guarantee for every Day of delay in fulfilling the specified obligations on or before a	this Agreement providing for extension of time for performance or excuse from performance, as the case may be, of any of the obligations of the Concessionaire under this Agreement, the Concessionaire shall pay to the Concessioning Authority liquidated damages at the rate of 0.1% (zero point one percent) of the Performance Guarantee for every Day of delay in fulfilling the specified obligations on or before a Milestone Date including a delay in obtaining the Completion Certificate or the Provisional

S.	Clauses	As per Model Concession	As per Draft Concession
No.		Agreement	Agreement
		Milestone Date including a	Scheduled Project Completion Date
		delay in obtaining the	Phase I or the Scheduled Project
		Completion Certificate or the	Completion Date Phase II , as the
		Provisional Certificate on or	case may be. Provided such
		before the Scheduled Project	liquidated damages shall not in
		Completion Date. Provided	aggregate exceed 5% (five percent)
		such liquidated damages	of the Estimated Project Cost and
		shall not in aggregate exceed	unless the delay is in obtaining of
		5% (five percent) of the	the Completion Certificate or the
		Estimated Project Cost and	Provisional Certificate, shall not be
		unless the delay is in	payable for less than 15 (fifteen)
		obtaining of the Completion	Days of delay from a Milestone
		Certificate or the Provisional	Date, in fulfilling a specified
		Certificate, shall not be	obligation. The Parties agree that
		payable for less than 15	the liquidated damages as provided
		(fifteen) Days of delay from a	are a genuine pre-estimate of the
		Milestone Date, in fulfilling a	damages the Concessioning
		specified obligation. The	Authority is likely to suffer and are
		Parties agree that the	not by way of a penalty. In case the
		liquidated damages as	aggregate delay exceeds 180 (one
		provided are a genuine pre-	hundred and eighty) Days or the
		estimate of the damages the	aggregate liquidated damages paid
		Concessioning Authority is	and/or payable under this
		likely to suffer and are not by	provision exceeds the specified
		way of a penalty. In case the	limit of 5% (five percent) of the
		aggregate delay exceeds 180	Estimated Project Cost, the
		(one hundred and eighty)	Concessioning Authority shall be
		Days or the aggregate	•
		liquidated damages paid	
		and/or payable under this	
		provision exceeds the	Article 16.5 shall follow. The
		specified limit of 5% (five	
		percent) of the Estimated	
		Project Cost, the	with respect to liquidated damages
		Concessioning Authority	
		shall be entitled to terminate	
		this Agreement and the	
		consequences of termination	
		as laid down in Article 16.5	
		shall follow. The	
		Concessioning Authority	
	I	Concessioning namenty	

S.	Clauses	As per Model Concession	As per Draft Concession
No.		Agreement	Agreement
		may, at its discretion recover	
		any amounts with respect to	
		liquidated damages from the	
		Performance Guarantee.	
15.	Shareho	The Concessionaire shall	The Concessionaire shall ensure
	lding	ensure that the Applicant/	that the Applicant/ members of the
	Clause	members of the Consortium	Consortium maintain Management
	11.2 (a)	maintain Management	Control at least until expiry of the
		Control at least until expiry	two (2) years after COD as also
		of the two (2) years after	maintain their equity holding in
		COD as also maintain their	the Concessionaire such that:
		equity holding in the	
		Concessionaire such that	(a) Selected Bidder/Consortium
		(a) Selected	members together with
		Bidder/Consortium	its/thier associates hold not
		Members together with	less than 51% (fifty one
		its/their Associates hold	percent) of its paid up equity
		not less than 51% (Fifty	capital until 2 (two) years after
		One Percent) of its	Date of Commercial
		issued and paid up	Operations Phase I and not
		equity and that no	less than 26% (twenty six
		member of Consortium	percent) of such equity until
		whose technical and	expiry of 2 years after COD. At
		financial capacity was	any time, after expiry of the
		evaluated for the	aforesaid shareholding period,
		purposes of Pre-	Lead Member can approach
		qualifications in	Authority for approval
		response to Request for	proposing a new entity/
		Qualification shall hold	consortium. Authority may at its sole discretion consider and
		less than 26% (Twenty	approve it subject to the
		Six Percent) of such	entity/consortium meeting the
		equity until expiry of	eligibility criteria as prescribed
		two (2) years after COD.	in Bid Document for the
		At any time, after expiry	Project; and
		of the aforesaid share holding period, lead	Troject, and
		member can approach	
		Authority for approval	
		proposing a new entity/	
		consortium. Authority	
		may at its sole	

S. No.	Clauses	As per Model Concession Agreement	As per Draft Concession Agreement	
	Clause 15.1 (a) (iii)	discretion consider and approve it subject to the entity/consortium meeting the eligibility criteria as prescribed in Bid Document for the Project; and a delay of more than 180 (one hundred and eighty) Days from any Milestone Date in achieving any of the performance obligations set forth for the relevant Milestone Date or the Date of Commercial Operations is delayed for more than 180 (one hundred and eighty) Days from the Scheduled Project Completion Date;	a delay of more than 180 (one hundred and eighty) Days from any Milestone Date in achieving any of the performance obligations set forth for the relevant Milestone Date or the Date of Commercial Operations Phase I or the Date of Commercial Operations Phase II is delayed for more than 180 (one hundred and eighty) Days from the Scheduled Project Completion Date Phase I or Scheduled Project	
			Completion Date Phase II, as the case maybe;	
17	Clause 17.1 (b)	If the termination is after the Date of Commercial Operation, due to a Concessionaire Event of Default, the compensation payable by the Concessioning Authority to the Concessionaire shall be the lowest of:	If the termination is after the Date of Commercial Operation Phase I , due to a Concessionaire Event of Default, the compensation payable by the Concessioning Authority to the Concessionaire shall be the lowest of:	

Appendix D

IRR and NPV calculation for concessionaire

Return Parameter	Base Case Scenario
Project IRR (Standalone)	13.44%
Equity IRR (Standalone)	16.00%

Calculation of Project IRR Discounting Factor 12%

FY	Financial	Operating	Net Cash
Count	Year	Factor	Flow
1	2019-20	0%	(4.86)
2	2020-21	50%	(106.39)
3	2021-22	100%	17.72
4	2022-23	100%	21.08
5	2023-24	100%	24.77
6	2024-25	100%	28.83
7	2025-26	100%	32.24
8	2026-27	100%	(123.19)
9	2027-28	100%	25.51
10	2028-29	100%	(0.36)
11	2029-30	100%	33.83
12	2030-31	100%	(69.72)
13	2031-32	100%	44.24
14	2032-33	100%	49.70
15	2033-34	100%	55.59
16	2034-35	100%	44.29
17	2035-36	100%	64.26
18	2036-37	100%	(35.22)
19	2037-38	100%	70.02
20	2038-39	100%	68.97
21	2039-40	100%	63.70
22	2040-41	100%	(74.17)
23	2041-42	100%	72.26
24	2042-43	100%	51.14
25	2043-44	100%	74.29
26	2044-45	100%	29.51
27	2045-46	100%	78.27
28	2046-47	100%	(3.63)
29	2047-48	100%	84.36
30	2048-49	100%	85.26
31	2049-50	50%	67.46

PIRR 13.44%

Calculation of Equity IRR:

FY	Financial	Operating	Net Cash Flows (
Count	Year	Factor	Except Equity)
1	2019-20	0%	(1.49)
2	2020-21	50%	(27.36)
3	2021-22	100%	5.44
4	2022-23	100%	4.94
5	2023-24	100%	9.38
6	2024-25	100%	14.18
7	2025-26	100%	18.33
8	2026-27	100%	(61.66)
9	2027-28	100%	0.00
10	2028-29	100%	0.00
11	2029-30	100%	0.00
12	2030-31	100%	0.00
13	2031-32	100%	0.00
14	2032-33	100%	0.00
15	2033-34	100%	0.00
16	2034-35	100%	(0.00)
17	2035-36	100%	18.13
18	2036-37	100%	(18.13)
19	2037-38	100%	49.28
20	2038-39	100%	72.30
21	2039-40	100%	67.51
22	2040-41	100%	(74.24)
23	2041-42	100%	72.19
24	2042-43	100%	51.07
25	2043-44	100%	74.22
26	2044-45	100%	29.44
27	2045-46	100%	78.20
28	2046-47	100%	(3.70)
29	2047-48	100%	84.28
30	2048-49	100%	85.18
31	2049-50	50%	67.44

EIRR 16.00%

Criteria for Pre-qualifying applicants conditions of eligibility

- 1. The Applicant's competence and capability is proposed to be established by the following parameters:
 - (a) Technical Capacity
 - (b) Financial Capacity
 - (c) O&M Experience
- **a. Technical Capacity:** For demonstrating technical capacity and experience (the **"Technical Capacity"**), the Applicant shall, over the past 5 (five) financial years preceding the Application Due Date, have:
 - i. paid for, or received payments for, construction and/or operation of Eligible Project(s); and/or
 - ii. paid for development of Eligible Project(s) in Category 1 and/or Category 2 specified in Clause 3.2.1(of the RFQ); and/ or
 - iii. collected and appropriated revenues from Eligible Project(s) in Category 1 and/or Category 2 specified in Clause 3.2.1(of the RFQ),

such that the sum total of the above is more than Rs. 518.48Crores (Indian Rupees Five Hundred Eighteen Crores and Forty Eight Lakhs Only) (the "Threshold Technical Capacity").

Provided that at least one fourth of the Threshold Technical Capacity shall be from the Eligible Projects in Category 1 and/ or Category 3 specified in Clause 3.2.1(of the RFQ).

b. Financial Capacity: The Applicant shall have a minimum Net Worth (the **"Financial Capacity"**) of Rs 64.81Crores (Indian Rupees Sixty Four Crores and Eighty One Lakhs only) at the close of the preceding financial year.

In case of a Consortium, the combined technical capacity and net worth of those Members, who have and shall continue to have an equity share of at least 26% (twenty six per cent) each in the SPV, should satisfy the above conditions of eligibility; provided that each such Member shall, for a period of 2 (two) years from the date of commercial operation of the Project, hold equity share capital not less than: (i) 26% (twenty six per cent) of the subscribed and paid up equity of the SPV; and (ii) 5% (five per cent) of the Total Project Cost specified in the Concession Agreement.

c. O&M Experience: The Applicant shall, in the case of a Consortium, include a Member who shall subscribe and continue to hold at least 10% (ten percent) of the subscribed and paid up equity of the SPV for a period of 5 (five) years from the date of commercial operation of the Project, and has either by itself or through its Associate, experience of 5 (five) years or more in operation and maintenance (O&M) of Category 1 projects specified in Clause 3.2.1(of the RFQ), with an aggregate capital cost equal to Rs 280.71Crores (Rs. Two Hundred Eighty Crores and Seventy One Lakhs Only). In case the Applicant is not a Consortium, it shall be eligible only if it has equivalent experience of its own or through its Associates. In the event that the Applicant does not have such experience, it should furnish an undertaking that if selected to undertake the Project, it shall for a period of at least 5 (five) years from the date of commercial operation of the Project, enter into an agreement for entrusting its operations & maintenance (O&M) obligations to an entity having the aforesaid experience, failing which the Concession Agreement shall be liable to termination.

2. Technical Capacity for purposes of evaluation

- 2.1 Subject to the provisions of Clause 2.2(of the RFQ), the following categories of experience would qualify as Technical Capacity and eligible experience (the "Eligible Experience") in relation to eligible projects as stipulated in Clauses 3.2.3 (of the RFQ) and 3.2.4 (of the RFQ) (the "Eligible Projects"):
 - Category 1: Project experience on Eligible Projects in Port sector that qualify under Clause 3.2.3 (of the RFQ)
 - Category 2: Project experience on Eligible Projects in core sector that qualify under Clause 3.2.3 (of the RFQ)
 - Category 3: Construction and/or operation experience on Eligible Projects in Port sector that qualify under Clause 3.2.4 (of the RFQ)
 - Category 4: Construction experience on Eligible Projects in core sector that qualify under Clause 3.2.4 (of the RFQ)

For the purpose of this RFQ:

- (i) Port sector would be deemed to include Marine structures, Onshore and Off-shore Terminals, Berths, Jetties, Quays, Cargo Handling System, CFS/ICDs, Storage Tanks/Tank Farms, Conveyors, Pipelines, Warehousing& Silos, all associated with seaport and
- (ii) core sector would be deemed to include power, telecom, highways, airports, railways, metro rail, industrial parks/estates, logistics parks, pipelines irrigation, water supply, sewerage and real estate

development.

(Please note: Real estate development shall not include residential flats unless they form part of a real estate complex or township which has been built by the Applicant)

- 2.2 Eligible Experience in respect of each category shall be measured only for Eligible Projects.
- a. For a project to qualify as an Eligible Project under Categories 1 and 2:
 - (a) It should have been undertaken as a PPP project on BOT, BOLT, BOO, BOOT or other similar basis for providing its output or services to a public sector entity or for providing nondiscriminatory access to users in pursuance of its charter, concession or contract, as the case may be. a project which constitutes a natural avoidance doubt, of monopoly such as an airport or port should normally be included in this category even if it is not based on a long-term agreement with a public entity;
 - (b) the entity claiming experience should have held, in the company owing the Eligible Project, a minimum of 26% equity during the period for which Eligible Experience is being claimed;
 - (c) the capital cost of the project should be more than Rs.51.85 crore (Rupees Fifty One Crores Eighty Five Lakhs only); and
 - (d) the entity claiming experience shall, during the past 5 (five) financial years preceding the Application Due Date, have (i) paid for development of the project (excluding the cost of land), and/ or (ii) collected and appropriated the revenues from users availing of non-discriminatory access to or use of fixed project assets, such as revenues from highways, airports, ports and railway infrastructure, but shall not include revenues from sale or provision of goods or services such as electricity, gas, petroleum products, telecommunications or fare/freight revenues and other incomes of the company owning the Project.
- For a project to qualify as an Eligible Project under Category 3, the 2.4 Applicant should have paid for execution of its construction and/or works or received payments from operation its client(s) construction and/or operation works executed, fully or partially, during the 5 (five) financial years immediately preceding the Application Due Date, and only the payments (gross) actually made or received, as the case may be, during such 5 (five) financial years. For a project to qualify as an Eligible Project under Category 4, the Applicant should have paid for execution of its construction works or received payments from its client(s) for construction works executed, fully or partially, during the 5 (five)

financial years immediately preceding the Application Due Date, and only the payments (gross) actually made or received, as the case may be, during such 5 (five) financial years. However, payments/receipts of less than Rs. 51.85 crore (Rupees Fifty One Crores Eighty Five Lakhs only) shall not be reckoned as payments/receipts for Eligible Projects. For the avoidance of doubt, construction works shall not include supply of goods or equipment except when such goods or equipment form part of a turn-key construction contract/ EPC contract for the project. Further, the cost of land shall not be included hereunder.