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TARIFF AUTHORITY FOR MAJOR PORTS

G.No. 368 **New Delhi,** **16 November 2015**

NOTIFICATION

In exercise of the powers conferred under Section 48,49 and 50 of the Major Port Trusts Act, 1963 (38 of 1963), the Tariff Authority for Major Ports hereby disposes of the proposal received from the Jawaharlal Nehru Port Trust (JNPT) for Fixation of Reference Tariff for Development of Additional Liquid Bulk Terminal (ALBT) at JNPT under PPP Mode.

(T.S. Balasubramanian)
Member (Finance)

Tariff Authority for Major Ports

Case No. TAMP/18/2015 – JNPT

The Jawaharlal Nehru Port Trust - - - Applicant

QUORUM

(i). Shri. T.S. Balasubramanian, Member (Finance)
(ii). Shri. Chandra Bhan Singh, Member (Economic)

O R D E R

(Passed on this 22nd day of September 2015)

This case relates to a proposal received from the Jawaharlal Nehru Port Trust (JNPT) for Fixation of Reference Tariff for Development of Additional Liquid Bulk Terminal (ALBT) at JNPT under PPP Mode.

2.1. This Authority had passed an Order dated 31 December 2013 on the proposal received from Jawaharlal Nehru Port Trust (JNPT) for fixation of Reference tariff for development of Additional Liquid Bulk Terminal (ALBT) at JNPT. This Order was notified in the Gazette of India on 3 February 2014 vide Gazette No.38.

2.2. Vide the said Order, Reference tariff was fixed for a Liquid Terminal comprising of two berths with an aggregate optimal capacity of 10.98 MMTPA envisaged to handle Crude Oil, Petroleum Oil and Lubricants (POL) and Other Liquid cargo.

3.1. In this backdrop, the JNPT vide its letter dated 12 March 2015 has again filed a proposal for fixation of Reference tariff for Liquid Bulk Terminal at JNPT under PPP mode on the ground that the JNPT has decided to restructure the project. The summary of the points made by the JNPT in its proposal dated 12 March 2015 is given below:

(i). Based on the proposal filed by the JNPT for fixation of Reference Tariff for Additional Liquid Bulk Terminal in October 2013 under the Reference Tariff guidelines, 2013, TAMP had passed an Order on 31 December 2013, which was notified in the Gazette of India on 3 February 2014 vide Gazette No.38.

(ii). Thereafter, the port had issued RFQs to the experienced bidders. However, taking into consideration the feedback from the bidders it was decided to restructure the project.

(iii). The revised traffic study was carried out and it was observed that instead of 6 berths, port will have to construct 2 berths only. Thus, the cost of project was reduced.

(iv). Accordingly, it was felt necessary to arrive the upfront tariff based on the revised project structure as per the guidelines, 2013.

(v). A detailed traffic study was carried out to assess the traffic potential of JNPT and it was observed that POL products and crude oil traffic contributes to the major portion of liquid cargo traffic in JNPT.

(vi). In planning of the facility, it is considered that existing BPCL Jetty will continue to handle to its design capacity i.e. 5.5 MMTPA and additional traffic will be attracted to the additional terminal. Hence, it has been decided to go ahead with only Phase-IA of the development of the project with two liquid cargo jetties.

(vii). The tariff is proposed in the following categories:

(a). Berth Hire Charges
(b). Cargo Handling Charges
(c). Storage Charges

3.2. Subsequently, at our request vide our letter dated 16 March 2015 to furnish the requisite details to enable us to proceed further in the matter, the JNPT vide its letter dated 17 March 2015 has furnished the feasibility report, list of users/ shortlisted bidders/ prospective applicants with their address and contact details and proposed reference tariff Scale of Rates along with conditions governing the application of Scale of Rates.

3.3. In accordance with the consultative procedure prescribed, a copy each of the JNPT proposal dated 12 March 2015 and 17 March 2015 was forwarded to the users/ user organizations and prospective applicants (as per the list provided by the JNPT) vide our letter dated 24 March 2015, seeking their comments by 3 April 2015. A joint hearing in this case was scheduled to be held on 8 April 2015 at the Office of this Authority. The details of the JNPT proposal dated 12 March 2015 and 17 March 2015 have been brought out in the later part of this Order.

3.4. In the meantime, the JNPT vide its letter dated 30 March 2015 has stated that due to certain internal deliberation, it has decided to revise its proposal dated 12 March 2015 and 17 March 2015 and accordingly, the JNPT requested this Authority to keep its proposal on hold, till such time a revised proposal is submitted by them again in due course of time. In view of this position, the joint hearing scheduled on 8 April 2015 was cancelled.

3.5. In the meanwhile, a list of points to be kept in view by JNPT while firming up its revised proposal was issued to JNPT vide our letter dated 1 April 2015. The JNPT vide its letter dated 13 April 2015 has responded to the points made by us. The list of points made by us and the response of JNPT thereon are tabulated below:

<table>
<tr><th>Sl. No.</th><th>Points made by us</th><th>Response of JNPT</th></tr>
<tr><td>(i).</td><td>As per Clause 2.2 of the Tariff Guidelines of 2013, the Reference Tariff will be the highest tariff fixed for that commodity in the concerned Major Port Trust under the 2008 Tariff Guidelines and in case no tariff has been fixed for that commodity at that Major Port Trust or if the highest tariff fixed for a particular commodity in the concerned major Port Trust does not represent the project proposed to be developed, then the concerned Major Port Trust can propose to TAMP any other tariff fixed under 2008 Tariff guidelines in any other major Port Trust which is representative enough for that commodity giving detailed and sufficient justification. Simultaneously, Clause 2.4 of the Tariff Guidelines of 2013 stipulate that if in the view of the Major port Trust, the tariff determined for a particular commodity under 2008 guidelines at that Major Port Trust or any other Major Port Trust is not a representative Reference Tariff for that commodity, then the Major Port is free to approach TAMP with a proposal to refix Reference Tariff under 2008 guidelines for the project giving detailed and sufficient justification.

In this connection, it may be recalled that this Authority vide its Order no.</td><td>In the tariff proposal of December 2013, it was envisaged that in Phase I–2 berths and in Phase II additional berths will be developed keeping in view of the traffic forecast. Accordingly, the storage tanks, pipelines and other facilities were planned to handle cargo of 6 berths. However, the berthing structure cost was taken only for Phase I i.e. 2 berth. Subsequently, the traffic study has been updated to factor current market & economic conditions. Based on the revised traffic forecast the total capacity of the project has been revised and accordingly project structure has been revised. This has led to lower capital cost in development of the required facilities. The key differences in the project structure as per December 13 proposal and present proposal are:
(₹ in crores)
<table>
<tr><th>Particulars</th><th>Previous Proposal (December 2013)</th><th>Present Proposal</th></tr>
<tr><td>Capital Cost</td><td>1041.99</td><td>758.40</td></tr>
<tr><td>Civil Cost (Approach Trestle, Walkways etc.)</td><td>282.66</td><td>280.28</td></tr>
<tr><td>Equipment Costs (Marine Loading Arm, Dock Lines, etc)</td><td>266.76</td><td>182.54</td></tr>
<tr><td>Berthing Structure</td><td>75.93</td><td>76.63</td></tr>
</table></td></tr>
</table>

	TAMP/50/2013-JNPT dated 31 December 2013 has fixed Reference Tariff for an additional Liquid Bulk Terminal (LBT) at JNPT. This LBT was envisaged to handle Crude, POL and Other Liquid cargo based on development of two berths. In the case in reference also, the JNPT envisages to handle Crude, POL and Other Liquid cargo at the additional Liquid Bulk Terminal (LBT) comprising of 2 berths. That being so, the need for a fresh Reference Tariff to be pondered upon.	<table><tr><td>Storage Civil Costs (Tank farm foundation including piling, internal roads etc.)</td><td>216.18</td><td>75.61</td></tr><tr><td>Storage Equipment Costs (Tank fabrication & piping, etc)</td><td>200.46</td><td>143.34</td></tr><tr><td>TOTAL</td><td>1041.99</td><td>758.40</td></tr></table> <table><tr><td>Tank Farm Capacity</td><td>1.28 million KL</td><td>0.62 million KL</td></tr><tr><td>(0.62 million KL (capacity of phase IA as per DPR) + 0.66 million KL (capacity of phase IB as per DPR))</td><td></td><td></td></tr><tr><td>Tank Farm Area Size</td><td>73 ha</td><td>36.5 ha</td></tr></table> In view of above, since there is a significant change in the project cost on account of equipment and storage (civil & equipment) (reduction by approx. ₹300 crores) and investment in tank farm area, it is suggested that a fresh tariff is estimated.
(ii).	As per the Traffic forecast furnished by the JNPT, the traffic of Liquid cargo comprising of Crude Oil, POL and Other Liquids is expected to reach 6.79 MMTPA during the year 2034-35. That being so, the need for creating capacity 20 years in advance at almost double the traffic projection (i.e. 11.25 MMTPA based on the optimal capacity of the facility consisting of 2 no. of berths) to be deliberated, as investment in the infrastructure facilities, both civil and equipment, to create almost 100% additional capacity to be an idle investment looking to the traffic potential indicated at 6.79 MMTPA.	The traffic capacity of 11.25 MMTPA is calculated based on 2008 guideline issued by TAMP considering 70% berth occupancy and 365 days working time and handling rate mentioned by TAMP for the purpose of estimate the Upfront Tariff. However, this calculation does not include the time required for peripheral activities such as berthing and de-berthing of ships, obtaining customs clearance, surveys, positioning and hook up of equipment, post operation of survey (where necessary), waiting for pilots and clearance for navigation. For the above reasons the effective handling rate of the berth is significantly reduced and also port operating days of 330 days (days to account for down time) has been considered which reduces the overall handling capacity of the berth to 7.5 – 8 MMTPA.
(iii).	Further, based on the cargo share of Crude Oil, POL and Others at 3.65%, 63.74% and 32.61% respectively (as furnished by the JNPT) and considering the handling rate in respect of the Crude Oil, POL and Others at 5000 tonnes/ hour, 1000 tonnes/ hour and 300 tonnes/ hour, as prescribed in the upfront guidelines of 2008 for liquid cargo terminal, the optimal capacity for a berth for 24 hours and 365 days at 70% utilization works out to 5.63 million metric tonnes per annum. This shows that a single berth configuration may almost be sufficient to handle the traffic of about 6.79 MMTPA envisaged during the Phase – I. Therefore, the need for the two berth configuration to be examined. If 2 berth configuration is absolutely essential even at the start of the project, the capital and the operating costs for the additional berth may require	Since the initial traffic is about 4.7 MMTPA and the effective handling capacity of single berth is 3.75 – 4 MMTPA, the requirement of 2 berths at the beginning of the project is essential.

	justification.	
(iv).	The linkage between pipeline dimension and handling rates of each type of liquid cargo considered in the optimal capacity calculation.	Handling rates considered in optimal capacity calculation is as per TAMP guidelines, 2008. This fact has been confirmed by the technical consultant.
(v).	Whether the capacity of the storage tank farm is in tandem with the capacity of the LBT.	Yes. The detailed explanation is provided in Section 10.4.3 of DPR. However, the number of tanks are reduced to 50% of Phase-I considering the restructuring the project by developing only 2 Berths.
(vi).	The DPR furnished by JNPT for the proposal under reference was seen to be as of August 2013. Given that the unit rates considered in the capital cost estimation in DPR would have undergone a significant change during the intervening period, the capital cost, may require updation so as to reflect the unit rates prevailing as of the year in which the revised proposal would be filed.	Though the estimate is prepared by the consultants in August 2013, the same is mostly in line with the prevailing market rates of 2015.
(vii).	The total tonnage in the berth hire calculation should also reflect the optimal capacity figure.	Agreed. Revised Tariff Proposal in view of this is furnished.
(viii).	Considering a total of 365 days at 70% utilization the no. of days in a year works out to 256 days. In the berth hire calculation, the no. of berth days is to reflect this position.	Agreed. Revised Tariff Proposal in view of this is furnished. However since there are 2 berths the total berth days are 512.
(ix).	Considering a base of 256 days, the no. of berth hours works out to 6132 hours i.e. 256 days x 24 hours. In the berth hire calculation, the no. of berth hours is to reflect this position.	Agreed. Revised Tariff Proposal in view of this is furnished. However, since there are two berths the total berth hours is worked out to 12288 i.e. 512 days * 24 hours.

4.1 The JNPT vide its letter dated 1 April 2015 submitted its revised proposal and vide its subsequent letter dated 2 April 2015 submitted its revised Scale of Rates along with the Performance Standards. It is relevant to mention here that the revision in the revised proposal furnished by the JNPT was only to the extent of some minor changes in the capital cost estimation and some minor change in the operating cost estimates. However, since the users/ prospective bidders had been intimated about revision of proposal by JNPT, a copy each of the revised proposal of JNPT dated 1 April 2015 and revised SOR dated 2 April 2015 was forwarded to the users/ user organisations and prospective applicants (who were taken on consultation in the earlier proposal) vide our letter dated 8 April 2015 seeking their comments. The details of the JNPT proposal dated 1 and 2 April 2015 have been brought in the later part of the Agenda.

4.2 In this context, M/s. Adani Ports and Special Economic Zone Limited (APSEZL) vide its letter dated 15 April 2015 and M/s. IMC Limited vide its letter dated 15 April 2015 have furnished its comments. The comments received from these prospective bidders were forwarded to JNPT as feedback information. The JNPT vide its letter dated 20 April 2015 has responded to the comments of APSEZL. Inspite of reminders dated 28 April 2015 and 20 May 2015, the JNPT has not responded and furnished information/ clarification as sought by IMC Ltd.

4.3. Based on a preliminary scrutiny of the revised proposal dated 1 and 2 April 2015 as well as scrutiny of the submissions made by the JNPT vide its letter dated 13 April 2015, the JNPT was requested to furnish additional information/ clarifications on various points vide our letter dated 15 April 2015**.** The JNPT vide its letter dated 20 April 2015 has responded. A summary of the queries raised by us and response of the JNPT thereon are tabulated below:

Sl. No.	Information/ clarification sought by us	Response of JNPT
A.	**General:**	
(i).	With regard to the response furnished by the JNPT at point no. (i) of its letter dated 13 April 2015, the JNPT has indicated the key differences in the project structure as per December 2013 proposal as well as the present proposal. In the said table, the Tank farm capacity in the December 2013 proposal is indicated as 1.28 Million KL. In this regard, JNPT to note that in the Order of December 2013, the Capacity of Tank Farm has been considered at 0.66 Million KL and not 1.28 Million KL.	There was some ambiguity in calculation of capacity of tank farms in the December 2013 proposal. Capacity of only Phase IB (0.66 million MT) was included for. There was an omission of capacity of phase IA (0.62 MT) in the proposal. Detailed calculation of tank farm capacity is provided in DPR at Table 10-15 for general guidelines only.
(ii).	The JNPT at point no. (ii) of its letter dated 13 April 2015 has stated that considering the time required for peripheral activities such as berthing and de-berthing of ships, obtaining customs clearance, surveys, positioning and hook up of equipment, post operation of survey (wherever necessary), waiting for pilots and clearance for navigation, the effective handling rate of the berth is significantly reduced, whereby the overall handling capacity of the berth is reduced to 7.5 - 8 MMTPA. Norms for calculation of optimal capacity of Liquid Bulk Terminal stipulated in 2008 Guidelines do not permit to take into the factor listed by JNPT for calculation of optimum capacity. Therefore, the JNPT to fully justify the need to have a 2 berth configuration even at the start of the project.	Optimal Berth Capacity (11.25 MMTPA) for assessment of tariff is as per TAMP 2008 guidelines itself. However, when planning for project development. It is estimated that to handle (7.5 MMTPA/ the projected cargo) a minimum 2 berth configuration is required (as per DPR).
(iii).	The JNPT to furnish the details of the total allocation of land for the project and the details of the land proposed to be allocated for the ancillary facilities.	The total land proposed to be allocated for storage facilities (tank farm) and ancillary facilities is 36.5 Ha.
(iv).	The JNPT to also confirm whether the proposed allotment of land for the LBT is in line with the land use plan of the port.	Yes. The land is earmarked for port operational activities as per approved CZMP of the port in 2005.
(v).	The basis for proposing to allot 12.8 hectares of water area for the 2 berths and 36.5 hectares of land for setting up of storage facilities to be furnished.	Water Area for jetties: 400m*50m =20000sq.m Water Area for Approach Trestle 7200m*15m=108000sq.m. Total Water Area: 128000 sq.m., i.e. 12.8 hectares.
(vi).	As already communicated to JNPT vide our letter of even number dated 08 April 2015, the JNPT to furnish the copy of the approval of the Board of Trustees with regard to the revised proposal.	The said proposal is being placed before the Board in its ensuing meeting. After receipt of approval of the Board, the same shall be forwarded to TAMP.
(vii).	A few arithmetical errors have been observed in the revised proposal furnished by the JNPT. The JNPT to rectify the arithmetical errors, while reviewing its proposal.	Agreed
(viii).	The JNPT to indicate, whether after fixation of Reference tariff for the Additional Liquid Bulk Terminal (ALBT) vide the tariff Order of December 2013, the matter was taken up further with the Competent Authority in the Government of India. If so, the observations, if	Yes, the proposal was approved by PPPAC. However, feedback was received from cabinet committee and prospective bidders regarding the traffic estimation on the basis of which the traffic was reviewed and project structure

<table>
<tr><td></td><td>any, made by the Competent Authority and action, if any, taken by the JNPT in this regard to be intimated. It may also be intimated whether the current JNPT proposal under reference, takes into account all such observations made by the Competent Authority then, if any.</td><td>was modified. There was no objection on tariff order.</td></tr>
<tr><td>B.</td><td><u>Optimal Capacity:</u></td><td></td></tr>
<tr><td>(i).</td><td>The JNPT has computed the optimal capacity of the liquid terminal assuming a percentage share of 3.65% for “Crude oil”, 63.74% for POL and 32.61% for “Other liquids”. In this regard, the actual percentage share of each of the cargo viz. Crude Oil, POL and other liquids at JNPT during the last three years to be furnished. The basis for considering the share of crude oil, POL and other Liquids at 3.65%, 63.74% and 32.61% respectively, also to be furnished.</td><td>Liquid Traffic handled in last three years at JNPT for Crude Oil, POL and Other Liquids is given in MT as under:

<table><tr><th>Commodity</th><th>2012-13</th><th>2013-14</th><th>2014-15</th></tr><tr><td>Crude Oil</td><td>2,121,237 (36%)</td><td>1,734,848 (28%)</td><td>1,568,333 (25%)</td></tr><tr><td>POL</td><td>2,004,259 (34%)</td><td>2,684,079 (43%)</td><td>2,465,817 (40%)</td></tr><tr><td>Other Liquid (including edible oil)</td><td>1,753,858 (30%)</td><td>1,862,731 (29%)</td><td>2,155,495 (35%)</td></tr><tr><td>Total</td><td>5879354</td><td>6281658</td><td>6189645</td></tr></table>
The basis for share of crude oil, POL and other liquids is based on no. of berth days used instead of percentage share of cargo volume required to handle the respective cargo in 2034-35.</td></tr>
<tr><td>(ii).</td><td>The JNPT in its proposal has indicated the dimension of the Crude Oil pipe Line at 36’ ø, POP pipe Line at 24’ ø , Edible Oil pipe Line at 20’ ø and 2 no of Chemical pipe Lines at 16’ ø and 8’ ø. In this regard, the reply furnished by the JNPT at point no. (iv) of its letter dated 13 April 2015 does not establish linkage between pipeline dimension and handling rates of each type of liquid cargo considered in the optimal capacity calculation. The JNPT to furnish the said linkage.</td><td>The DPR prepared by JNPT is submitted for general guidelines and based on the conceptual planning. However, the dimension will be finalized by detailed engineering stage during RFP stage.</td></tr>
<tr><td>(iii).</td><td>The JNPT in its Detailed Project Report (DPR) under clause 7.7.1 of Storage area requirement has stated that the Storage Tank developed will be for transit purpose only. Further, in the DPR it has been stated that the storage tanks will be suitable to hold 7 to 10 days of traffic. In this regard, the JNPT to furnish the reason to consider holiday traffic pertaining to 7-10 days in the storage tanks.</td><td>The holding time in the storage tank is conceptual. However, the actual holding time will have to be worked out during detailed engineering stage by the Concessionaire. The DPR is for general guidelines purpose. Potential Investors are free to prepare their own DPR on their assumption.</td></tr>
<tr><td>(iv).</td><td>With reference to pipeline, the port to certify that the dimensions considered by it in the proposal is optimum and that no further improvement, which may have an impact on handling rate, would be possible due to technical reasons. The port also to clarify whether the Concession Agreement would categorically specify the dimensions of pipeline, which cannot be altered by the BOT operator, after award of the contract.</td><td>The dimension proposed in DPR are based on the conceptual planning for general guidelines. Bidders are free to prepare their own DPR. However, the dimensions will be finalized by detailed engineering stage during RFP stage.</td></tr>
<tr><td>(v).</td><td>The reason for considering the ratio of foreign cargo at 64% and that of Costal cargo at 36%, for all the three types of cargo envisaged to be</td><td>This is based on foreign to coastal cargo ratio of last 2-3 years.</td></tr>
</table>

	handled at LBT to be explained.	
(vi).	The types of liquid cargo considered under the category of 'Other Liquid Cargo' in the capacity calculation to be listed out.	Edible Oil, Molasses and Chemical.
C.	**Capital cost**:	
(i).	The DPR furnished by the JNPT under cover of its Letter dated 17 March 2015 at Annexure 12.1, indicates the total project cost at ₹1127.52 crores. The JNPT in its proposal is seen to have not considered some items of capital costs as well as not seen to have considered the amount as indicated in the DPR. The JNPT is thus, seen to have considered capital cost at ₹758.42 crores only. The reason for considering a lower capital cost estimation in the calculations to be explained by JNPT.	Cost of Capital dredging in manoeuvring is not included in the project cost, as this cost will not be borne by the Concessionaire. Also, the cost of civil works (such as berth, Trestle), mechanical works and ground improvement works for tank farm is halved resulting in lower total project cost.
(ii).	The JNPT to furnish the basis for the quantum of each item of civil cost and document substantiating the base rate considered by it to estimate the civil capital costs under each of the activity viz., Handling activity, Berthing activity and Storage activity.	As per the DPR prepared by M/s L&T Ramboll.
(iii).	The JNPT also to furnish workings to arrive at the cost of each of the other equipment, as considered by it in its proposal. The documentary evidence in support of the cost of the each of the said equipment also to be furnished.	As per the DPR prepared by M/s L&T Ramboll.
(iv).	With regard to capital dredging, the unit rate of dredging may be substantiated with documentary proof.	Only berth pocket dredging is considered and rate adopted is based on the estimated rate of capital dredging recently carried out by JNPT.
(v).	As stated earlier, the Reference tariff fixed vide Order of December 2013 was for a 2 berth configuration envisaged to handle Crude Oil, POL and Other Liquid Cargo. Now, also the project envisages a 2 berth configuration and this project also envisages handling of crude oil, POL and Other Liquid Cargo. However, even in such a scenario, the capital cost components considered now by JNPT in its proposal is seen to be different from the capital cost components considered in the December 2013 order. In this regards, the JNPT to clarify the following:	
	(a). Even when the share of crude oil has reduced from 9.79% (December 2013 order) to 3.65% (current proposal), the JNPT in its current proposal has continued to consider 2 Loading Arms for crude oil.	The percentage share is now based on number of berth days used instead of percentage of cargo volume. This is taken because each cargo has a different handling rate and only the number of berth days utilized by individual cargo will give a realistic picture of the percentage share of berth's capacity.
	(b). When the share of other liquid cargo has increased from 15.01% (December 2013 order) to 32% (current proposal), the capital cost towards pipelines relating to other liquid cargo considered by JNPT, is seen to have reduced from ₹80.93 crores to ₹58.05 crores.	The percentage share is now based on number of berth days instead of total volume. This is taken because each cargo has a different handling rate and only the number of berth days utilized by individual cargo will give a realistic picture of the percentage share of berth's

		capacity.
	(c). The capital cost pertaining to storage activity is seen to have been drastically reduced from ₹416.64 crores (December 2013 order) to ₹218.96 crores in the current proposal.	Yes. As Phase IB of the project is no longer envisaged, the requirement of expenditure of developing the tank farm area is reduced.
D.	**Operating cost:**	
(i).	The JNPT to furnish documentary evidence in support of cost of power at ₹14.50 per unit.	The rates are as per the latest tariff/bill of MSEDCL.
(ii).	The JNPT is seen to have considered the base rate of ₹19.42 per Sq.m for the calculation of the license fee for water area and the land area under the cargo handling activity and the storage activity. The JNPT to explain the basis for considering ₹19.42 per sq.m for water area license fee. The JNPT also to indicate reference to the existing Scale of Rates of JNPT, based on which it has considered ₹19.42 per sq.m. as license fee in its calculation.	The rates applicable for 4th Container Terminal for 2015-16 have been adopted.
E.	**Revenue Requirement and proposed tariff**:	
(i).	The JNPT to furnish the basis of considering the storage capacity of the tank farm at 620590 KL with workings.	Detailed calculation of tank farm capacity is provided in DPR at table 10-15.
(ii).	The JNPT has estimated the storage charge based on the capacity of the tank farm at 620590 KL for 365 days at 70% utilization (256 days). In this regard, to confirm that the liquid cargo would be stored for all the 256 days in a year, so that the BOT operator will achieve the revenue requirement from storage of cargo.	The tank farm shall be available for usage throughout the year, however there is no guarantee that all the tanks shall be completely full for all the 365 days. Therefore, 70% utilization is considered based on general practice.
(iii).	In the calculation of berth hire, JNPT to furnish the basis for considering the average size of the vessels carrying Crude Oil, POL and Other Liquids at 72000 GRT, 48000 GRT and 36000 GRT respectively.	The values were taken from Dec 13 Proposal.
(iv).	The JNPT also to furnish the average GRT of the vessels carrying the above mentioned liquid cargo during the last three years for each of the said cargo.	Average GRT for liquid cargo for last three years is as under: 2011-12 : for 461 vessels, GRT is 8,858,868 2012-13 : for 468 vessels, GRT is 9,919,872 2013-14 : for 478 vessels, GRT is 10,537,727
(v).	The JNPT to specify the basis for considering 64% as foreign cargo and 36% as coastal cargo.	This is based on foreign to coastal cargo ratio of last 2-3 years.
(vi).	JNPT to furnish the basis for considering the average parcel size of vessels carrying crude oil, POL and other liquids at 55000 tonnes, 13250 tonnes and 6652 tonnes respectively.	As per the DPR prepared by M/s L&T Ramboll.
(vii).	The JNPT also to furnish the average parcel size of the vessel carrying the above mentioned liquid cargo during last three years for each of the said cargo.	Average Parcel Size of Liquid Cargo vessels for last three years is as under: 2011-12 : 14,879 MT 2012-13 : 12,563 MT 2013-14 : 13,142 MT
(viii).	The JNPT is seen to have considered an unberthing time at 6 hours per vessel. In this regard, JNPT to clarify/ furnish the following:	This is total time for peripheral activities, including berthing and de-berthing of ships, obtaining customs clearance, surveys, positioning and hook up of
	(a). The basis for considering unberthing	

	time of 6 hours.	equipment, post operation of survey (wherever necessary), waiting for pilots and clearance for navigation.
	(b). The breakup for the unberthing time of 6 hours.	
	(c). The average unberthing time in respect of the liquid cargo vessels during last three years.	
F.	**Scale of Rates:**	
(i).	The JNPT has prescribed a general note in the tariff schedule with regard to indexation of the tariff caps to inflation to the effect that the tariff caps would be indexed to the extent of 60% of the variation in WPI occurring between 1 January 2013 and 1 January of the relevant year. Since the JNPT has stated that the capital cost and operating cost estimates are mostly in line with the prevailing market rates of the year 2015 though the estimates was prepared in August 2013, the general note in the tariff scheduled may be suitably modified to the effect that the tariff caps would be indexed to the extent of 60% of the variations in WPI occurring between 1 January 2015 and 1 January of the relevant year.	Agreed.
(ii).	As per policy direction of the Government, concessional tariff are to be prescribed for coastal cargo (other than thermal coal and POL including crude oil, iron ore and iron ore pellets) not exceeding 60% of the normal cargo/ vessel related charges. In such a scenario, prescription of concessional coastal rate for handling crude oil and POL in the proposed Reference Tariff Schedule to be justified.	Agreed.
(iii).	The reason for not proposing any free days for storage of liquid cargo to be explained.	The Concessionaire has to decide on this issue.
G.	**Performance Standards:**	
(i).	The indicative norms in the Performance Standard Schedule distinguish the POL products into white and black. However, no such differentiation has been made in the capacity calculation. The JNPT to explain the position.	The performance standards is as per Model Concession Agreement, while handling rates in TAMP proposal are as per TAMP guidelines
(ii).	In case of black POL products, an indicative norm of 700 tonnes per hour is prescribed, which is seen to be on a lower side when compared to the per day output for the POL considered at 1000 tonnes per hour in the optimal capacity calculation. The JNPT, therefore, to review the performance standard in this regard.	
(iii).	Further, in the Performance Standard Schedule, indicative norms has been specifically prescribed for LPG/ LNG at 400 tonnes per hour. However, the said cargo share has not been considered while determining the optimal capacity. The JNPT to review this position.	
(iv).	The indicative norm of 250 tonnes per hour for Other Liquids in the Performance Standard Schedule, is seen to be on a lower side when compared to the per day output for the Other Liquids considered at 300 tonnes per hour in the	

	optimal capacity calculation. The JNPT, therefore, to review the performance Standard in this regard.	
(v).	In the schedule of performance standards, the JNPT has prescribed conditionalities governing performance evaluation and calculation of liquidated damages. Clause 2.2 of the revised guidelines for determination of tariff for projects at major port trusts, 2013, requires a port trust to propose 'Performance standards'. In this regard, the JNPT to examine the relevance of prescribing the above said conditionalities in the schedule of performance standards. In this connection, it may be recalled that while fixing the Reference tariff for the LBT in December 2013, such a prescription proposed by JNPT in its proposed performance standards then was not approved in December 2013 Order.	

4.4. A joint hearing on the revised proposal of JNPT dated 1 and 2 April 2015 was held on 20 April 2015 at the Office of this Authority in Mumbai. The Consultant of JNPT i.e., RITES had made a PowerPoint presentation of the proposal on behalf of the JNPT. At the joint hearing, the JNPT and the users / user organisations / prospective applicants have made their submissions.

4.5. As agreed at the joint hearing, the users /user organisations/ prospective bidders were requested to furnish their submission made in the joint hearing in writing directly to JNPT and with a copy endorsed to this Authority. The JNPT was requested vide our letter dated 22 April 2015 to respond to the submissions to be made by the users and modify its proposal, if required.

4.6. In this connection, after a reminder dated 28 April 2015, M/s Adani Ports and Special Economic Zone Limited (APSEZL) vide its email dated on 29 April 2015**,** Mumbai and Nhava-Sheva Ship Agents' Association (MANSA) vide its e-mail dated 29 April 2015 and M/s IOT Infrastructure and Energy services Ltd vide its email dated 05 May 2015 have furnished their comments. The JNPT has not furnished its comments on the submissions made by the users/ prospective bidders.

5.1. After reminders dated 28 April 2015 and 20 May 2015**,** the JNPT vide its letter dated 18 June 2015 has furnished its revised proposal. Thereafter, the JNPT vide its letter dated 22 June 2015 has furnished the Scale of Rates (SOR) along with the Performance Standards. Since the JNPT had made substantial changes in its revised proposal i.e. reducing the optimal capacity, delinking of storage activity etc.as compared to the April 2015 proposal of JNPT, the proposal dated 18 June 2015 and 22 June 2015 was also decided to be taken up consultation and thus, a copy of the proposal was forwarded to concerned users/ prospective bidders vide our letter 24 June 2015, seeking their comments. The details of JNPT proposal dated 18 June 2015 and 22 June 2015 have been brought out in the later part of this Order.

5.2. M/s IOT Infrastructure and Energy Services Ltd. vide its email dated 30 June 2015 and M/s IMC Ltd. vide its email dated 8 July 2015, have submitted their comments on the JNPT proposal dated 18 and 22 June 2015. The JNPT vide its letter dated 14 July 2015 has responded that its proposal dated 18 June and 22 June 2015 has been superseded by the new revised proposal dated 3 July 2015 filed by the port. Thereafter, the JNPT vide its letter dated 17 July 2015 has responded to the submissions made by the IMC Ltd.

5.3. With regard to the comments furnished by IOTL vide its email dated 30 June 2015, the JNPT was reminded vide our letter dated 10 July 2015 to furnish its comments. Thereafter, JNPT was again reminded vide our letter dated 22 July 2015 in this regard. The JNPT has, however, not furnished its comments on the submissions made by IOTL till the finalisation of the case.

5.4. On a preliminary scrutiny of the revised proposal filed by JNPT under cover of its letter dated 18 and 22 June 2015, the JNPT was requested vide our letter dated 3 July 2015 to furnish

additional information/ clarifications on some points . The JNPT vide its letter dated 17 July 2015 has responded. The information sought by us and the response of JNPT thereon is tabulated below:

Sr. No.	Information/ Clarification sought by us	Response of JNPT
	General:	
(i)	As requested vide our letter of even number dated 24 June 2015, the JNPT to furnish the copy of the approval of the Board of Trustees with regard to the revised proposal.	The matter in regard to the approval for upfront tariff by the JNPT Board of Trustees will be discussed in the ensuing meeting to be held on 31st July 2015.
(ii)	A copy of the Feasibility Report in support of the revised proposal of JNPT to be furnished.	A copy of Detailed Project Report prepared by L&T Ramboll, was already forwarded to TAMP earlier. However, a brief note on revised proposal along with layout and revised traffic projections is enclosed.
(iii)	The basis for proposing to allot 6.7 hectares of water area for the 2 berths to be furnished.	The area has been worked out based on the revised layout of berths and approach trestle.
(iv)	In the proposal submitted by JNPT in April 2015, the JNPT had separately captured the storage capacity, capital costs and operating costs pertaining to the storage activity and had, thus, prescribed a separate levy of storage charges. However, in the revised proposal now filed by the JNPT under cover of its letters dated 18 June 2015 and 22 June 2015, it is seen that the JNPT has excluded levy of separate storage charges from the purview of the proposal under reference, when compared with the proposal of April 2015. In this connection, the JNPT to clarify the following:	
	(a). As per Section 48(1)(d) of the Major Port Trusts Act, 1963, this Authority is mandated to fix storage charges, among other charges, for storage services rendered by a Major Port Trust or a person authorized by the Port Trust. Further, the norms prescribed for a Liquid Bulk terminal in the Upfront Tariff Guidelines of 2008, which has been taken as base by JNPT in formulation of its proposal, stipulates that total annual Revenue Requirement is to be apportioned between Handling Charges (95%) and Miscellaneous charges (5%). With regard to handling charges, the guidelines also stipulate that the handling charges would include storage charges for storing in tanks, apart from other charges like cargo loading or unloading charges (as the case may be), wharfage and transportation through pipelines. The JNPT has not prescribed a separate levy for storage charges in its revised proposal of June 2015. As per the Note below Section 3 of the draft Scale of rates, the handling charges do not include	In the present revised proposal, the construction of storage facilities are delinked from the earlier proposal in accordance with the tariff guidelines for handling liquid cargo. Further, the cost of laying of pipelines is not considered in the proposal, since the same is required to be borne by the Tank Farm Operator. The 50ha of land for creation of the storage facilities is earmarked in this project, for which JNPT will levy the lease rentals. The provision of 50ha of land is provided based on the apprehensions of the prospective bidders in the TAMP meeting held on 20th April, 2015. O&M Cost of land should not be included in the handling charges as all the cargo which will be handled at ALBT will not be stored and therefore the cost towards storage (i.e. lease and electricity) should not be included in working out of tariff. The proposal has been modified accordingly.

	cargo storage charges. The JNPT has also not taken into account the capital costs pertaining to the storage facilities. If the levy of storage charges is envisaged to be excluded from the purview of the proposal under reference, the JNPT to clarify/ furnish the following: (i). The tariff arrangement envisaged by it for storage of liquid cargo handled at the Additional Liquid Bulk Terminal (ALBT) and the rate envisaged to be levied for storage of liquid cargo by the successful bidders. (ii). The reason to allot 50 hectares of land to the prospective BOT operator towards storage facilities. (iii). The reason to capture the power cost for illumination as well as the license fee pertaining to the 50 hectares of land in the proposal under reference, envisaged to be used for storage facilities, when the tariff for storage has not been proposed by JNPT. (iv). The power cost for illumination of 50 hectares of land and license fee for the said 50 hectares of land have been built into the costing; and, therefore, the successful operator would be realizing the above said cost from the users of the facility as a part of tariff relating to handling charges. That being so, if the JNPT allows the operator to collect the storage charges separately (which is, however, not included in the 'revised' proposal), it will be a double recovery by the operator from the concerned users. If the storage fee is not in the purview of the proposal, the power cost for illumination and license fee for the 50 hectares of land have to be excluded.	
	(B) <u>Optimal Capacity:</u>	
	(i). The reason to exclude handling of Crude Oil from the ambit of the project under reference to be explained.	The handling of crude oil is not excluded from the revised proposal.
	(ii). The basis for considering the share of POL at 79.19% and that of "Other liquids" at 20.81% to be furnished.	The basis for the share of POL and other liquids is based on the traffic projections, taking into consideration the market demand
	(iii). In connection to the April 2015 proposal, the JNPT had stated that the liquid cargo considered under the category of 'Other Liquid Cargo' was Edible Oil, Molasses and Chemical. Given that the share of 'Other Liquids' have now reduced to 20.81% from the earlier level of 32.61%, the JNPT to list down the types of liquid cargo considered under the category of 'Other Liquid Cargo'.	Other liquid are considered as liquid chemicals, molasses and edible oil.
	(C). <u>Capital cost</u>: (i). The JNPT to furnish the basis for the quantum of each item of civil cost and	

	document substantiating the base rate considered by it to estimate the civil capital costs under each of the activity viz., Handling activity and Berthing activity. (ii). The JNPT to also furnish workings to arrive at the cost of each of the equipment, as considered by it in its proposal. The documentary evidence in support of the cost of the each of the said equipment may also be furnished. (iii). In the Capital cost pertaining to the Cargo handling activity, the JNPT is not seen to have captured the cost of pipelines. The reason for excluding the cost of pipelines to be furnished. If the cost of pipelines is to be included, the cost estimates to be revised. The capital cost of the pipeline so considered to be substantiated with a documentary proof. (iv). The reason for exclusion of capital cost of certain evacuation facilities like Water, Air, Nitrogen Bunkering Lines, Tank Automation and Control & Monitoring System to be furnished. (v). The reason for excluding the capital cost relating to quick release hooks and fenders to be brought out. (vi). With regard to dredging cost, please clarify/ furnish the following: (a). In the proposal of April 2015, the cost of dredging has been estimated by the port at ₹ 3.51 crores only, whereas, in the revised proposal of June 2015, the dredging cost is estimated at ₹ 220.11 crores. The reason for a substantial increase in dredging cost to be justified. (b). Furnish documentary proof in support of the unit rate of dredging.	The revised estimated cost has been worked out as per the current market rates. The cost of laying of pipeline is not included in the estimated cost. Also the construction cost of storage facilities is delinked in the present proposal. Hence, capital cost of evacuation facilities are not considered. The capital cost of fenders and quick release hooks has already been considered in the rate considered for the construction of liquid berths The dredging of berth pocket is only considered in the present proposal since the dredging of the maneuvering area is falling under the scope of development of the Fourth Container Terminal. The unit rate of dredging is considered as Rs.225/Cum based on the approved rate at JNPT with escalation, which also includes charges towards mobilization and demobilization of requisite dredgers.
	D. <u>Operating cost</u>: (i). Inspite of a specific request made to JNPT earlier, the JNPT has not furnished documentary evidence in support of the rate of ₹ 14.50 per unit towards power cost and has stated that the unit cost of ₹ 14.50 is per the latest tariff bill of MSEDCL. The JNPT to furnish documentary evidence in support of cost of power at ₹ 14.50 per unit. (ii). The JNPT is seen to have considered the base rate of ₹ 19.42 per Sq.m for the calculation of the license fee for water area and the land area under the cargo handling activity and the storage activity. The	The rates are arrived as per JNPT SOR plus 20% surcharge.

	JNPT to explain the basis for considering ₹ 19.42 per sq.m for water area license fee. The JNPT to also indicate reference to the existing Scale of Rates of JNPT, based on which it has considered ₹ 19.42 per sq.m. as license fee in its calculation.	
	E. <u>Revenue Requirement and proposed tariff</u>: (i). Inspite of a specific request vide our letter of even number dated 14 April 2015, the JNPT is not seen to have furnished the breakup for the unberthing time of 6 hours and the average unberthing time in respect of the liquid cargo vessels during last three years. The JNPT to furnish the requisite information.	The unberthing time of 6 hours and average unberthing time in respect of the liquid cargo vessels are as per the normal practice in JNPT
	<u>(F). Scale of Rates</u> (i). The JNPT has prescribed a general note in the tariff schedule with regard to indexation of the tariff caps to inflation to the effect that the tariff caps would be indexed to the extent of 60% of the variation in WPI occurring between 1 January 2013 and 1 January of the relevant year. Since the proposal of JNPT is to fix the Reference tariff in the year 2015 presumably taking into account the capital cost and operating cost estimates mostly in line with the prevailing market rates of the year 2015, the general note in the tariff schedule to be suitably modified to the effect that the tariff caps would be indexed to the extent of 60% of the variation in WPI occurring between 1 January 2015 and 1 January of the relevant year.	Suggestion made by TAMP has been noted for compliance
	(ii). As per policy direction of the Government, POL is not eligible for concessional tariff. Therefore, prescription of concessional coastal rate for handling POL in the proposed Reference Tariff Schedule to be justified.	As per TAMP Order No. TAMP/4/2004-Genl dated 07 January 2015 referring to communication by Ministry of Shipping, Road Transport and Highways No. PR-14019/29/2001-PG dated 01 January 2005, "It has been decided that the cargo/container related charges for all coastal cargo/containers, other than thermal coal and POL including crude oil, should not exceed 60% of the normal cargo/container related charges." However, in the past proposal this issue was not raised. We agree to not propose any concessional tariff for coastal cargo in respect of POL and Crude Oil.
	G. <u>Performance Standards</u> (i). The indicative norms in the Performance Standard Schedule distinguish the POL products into white and black. However, no such differentiation has been made in the capacity calculation. The JNPT to explain the position. (ii). In case of black POL products, an indicative norm of 700 tonnes per hour is prescribed, which is seen to be on a lower	Performance standard specified are based on the performance standards given in MCA. The handling rates used in the Optimal Capacity Calculation of the Tariff Proposal based on TAMP guidelines are on equal to or higher than the performance standards proposed and are only a minimum handling rate proposed for each cargo.

	side when compared to the per day output for the POL considered at 1000 tonnes per hour in the optimal capacity calculation. The JNPT to, therefore, review the performance standard in this regard. (iii). The indicative norm of 250 tonnes per hour for Other Liquids in the Performance Standard Schedule, is seen to be on a lower side when compared to the per day output for the Other Liquids considered at 300 tonnes per hour in the optimal capacity calculation. The JNPT to, therefore, review the performance Standard in this regard. (iv). In the schedule of performance standards, the JNPT has prescribed conditionalities governing performance evaluation and calculation of liquidated damages. Clause 2.2 of the revised guidelines for determination of tariff for projects at major port trusts, 2013, requires a port trust to propose 'Performance standards'. In this regard, the JNPT to examine the relevance of prescribing the above said conditionalities in the schedule of performance standards. In this connection, it may be recalled that while fixing the Reference tariff for the LBT in December 2013, such a prescription proposed by JNPT in its proposed performance standards then was not approved in December 2013 Order.	

6.1 In the meanwhile, the JNPT again revised its proposal and filed it vide its letter dated 3 July 2015**.** The JNPT vide its e-mail dated 4 July 2015 has furnished the draft Scale of Rates (SOR) along with the Performance Standards. The details of the JNPT proposal dated 3 July and 4 July 2015 have been brought out in the later part of this Order.

6.2 The JNPT in its revised proposal dated 3 July 2015 has stated that based on the apprehension of the prospective bidders raised during meeting at TAMP office on 20 April 2015, the following aspects have been taken into account in the revised proposal:

(i). The length of the trestle is reduced to 6.3 Km from earlier 7.2 Km. Also the width of trestle is reduced to 12 Mtrs. From earlier 15 Mtrs.

(ii). The liquid storage area earmarked for these facilities is increased to 50 ha. from earlier 36.5 ha.

(iii). The construction of storage facilities are delinked from the earlier proposal in accordance with the tariff guidelines for handling liquid cargo.

(iv). The estimate has been updated to current year rates.

7.1 In the revised proposal submitted by JNPT in July 2015, there was change in the cargo share and thus in the optimal capacity of the ALBT as compared to June 2015 of proposal of JNPT. Further, even though the total project cost in the July 2015 proposal was comparable with the June 2015 proposal, there was a change in the internal capital cost elements. In view of the above position, it was decided to take up the revised proposal of July 2015 on consultation with the relevant

stakeholders. We have vide our letter dated 10 July 2015 circulated the revised proposal dated 3 July 2015 and 4 July 2015 to the users/ user organisations and bidders to furnish their comments.

7.2. The IMC Limited has furnished its comments vide its email dated 20 July 2015 on the 3 and 4 July 2015 proposal of JNPT. We have forwarded the comments of the IMC Limited (IMCL) to the JNPT as feedback information. The JNPT has furnished its comments on the submissions made by IMCL vide its letter dated 29 July 2015.

8. Since the JNPT had made substantial changes in its proposal of July 2015 vis-à-vis the April 2015 proposal, another joint hearing was held in the case in reference on 20 July 2015 at the office of this Authority. At the joint hearing, the Consultant of JNPT i.e., RITES had made a PowerPoint presentation of the proposal on behalf of the JNPT. The JNPT and the users / user organisations / prospective applicants have made their submissions.

9.1. Just prior to the joint hearing, the JNPT vide its letter dated 17 July 2015 has again submitted a revised proposal and vide its letter dated 20 July 2015 has furnished the revised Scale of Rates. The revision was to the extent of non-inclusion of lease rent and electricity charges in the proposed tariff. Since the users/ prospective bidders were not aware of the revised proposal of JNPT, as decided at the joint hearing, the JNPT was requested vide our letter dated 22 July 2015 to forward a copy of its revised proposal to all the relevant stakeholders. The users/ prospective bidders were also requested to furnish their comments on the revised proposal of JNPT.

9.2. In this connection, the JNPT vide its letter dated 24 July 2015 has stated that as decided at the joint hearing and after rectifying some typographical errors noticed in its proposal of 17 July 2015, it has forwarded a copy of its revised proposal to all the bidders and stakeholders and has forwarded a copy of the rectified proposal to us. The details of the JNPT proposal dated 24 July 2015 have been brought out subsequently.

9.3. Further, as agreed at the joint hearing, the JNPT was requested vide our letter dated 22 July 2015 to furnish some additional information/ clarification. The JNPT vide its letter dated 29 July 2015 has furnished its reply. The information sought by us and the response of JNPT thereon are tabulated below:

Sl. No.	Information/ Clarification sought by us	Response of the JNPT
(i).	As confirmed by the JNPT vide its letter number JNP/Fin/TAMP/2015/1470 dated 15 July 2015, the JNPT to furnish the copy of the approval of the Board of Trustees of JNPT for the proposal in reference.	The upfront tariff proposal is placed before the Board meeting in the ensuing meeting to be held on 31st July 2015. The copy of Board resolution and complete Agenda Item has been furnished by JNPT.
(ii).	A copy of the Feasibility Report in support of the revised proposal of JNPT to be furnished	The copy of DPR has already been submitted to TAMP earlier. A brief note on the revised project along with the layout was submitted to TAMP vide JNPT's letter dated 3rd and 17th July 2015.
(iii).	The basis for proposing to allot 8.25 hectares of water area for the 2 berths to be furnished	The allotment of 8.25 hectares of water area for the two berths approach trestle is as per the plan area of proposed layout and the brief note which is already submitted to TAMP vide JNPT's letter dated 3rd and 17th July 2015.
(iv).	The basis for considering the share of Crude Oil at 5.68%, POL at 46.95% and that of "Other liquids" at 47.371% to be furnished	The basis for consideration the share of crude oil, POL and other liquids is based on the recent traffic demand and the details are already been given in the brief note on the project vide JNPT letter dated 3rd and 17th July 2015.
(v).	The reason for reducing the share of POL ffrom the earlier 63.74% in the April 2015 proposal to 46.95% in the proposal under reference to be explained.	The crude oil production has declined compared to earlier forecast and studies carried out by the consultant in year 2012. Now, the competitive edge of JNPT for

		attracting crude has reduced. The additional crude traffic from competing port is not considered as the facility are developed at Hazira and Mumbai Port during last 3 years. The traffic projection for POL is as per the recent traffic forecast and the details are given in the brief note vide JNPT letter dated 3rd and 17th July 2015.
(vi).	In connection to the April 2015 proposal, the JNPT had stated that the liquid cargo considered under the category of 'Other Liquid Cargo' was Edible Oil, Molasses and Chemical. Given that the share of 'Other Liquids' have now increased to 47.37% from the earlier level of 32.61%, the JNPT to list down the additional types of liquid cargo considered under the category of 'Other Liquid Cargo'.	The majority of the liquid cargo considered under category of other liquid cargo is edible oil, molasses and chemical as per the traffic forecast
(vii).	As per Section 48(1)(d) of the Major Port Trusts Act, 1963, this Authority is mandated to fix storage charges, among other charges, for storage services rendered by a Major Port Trust or a person authorized by the Port Trust. Further, the norms prescribed for a Liquid Bulk terminal in the Upfront Tariff Guidelines of 2008, which has been taken as base by JNPT in formulation of its proposal, stipulates that total annual Revenue Requirement is to be apportioned between Handling Charges (95%) and Miscellaneous charges (5%). With regard to handling charges, the guidelines also stipulate that the handling charges would include storage charges for storing in tanks, apart from other charges like cargo loading or unloading charges (as the case may be), wharfage and transportation through pipelines. However, in the revised proposal of July 2015, the JNPT has neither taken into account the capital costs pertaining to the storage facilities nor has prescribed a separate levy for storage charges. With regard to a specific query in this regard bringing out the above statutory position, vide our letter of even number dated 03 July 2015, the JNPT has stated that it has delinked the construction of storage facilities in accordance with the tariff guidelines. In this connection, it is relevant to mention here that the Upfront Tariff Guidelines of 2008 stipulates prescription of charges for storage facilities. Nevertheless, if the JNPT desires to delink the storage facility from the scope of its proposal in reference, the JNPT is requested to pointedly clarify that it does not wish to have separate rate towards storage facility in the proposal under reference.	As per the norm prescribed for fixation of upfront tariff for services rendered at Liquid Cargo Terminal, tariff structure is grouped into liquid cargo handling charges (95% of the total revenue allocated) and miscellaneous charges (5% of total revenue allocated). In the norms for calculation of capital cost, under Civil construction cost it is stated that estimates to be given by the Port Trust for construction of civil work listed under Section-4.2 of Annex-IV for achieving maximum capacity. Under Norms for determination maximum capacity or optimal capacity, it is considered that capacity of the terminal is mainly dependent on the type of cargo handled, cargo mix ratio and size of vessels to be handled. Considering the above factors, the berth side has optimal capacity of about 11 MTPA. During both the joint hearing with TAMP and stake holders, the stake holder stated that, to create such storage facilities a large tank farm is required, capital cost of the same will be huge. If the tank farm is part of the project and capital cost of the same is included in the project cost, then project is becoming unviable. The stake holders state that therefore they need flexibility in construction of tank farm in phases as per traffic demand. The Transaction Advisor M/s RITES Ltd has opined that the O&M cost of land should not be included in the handling charges as there will be some cargo which will be handled but not stored. Also if JNPT includes the O&M cost of land in current proposal and also allows the operator to collect the storage charges separately, it will be a double recovery from the concerned users and therefore the cost towards storage (i.e. lease rental and electricity) should not be included in

		working out of tariff for handling charges. In view of above, JNP proposed to construct storage facilities on Port's own land with prescribed lease rental and construction cost of tank farm is excluded from the project cost in line with JNPT's existing liquid terminal operated by BPCL and IOC where tank farm is operated by individual tank farm operators including terminal operator. Reference Tariff as performance standards notified by the TAMP will be mentioned in the Bid document and subsequently in the concession agreement in respect of PPP project. JNPT is in process of obtaining SFC approval for the above project for which tariff fixation by TAMP is to be indicated. The JNPT is going to levy the lease rental for the area to be leased out to operator for creation of the storage facility.
(viii)	A copy of the Powerpoint presentation made by the Consultant of JNPT during the joint hearing held on 20 July 2015.	(The JNPT vide its letter dated 29 July 2015 has furnished a copy of the Powerpoint presentation.)

10.1. The highlights of the revised proposal of JNPT dated 24 July 2015 are given below:

(i). Traffic Forecast:

(a). Various liquid cargoes have been forecasted for JN Port additional liquid terminal in different categories such as crude oil, POL products and other liquid cargoes. In planning of the facility, it has been considered that the existing BPCL Jetty will continue to handle traffic to its designed capacity i.e. 5.5 MTPA. The additional traffic will be attracted to the Additional Terminal. The traffic proposed by the JNPT for the year 2018-19 and 2034-34 is 5.07 MTPA and 6.79 MTPA respectively. As per JN Port, POL products and Crude oil traffic will contribute to the major portion of the liquid cargo traffic.

(b). The additional liquid terminal is proposed considering cargo projection up to the year 2034-35 and it consists of 2 liquid cargo berths.

(c). The reference tariff calculation for the cargo handled during concession period of the ALBT is calculated for the Cargo handling charges and Berth hire charges.

(d). Proposal shall contain of:

(i). Construction of two liquid handling berths to accommodate vessels with size upto 1,20,000 DWT.

(ii). The berth pocket shall be maintained with a minimum depth of (-)15.5 below CD.

(iii). Construction of breasting dolphins, mooring dolphins and service platform (for both the berths that can accommodate vessels with minimum size 20,000 DWT and maximum size 1,20,000 DWT.

(iv). Construction of approach trestle of about 6.32 km length and minimum width of 12m connecting jetty and landfall point located at the backup area.

(v). The facilities shall be latest designs meeting stringent safety regulations and conform to international standards.

(vi). The estimated time period for construction is 3 years from the date of award of Concession.

(ii). Optimal Capacity.

The optimal capacity assessed by the JNPT in its proposal is 10.98 MMTPA.

S. No	Type of Cargo	% Share of Capacity as per Berth Days Required	Handling Rate	Optimal capacity (in MTPA)	
				1 Berth	2 Berth
(i)	Crude Oil	5.68%	120000 T/Day	1.74	3.48
(ii)	POL	46.95%	24000 T/Day	2.88	5.76
(iii)	Other Liquid (Edible oil, chemicals, molasses etc)	47.37%	7200 T/Day	0.87	1.74
	Total Capacity			**10.98 MMTPA**	

(iii). Capital Cost

The project capital cost considered by the JNPT is ₹ 686.68 Cr for the ALBT is given below:

Sl. No.	Item Description	Total Amount (₹ in Cr)
A	**CARGO HANDLING ACTIVITY**	
1	**CIVIL COSTS**	
1.1	**Approach Trestle**	487.95
		(75828 sq.mtr × ₹ 64350)
1.2	**Walkways**	2.05
		(351sqm× ₹ 50000)
1.3	Other Costs (Building, control room, substation, security, water tower, TLF Structure, IT charges etc.)	11.70
1.4	**Miscellaneous Cost @ 5%**	25.09
	Sub Total A (1)	**526.79**
2	**EQUIPMENT COSTS**	
2.1	Loading & Unloading	47.54
2.2	Fire-Fighting for Jetty	11.70
2.3	Electrical Work	35.10
2.4	Miscellaneous Cost @ 5%	4.72
	Sub Total A (2)	**99.05**
	Total (A) (1+2)	**625.85**
B	**BERTHING ACTIVITY**	
1	SERVICE PLATFORM	10.07
		(1230sqm × 81900)
2	BREASTING DOLPHINS	24.18
		(2952sq.m ×81900)
3	MOORING DOLPHINS	19.26
		(2352sq.m ×81900
4	DREDGING	4.42
		(168000cu.m ×263.25)
5	Miscellaneous Cost @ 5%	2.90
	Total (B)	**60.83**
	TOTAL CAPITAL COST (A) + (B)	**686.68**

(Note: Inclusive of 14% for Service tax and 3% for Contingencies)

[As compared to the earlier proposal of the 3 July & 4 July 2015, the port has not made any changes in the Optimal capacity and the capital cost of the project].

(iv). Operating Cost:

(a). The Key parameters considered to estimate the operating cost for ALBT are:

(i). Allotment of 8.25 ha of water area for the two berths and Approach trestle.

(ii). Allotment of 50 ha of land area for setting up of storage yard.

(iii). land lease rent considered @ ₹ 19.42/sq.m/month, water lease rent is 50% of land lease rent.
(iv). Power cost is considered as ₹ 14.50 per unit.
(v). Depreciation @ 3.34% for civil works, 10% for equipment's.

(b). The operating cost estimated by port is tabulated below:

(i). Cargo handling activity.

Sl. No	Item Description	Maintenance Norms	Total Cost (in ₹ Cr)
(i)	**Capital Cost**		
	Civil Cost		526.79
	Equipment Cost		99.05
	Total Capital Cost for Cargo Handling		**625.85**
(ii)	**Operation & Maintenance Cost**		
(a)	Power Cost		2.87
			((((Water Area - 6319m*12m(Trestle)+6705 Sqm(Berth)))*(10^-4 hectare/sq.m* (240000 units per hectare @ Rs.14.5 per unit))
(b)	Repair & Maintenance		
	Civil Works	(1% of Civil Costs)	5.27
	Equipment Works	(2% of Equipment Costs)	1.98
(c)	Insurance	(1% of Gross Fixed Assets)	6.26
(d)	Depreciation		
	Civil Works	(3.34% of Civil Costs)	17.59
	Equipment Works	(10% of Equipment Costs excl pipeline)	9.91
	Pipeline Costs	(4% of Pipeline Costs)	
(e)	License Fee		0.96
			((((Water Area - 6319m*12m(Trestle)+6705 Sqm(Jetties))+*(Rs 19.42 per sq.m per month)*(Rs 12 Months)*(0.5)
(f)	Other Expenses (1% of Gross Fixed Assets)		6.26
	Total Operating Costs for Cargo Handling		**51.10**

(ii). Berthing Activity.

Sl. No	Item Description	Maintenance Norms	Total Cost (in ₹ Cr)
(i)	**Capital Cost**		
	Civil Cost excluding dredging		**56.19**
	Dredging		**4.64**
	Total Capital Cost for Berth Activity		**60.83**
(ii)	**Operation & Maintenance Cost**		
(a)	Repair & Maintenance Charge	(1% of berth costs)	0.56
(b)	Depreciation	(3.34% of Civil Costs)	2.03
(c)	Insurance	(1% of Gross Fixed Assets)	0.61
	Total Operating Cost for Berth Activity		**3.20**

(v). Annual Revenue Requirement (ARR):

(a). For Cargo Handling

Sl. No.	Item Description	(₹ in crores)
1	Return on Capital Employed (16% of Capital Cost)	100.14
2	Operation & Maintenance Cost	51.10
	Total Revenue Requirement	**151.24**
	Allocation of Revenue Requirement	
	Cargo Handling Charges (95%)	143.67
	Miscellaneous Charges (5%)	7.56
	Total Revenue Requirement (Cargo Handling)	151.24

(b). For Berth Hire.

Sl. No.	Item Description	(₹ in crores)
1	Return on Capital Employed (16% of Capital Cost)	9.73
2	Operation & Maintenance Cost	3.20
	Total Revenue Requirement	**12.94**

(vi). Estimation of tariff:

(a). Cargo handling charges:

Cargo type	Capacity			Handling rate per day (T/day)	% share of capacity	Revenue Requirement	Foreign Cargo (₹/T)	Coastal Cargo (₹/T)
	Foreign (64%)	Coastal (36%)	Total (MTPA)					
Crude Oil	3.48	2.23	1.25	120000	6%	9.73	23.43	23.43
POL	5.76	3.68	2.07	24000	47%	80.41	117.15	117.15
Other liquid	1.74	1.12	0.63	7200	47%	68.06	456.19	273.72
Total	**10.98**	**7.03**	**3.95**			**143.67**		

(b). Miscellaneous Charges:

Sr.No	Particulars	Amount (in ₹)
	Miscellaneous Revenue Requirement (₹ in Cr)	7.56
	Capacity (MTPA)	10.98
	Miscellaneous Charge (₹ per ton)	**6.88**

(c). Berth Hire charges:

As per JNPT the berth hire charges are computed as per TAMP guidelines. The details furnished by JNPT is tabulated below:

Sr. No.	Particulars	Unit	Crude Oil	POL	Other Liquids	Total
i	Ship day output	Tonnes/ day	120000	24000	7200	
ii.	Average GRT	Tonnes	72000	48000	36000	
iii.	Average parcel size	Tonnes	55000	13250	7077	
iv.	Tonnage expected to be handled	Tonnes	3484191	5757449	1742914	10984554
v.	Average no. of berth days ((iv / i))	Days	29	240	242	511
vi.	No. of berth hours {24 x (v)}	Hours	697	5757	5810	12264
vii	Expected number of vessels (iv / iii)	Nos.	63	435	246	
viii.	Unberthing time per vessel	Hours	6	6	5	
ix.	Unberthing hours (vii x viii)	Hours	380	2607	1231	4219
x.	Total hours	Hours	1077	8365	7041	16483

	(vi + ix)					
xi.	Total GRT hours (ii x x)	GRT hours	77539076	401500615	253482137	732521827
xii.	Revenue Requirement	₹				129352957
xiii	Foreign Vessel rates (Revenue Requirement/ GRT hours)					**0.21**
xiv	Coastal Vessel rates (60% of xiii)					**0.12**

(# Note: The Foreign rate comes to ₹0.17 i.e [(129352957/732521827)=0.17]

(vii). The proposed Scale of Rates and the Performance standards is given below:

(a). Scale of Rates:

Scale of Rates	**Amount (in ₹)**	
Cargo Handling (₹ in MT)	Foreign	Coastal
Crude	23.43	23.43
POL	117.15	117.15
Other Liquid	456.19	273.72
Misc. Charges	6.88	
Berth Hire Charges (₹ per GRT per hour)		
Foreign going vessel	0.21	
Coastal vessel	0.12	

(b). Performance standards:

Type of Liquid Cargo	**Norm for Gross Berth Output**
Crude Oil	5000 Tonne/Hour
POL	
White	1000 Tonne/Hour
Black	700 Tonne/Hour
Other Liquids	250 Tonne/Hour

10.2. As decided at the joint hearing held on 20 July 2015, the JNPT has circulated its revised proposal of 24 July 2015 to the users/ user organisations and prospective bidders to furnish their comments. As decided at the joint hearing, the users / user organisations / prospective bidders were requested vide our letter dated 22 July 2015 to furnish their comments on the 24 July 2015 revised proposal of JNPT directly to JNPT and with copy endorsed to TAMP. In this connection, the Vopak India Private Limited (VIPL) and M/s Adani Ports and Special Economic Zone Limited have vide their respective email dated 27 July 2015 and IMC Limited vide its email dated 28 July 2015, addressed to JNPT and with a copy endorsed to us, have furnished their comments. The JNPT vide its letter dated 29 July 2015 and vide its email dated 11 August 2015 has furnished its comments.

11. Arising out of the response of JNPT to the comments of some of the prospective bidders viz., Vopak India Private Limited (VIPL), Adani Ports and Special Economic Zone Limited (APSEZL) and IMC Limited, as brought out above, the JNPT was requested vide our letter dated 03 August 2015 to furnish some information/ clarification. The JNPT vide its email dated 11 August 2015 has responded. The clarification sought by us and the response of JNPT thereon are tabulated below:

Sr. No.	**Clarification sought by us**	**Response of JNPT**
(i)	A query made by IMC Limited vide its e-mail	The JNPT has replied to IMC that based on

	dated 20 July 2015 seeking clarity on whether the BOT Operator, based on the customer demand, can levy separate charges for specific special facilities for certain liquid cargoes such as heating, refrigeration, inert gas blanketing, the JNPT has clarified to the IMC Limited that BOT operator can levy extra charges for rendering special services for the handling specific liquid cargo with due approval of the TAMP. The tariff fixed under 2013 guidelines for a period of 30 years is subject to only indexation. That being so, the JNPT is requested to clarify whether the clarification given by JNPT, for levy of charges for extra services, after the bidding fits into the Reference Tariff Guidelines of 2013.	customer demand IMC can levy separate charges for specific facilities for certain liquid cargo such as heating, refrigeration, inert gas blanketing, etc. TAMP has raised objection on this point. It is to state that these are not part of normal handling charges arising out of handling liquid cargo but special services to be provided on case to case basis depending on requirement of user of the terminal. These facilities are optional and therefore requiring additional investment and therefore the reply had been sent that the BOT operator can levy separate charges subject to approval of TAMP. It is not possible to visualise all the services that is required either as an option or arising out of any statute that may come into force at later date and therefore such services is provided at a charges for which separate approval of the TAMP is required. In view of the specific objection raised by TAMP JNPT has now clarified to Mis.IMC Ltd under cover of our letter dated 61h August 2015 that apart from miscellaneous charges for specific services specified therein, no other separate charges can be levied for certain liquid cargo such as heating, refrigeration, inert gas blanketing, etc.
(ii)	With regard to a query made by IMC Limited vide its e-mail dated 20 July 2015 seeking clarity on whether the BOT Operator will be free to decide on the storage charges, the JNPT has clarified to IMC Limited that BOT operator will be free to decide for storage charges. In this regard, it is relevant to mention here that as per Section 48(1)(d) of the Major Port Trusts Act, 1963, this Authority is mandated to fix storage charges, among other charges, for storage services rendered by a Major Port Trust or a person authorized by the Port Trust. In this connection, the JNPT is requested to clarify whether the freedom for the BOT operator to decide on the storage charges for the Liquid Cargo Terminal as clarified by JNPT is as per the stipulation contained in Section 48(1)(d) of the MPT Act, 1963, and in line with the Upfront Tariff Guidelines of 2008 relating to a Liquid Bulk terminal.	As pointed out during the presentation and project summary that cost of constructing Tank Farm has not been included in project cost and delinked from the project. The Port is only leasing land to the extent of 50 hectares and on such land Tank Farms will be constructed. The conditions prevailing then regarding safety and other issues will determine the actual cost of Tank Farms. It is not possible to foresee at this moment such eventality and since Port is already collecting licence fee for the land. The JNPT have now clarified that area about 50 hectares is earmarked for proposed storage facilities required for subject project. This area will be leased to successful bidder for construction of tank farm on lease rental.

12. The JNPT vide its emails dated 18 August 2015 **(pg. no.1255-1280/c)** has furnished the copy of Board resolution and the Agenda note placed by it before its Board on the ALBT proposal in reference. From the document furnished by the JNPT, it is seen that the Board of JNPT has passed the following resolution:

> **"***RESOLVED THAT the proposal for restructure of the project by developing two berths with slightly modified lay out, revised traffic forecast and delinking of construction of storage facilities at the revised cost estimate of ₹654 crores as against earlier ₹763.79 crores and overall revised project cost estimate (including*

IDC and financing cost) of ₹796.51 crores as against earlier ₹955 crores and accordingly inviting RFQ as per Model document of the Government of India globally though press advertisement be and hereby approved.

RESOLVED FURTHER THAT the proposal of JNPT submitted to TAMP on upfront tariff for the restructured project taking into consideration the modified layout, revised traffic projections and delinking of storage facilities to TAMP for its notification, be and is also hereby approved.

*RESOLVED FURTHER THAT the proposal on SFC Memo including Draft Concession Agreement to be submitted to Ministry of Shipping taking into consideration of notified upfront tariff by TAMP for further necessary approval of the Government and authorizing the Chairman for sending the same to MOS and sending clarification if any from time to time in this regard be and is also hereby approved.***"**

13. A comparative position of the proposals of JNPT dated 12 March 2015 & 17 March 2015, 1 April 2015 & 2 April 2015, 18 June & 22 June 2015, 3 July & 4 July 2015 and 24 July 2015 is given below:

(₹ in Crores)

Sr. No	Particulars	12 March & 17 March 2015	1 April & 2 April 2015	18 June & 22 June 2015	3 July and 4 July 2015	24 July 2015
I	**Optimal capacity**					
(a)	Percentage Share of Liquid cargo:					
	- Crude Oil	3.65%	3.65%	0.00%	5.68%	5.68%
	- POL	63.74%	63.74%	79.19%	46.95%	46.95%
	- Other Liquids	32.61%	32.61%	20.81%	47.37%	47.37%
(b)	Handling rate of Liquid cargo per day:					
	- Crude Oil	120000	120000	0	120000	120000
	- POL	24000	24000	24000	24000	24000
	- Other Liquids	7200	7200	7200	7200	7200
(c)	Optimal Quay Capacity for a Berth = 0.7 * ((S1*P1)+(S2*P2)+(S3*P3)) * 365	**5627520**	**5627520**	**5240596**	**5491881**	**5491881**
(d)	Optimal Quay Capacity for 2 Berths = 0.7 * ((S1*P1)+(S2*P2)+(S3*P3)) * 365	**11255041**	**11255041**	**10481192**	**10983761**	**10983761**
II	**Capital Cost**					
A.	**Cargo Handling Activity:**					
(a)	**Civil costs**					
(i)	Approach Trestle	264.98	264.98	280.8	487.95	487.95
(ii)	Walkways	1.95	1.95	1.64	2.05	2.05
(iii)	Other Cost		0.00	11.7	11.7	11.7
(iv)	Miscellaneous cost @ 5%	13.35	13.35	14.71	25.09	25.09
	Total Civil Costs (a)	**280.28**	**280.28**	**308.85**	**526.79**	**526.79**
(b)	**Equipment costs**					
(i)	**Dock Lines**					
	36" ф Crude Oil Line	24.30	24.30	-	-	
		(9000m*27000)	(9000m*27000)	-	-	
	24" ф POL Line	28.80	28.80	-	-	
		(18000m*16000)	(18000m*16000)	-	-	
	20" ф Edibile Oil Line	13.05	13.05	-	-	
		(9000m*14500)	(9000m*14500)	-	-	
	16" ф Chemical Line	22.50	22.50	-	-	
		(18000m*12500)	(18000m*12500)	-	-	
	8" ф Chemical Line	22.50	22.50	-	-	
		(9000m*25000)	(9000m*25000)	-	-	

	Total of Docklines	**111.15**	**111.15**	**0**	**0**	
(ii)	**Loading Arm**			47.54	47.54	
	For Crude Oil	10.00				
		(2 nos *5 Cr)				
	For POL	27.00				
		(6 nos* 4.5 Cr)				47.54
	For Edible Oil	0.63				
	For Chemical Line	2.00				
	Total of Loading Arms	**39.63**	**39.63**	**47.54**	**47.54**	**47.54**
(iii).	**Evacuation Facilties**					
	Water, Air, Nitrogen, bunkering lines	0.77	0.77	-	-	
	Tank Automation	3.96	3.96	-	-	
		(44 Nos*900000)	(44 Nos*900000)	-	-	
	Control and Monitoring System	5.00	5.00	-	-	
	TLF system composite work of piping, pumping station, electrical & terminal Automation works	-	-	-	-	
	For POL	5.78	5.78	-	-	
		(17 Each bay*34 lakhs)	(17 Each bay*34 lakhs)	-	-	
	For Edible Oil	0.68	0.68	-	-	
		(2 Each bay * 34 lakhs)	(2 Each bay * 34 lakhs)	-	-	
	For Chemicals	2.38	2.38	-	-	
		7 Each bay*34 lakhs)	7 Each bay*34 lakhs)	-	-	
	Total of Evacuation Facilties	**18.57**	**18.57**	**0**	**0**	
(iv)	**Fire-Fighting for Jetty**	4.5	4.5	11.70	11.70	11.70
(v)	**Electrical Works**	-	-	35.10	35.10	35.10
(vi)	**Miscellaneous Cost @ 5%**	8.69	8.69	4.72	4.72	4.72
	Total of Equipment Cost (b)	**182.54**	**182.54**	**99.05**	**99.05**	**99.05**
	Total capital cost for the cargo handling activity (a+b)	**462.82**	**462.82**	**407.92**	**625.85**	**625.85**
B.	**Berthing activity:**					
	Service Platform	10.49	10.49	10.07	10.07	10.07
	Breasting Dolphins	18.88	18.22	24.18	24.18	24.18
	Mooring Dolphins	35.22	35.28	19.26	19.26	19.26
	Quick Release Hooks	2.76	2.76			
	Frenders	0.48	0.48			
	Dredging	3.51	3.51	220.11	4.42	4.42
	Other Costs	2.26	2.26			
	Miscellaneous cost @ 5%	3.62	3.62	13.68	2.90	2.90
	Total capital costs for the berthing activity	**77.72**	**76.10**	**287.30**	**60.83**	**60.83**
C.	**Storage activity:**					
(a)	**Civil cost**	75.61	75.61	-	-	
(b)	**Mechanical Cost**	143.35	143.35	-	-	
	Total capital costs for Storage activity (c).	**218.96**	**218.96**	-	-	
D	**Total capital cost of the project (A + B + C)**	**757.88**	**757.88**	**695.21**	**686.68**	**686.68**
III.	**Operating Cost.**					
A.	**Cargo handling activity:**					
	(a). Power cost	4.45	4.45	19.72	20.27	2.87
		(Land Area- 36.5 ha*240000*₹ 14.5 per unit) Water Area - 7200m*15m (Trestle) + 400m*50m (Jetties)) * (10^-4 hectare/sq.m)		Water Area - 5000m*12m (Trestle) + 6705 sqm berth) * (10^-4 hectare/sq.m) * (240000 units per hectare) * (₹ 4.5 per unit)	Water Area - 5000m*12m (Trestle) + 6705 sqm berth) * (10^-4 hectare/sq. m) * (240000	((((Water Area - 6319m*12m (Trestle)+6705 Sqm(Berth)))*(10^-4 hectare/sq. m* (240000 units per

		* (240000 units per hectare) * (₹ 4.5 per unit)			units per hectare) * (₹ 4.5 per unit)	hectare @ Rs.14.5 per unit))
	(b). Repair & Maintenance					
	- Civil works (1% on civil costs)	2.80	2.80	3.09	5.27	5.27
	- Equipment cost (2% on Equipment costs)	3.65	3.65	1.98	1.98	1.98
	(c). Insurance (1% on Gross fixed assets)	4.63	4.63	4.08	6.26	6.26
	(d). Depreciation					
	- Civil works (3.34% on civil costs)	9.36	9.36	10.32	17.59	17.59
	- Equipment cost (10% on Equipment costs excl. pipeline cost)	7.14	7.14	9.91	9.91	9.91
	- Pipelines cost / Storage tank Cost	4.45	4.45		0.00	0.00
	(e). License Fee	1.49	1.49	12.43	12.61	0.96
	f). Other Expenses (1% on Gross fixed assets)	4.63	4.63	4.08	6.26	6.26
	Operating Cost of Cargo handling (a)	**41.19**	**42.60**	**65.60**	**80.15**	**51.10**
B.	**Berthing activity:**					
	(a). Repairs & Maintenance Charge (1% on berth costs)	0.76	0.77	0.56	0.56	0.56
	(b). Depreciation (3.34% on berth costs)	2.54	2.56	9.60	2.03	2.03
	(c). Insurance (1% on berth costs)	0.76	0.77	2.87	0.61	0.61
	Operating cost for the berthing activity (b)	**4.06**	**4.09**	**13.03**	**3.20**	**3.20**
C.	**Storage activity:**					
(i)	**POL & Other Liquid Storage Tank Farm**					
	(a). Power cost	12.70	12.70	-	-	-
	(b). Repair & Maintenance			-	-	-
	- Civil works (1% on civil costs)	0.76	0.76	-	-	-
	- Equipment cost (2% on Equipment costs)	2.87	2.87	-	-	-
	(c). Insurance (1% on Gross fixed assets)	2.19	2.19	-	-	-
	(d). Depreciation			-	-	-
	- Civil works (3.34% on civil costs)	2.53	2.53	-	-	-
	- Equipment cost	6.65	6.65	-	-	-
	- Storage tank cost - (4% on storage tank cost)	3.07	3.07	-	-	-
	(e). License Fee	0.44	8.51	-	-	-
				-	-	-
	(f). Other Expenses (1% on Gross fixed assets)	2.19	2.19	-	-	-
	Operating cost for the POL & Other Liquid Storage Tank Farm (c).	**33.39**	**41.46**	**-**	**-**	**-**
IV	**Estimated Revenue Requirement & upfront tariff**					
A.	**Cargo handling activity:**					
(i).	**Estimated Revenue Requirement**					
	(a). Total Operating Cost	41.19	42.60	65.60	80.15	51.10
	(b). Return on capital Employed @ 16%	74.05	74.05	65.26	100.14	100.14
	(c). Total Revenue requirement from liquid handling activity	**115.24**	**116.65**	**130.86**	**180.29**	**151.24**
(ii).	**Apportionment of Revenue Requirement**					
	(a). Liquid Handling Charges	109.48	110.82			

	(95%)			124.32	171.27	143.67
	(b). Miscelleneous Charge (5%)	5.76	5.83	6.54	9.01	7.56
	(c). Total Revenue requirement from liquid handling activity	**115.24**	**116.65**	**130.86**	**180.29**	**151.24**
(iii).	**Liquid Handling charge**					
A	**Cargo handling Charge**					
	(a). Liquid Handling Charge					
	- Revenue Requirement (₹ in crores)	109.48	110.82	124.32	171.27	143.67
	- Capacity (Million Metric Tonnes per annum)	11.25	11.25	10.48	10.98	10.98
	- Per tonne handling rate (in ₹ .) (foreign)					
	- Crude oil	20.86	21.11	0.00	32.63	23.43
	- POL	104.28	105.56	118.42	163.15	117.15
	- Other liquid	347.62	351.88	394.74	543.83	456.19
	(b). Miscellaneous Charge					
	- Revenue Requirement (₹ in crores)	5.76	5.83	6.54	9.01	7.56
	- Capacity (Million Metric Tonnes per annum)	11.25	11.26	10.48	10.98	10.98
	- Miscellaneous Charge (₹ per tonne)	**5.12**	**5.12**	**6.25**	**8.21**	**6.88**
B.	**Storage activity:**					
(i).	**POL & Other Liquid Storage Tank Farm**					
	Estimated Revenue Requirement					
	(a). Total Operating Cost	33.39	41.46	-	-	-
	(b). Return on capital Employed @ 16%	35.03	35.03	-	-	-
	(c). Total Revenue requirement from storage activity	**68.42**	**76.49**	**-**	**-**	**-**
	Capacity of Tank Farm in KL	620590	620590	-	-	-
	No. of operating days	365	365	-	-	-
	Optimal utilisation	70%	70%	-	-	-
	Storage charge per tonne per day (in Rupees)	**4.32**	**4.82**	-	-	-
	Storage charge per tonne per month (in Rupees)	**129.46**	**144.72**	-	-	-
C.	**BERTH HIRE CHARGES**					
	(a) Operating cost	4.09	4.09	13.03	3.20	3.20
	(b) Return on capital Employed @ 16%	12.26	12.26	45.97	9.73	9.73
	(c)Total Revenue requirement from Berthing services	**16.35**	**16.35**	**59.00**	**12.94**	**12.94**
	Berth hire Charge (Rate per GRT per hour) in ₹ for foreign going vessels	**0.39**	**0.39**	**0.85**	**0.21**	**0.21**
	Berth hire Charge (Rate per GRT per hour) in ₹ for coastal vessels	**0.23**	**0.23**	**0.51**	**0.12**	**0.12**

14. The proceedings relating to consultation in this case are available on records at the office of this Authority. An excerpt of the comments received and arguments made by the concerned parties will be sent separately to the relevant parties. These details will also be made available at our website http://tariffauthority.gov.in.

15. With reference to totality of the information collected during the processing of this case, the following position emerges:

(i). The Jawaharlal Nehru Port Trust (JNPT) has envisaged development of an Additional Liquid Bulk Terminal (ALBT) at JNPT to handle liquid cargo like Crude Oil, Petroleum and Oil Lubricants (POL) and Other liquid cargo (consisting of Edible oil, chemicals, molasses, etc.), under Public Private Partnership (PPP) mode on Design, Build, Finance, Operate and Transfer (DBFOT) basis.

In this connection, it may be recalled that based on a proposal earlier filed by JNPT in October 2013, this Authority had passed an Order no. TAMP/50/2013-JNPT dated 31 December 2013 fixing Reference Tariff for the ALBT to handle liquid cargo like Crude Oil, Petroleum and Oil Lubricants (POL) and other liquid cargo. This Order was notified in the Gazette of India on 3 February 2014 vide Gazette No.38.

From the submissions made by the JNPT, it is seen that though the Public Private Partnership Approval Committee (PPPAC) has given its approval, the JNPT, taking into consideration the feedback from the Cabinet Committee and the prospective bidders, has decided to restructure the project by considering a reduced level of capacity and reduced capital costs.

Subsequently, based on the inputs received from the prospective bidders during the consultation proceedings relating to the case in reference, the JNPT has excluded levy of separate storage charges from the purview of the proposal under reference. Further, the cost of laying of pipelines has also not been considered by the JNPT in the proposal. The key differences noticed in the current proposal vis-à-vis project parameters considered in the December 2013 Order of JNPT are highlighted below:

(₹ in crores)

PARTICULARS	December 2013 Order	Present Proposal
Land to be allotted for storage	**73 hectares**	**-NIL-**
Optimal Capacity for a 2 Berth configuration	**15.78 MMTPA**	**10.98 MMTPA**
Capital Cost		
Cargo handling activity		
- Civil Cost	282.66	526.79
- Equipment Cost	266.76	99.06
Berthing activity	75.93	60.83
Storage activity		
- Civil Costs	386.21	-NIL-
- Equipment Cost	30.43	-NIL-
TOTAL	**1041.99**	**686.68**
Tank Farm Capacity	**1.28 million KL**	**-Not Applicable-**

(ii). The JNPT in its initial proposals of March 2015 as well as April 2015 had taken into account the capital cost and operating cost pertaining to the storage related activity and had proposed separate rates for the storage of liquid cargo. However, in its revised proposal submitted in June and July 2015, the JNPT, on the ground that the prospective bidders have felt that the capital cost towards construction of large tank farm for storage of liquid cargo at the level of the optimal capacity, will be huge and that on inclusion of the said huge capital cost pertaining to construction of tank farm in the cost of the project under reference, will make the project unviable and thus, based on the need expressed by the prospective bidders to have flexibility in construction of tank farm in phases as per traffic demand, has proposed to delink the construction of storage facilities from the scope of its proposal in reference. In response to a query raised by us, the JNPT has sought to clarify that the exclusion of construction of storage facilities is in accordance with the tariff guidelines for handling liquid cargo. The clarification given by JNPT is not correct since Section 4.2 of Annex-IV (Norms for fixation of upfront tariff for services rendered at Liquid Bulk Terminal) explicitly includes civil construction cost of Storage yard and Tankages. Despite this position, the JNPT in its latest revised proposal of 24 July 2015 has neither taken into account the capital costs pertaining to the storage facilities nor has prescribed a separate levy for storage of liquid cargo. In this connection, the JNPT has drawn reference to the other existing liquid terminals at JNPT operated by Bharat Petroleum Corporation Limited (BPCL) and Indian Oil Corporation Limited (IOCL), where tank farm is reported to be operated by individual tank farm operators including terminal operator.

In this regard, it is relevant to mention here that as per Section 48(1)(d) of the Major Port Trusts Act, 1963, this Authority is mandated to fix storage charges, among other charges, for storage services rendered by a Major Port Trust or a person authorized by the Port Trust. Further, the norms prescribed for a Liquid Bulk terminal in the Upfront Tariff Guidelines of 2008, which has been taken as base by JNPT in formulation of its proposal, stipulates that total Annual Revenue Requirement is to be apportioned between Handling Charges (95%) and Miscellaneous charges (5%). With regard to handling charges, the guidelines also stipulate that the handling charges would include storage charges for storing in tanks, apart from other charges like cargo loading or unloading charges (as the case may be), wharfage and transportation through pipelines. Even when the above statutory position has been brought to the notice of the JNPT, the JNPT has chosen to continue to delink the storage facility from the scope of its proposal in reference.

Thereafter, with regard to a clarification sought by one of the prospective bidders viz., IMC Limited, the JNPT has stated that an area of about 50 hectares of land, which is earmarked for the storage facilities, will be leased to successful bidder for construction of tank farm on lease rental basis and that the BOT Operator will be free to decide on the storage charges. In this regard, it is relevant to mention here that as stated earlier, the Major Port Trusts Act, 1963, mandates this Authority to fix storage charges, among other charges, for storage services rendered by a Major Port Trust or a person authorized by the Port Trust. Further, the tariff fixed based on the stipulation of the 2013 reference tariff guidelines for a period of 30 years is subject to only indexation. That being so, the freedom given by the JNPT on the BOT operator to decide upon the storage charges after the bidding is not seen to be in line with the stipulation contained in Section 48(1)(d) of the MPT Act, 1963, nor does it fit into the Reference Tariff Guidelines of 2013.

Nevertheless, given that the Board of Trustees of JNPT has approved delinking of levy of storage charges from the purview of tariff fixation in the proposal under reference, this Authority is constrained to purely rely upon the decision of the port to delink the levy of storage charges from the purview of tariff fixation and thus, goes ahead with fixing of handling and miscellaneous charges only. It is clarified to JNPT that the responsibility for the implication arising out of not proposing storage charges upfront will wholly rest with the JNPT.

Further, with regard to the reference to the tariff arrangement at BPCL and IOCL, it is relevant to mention here that while BPCL is a BOT operator at JNPT, the IOCL does not appear so and hence IOCL does not fall within the regulatory ambit of this Authority. Therefore, this Authority is not in a position to comment on the tariff arrangement prevailing at IOCL. However, with regard to BPCL, that it operates the Tank farm as mentioned by JNPT, Section 42(4) read with Section 48 of the MPT Act requires rates to be notified by this Authority in respect of identified services provided by persons authorized under Section 42(3) of the MPT Act. No proposal has been received from the BPCL so far seeking approval for levy of storage charges. The matter is being taken up with BPCL separately.

(iii). Clause 2.4 of the Revised Guidelines for Determination of Tariff for Projects at Major Ports, 2013, stipulates that if in the view of the Major port Trust, the tariff determined for a particular commodity under 2008 guidelines at that Major Port Trust or any other Major Port Trust is not a representative Reference Tariff for that commodity, then the Major Port is free to approach the Authority with a proposal to re-fix Reference Tariff under 2008 guidelines for the project giving detailed and sufficient justification.

In the case in reference, since Reference Tariff for an additional Liquid Bulk Terminal (LBT) (to handle Crude, POL and Other Liquid cargo based on development of two berths) has already been fixed at JNPT vide the Order of December 2013, and given that the JNPT envisaged to handle Crude, POL and Other Liquid cargo at the additional Liquid Bulk Terminal (LBT) comprising of 2 berths in the current proposal

also, the JNPT was requested to ponder upon the need for a fresh Reference Tariff. In this regard, considering the significant change in the project cost, the port has insisted to go ahead with fixation of a fresh Reference tariff for the LBT based on the feedback of stakeholders and cabinet committee. Accordingly, the proposal of JNPT is taken up for fixing a fresh Reference tariff based on the 2013 Reference Tariff Guidelines, by generally following the norms prescribed in the 2008 upfront Guidelines for a liquid terminal.

(iv). As stated earlier, the JNPT has submitted its proposal in March 2015. Subsequently, the JNPT under cover of its letter dated 1 and 2 April 2015 has revised its proposal. Thereafter, while responding to the additional information/ clarification sought by us, the JNPT in its letter dated 13 April 2015 has furnished the revised berth hire calculation. Further, based on the discussion during the joint hearing, the JNPT vide its letter dated 18 June 2015 and 22 June 2015 has submitted its revised proposal. The revision was to the extent of delinking of levy of storage charges from the purview of its proposal. Thereafter, the JNPT vide its letter dated 03 July 2015 and 04 July 2015 has submitted its revised proposal, so as to exclude the cost of licence fee and power cost in respect of 50 hectares of storage area. Subsequently, on the last occasion, the JNPT vide its letter dated 24 July 2015 has submitted its revised proposal, so as to rectify some typographical error in its proposal. In view of the frequent changes intimated by the JNPT in its proposal, the proposal of JNPT could not be disposed in a time bound manner, as stipulated in the Reference tariff Guidelines. The latest revised proposal of 24 July 2015 filed by the JNPT along with the information/ clarification furnished by JNPT during the processing of the case in reference is considered in this analysis.

(v). Based on the cargo share of Crude Oil, POL and Others at 5.68%, 46.95% and 47.37% respectively (as furnished by the JNPT) and considering the handling rate in respect of the Crude Oil, POL and Others at 5000 tonnes/ hour, 1000 tonnes/ hour and 300 tonnes/ hour, as prescribed in the upfront tariff fixation guidelines for liquid cargo terminal and that adopted by the JNPT itself, the optimal capacity for a berth for 24 hours and 365 days at 70% utilisation worked out to 5.49 million metric tonnes per annum at one berth. Thus, the JNPT in its proposal has considered optimal capacity of the facility for 2 no. of berths at 10.98 MMTPA. Whereas, as per the Traffic forecast furnished by the JNPT, the traffic of Liquid cargo comprising of Crude Oil, POL and Other Liquids is expected to reach 6.79 MMTPA during the year 2034-35. In view of the above position, the JNPT was requested to look into the need for creating a facility with a capacity of 10.98 MMTPA at almost double the traffic projection at 6.79 MMTPA, 20 years in advance, as investment in the infrastructure facilities, both civil and equipment is an idle investment. Further, this also shows that a single berth configuration, though may not be fully sufficient to handle the traffic of about 6.79 MMTPA envisaged during the Phase – I, a two berth configuration would result in creating capacity on a very much higher side.

In this regard, the JNPT is of the view that the capacity calculation of 10.98 MMTPA is based on the formula given in the Upfront Guidelines. However, it does not factor the time required for peripheral activities such as berthing and de-berthing of ships, obtaining customs clearance, surveys, positioning and hook up of equipment, post operation of survey (where necessary), waiting for pilots and clearance for navigation. Taking into account the above said factors, the JNPT has opined that the actual capacity of 2 berths would be only about 7.5 – 8 MMTPA. The JNPT has also stated that when planning for project development, for handling the projected cargo of 7.5 MMTPA, the Detailed Project Report (DPR) also prescribes a requirement of a minimum 2 berth configuration.

With regard to the submission made by the JNPT about the Guidelines not considering the time required for the various peripheral activities as listed above, it is to state that the optimal quay capacity calculation as prescribed in the Upfront Guidelines for any of the commodities including Liquid Bulk cargo stipulates calculation of capacity with a utilization factor of 70%. Nevertheless, based on the

judgment of the JNPT to have a 2 berth configuration and given that the JNPT Board has approved a 2 berth configuration and since the DPR prescribes a requirement of a minimum 2 berth configuration and also since none of the prospective bidders have objected to a 2 berth configuration, this Authority goes ahead for approval of Reference Tariff for a 2 berth configuration.

(vi). The JNPT in its proposed has indicated the dimension of the Crude Oil pipe Line at 36' ø, POL pipe Line at 24' ø , Edible Oil pipe Line at 20' ø and 2 no of Chemical pipe Lines at 16' ø and 8' ø. With regard to a specific request to establish the linkage between pipeline dimension and handling rates of each type of liquid cargo considered in the optimal capacity calculation, the JNPT has stated that handling rates considered in optimal capacity calculation is as per guidelines 2008 and that the dimension of the pipelines will be finalized by detailed engineering stage during RFP stage. In this connection, the JNPT is advised to ensure that the pipelines deployed by the operator would be commensurate with the handling rates and optimal capacity of the project. Further, to protect the user interest, the JNPT is also advised to spell out the minimum requirement of the pipelines in the Concession Agreement. Also, to ensure that the operator does not put into use pipelines of higher dimension with a higher pumping rate resulting in a higher productivity of the liquid cargo berths, than that is considered for determining the optimal capacity of the facility, the JNPT is advised to ponder over the situation where the operator may deploy pipelines of higher dimension and incorporate a suitable provision in this regard in the Concession Agreement, if felt necessary by it.

(vii). The JNPT has proposed allotment of 500000 sq. m. (50 hectares) of land area and 82533 sq. m. (8.25 hectares) of water area for the proposed facility. As brought out earlier, the area of 500000 sq.m of land area is earmarked for the storage facilities and to be leased to successful bidder for construction of tank farm on lease rental basis. Since the JNPT has chosen to delink the levy of storage charges from the current proposal in reference, this Authority is not inclined to delve deep into the utilization, sufficiency or insufficiency of the area envisaged to be earmarked for the storage facilities. Incidentally, the JNPT has not factored in the lease rental and electricity charges for the 50 hectares of land in the operating cost calculation.

(viii). Optimal capacity:

(a). By considering the percentage share of the liquid cargoes viz., Crude oil, POL and Other liquids at 5.68%, 46.95% and 47.37% respectively and the handling rate of above mentioned Liquid cargo at 120000 tonnes/day, 24000 tonnes/day and 7200 tonnes/day respectively and at 70% utilization, the JNPT has determined the optimal capacity for a two berth configuration at 10.98 Million Metric Tonnes Per Annum (MMTPA).

(b). The percentage share of the liquid cargoes viz., Crude oil, POL and Other liquids at 5.68%, 46.95% and 47.37% respectively is reported to be based on the recent traffic position.

Based on the submission of one of the prospective bidders i.e. M/s. IMC Limited (IMCL) that capacity envisaged for the terminal is skewed towards POL handling, the JNPT has reduced the share of POL from the earlier share ranging from 64% to 79% in proposals submitted in various dates to about 47% in the latest proposal. Another prospective bidder, M/s. Adani Ports and Special Economic Zone Limited (APSEZL) is of the view that the allocation of capacity to Crude Oil should be reduced. The submission made by APSEZL is not seen to be backed up with workings. The judgment of the port in considering the cargo share in respect of each of the type of liquid cargo envisaged to be handled at the facility, is relied upon.

(c). The handling rate for Crude oil, POL and Other Liquids considered by the JNPT at 120000 tonnes/day, 24000 tonnes/day and 7200 tonnes/day

respectively is seen to be in line with the handling rates prescribed for the said cargo items in the Upfront tariff fixation Guidelines, 2008. APSEZL has stated that the handling rate of 5000 tonnes per hour considered in respect of Crude oil is not possible to achieve in case of Liquid berths. However, the APSEZL has not suggested any alternate handling rate supported with basis. Since the handling rate for Crude oil, POL and Other Liquids considered by the JNPT is in line with the handling rates prescribed for the said cargo items in the Upfront Guidelines, 2008, the same are considered in the analysis.

(d). Considering the cargo share and the handling rate of each of the cargo as discussed above, the optimal capacity of the proposed ALBT facility for a two berth configuration works out to 10.98 Million Metric Tonnes Per Annum at 70% utilization of the facility envisaged to be created.

During the proceedings relating to the case in reference, one of the prospective bidders viz., APSEZL has stated that since capacity will have a bearing on various aspects viz., size of pipelines, length of the jetty, handling of cargo and evacuation of cargo, the capacity should consider, least among all the above aspects. In this regard, it is to state that it may be reasonable to assume that the handling norms stipulated in the Upfront tariff guidelines of 2008 pertaining to Liquid Bulk Terminal, which has been considered as the base by JNPT in formulating its proposal in reference, would have taken into account the factors mentioned by APSEZL. As far as the size of pipelines and configuration of the jetty are concerned, the matter has already been discussed elaborately in an earlier paragraph.

Another prospective bidder viz., Vopak India Private Limited (VIPL) is of the view that since the traffic will grow in phases over the years, the optimal berth capacity does not represent the realisable traffic; and therefore, the VIPL has stated that the tariff estimation should be based on the projected incremental traffic and not on the optimal berth capacity. With regard to the submission of VIPL, it is relevant to mention here that the Upfront tariff guidelines of 2008 stipulate considering optimal capacity of a facility as a base to arrive at the tariff for the facility. When the stress is on fixing of an upfront tariff based on certain norms before the start of a project, the question of taking into account the traffic envisaged to be handled at the facility in future does not arise.

Considering the handling rate for Crude oil, POL and Other Liquids as prescribed in the 2008 Upfront Guidelines and taking into account the share of each cargo, the optimal capacity at 10.98 Million Metric Tonnes Per Annum, as proposed by the port, is considered in the analysis.

(ix). Capital Cost:

(a). The DPR forming part of the proposal as furnished by the JNPT indicates the total project cost at ₹ 1127.52 crores. The JNPT in its proposal is, however, seen to have considered capital cost to the tune of about ₹ 686.68 crores only. The major reduction is seen to be on account of exclusion of the capital cost relating to the storage activity in its proposal. Further, the cost of some of the civil works and mechanical works is seen to have been reduced by JNPT. The judgment of the port in considering a reduced level of capital cost as compared to the DPR, is relied upon in the analysis.

(b). Handling activity:

The capital cost for the handling activity as estimated by the JNPT is ₹625.85 crores of which ₹526.79 crores is estimated towards civil capital costs and the balance ₹99.06 crores is estimated for equipment capital costs.

(i). Civil works:

(a). The estimated civil costs relating to handling of liquid cargo to the tune of ₹526.79 crores pertains to Approach Trestle, Walkways, Other Costs (Building, Control room, Substation, Security, Watch tower, TLF structure etc) and Miscellaneous cost @ 5%. The upfront tariff guidelines broadly indicate the civil works involved for the liquid cargo terminal and require the port to estimate the civil cost. The nature of the civil works proposed to be undertaken at the facility generally adheres to normative list of civil works stipulated in the guidelines for the liquid cargo terminal. The exclusion of civil construction cost towards storage yard and Tankages appears to arise on account of the decision of JNPT to exclude the storage activity from the proposal.

(b). The JNPT has stated that the rate for each item of civil work is as per the Feasibility Report of 2013. Given that the unit rates considered in the capital cost estimation in DPR might have undergone a significant change during the intervening period, the JNPT was given an opportunity to update its capital cost so as to reflect the unit rates prevailing as of the year in reference. In this regard, the JNPT has opined that though the estimates pertain to the year 2013, the same is mostly in line with the prevailing market rates of 2015. In view of this position, the capital cost estimates as furnished by the port are relied upon.

(c). Under the civil capital cost, the JNPT has considered miscellaneous capital cost @ 5% of the estimated civil cost. Similarly, the JNPT has considered miscellaneous capital cost @ 5% of the estimated equipment cost. It is relevant to mention here that the Upfront tariff guidelines of 2008 stipulate estimating Miscellaneous capital cost @ 5% of the total of the estimated civil and equipment. The JNPT instead, has separately considered the miscellaneous cost under the respective category of Capital cost.

(ii). Equipment costs:

(a). The cost of equipment comprises of cost of Loading/ Unloading Arms, Fire Fighting System for Jetty, Electrical works and Miscellaneous cost @ 5%. The nature of the equipment proposed to be deployed at the facility generally adheres to normative list of equipment stipulated in the guidelines for the liquid cargo terminal.

(b). The JNPT has not furnished documentary evidence in support of the cost of equipment. It has only mentioned that the cost of the equipment is as per the Feasibility Report of 2013 and that the same is in line with the prevailing market rates of 2015. The equipment cost for each item of equipment as furnished by the JNPT is considered.

(c). For the reasons stated earlier, the estimation of Miscellaneous capital cost @ 5% of the total of the estimated equipment cost is considered in the analysis.

(c). Berthing activity:

(i). The JNPT has estimated the capital costs relating to berthing activity to the tune of ₹60.83 crores. This estimated cost pertains to Service platform, Breasting dolphins, Mooring dolphins, Dredging and Miscellaneous cost @ 5%.

(ii). The JNPT has stated that the rate for each item of civil work under the berthing activity is as per the Feasibility Report of 2013. For the reasons given earlier, the amount as estimated by the port is relied upon.

(iii). With regard to dredging cost estimated at ₹4.42 crores, the cost is reported to be towards berth pocket dredging only. The rate for dredging is reported to be based on the rate of capital dredging recently carried out by JNPT, which is relied upon.

(iv). The JNPT has considered miscellaneous capital cost @ 5% of the estimated capital cost relating to berthing activity. Though the Upfront tariff fixation guidelines of 2008 stipulate estimation of Miscellaneous capital cost @ 5% of the total of the estimated civil cost incase of handling activity, the guidelines do not specifically provide for estimation of miscellaneous capital cost under berthing service. It is noteworthy that in many cases relating to fixation of the upfront tariff for various projects at various major port trusts, the miscellaneous capital cost at 5% has been considered to meet contingencies under the Berthing Service. Keeping in view the position considered in the various cases, the miscellaneous capital cost under the berthing activity at 5% of the capital cost of berth is taken into account, as proposed by the port.

(d). During the proceedings relating to the case in reference, the APSEZL has made a general mention that the capital cost considered by the JNPT towards various assets is grossly inadequate. It has, however, not suggested any alternative capital cost with basis to be considered in the case in reference. The capital cost as estimated by the JNPT is relied upon as discussed in the earlier paragraphs.

(x). Return on capital employed is calculated at 16% of the estimated capital cost as per the norms prescribed in the guidelines.

(xi). Operating cost:

(a). Cargo Handling activity:

(i). Power cost:
Power cost has been estimated by the port for illumination of 8.25 hectares of water front area at 2,40,000 units per hectare per annum at the rate of ₹14.5 per unit.

The consumption of 2,40,000 units per hectare per annum for illumination is as per the norms prescribed in the upfront guidelines. Inspite of a specific request, the JNPT has not furnished documentary evidence in support of the rate of ₹ 14.50 per unit. The port has stated that the unit cost of ₹ 14.50 is per the latest tariff bill of MSEDCL. Relying on the reply furnished by the JNPT, the unit cost of power as estimated by the port at ₹ 14.50 is considered in this analysis.

(ii). Repairs and maintenance cost has been estimated by the JNPT at 1% of the civil assets and 2% of the equipment costs. This is seen to

be in line with the norms prescribed in the guidelines and hence accepted.

(iii). Insurance cost and other expenses each has been estimated by JNPT at 1% of the gross fixed assets. This is also seen to be in line with the norms prescribed in the guidelines and hence accepted.

(iv). Depreciation has been computed by JNPT @ 3.34% on civil cost and 10 % on equipment cost. The rate of depreciation on civil cost and equipment cost is seen to be in line with the rates of depreciation adopted in the December 2013 Order of JNPT, wherein the JNPT had confirmed that the said rates of depreciation is as per the depreciation prescribed in the Companies Act, 2013.

(v). Licence Fee:

The guidelines for upfront tariff stipulate that licence fee for port land is to be estimated based on the rates prescribed in the Scale of Rates of the respective Major Port Trusts. Licence fee has been estimated by the port for 82533 sq.m of water front area, by considering 50% of the rate of ₹19.42 per sq. mtr per month. The rate of ₹ 19.42 per sq. mtr per month is reported to have been adopted based on the rates as considered in the upfront tariff fixation of the 4th container Terminal in JNPT in February 2009 as base.

In this connection, it is noteworthy that the revision of Estate rentals at JNPT is overdue. In spite of requests made to JNPT in various occasions, the JNPT has not filed proposal for revision of its Estate rentals based on the stipulation contained in the Land Policy Guidelines. The lease rental as estimated by the JNPT is relied upon in the analysis.

(b). Berthing activity:

The guidelines require the operating cost for berthing service to be estimated at 1% of the berth cost. In addition to maintenance cost, the JNPT has considered insurance and depreciation while estimating the operating cost of berthing service.

Although the guidelines restrict the operating cost at 1% of the berth cost, the asset requires adequate insurance coverage and the fact that the value of the asset will depreciate due to wear and tear can also not be denied. While fixing upfront berth hire at the other Major Port Trusts, this position was recognised and the cost of insurance and depreciation were considered to assess the annual revenue requirement from berthing service.

In view of the position explained above, the element of insurance cost @ 1% and depreciation cost @ 3.34% are considered in this case also while estimating the operating cost for assessment of the revenue requirement from berth hire service.

(xii). The statement for fixing upfront tariff submitted by the JNPT for the ALBT has been modified in line with the above analysis. A copy of the modified statement is attached as **Annex - I (a).**

(a). Cargo handling activity:

(i). The annual revenue requirement for the liquid cargo handling activity which is the sum of the operating cost and return on capital employed works out to ₹ 151.24 crores as estimated by port.

(ii). The JNPT has apportioned 95% of the total revenue requirement towards handling charges and 5% towards miscellaneous charge, as stipulated in the upfront guidelines for liquid bulk terminal.

(iii). Based on foreign to coastal cargo ratio for the past 2-3 years, the JNPT has considered the ratio of foreign cargo at 64% and that of Costal cargo at 36%, for all the three types of cargo envisaged to be handled at LBT. This position is relied upon in the analysis.

(iv). As per coastal concessional policy of the Government, POL including crude oil is not entitled for concessional tariff. Accordingly, the JNPT has not proposed any coastal rates for Crude oil and POL and has proposed concessional rates for coastal cargo of only in respect of Other Liquids in line with the Government policy.

(v). Considering the estimated annual revenue requirement pertaining to the cargo handling activity, the per tonne handling rate in respect of each of the cargo is determined by JNPT based on the handling rate of each cargo and their individual composition of foreign/ coastal cargo to meet the estimated revenue requirement. However, since the Liquid cargo like Crude Oil and POL would not enjoy any coastal concession (based on the Government policy), the question of factoring the coastal concession to arrive at the per tonne rate in respect of Crude oil and POL does not arise. Therefore, coastal concession is factored only in the calculation of per tonne rate in respect of Other Liquids. Such an approach was accepted by this Authority while fixing the Reference tariff for ALBT earlier in December 2013. A working in this regard is attached as **Annex-I (b).**

(vi). Some of the prospective bidders viz., VIPL and APSEZL have expressed the inadequacy of the per tonne handling rates of Crude and POL and Other Liquids. According to VIPL and APSEZL, the per tonne handling rates of Crude and POL is very much on the lower side. However, with regard to Other Liquids, while VIPL has appreciated the JNPT proposal for setting up the higher tariff cap for "Other Liquids" as this provides greater flexibility to the terminal operator, the APSEL is of the view that the rates are very much on the higher side and that the said higher levy would drive away cargo from the proposed facility.

In this connection, it is relevant to mention here that per tonne rates have been arrived, by taking into account the capital costs and the operating costs in respect of the project at the level as estimated by the JNPT. Furtehr, the approach adopted to derive the per tonne rates is in line with the approach adopted in other Reference tariff cases of other Major Port Trusts

(vii). Considering 5% of the total revenue requirement related to handling activity and the total optimal capacity, the miscellaneous levy works out to ₹6.88 per tonne. The miscellaneous levy is seen to cover services like pigging, compressor charges, vaporizer charges and such related charges.

(b). Berthing activity:

Based on the analysis explained earlier, the revenue requirement from berthing service works out to ₹12.93 crores, as estimated by the port.

Considering the tonnage for each of the cargo proposed to be handled at ALBT and taking into account the ship day output of 120000 tonnes per day incase of Crude oil vessels, 24000 tonnes per day for POL vessels and 7200 tonnes per day incase of Other Liquids, the JNPT has arrived at the number of berth days. Thereafter, by considering the factor of 24 hours per day, the JNPT has arrived at the number of berth hours for each of the cargo type. Thereafter, the JNPT has considered unberthing time at 6 hours per vessel. This time slot is reported to be towards peripheral activities, including berthing and de-berthing of ships, obtaining customs clearance, surveys, positioning and hook up of equipment, post operation of survey (wherever necessary), waiting for pilots and clearance for navigation. In other words, in addition to the time required for a vessel to complete its cargo operations, the vessel will continue to stay on an average for 6 more hours towards the above mentioned activities. In view of the above, the time of 6 hours per vessel has also been factored by JNPT in the calculation of berth hire to arrive at the total GRT hours.

In this regard, it is relevant to mention here that factoring of additional time over and above the time required for cargo operations have been considered in some of the upfront tariff cases at Kolkata Port Trust (KOPT) and Cochin Port Trust (COPT). However in these cases, the period relating to unberthing has been captured in the optimal capacity calculation as well as in the berth hire calculation.

In the case of JNPT, the reasons cited by JNPT for a vessel to wait for some more time after completing its cargo operations appear to be common in nature and not unique to JNPT alone. Further in the case of JNPT, the JNPT has factored the additional time in the calculation of berth hire only and not in the capacity calculation. Thus, when the optimal capacity of a facility is calculated based on the utilisation for 6132 hours (i.e. 24hours x 365 days x 70%), thus question of calculating berth hire for a period of 8242 hours by JNPT cannot be taken into account due to mismatch in the working hours. In view of the above position, the additional time of 6 hours towards unberthing time considered by JNPT is not factored in the calculation of berth hire charges.

Considering the average GRT of the vessels and the operating hours at 12264 (6132 hours per berth x 2 berths) and the ratio of foreign and coastal vessels at 64:36, the berth hire charges works out to 0.35 per GRT per hour in respect of foreign going vessels and ₹ 0.21 per GRT per hour incase of Coastal vessels.

In this connection, it is relevant to mention here that the capital cost and operating costs under the berthing activity have all been considered with reference to two berths. Therefore, the berth hire derived as above is applicable for two berths. Incase of occupation of only one berth by a vessel, the rate relevant for one berth should only be applied. Thus, incase of occupation of only one berth by a vessel, the upfront berth hire rate of ₹ 0.14 per GRT per hour or part thereof on foreign vessels and ₹ 0.085 per GRT per hour or part thereof on coastal vessels will be applicable. A suitable note in this regard is prescribed in the Reference tariff Schedule under the Berth hire charges. Such an approach has been adopted while fixing the upfront tariff for development of West Quay-North berth (WQ-7 and WQ-8) in the inner harbour of Visakhapatnam Port Trust for handling dry bulk cargo, fixation of Reference tariff in respect of two projects at MBPT viz., Offshore Multipurpose Cargo Berth and Harbour Wall Berth as well as in the earlier Order passed in December 2013 for the ALBT.

It has already been decided by this Authority while finalising the upfront berth hire at the other Major Port Trusts to approve the upfront berth hire charge in

Rupee term only. The proposal of the JNPT for rupee denominated berth hire is in line with the decision taken by this Authority in the other upfront tariff cases.

(xiii). In the proposed reference tariff schedule, the JNPT has proposed definitions for common terms like foreign vessel, free period, port, TAMP and tonne. These definitions are found to be in line with the definitions prescribed for the respective terms in the other upfront tariff cases and Scale of Rates of other major ports and private terminals.

(xiv). The Government of India in the Ministry of Shipping (MOS) undercover of its letter No. PT-11033/51/2014-PT dated 11 November 2014 has forwarded a copy of the guidelines on priority berthing of coastal vessels at Major Port issued vide letter No.PT-11033/51/2014-PT dated 4 September 2014 to this Authority. Accordingly, this Authority vide its Order no. TAMP/52/2014-Genl. dated 28 November 2014 has, interalia, approved the replacement of definition of 'Coastal Vessel' prescribed in the existing SOR of all the Major Port Trusts as follows:

'*"Coastal vessel" shall mean any vessel exclusively employed in trading between any port or place in India to any other port or place in India having a valid coastal licence issued by the Director General of Shipping/ Competent Authority.***'**

Therefore, the definition of Coastal Vessel as proposed by the JNPT is modified with the above mentioned definition of 'Coastal Vessel'.

(xv). The JNPT has proposed some general conditionalities like conditionalities governing levy of interest on delayed payments/ refunds, rounding off bills, non-levy of charges for delay beyond a reasonable level attributable to the terminal operator, conditionalities prescribing criteria for categorization of a vessel as a foreign going vessel or coastal vessel, conditionalities prescribing 60% concessional tariff, conditionalities governing the flexibility provided to the terminal operator to levy charges lower than ceiling rates, which are found to be in line with the general conditionalities prescribed in the Upfront tariff schedule of various major port trusts.

(xvi). In the Berth hire Schedule, the common conditionalities like the period of berth hire to be calculated from the time vessel occupies the berth, Berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch, etc, and no berth hire to be levied for the period when the vessel idles at the berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator, are seen to be in line with the conditionalities prescribed at the Scale of Rates of the port and also in other upfront tariff Schedule.

(xvii). The JNPT has proposed a provision under the Schedule of Cargo handling charges to state that the handling charges prescribed shall include the cargo loading or unloading charges (as the case may be), transportation through pipelines, wharfage, etc. The note also states that it would include unloading of the cargo from vessels and transfer of the same up to the point of storage and loading on to trucks/ tankers in respect of import cargo and unloading of the cargo from the trucks/ tankers at the storage tank farm in respect of export cargo, transfer of the cargo to the loading point, loading onto the vessels, which is approved.

(xviii). Under the Miscellaneous charge schedule, a note has been prescribed stating that miscellaneous charge is towards rendering services like pigging, compressor charges, vaporizer charges and such related charges, which is approved.

(xix). In response to the clarification sought by one of the prospective bidders IMC Limited whether the BOT Operator, based on the customer demand, can levy separate charges for specific special facilities for certain liquid cargoes such as heating, refrigeration, inert gas blanketing, the JNPT is seen to have clarified to the IMC

Limited that BOT operator can levy extra charges for rendering special services for handling specific liquid cargo with due approval of this Authority. According to JNPT, it is not possible to visualise all the services that is required at a later date and therefore, it has stated that such services is provided after seeking approval of this Authority. In this connection, it is relevant to mention here that the 2013 guidelines stipulates fixation of a tariff upfront before initiating the bidding process. Thereafter, it provides for a year on year increase in the said tariff by applying the applicable indexation factor. The 2013 Guidelines do not provide for fixation of a new tariff for a new service/ facility in a post bid scenario. On being pointed out to clarify whether such an arrangement fits into the provision of Reference tariff fixation guidelines of 2013 requiring fixation of Reference Tariff upfront, the JNPT has subsequently clarified to IMCL that apart from miscellaneous charges for specific services specified therein, no other separate charges can be levied for certain liquid cargo such as heating, refrigeration, inert gas blanketing etc.

This Authority does not have any objection to the levy of the said charges, provided the JNPT seeks approval of this Authority at this stage itself, rather than advising the bidders to approach this Authority at a later date, after the bidding process is completed.

(xx). As per clause 2.8 of the upfront tariff Guidelines of 2008, the tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January 2008 and 1 January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1 April of the relevant year to 31 March of the following year. In the instant case, since the estimation of capital cost and unit rate of operating cost considered in the upfront tariff calculation are as of the year 2015, as confirmed by the JNPT, it is found appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as on 1 January 2015.

(xxi). Clause 2.2 of the revised tariff guidelines of 2013 requires this Authority to prescribe the Reference Tariff along with the Performance Standards. Though the revised guidelines of 2013 do not require this Authority to go into the Performance Standards proposed by the port it is not unreasonable to assume that the ports would propose reasonable and achievable Performance Standard.

The JNPT has proposed the Performance Standards in respect of Crude, POL products (White and Black) and Other Liquids. The cargo items for which Performance Standards are proposed are not seen to match with the cargo items for which tariff has been proposed in the Reference tariff schedule. In the fixation of reference tariff till now, the cargo items for which Performance Standards are proposed generally match with the cargo items for which tariff has been proposed in the Reference tariff schedule. It is noteworthy that in the tariff order dated 31 December 2013 in respect of the same project, such differential Performance Standards for white and black POL products were not approved which is well within the knowledge of JNPT. Even now and inspite of a specific request, the JNPT has not justified prescription of differential Performance Standards in respect of White and Black POL products. In the absence of justification, the Performance Standards is prescribed in respect of Crude, POL products and Other Liquids only.

The JNPT has proposed the Performance Standards by prescribing the indicative norms at 5000 tonnes per hour in case of Crude, 1000 tonnes per hour for White POL products, 700 tonnes per hour for Black POL products and 250 tonnes per hour in respect of Other Liquids. For the reasons mentioned above, the Performance Standards is prescribed in respect of Crude, POL products and Other Liquids only.

Since the indicative performance standard in respect of Other Liquids was seen to be on a lower side when compared to the output of one berth at 300 tonnes per hour, the JNPT was requested to review the performance standard. In this regard, the JNPT

has stated that the performance standard is as per Model Concession Agreement, while handling rates are as per TAMP guidelines.

While approving the proposal of Cochin Port Trust for fixation of Reference tariff for Coal Handling Terminal and the proposal of Mumbai Port Trust (MBPT) for fixation of Reference Tariff for multipurpose off shore cargo terminal, it had come to the notice of this Authority that the Performance Standards proposed by the concerned Major Port Trusts in these two cases are significantly lower.

Clause 2.5 of the 2013 revised tariff guidelines stipulates that the Reference Tariff and Performance Standards notified by TAMP would be mentioned in the bid document and subsequently in the Concession Agreement in respect of PPP Projects. As per the said guidelines, on the achievement of the Performance Standards at the level incorporated in the Concession Agreement, the operator is eligible to seek upward revision upto 15% over the indexed reference tariff. Thus, achievement of Performance Standards to claim tariff hike is the fulcrum of the 2013 guidelines. The Performance Standard notified by this Authority based on the proposal of the Major Port Trusts shall have a significant impact on the tariff to be levied by the Operator during the entire period of Concession Agreement. In view of this provision of performance linked tariff envisaged in the 2013 guidelines, it is appropriate that the Major Port Trust carry out due diligence and take sufficient care while proposing Performance Standards at a reasonable level instead of solely adopting the indicative norms appended at Appendix-15 – Performance Standards to the Model Concession Agreement issued by the Ministry of Shipping. As suggested in the Appendix-15, the norms are only indicative relating to gross berth day output for major cargo items and other parameters as well. Even if the Performance Standards proposed by port trust are lower than the handling rate considered in the calculation of optimal quay capacity, then as per the 2013 guidelines, the BOT operator will have the option of seeking tariff revision upto 15% over the indexed Reference Tariff on achieving the lower Performance Standards prescribed in the Concession Agreement without achieving any improvement in the performance. This perhaps may not serve the intended purpose for which the revised guidelines of 2013 are issued by the MOS linking achievement of performance to tariff hike.

In view of the above position, the MOS has already been requested to advise all the Major Port Trusts to propose reasonable and achievable Performance Standards which should not be lower than the output (handling) rate considered in the optimal quay capacity calculation of the PPP project.

Accordingly, in the present case of JNPT also, Performance Standards are prescribed based on output (handling) rate considered in the optimal quay capacity calculation. Thus, the Performance Standards are prescribed at 5000 tonnes per hour per berth in respect of Crude, 1000 tonnes per hour per berth in respect of POL and 300 tonnes per hour per berth in respect of Other Liquids.

Recognizing that clause 2.2. of the revised guidelines of 2013 requires this Authority to notify the Performance Standards, the Performance Standards as slightly modified by us along with the conditionalities proposed by the JNPT, are notified along with the Reference Tariff Schedule.

16.1. Subject to above, the Reference Tariff Schedule along with conditionalities governing the Reference Tariff has been modified.

16.2. The modified Reference Tariff Schedule is attached as **Annex-II** and the Performance Standards for the ALBT at JNPT as modified by us is attached as **Annex-III**.

16.3. In the result, and for the reasons given above, and based on a collective application of mind, this Authority approves the modified Reference Tariff Schedule for the ALBT at JNPT and notifies it alongwith the modified Performance Standards.

16.4. As per clause 2.5 of the Revised Tariff Guidelines 2013, the Reference Tariff and Performance Standards notified by the Authority shall be mentioned in the bid document and subsequently in the Concession Agreement in respect of PPP Projects. Accordingly, the JNPT is advised to incorporate the Reference Tariff and Performance Standards, in the bid document and subsequently in the Concession Agreement in respect of PPP Projects as agreed by the port.

17.1. From the date of Commercial Operation (CoD) till 31st March of the same financial year, the tariff would be limited to the indexed Reference Tariff relevant to that year, which would be the ceiling. The aforesaid Reference Tariff shall be automatically revised every year based on an indexation as provided in para 2.2 of the tariff guidelines of 2013 which will be applicable for the entire concession period.

However, the PPP operator would be free to propose a tariff along with Performance Standards (the "Performance Linked Tariff") from the second year of operation onwards, over and above the indexed Reference Tariff for the relevant financial year, at least 90 days before the 1st April of the ensuing financial year. Such Performance Linked Tariff shall not be higher than 15% over and above the indexed Reference Tariff for that relevant financial year (and this will be the Tariff Cap). The Performance Linked Tariff would come into force from the first day of the following financial year and would be applicable for the entire financial year.

17.2. The proposal shall be submitted to TAMP along with a certificate from the independent engineer appointed under the Concession Agreement of the Project indicating the achievement of Performance Standards in the previous 12 months as incorporated in the Concession Agreement or for the actual number of months of operation in the first year of operation as the case may be.

17.3. On receipt of the proposal, TAMP will seek the views of the Major Port Trust on the achievement of Performance Standards as outlined in para 5 of the tariff guidelines of 2013, within 7 days of receipt.

17.4. In the event of Operator not achieving the Performance Standards as incorporated in the Concession Agreement in previous 12 months, TAMP will not consider the proposal for notifying the Performance Linked Tariff for the ensuing financial year and the Operator shall be entitled to only the indexed Reference Tariff applicable for the ensuing financial year.

17.5. After considering the views of the Major Port Trust, if TAMP is satisfied that the Performance Standards as incorporated in the Concession Agreement have been achieved, it shall notify the performance linked tariff by 15th of March to be effective from 1st of April of the ensuing financial year.

17.6. While considering the proposal for Performance Linked Tariff, TAMP will look into the Performance Standards and its adherence by the Operator. TAMP will decide on the acceptance or rejection of the Performance Linked Tariff proposal based on the achievement or otherwise of the Performance Standards by the operator. Determination of indexed Reference Tariff and Performance Linked Tariff will follow the illustration shown in the Appendix attached to the tariff guidelines of 2013.

17.7. From the third year of operation, the Performance Linked Tariff proposal from the PPP operator shall be automatically notified by TAMP subject to the achievement of Performance Standards in the previous 12 months period as certified by the Independent Engineer. The PPP operator, for the Performance Linked Tariff from the third year onwards, will submit the Performance Linked Tariff proposal along with the achievement certificate from the independent engineer by 1st March and TAMP shall notify by 20th March, the Performance Linked Tariff to be effective from the ensuing financial year.

17.8. In the event any user has any grievance regarding non-achievement by the PPP operator of the Performance Standards as notified by the TAMP, he may prefer a representation to TAMP which, thereafter, shall conduct an inquiry into the representation and give its finding to the concerned Major Port Trust. The Major Port Trust will be bound to take necessary action on the findings as per the provisions of the respective Concession Agreement.

17.9. Within 15 (fifteen) days of the signing of the Concession Agreement, the concerned operator will forward the Concession Agreement to TAMP which will host it on its website.

17.10. The PPP operator shall furnish to TAMP quarterly reports on cargo traffic, ship berth day output, average turnaround time of ships, average pre-berthing waiting time as well as the tariff realized for each berth. The quarterly reports shall be submitted by the PPP operator within a month following the end of each quarter. Any other information which is required by TAMP shall also be furnished to them from time to time.

17.11. TAMP shall publish on its website all such information received from PPP operator. However, TAMP shall consider a request from any PPP operator about not publishing certain data/ information furnished which is commercially sensitive. Such requests should be accompanied by detailed justification regarding the commercial sensitiveness of the data/information in question and the likely adverse impact on their revenue/ operation of upon publication. TAMP's decision in this regard would be final.

(T.S. Balasubramanian)
Member (Finance)

ANNEX - I (a)

REFERENCE TARIFF CALCULATION FOR THE ADDITIONAL LIQUID BULK TERMINAL TO BE DEVELOPED AT JAWAHARLAL NEHRU PORT TRUST.

₹ in crores

Sr. No.	Particulars	Proposal of JNPT dated 24 July 2015	Estimates modified by TAMP
I	**Optimal capacity**		
(a)	Percentage Share of Liquid cargo:		
	- Crude Oil (S1)	5.68%	5.68%
	- POL (S2)	46.95%	46.95%
	- Other Liquids (S3)	47.37%	47.37%
(b)	Handling rate of Liquid cargo per day:		
	- Crude Oil (P1)	120000	120000
	- POL (P2)	24000	24000
	- Other Liquids (P3)	7200	7200
(c)	Optimal Quay Capacity for a Berth = 0.7 * ((S1*P1)+(S2*P2)+(S3*P3)) * 365	**5491881**	**5491881**
(d)	Optimal Quay Capacity for 2 Berths = 0.7 * ((S1*P1)+(S2*P2)+(S3*P3)) * 365	**10983761**	**10983761**
	Optimal Capacity in million tonnes / annum	**10.98**	**10.98**
II	**Capital Cost**		
		₹ in crores	
A.	**Cargo Handling Activity:**		
(a)	**Civil costs**		
	Approach Trestle	487.95	487.95
	Walkways	2.05	2.05
	Other Costs (Building, Control room, Substation, Security, Watch tower, TLF structure etc.)	11.70	11.70
	Miscellaneous cost @ 5%	25.09	25.09
	(a)	526.79	526.79
(b)	**Equipment costs**		
	Loading/ Unloading Arm	47.54	47.54
	Fire Fighting System for Jetty	11.70	11.70
	Electrical Works	35.10	35.10
	Miscellaneous cost @ 5%	4.72	4.72
	(b)	99.06	99.06
	Total capital costs for the cargo handling activity	**625.85**	**625.85**
B.	**Berthing activity:**		
	Service Platform	10.07	10.07
	Breasting Dolphins	24.18	24.18
	Mooring Dolphins	19.26	19.26
	Dredging	4.42	4.42
	Miscellaneous cost @ 5%	2.90	2.90
	Total capital costs for the berthing activity	**60.83**	**60.83**
C	**Total capital cost of the project (A + B)**	**686.68**	**686.68**
III	**Operating Cost**		
A	**Cargo handling activity:**		
	(a). Power cost	2.87	2.87
	(JNPT - 8.25 hectares water front area * 240000 units per hectare @ Rs.14.5 per unit) (TAMP - 8.25 hectares water front area * 240000 units per hectare @ Rs.14.5 per unit)		
	(b). Repair & Maintenance		
	- Civil works (1% on civil costs)	5.27	5.27
	- Equipment cost (2% on Equipment costs)	1.98	1.98
	(c). Insurance (1% on Gross fixed assets)	6.26	6.26
	(d). Depreciation		
	- Civil works (3.34% on civil costs)	17.59	17.59
	- Equipment cost	9.91	9.91
	(JNPT - 10% on Equipment costs) (TAMP - 10% on Equipment costs)		
	(e). License Fee		
	(JNPT - For Water front - 82533 sq.mtrs. * Rs.19.42 per sq.m * 12 months * 0.5) (TAMP - For Water front - 82533 sq.mtrs. * Rs.19.42 per sq.m * 12 months * 0.5)	0.96	0.96
	(f). Other Expenses (1% on Gross fixed assets)	6.26	6.26
	Operating Cost for cargo handling activity	**51.10**	**51.10**

Sr. No.	Particulars	Proposal of JNPT dated 24 July 2015	Estimates modified by TAMP
		₹ in crores	
B.	**Berthing activity:**		
	(a). Repairs & Maintenance Charge (1% on berth costs)	0.56	0.56
	(b). Depreciation (3.34% on berth costs)	2.03	2.03
	(c). Insurance (1% on berth costs)	0.61	0.61
	Operating cost for the berthing activity	**3.20**	**3.20**
IV	**Estimated Revenue Requirement & upfront tariff**		
A.	**Cargo handling activity:**		
(i).	**Estimated Revenue Requirement**		
	(a). Total Operating Cost	51.10	51.10
	(b). Return on capital Employed @ 16%	100.14	100.14
	(c). Total Revenue requirement from liquid handling activity	**151.24**	**151.24**
(ii).	**Apportionment of Revenue Requirement**		
	(a). Liquid Handling Charges (95%)	143.67	143.67
	(b). Miscelleneous Charge (5%)	7.56	7.56
	(c). Total Revenue requirement from liquid handling activity	**151.24**	**151.24**
(iii).	**Liquid Handling charge**		
	(a). Liquid Handling Charge		
	- Revenue Requirement (₹ in crores)	143.67	143.67
	- Capacity (Million Metric Tonnes per annum)	10.98	10.98
	- Per tonne handling rate (in Rs.)		
	- Crude Oil	**23.43**	**23.43**
	- POL	**117.15**	**117.15**
	- Other liquid	**456.19**	**456.19**
	(b). Miscelleneous Charge		
	- Revenue Requirement (₹ in crores)	7.56	7.56
	- Capacity (Million Metric Tonnes per annum)	10.98	10.98
	- Miscellenous Charge (₹ per tonne)	**6.88**	**6.88**
C.	**BERTH HIRE CHARGES**		
	(a) Operating cost	3.20	3.20
	(b) Return on capital Employed @ 16%	9.73	9.73
	(c)Total Revenue requirement from Berthing services	**12.93**	**12.93**
	Berth hire Charge (Rate per GRT per hour) in ₹ for foreign going vessels	**0.21**	**0.28**
	Berth hire Charge (Rate per GRT per hour) in ₹ for coastal vessels	**0.12**	**0.17**

Berth Hire Calculation:

Sr. No.	Particulars	Unit	Proposal of JNPT dated 24 July 2015				Estimates modified by TAMP			
			Crude Oil	POL	Others Liquids	Total	Crude Oil	POL	Others Liquids	Total
i	Ship day output	Tonnes/day	120000	24000	7200		120000	24000	7200	
ii.	Average GRT	Tonnes	72000	48000	36000		72000	48000	36000	
iii.	Average parcel size	Tonnes	55000	13250	7077		55000	13250	7077	
iv.	Tonnage expected to be handled	Tonnes	3484191	5757449	1742914	10984554	3482976	5757948	1742837	10983761
v.	Average no. of berth days (iv / i)	Days	29	240	242	511	29	240	242	511
vi.	No. of berth hours {24 x (v)}	Hours	697	5757	5810	12264	697	5758	5809	12264
vii.	Expected number of vessels (iv / iii)	Nos.	63	435	246	744	63	435	246	
viii.	Unberthing time per vessel	Hours	6	6	5		0	0	0	
ix.	unberthing hours (vii x viii)	Hours	380	2607	1231	4219	-	-	-	0
x.	Total hours (vi + ix)	Hours	1077	8365	7041	16483	697	5,758	5,809	12264
ix.	Total GRT hours (ii * x)	GRT hours	77539087	401500594	253479837	732519518	50154854	276381504	209140445	535676803
x.	Revenue Requirement	Rupees				129339651				129339651

Working for foreign vessel 64% and coastal vessel 36%)		Working for foreign vessel 64% and coastal vessel 36%)	
732519518 * 64% * x + 732519518 * 36% * 0.6x =	129339651	551411976 * 64% * x + 551411976 * 36% * 0.6x =	129339651
468812491.7 x + 263707027 * 0.6x =	129339651	468810294.1 x + 263705790.4 * 0.6x =	129339651
x = Foreign going vessel rate	**0.21**	x = Foreign going vessel rate	**0.28**
Coastal vessel Rate = 0.6 x foreign going vessel rate	**0.12**	Coastal vessel Rate = 0.6 x foreign going vessel rate	**0.17**

Annex - I(b)

WORKINGS TO ARRIVE AT THE PER TONNE HANDLING RATES:

As per TAMP

	Capacity				Handling rates					
	Total	**Foreign**	**Coastal**		**Handling rate per day**	**Cargo working days**	**% of cargo working days**	**Revenue requirement**	**Foreign cargo rate**	**Coastal cargo rate**
Crude	3482976	2229105	1253871		120000	29	5.68%	81123361	23.29	0.00
POL	5757948	3685087	2072861		24000	240	46.95%	670553133	116.46	0.00
Others	1742837	1115416	627421		7200	242	47.37%	676551692	453.49	272.10
Total capacity	**10983761**	**7029607**	**3954154**			511		**1428228186**		

As per JNPT

	Capacity				Handling rates					
	Total	**Foreign**	**Coastal**		**Handling rate per day**	**Cargo working days**	**% of cargo working days**	**Revenue requirement**	**Foreign cargo rate**	**Coastal cargo rate**
Crude	3482976	2229105	1253871		120000	29	5.68%	81606591	23.43	0.00
POL	5757948	3685087	2072861		24000	240	46.95%	674547441	117.15	0.00
Others	1742837	1115416	627421		7200	242	47.37%	680581731	456.19	273.72
Total capacity	**10983761**	**7029607**	**3954154**			511		**1436735763**		

Annex - II

JAWAHARLAL NEHRU PORT TRUST

REFERENCE TARIFF SCHEDULE FOR THE ADDITIONAL LIQUID BULK TERMINAL

Definitions:-

In this Scale of Rates unless the context otherwise requires, the following definitions shall apply:

(i) **"Coastal vessel"** means any vessel exclusively employed in trading between any port or place in India to any other port or place in India having a valid coastal licence issued by the Director General of Shipping/ Competent Authority**.**

(ii) **"Foreign vessel"** means any vessel other than Coastal vessel.

(iii) **"Free Period"** shall mean the period during which cargo shall be allowed storage free of demurrage charges/ground rent and this period shall exclude Customs notified holidays and Terminal's non-operating days.

(iv) **"Port"** shall mean Jawaharlal Nehru Port Trust.

(v) "TAMP" shall mean the Tariff Authority for Major Ports constituted under Section 47A of the Major Port Trusts Act, 1963.

(vi) **"Tonne"** shall mean one metric tonne or 1,000 kilograms or one cubic metre.

1. GENERAL TERMS & CONDITIONS

i. Interest on delayed payments / refunds:

(a). The user shall pay penal interest on delayed payments under this Scale of Rates. Likewise, the operator shall pay penal interest on delayed refunds.

(b). The rate of penal interest will be 2% above the Prime Lending Rate of State Bank of India (SBI). The penal interest rate will apply to both the operator and the port users equally.

(c) The delay in refunds will be counted only 20 days from the date of completion of services or on production of all the documents required from the users, whichever is later.

(d) The delay in payments by the users will be counted only 10 days after the date of raising the bills by the Terminal Operator. This provision shall, however, not apply to the cases where payment is to be made before availing the services where payment of charges in advance is prescribed in this Scale of Rates.

ii. All charges worked out shall be rounded off to the next higher rupee on the grand total of the bill.

iii. Users will not be required to pay charges for delays beyond reasonable level attributable to the Terminal Operator.

iv. The status of the Vessel as borne out by its certification by the Customs or Director General of Shipping is the relevant factor to decide whether vessel is "Coastal" or "Foreign-going" for the purpose of levy of berth hire, and the nature of cargo or its origin will not be of any relevance for this purpose.

v. (a) A foreign going vessel of Indian Flag having a General Trading Licence can convert to Coastal run on the basis of a Customs Conversion Order.

(b) A foreign going vessel of Foreign Flag can convert to Coastal run on the basis of a Coastal Voyage Licence issued by the Director General of Shipping.

(c) In case of such conversion, coastal rates shall be chargeable by the load port from the time the vessel starts loading coastal goods.

(d). In cases of such conversion coastal rates shall be chargeable only till the vessel completes coastal cargo discharging operations; immediately thereafter, foreign going rates shall be chargeable by the discharge ports.

(e). For dedicated Indian coastal vessels having a Coastal Licence from the Director General of Shipping, no other document will be required to be entitled to Coastal rates.

vi. (a) The berth hire for all coastal vessel should not exceed 60% of the corresponding charges for other vessels.

(b) The cargo related charges for all coastal cargo other than crude including POL should not exceed 60% of the normal cargo related charges.

(c) Cargo from a foreign port which reaches an Indian Port "A" for subsequent transhipment to Indian Port "B" will be levied the concession charges relevant for its coastal voyage. In other words, cargo from/to Indian Ports carried by vessels permitted to undertake coastal voyage will qualify for the concession.

vii. The rates prescribed in this Scale of Rates are ceiling levels; likewise, rebates and discounts are floor levels. The operator may, if he so desires, charge lower rates and/ or allow higher rebates and discounts.

The Terminal Operator if so desires, rationalise the prescribed conditionalities governing the application of rates prescribed in the Scale of Rates if such rationalization gives relief to the user in rate per unit and the unit rates prescribed in the Scale of Rates do not exceed the ceiling levels.

The Terminal Operator should, however, notify the public such lower rates and / or rationalization of the conditionalities governing the application of such rates and continue to notify the public any further changes in such lower rates and / or in the conditionalities governing the application of such rates provided the new rates fixed shall not exceed the rates notified by the TAMP.

2. Berth Hire Charges:

The berth hire charge payable by masters / owners / agents of the vessel approaching or lying alongside the berth shall be as per the rates given below:

Foreign going Vessels	₹ 0.28 per GRT per hour
Coastal Vessels	₹ 0.17 per GRT per hour

Notes:

(i). Incase of occupation of only one berth by a vessel, 50% of the respective berth hire charges as mentioned above are leviable for the foreign going vessels and coastal vessels.

(ii). The period of berth hire shall be calculated from the time vessel occupies the berth.

(iii). Berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch, etc.

(iv). No berth hire shall be levied for the period when the vessel idles at its berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the Terminal Operator.

3. Cargo Handling Charges:

The liquid cargo handling charges at Oil Jetty shall be payable on the manifested cargo directly by the importer of cargo at the rates specified below:

(₹ per metric tonne)

Description / Cargo	Foreign	Coastal
Crude	23.43	23.43
POL	117.15	117.15
Others	456.19	273.72

Note:

The cargo handling charges shall include the cargo loading or unloading charges (as the case may be), transportation through pipelines, wharfage, etc.

(a). Unloading of the cargo from vessels and transfer of the same up to the point of storage and loading on to trucks/ tankers in respect of import cargo.

(b). Unloading of the cargo from the trucks/tankers at the storage tank farm in respect of export cargo, transfer of the cargo to the loading point, loading onto the vessels.

4. Miscellaneous Charges:

₹ 6.88 per tonne shall be charged towards pigging, compressor charges, vaporizer charges and such related charges.

5. General Note to Section 2 to 4 above.

(i). The tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1st January 2015 and 1st January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1st April of the relevant year to 31st March of the following year.

(ii). From the date of Commercial Operation (CoD) till 31st March of the same financial year, the tariff would be limited to the indexed Reference Tariff relevant to that year, which would be the ceiling. The aforesaid Reference Tariff shall be automatically revised every year based on an indexation as provided in para 2.2 of the tariff guidelines of 2013 which will be applicable for the entire licence period.

However, the Licensee would be free to propose a tariff along with Performance Standards (the "Performance Linked Tariff") from the second year of operation onwards, over and above the indexed Reference Tariff for the relevant financial year, at least 90 days before the 1st April of the ensuing financial year. Such Performance Linked Tariff shall not be higher than 15% over and above the indexed Reference Tariff for that relevant financial year (and this will be the Tariff Cap). The Performance Linked Tariff would come into force from the first day of the following financial year and would be applicable for the entire financial year.

(iii). The proposal shall be submitted to TAMP along with a certificate from the independent engineer appointed under the Concession Agreement of the Project indicating the achievement of Performance Standards in the previous 12 months as incorporated in the Licence Agreement or for the actual number of months of operation in the first year of operation as the case may be.

(iv). On receipt of the proposal, TAMP will seek the views of the Major Port Trust on the achievement of Performance Standards as outlined in para 5 of the tariff guidelines of 2013, within 7 days of receipt.

(v). In the event of Licensee not achieving the Performance Standards as incorporated in the Licence Agreement in previous 12 months, TAMP will not consider the proposal

for notifying the Performance Linked Tariff for the ensuing financial year and the Licensee shall be entitled to only the indexed Reference Tariff applicable for the ensuing financial year.

(vi). After considering the views of the Major Port Trust, if TAMP is satisfied that the Performance Standards as incorporated in the Concession Agreement have been achieved, it shall notify the performance linked tariff by 15th of March to be effective from 1st of April of the ensuing financial year.

(vii). While considering the proposal for Performance Linked Tariff, TAMP will look into the Performance Standards and its adherence by the Licensee. TAMP will decide on the acceptance or rejection of the Performance Linked Tariff proposal based on the achievement or otherwise of the Performance Standards by the Licensee. Determination of indexed Reference Tariff and Performance Linked Tariff will follow the illustration shown in the Appendix attached to the tariff guidelines of 2013

(viii). From the third year of operation, the Performance Linked Tariff proposal from the Licensee shall be automatically notified by TAMP subject to the achievement of Performance Standards in the previous 12 months period as certified by the Independent Engineer. The Licensee, for the Performance Linked Tariff from the third year onwards, will submit the Performance Linked Tariff proposal along with the achievement certificate from the independent engineer by 1st March and TAMP shall notify by 20th March, the Performance Linked Tariff to be effective from the ensuing financial year.

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Annex – III

ADDITIONAL LIQUID BULK TERMINAL AT JAWAHARLAL NEHRU PORT TRUST

PERFORMANCE STANDARDS

Gross Berth Output

The parameter deals with the productivity of the terminal (Gross Berth Output) for different types of cargo. In case of liquid bulk cargo, the capability of the terminal (mechanization, method of handling) and parcel size will determine the Gross Berth Output. Higher terminal capability and greater parcel size will lead to high productivity.

The Gross Berth Output shall be calculated as the total cargo handled (either loaded/ unloaded) from the ship during a month divided by the time spent by the ship at the terminal number of working days of ships in that month at that terminal. While determining the number of working days from the ship hours, the berth allowance of 4 hours shall be subtracted from the total hours.

The norms for Gross Berth Output for liquid bulk cargo are as follows:

Liquid Bulk	**Indicative Norms**
Crude Oil	5000 T/H
POL Products	1000 T/H
Other Liquids	300 T/H

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SUMMARY OF THE COMMENTS RECEIVED FROM THE PORT USERS / DIFFERENT USER ORGANISATIONS / PROSPECTIVE BIDDERS AND ARGUMENTS MADE IN THIS CASE DURING THE JOINT HEARING BEFORE THE AUTHORITY

F. No.TAMP/18/2015- JNPT - Proposal received from the Jawaharlal Nehru Port Trust (JNPT) for Fixation of Reference Tariff for Development of Additional Liquid Bulk Terminal (ALBT) at JNPT under PPP Mode.

1. A summary of comments received from the users/ user organisations/ prospective bidders on the revised proposal of JNPT dated 1 and 2 April 2015 and the comments of JNPT thereon is tabulated below:

Sl. No.	Comments made by users / prospective bidders	Response of JNPT
1.	**M/s. Adani Ports and Special Economic Zone Limited**	
(i).	The cargo handling charges fixed for Crude Oil and POL products is very less. This is happening as the capacity envisaged for the terminal is skewed towards POL handling.	The cargo handling charges are calculated as per TAMP guidelines 2013.
	(a). Looking at the cargo projection of JNPT, Crude Oil is projected to be handled at 0.84 Million Metric Ton by 2034-35. With such low projection the allocation of capacity to Crude Oil should be reduced. The rate proposed for Crude Oil handling should be revised upwards as the present rate of ₹21.11 per Metric Ton is very less.	
	(b). For POL, the Cargo Handling rate of ₹105.56 per Metric Ton is not sustainable. This is also very less in comparison with the existing BPCL berth where the Wharfage charges for POL are approx ₹140/- per Metric Ton for certain products.	
(ii).	Land area of 36.5 Ha earmarked for tankage is grossly inadequate for the anticipated throughout from the two berths. The reasons for the same can be seen as under:	The land area of 36.5 ha earmarked for storage facilities is adequate for the liquid cargo to be handled at 2 berths.
	(a). Turnaround for crude and POL may not be more than 8 to 10 cycles per year. It could be less than 8 turnaround per year for chemicals.	
	(b). OISD norms are becoming stringer day by day demanding higher safety distances between various facilities.	
	(c). Evacuation of cargo from tankage shall cater to rail sided facilities demanding additional land area for the same.	
	(d). Planning must cater to increased throughput from the two berths. This will mean that facility shall have provision to add more tankage capacity within the terminal. Reserve plot of land must be catered for future expansion within the maximum achievable throughput.	
	(e). In our quick assessment, land area of upto 55 Ha must be reserved and allotted to the bidder for this project consisting of 2 bulk liquid berths.	

	(f). Master plan of JNPT caters to two additional liquid berths over and above the proposed 2 berths. JNPT may advice the storage area for these the future berths.	
	(g). We would like to review the layout of tankage and other facilities based on which Draft Bid document has been proposed.	
(iii).	Project Cost Estimate:	The estimated project cost is based on DPR prepared by M/s L&T Ramboll, which is in line with the current rates of 2015. The DPR is for general guidelines. The estimated cost is at conservative side.
	(a). Considering the recent revision in OISD norms, the cost estimate of various items appear to be on lower side.	
	(b). Cost of pipelines appear to be on lower side for chemical lines which are expected to be of SS make. Edible oil pipelines may call for heat tracing for which cost is not included.	
	(c). Instrumentation and automation estimate appears to be on lower side.	
	(d). Fire-fighting is on lower side considering requirement of two berths.	
	(e). Cost of utilities (water, air, nitrogen and bunkering) is on lower side.	
	(f). No cost has been taken for rail siding and therefore lack of it would have negative impact on total throughput of the terminal.	
(iv).	Two berths of 180,000 DWT have been mentioned in the Draft Bid. Bidder may be allowed to exercise option to reduce the size of one of the two berths considering smaller vessels likely to be deployed in POL and chemical trade.	The design of the berths for handling liquid vessels for 1,80,000 DWT is considered, however, the bidders may handle one or more vessels at berth.
(v).	There shall be no restriction on type or commodity of cargo at the proposed additional liquid bulk terminal.	There is no restriction at the proposed additional liquid bulk terminal for handling of any type of commodity of liquid cargo.
(vi).	JNPT shall carry out further deepening of berth pocket from (-) 16.5m CD to (-) 18.0m CD at a specified threshold milestone and such milestone shall be clearly mentioned in the bid document.	At present the port is carrying out DPR for phase-II capital dredging project. After finalizing of this report, the same can be dealt appropriately during bid stage.
(vii).	Bidder shall be allowed to plan, arrangement and design of service platform. Minimum size of service platform mentioned in the draft Bid may be deleted.	To bring all the bidders at one platform, the minimum sizes of jetty structures are recommended in DPR and estimate is based on sizes proposed in the DPR. The DPR is for general guidelines.
(viii).	Draft Bid mentions 15m as deck width. Bidders may be allowed to plan and design the width of approach trestle as per their overall arrangement. Draft Bid may specify the minimum width of roadway.	Out of 15 M wide trestle, 7M is earmarked for 2 lane approach to the berths.
(ix).	For future development of additional two berths, (a). Developer of this project (2 berths) must have first right of refusal on next project (additional 2 berths). (b). Developer of this project must have sufficient exclusivity before commencement of 2nd Project (additional 2 berths) (c). Please include trigger point for development of next project (additional 2 berths).	As per the present traffic projection, the port has not envisaged further extension of the facility for liquid cargo.

1.2. M/s. IMC Limited has furnished the comments which are given below:

	M/s. IMC Limited
(i).	**Traffic Forecast:**
	(a). There are various liquid cargoes namely crude oil, POL products, organic and inorganic chemicals, vegetable oils and liquefied gases. The traffic forecast gives only the summary figures. It is requested that the break-up of traffic projections for the various liquid cargoes be furnished.
	(b). The traffic is projected to reach 6.79 million tonnes per annum only in the year 2034-35. However, the phase 1-A of the project entails two liquid handling berths to accommodate vessels with 180,000 DWT capacity. The existing BPCL liquid jetty is expected to handle 5.5 MMTPA. It is, therefore, suggested that only one berth is considered in phase 1-A and the second berth is included in second phase.
(ii).	**Optimal Capacity:**
	(a). Cargo projections include Crude Oil and 2.24 million tonnes per annum is considered for arriving at the optimal capacity of the terminal. It is requested that JNPT shares the basis of the crude oil traffic projections.
	(b). The optimal terminal capacity is 11.25 million tonnes per annum. However, the traffic projections given under Table 2, is only 6.5 million tonnes per annum for the year 2034-35. IMC request clarification as to how the traffic would reach 11.25 million tonnes per annum in the year 2018-19 and the basis for the assumption.
(iii).	**Developmental Plan:** Is there a second phase that is planned as part of the developmental plan? It is requested that the details of further phase/s of the project are shared.
(iv).	**Project Capital Cost:**
	(a). The dock pipeline lengths are more than 8 km and hence 8 inches diameter pipeline would lead to very low flow rates and affect the efficiency of operations. It is suggested that the minimum size of pipeline should be 12 inches and the project cost changed suitably.
	(b). In Table 3, the number of tanks is indicated as 44 (2.3), while the number of bays is only 26, which appears to be a mis-match. IMC requested JNPT to confirm the number of tanks planned for each category i.e. POL, edible oil and chemicals and also the number of bays.
(v).	**Fire Fighting System:** The cost considered for fire-fighting system for the jetty at ₹4.5 Crores appears to be on the lower side. It is requested that JNPT to share the technical specifications of the fire- fighting system and the basis of arriving at the cost.
(vi).	**Capital Dredging:** The cost of capital dredging is considered at ₹ 160 per cubic metre. Dredging volume is only 234,000 cubic meters, for which the dredging cost appears to be very low. It is requested to review and reconfirm the dredging cost and the project cost be increased suitably.
(vii).	**Storage Tank Capacity and Cost:** The proposal does not indicate the total capacity of the tankage considered, number of tanks and size of tanks. The tankage capacity is critical to achieve the projected throughput for the terminal. In the absence of these details, it is not possible to take a view on the adequacy of the tankage capacity and project cost for the storage tanks.
(viii).	**O&M Costs:** It is indicated that Land Area lease rent is considered @ ₹1 per sq.m per month as per JNPT scale of rates. However, in Table 7, license fee of ₹19.42 per sq.m per month is considered. We request clarification as to the license fee/lease rentals considered for the purpose of tariff fixation.
(ix).	**Storage Charges**
	(a). The basis and calculations for arriving at storage charges are not furnished in the proposal. It is requested that the details be furnished for our study.
	(b). What is the storage capacity considered for determining the storage charges? The storage capacity should be based on phase wise capacity and increase in line with the traffic projections

1.3. The JNPT has not responded to the comments of M/s. IMC Limited.

2.1 A joint hearing on the revised proposal of JNPT dated 1 and 2 April 2015 was held on 20 April 2015 at the Office of this Authority in Mumbai. The Consultant of JNPT i.e., RITES had made a PowerPoint presentation of the proposal on behalf of the JNPT. At the joint hearing, the JNPT and the users / user organisations / prospective applicants have made following submissions:

Jawaharlal Nehru Port Trust

(i). In Haldia, Paradip, nowhere the tankage/ storage has been considered along with the jetty.

(ii). Our capital cost estimates are okay and conservative and our Consultant has stated that it holds good.

Adani

(i). The capacity of the facility assessed by the JNPT at 11.25 MMTPA is very high. The capacity will have a bearing on the size of pipelines, length of the jetty, handling of cargo and evacuation of cargo. Therefore, capacity should be least of all the above aspects.

(ii). The land area of 36.5 ha of land is grossly inadequate.

(iii). The Chief Controller of Explosives (CCOE) has prescribed stringent norms with regard to spacing of the tank farms. According to us, in the area of about 36.5 ha, taking into account the spacing requirements a storage capacity of about 3.5 - 4 lakh KL is only possible, as in storage, behavior of each type of commodity is different and is to be taken into account.

(iv). The turnaround of liquid cargo is considered at 24 times by JNPT. The turnaround of only 5 times in a year is possible at best conditions.

(v). The storage model worked out by JNPT is far away from the current industry practices. The storage tanks should be tied up to a party on fixed monthly occupancy basis, irrespective of the period for which the party stores cargo.

(vi). The storage charge of ₹144/- per MT per month is very low and is not viable.

(vii). Incase of Liquid cargo, the tanker vessel does not generate more of berth hire income due to faster turnaround.

(viii). Even if the JNPT vessel related charges are lower as compared to BPCL jetty, who will come to JNPT jetty, as vessel income constitutes a miniscule portion of the total income from tanker vessels.

(ix). Cost of tank farm is on the lower side. We doubt that the cost of safety norms is grossly inadequate.

(x). Cost of pipelines is low, as the number of pipelines could go up so as to eliminate contamination of cargo.

(xi). Cost of firefighting is insufficient.

(xii). Even the cost of nitrogen for pigging operation is not sufficient as it is costly and requires compressor and may have to be used frequently.

(xiii). Thus, overall, the capital cost is inadequate.

(xiv). Berth occupancy at 70% is unheard of in the industry.

M/s. IMC Ltd.

(i). The capacity of the project at 11.25 MMTPA is seen to be on a higher side.

(ii). The storage model adopted by JNPT does not happen in the current scenario.

(iii). The storage charges should commensurate depending on the type of cargo stored.

(iv). Cost of Capital dredging seems to be on a lower side and needs to be reviewed.

2.2. As agreed at the Joint Hearing, M/s Adani Ports and Special Economic Zone Limited (APSEZL) vide its email dated on 29 April 2015**,** Mumbai and Nhava-Sheva Ship Agents' Association (MANSA) vide its e-mail dated 29 April 2015 and M/s IOT Infrastructure and Energy services Ltd vide its email dated 05 May 2015 have furnished their comments. The JNPT has not furnished its comments on the submissions made by the users/ prospective bidders. A summary of comments received from APSEZL, MANSA and M/s IOT is given below:

Sl. No.	Comments of the users/ user organizations/ prospective bidders
1.	**Adani Ports and Special Economic Zone Limited (APSEZL)**
i.	As per the Tariff Guidelines of 2008, for fixation of optimal capacity of Liquid Terminal, only the quay capacity is considered which is working to be 11.25 Million Tones. However in case of other commodities like Containers, Coal etc the lower value of optimal Quay capacity and Optimal Stack yard capacity is considered for arriving at the Terminal capacity. The same formula should be considered for Liquid Terminal due to following reasons:
a.	Turnaround of cargo from storage tanks is generally limited to 5 or 6 per year as per market practice.

b.	Considering 6 turn around per year from the tank farm, storage tanks of upto 18 lakh KL would be required for 11 MTPA cargo.
c.	In our quick assessment, with 36.5 Ha of back up land considering rail siding, truck parking, utilities, flare etc, the maximum storage possible will be around 4.75 lakh KL. With this storage capacity and considering 6 turnaround cycles per annum, the annual storage capacity shall work out to be around 3 Million Tons.
d.	With the above calculations, it can be observed that there is a huge mismatch between the Optimal Quay capacity of 11.25 Million Tonnes and Optimal Storage capacity of 3.0 Million Tonnes.
e.	Hence it is requested to kindly consider the Optimal storage Capacity before fixing up Terminal Capacity.
ii.	Land area of 36.5 Ha earmarked for tankage is grossly inadequate for the anticipated throughout from the two berths. Reasons are as follows:
a.	Oil Industry Safety Directorate (OISD) norms are becoming stringer by the day demanding higher safety distance between various facilities.
b.	Evacuation of cargo from tankage shall consider rail sided facilities demanding additional land area for the same
c.	Planning must cater to increase throughput from the berths. This will mean that facility shall have provision to add more tankage capacity within the terminal. Reserve plot of land must be earmarked for marginal expansion within the maximum achievable throughput at berths.
d.	In our quick assessment, land area of about 140 Ha including rail siding, truck parking, utilities flare etc. shall be required to handle 11.25 Mil Tons of cargo per annum.
e.	Master plan of JNPT caters to two additional liquid berths over and above the proposed 2 berths. JNPT may advice the storage area for these future berths.
iii.	The cargo handling charges fixed for crude Oil and POL product is very less. This is happening as the capacity envisaged for the terminal is skewed towards POL handling.
a.	Looking at the cargo projection of JNPT, Crude Oil is projected to be handled at 0.84 Million Metric Ton by 2034-35. With such low projection, the allocation of capacity to Crude Oil should be reduced. The rate proposed for Crude Oil handling should be revised upwards as the present rate of ₹. 21.11/- per Metric Ton is very less.
b.	For POL, the Cargo Handling rate of ₹. 105.56 per Metric Ton is not sustainable. This is also very less in comparison with the existing BPCL berth where the Wharfage charges for POL are approx. ₹. 140/- per Metric Ton for certain products.
iv.	Project Cost Estimate
a.	Cost of jetty structure considering two berths is on lower side. Raker piles in bored cast insitu construction suggested by Consultant is not a commonly adopted scheme for liquid jetties. Controlling stringent deflection limits in liquid jetty is better achieved using steel piles. The cost of facility with steel piles will be higher than projected by JNPT. Increase in project cost would have direct bearing on tariff derived as per TAMP guidelines. JNPPT is requested to revisit the cost of jetty structure and enhance it appropriately.
b.	Considering the recent revisions in OISD norms, the cost estimate of various items appear to be on lower side.
c.	Cost of pipelines appear to be on lower side for chemical lines which are expected to be of SS make. Edible oil pipelines may call for heat tracing for which cost is not included
d.	Instrumentation and automation estimate appears to be on lower side.
e.	Fire-fighting is on lower side considering requirement of two berths.
f.	Cost of utilities (water, air, nitrogen and bunkering) is on lower side.
g.	No cost has been taken for rail siding and therefore lack of it would have negative impact on total throughput of the terminal.
h.	Cost of storage tanks and associated facilities are for projected traffic of about 6.79 MTPA whereas jetty capacity is being taken as 11.26 MTPA. Additional cost of storage tanks and associated facilities to handle the balance cargo of 4.47 MTPA is not considered in project cost. Unless the additional tank farm capacity is built, it is not possible to realise the potential of berth capacity. As can be seen from the above, project cost is drastically on lower side compared to present market rates and safety norms. JNPT is requested to revisit the project cost and enhance it appropriately at par with market rates. Moreover any further increase in project cost would

	have direct bearing on proposed tariff being derived as per TAMP guidelines.
v.	JNPT has proposed to develop both berths to cater to 180,000 DWT vessels. In the traffic forecast of JNPT they have projected total cargo of 5.95 Million Tonnes between POL, Chemicals, Edible Oil and others. As per the Industry practice, 180,000 DWT vessels are not used to handle POL, Chemicals and Edible Oil as these commodities are handled in small parcel sizes sometimes in combined form. The only commodity which can be brought in 180,000 DWT vessels is crude oil which is projected as low as 0.84 Million Tonnes by JNPT. Hence in our view, Bidder may be allowed to exercise option to reduce the size of one of the two berths considering smaller vessels likely to be deployed in POL and chemical trade.
vi.	Bidder shall allowed to plan, arrange and design service platform to suit their development plants. Specifying minimum size of service platform in the draft Bid may be deleted. Bidder shall be allowed to exercise their judgment in deciding the configuration of marine facilities.
vii.	Draft Bid mentions 15m as deck width for approach trestle. Bidder shall be allowed to plan and design the width of approach trestle as per their overall arrangement of top side facilities. Minimum width of roadway on approach trestle shall be as per IRC guidelines.
viii.	JNPT may revisit the entire scheme of additional liquid terminal considering the following aspects as bare minimum inputs:
a.	Thorough analysis of anticipated traffic
b.	Breakup of commodities into import-export split, sensitive & hazardous cargoes, chemicals & POL etc.
c.	Develop optimum layout of berths, approach trestle, Tankfarm, evacuation and ancillary facilities considering established safety norms. Location of berths shall be governed based on minimizing length of docklines between berths and tankfarm even if it calls for marginal increase in length of approach channel. Most of the specialized chemical trade operates on small parcel sizes and thus docklines shall be of shortest possible lengths to minimize cargo hold up in docklines.
d.	Work out the most suitable plot plan and reserve areas for marginal expansion as is quite common to this kind of infrastructure.
e.	Update the cost of facility as per prevailing market rates
f.	Derive the nameplate capacity of facility which must be lowest of (a) berth capacity; (b) dockline capacity; (c) tankfarm storage capacity; (d) evacuation facilities into or out of Tankfarm. We request your good office to kindly put the above on your records and look into the same before going forward for the Tariff Notification.
2.	**Mumbai and Nhava-Sheva Ship Agents' Association (MANSA)**
	Prime facie, we feel the proposal of JNPT is in order.
3.	**M/s IOT Infrastructure and Energy Services Ltd.**
(i).	**Capital Cost**
	(a). Land Development **Observation:** The proposal has no mention about the soil quality and bearing quality and cost involved in the development of suitable land parcel to erect POL tanks. **Impact:** It may be a crucial and substantial cost and in absence of any technical data /information it is hard to comment.
	(b). Capital Dredging **Observation:** The Proposal accounts for capital dredging of 2,34,000 Cbm @ 150 Rs per cbm **Impact:** Any substantial increase in capital dredging may adversely impact the capital cost so envisaged and hence the tariff. Therefore any upward increase (over and above as mentioned in the proposal) in capital dredging cost should be in the ports's account.
(ii)	Operational Parameters
	(a). Berth output per day **Observation**: The berth output per day is highly overstated in case for crude oil. With two loading arms the maximum designed capacity at present at the existing liquid jetty is

	1250 KL/ Hr each, hence one can achieve 2500 KL / Hr i.e 60000 KL/ day. **Impact:** The berth output per day please be revisited or else to maintain the proposed output, the capital cost shall be revised.
(iii)	Handling Charges
	(a). Cargo Volumes **Observation:** JNPT has projected cargo volumes Crude- 2.24 MTPA POL- 7.82 MTPA Other Liquid- 1.2 MTPA At present, the existing JNPT liquid berth is handling crude oil arriving at the berth from the ONGC Uran facilities. The existing volumes are expected to remain stagnant and hence no incremental volumes of crude oil are envisaged in the project volumes. POL demand is also projected on the higher side. Moreover the existence of refineries of BPCL and HPCL to cater to the local demand may be seen which limits the POL imports into the region and at the Port. **Impact:** Understatement of Reference Tariff. The tariff shall be revised upwards for POL & adjusted suitably.
	(b). Vessels (Foreign & Coastal) **Observation:** The proposal submitted assumed 64% of foreign vessel traffic across all the commodities. POL is the largest component of the projected cargo. India is having surplus POL production and at present is net exporter of POL. Hence we are of the opinion that largely the domestic production would be moving production centers to the demand centers. Hence the coastal vessels traffic would be more than the foreign vessel traffic. **Impact:** The berthing structure once developed remains indifferent to foreign or coastal vessels. Therefore to arrive at the suitable handling charges we are of the view that the vessel traffic shall be revised and accordingly the handling charges for both type of vessels.
(iv)	Infrastructure
	(a). Storage capacity & Land Availability **Observation:** The proposal envisaged cumulative volumes of 9.02 MTPA. Crude oil is assumed not required to be stored (direct loading to vessel at berth through pipeline). In the absence of any evacuation pipeline, the cargo is expected to be handled through truck tankers. As per the observed norms of (6-8 turnaround), the minimum storage of 1 MTPA is required. The proposal submitted by JNPT has allocated 36.5 Ha of land to develop storage yard. Roughly and as per our experience specially for POL in the available land, developer can develop 2 lac KL capacity only. **Impact:** Hence the project is required to be equipped with suitable capacity to handle the proposed through put and therefore the capital cost has to be revised accordingly. Hence more land contiguous to the present allocated land should be provided to accommodate suitable storage infrastructure to handle the proposed throughput. Further the capital cost & O & M cost is required to be revised and hence the tariff.
(v)	Extra-ordinary Item
	(a). Other type of cargo

	Observation: LPG if required to be handled at this terminal. LPG a commodity falling under POL cargo **Impact:** The commodity requires separate infrastructure and facilities and hence the capital cost. We seek the views of JNPT on the same if it is to be included in the proposed project.

2.3. The JNPT has not responded to the comments of the above users / users organization / prospective bidders.

3.1. A summary of comments on the JNPT proposal dated 18 and 22 June 2015 received from the M/s. IMC Limited and M/s IOT Infrastructure and Energy Services Ltd and the comments of JNPT on submissions made by the IMC Ltd. is tabulated below:

Sr. No	Comments of the users/ user organizations/ prospective bidders	Reply furnished by JNPT
1.	**IMC Limited**	
(i).	**Restructuring of the project** It is noted that construction of tank farms are delinked from the earlier tariff proposal. However, 50 hectares of reclaimed land will be earmarked for storage facilities and Concessionaire has to pay the lease rentals. We request clarification as to whether the Concessionaire shall be entitled to decide on the storage tank farm capacity and is free to fix the tariff for storage services.	Yes. The Concessionaire shall be entitled to decide on the storage tank farm capacity and is free to fix the tariff for storage services.
(ii).	**Project Details:** We request JNPT to furnish the details of the facilities that are excluded for the consideration of the revised tariff proposal.	The construction of storage facilities including the ancillary works and laying of pipeline is excluded from the revised tariff proposal.
(iii).	**Berthing Structure** In the revised structure, two berths are proposed for vessels upto 55,000 DWT. More than 90 percent of the traffic is made up of POL products, which are imported/exported in much larger vessel sizes of over 100,000 DWT (Aframax, LR2). With larger shipments, ocean freight and handling costs will be reduced significantly. Further, the lower vessel sizes will result in significant increase in the number of shipments resulting in higher costs in terms of demurrages etc. We request a review of the vessel size assumptions and request JNPT to provide the rational for considering the vessel size of only 55,000 DWT.	The maximum capacity of designed vessel considered in the revised proposal is 120000 DWT and minimum 20000 DWT.
(iv).	**Traffic Forecast:** Under Traffic Forecast, the annual traffic projection considered for the additional liquid terminal is 5.95 million tonnes per annum, There are various liquid cargoes namely POL products, organic and inorganic chemicals, vegetable oils and liquefied gases. The traffic forecast (Table 1) gives only the summary	In the revised proposal the traffic forecast considered is 6.79 Million Tonnes Per Annum (MTPA).

	figures. We request that the break-up of traffic projections for the various liquid cargoes is furnished on year-wise basis.	
(v).	Phase 1-A of the project considers two liquid cargo jetties and the traffic of 5.95 milllion tonnes per annum is for the year 2034-35. However, the phase 1-A of the project entails two liquid handling berths to accommodate vessels with 180,000 DWT capacity. The existing BPCL liquid jetty is expected to handle 5.5 MMTPA. It is therefore suggested that only one berth is considered in phase 1-A and the second berth is included in second phase.	In the revised proposal designed vessel is considered as 120000 DWT and traffic projection is 6.79 MTPA for two liquid berths in addition to BPCL liquid jetty traffic of 5.5 MTPA. It may be noted that two berths will be constructed in one phase only.
(vi).	**Developmental Plan** Is there a second phase that is planned as part of the developmental plan? We request that the details of further phase/s of the project are shared.	No second phase has been envisaged so far.
(vii).	**Optimal Berth Capacity:** The optimal berth capacity is 10.48 million tonnes per annum, whereas the traffic projection is 5.95 million tonnes per annum. JNPT to provide the basis, assumptions and year-wise break up for the optimal berth capacity of 10.48 million tonnes per annum.	The optimal capacity worked out as per the TAMP guidelines for revised proposal is 10.98 MTPA.
(viii).	**Tariff Calculation** It is observed that the tariff calculations are based on the optimal storage capacity of 10.48 million tonnes per annum. The traffic projections and break up for 10.48 million tonnes per annum have not been furnished. Further, the traffic projection for phase 1-A is considered as 5.95 million tonnes per annum. The assumption of traffic is very critical for the tariff fixation. JNPT therefore to clarify the basis for considering the traffic figures of 10.48 million tonnes per annum in arriving at the tariff.	Tariff calculations have been made based on the TAMP guidelines issued by the Ministry of Shipping.
(ix).	**Project Capital Cost** From Table 3, it is not clear whether dock pipelines have been considered in the project cost estimates. However, in the Reference Tariff Schedule, the Cargo Handling Charges appear to include pipeline transportation charges. JNPT to clarify whether the investment and operating cost for the dock lines have been considered in computation of the Cargo Handling Costs.	The cost towards laying of pipeline is not considered in the revised proposal and the same is required to be laid by the tank farm operator.

3.2. A summary of the comments furnished by M/s IOT Infrastructure and Energy Service Limited is given below:

(I). Cargo Handling Charges & Berth Hire Charges.

It is expected that POL to be the major volume contributors and significant portion of which is expected to be coastal movement, whereas in the tariff proposal, share of foreign vessels is assumed at 64% and for coastal vessels 36%. There being a gap between the expected traffic and assumptions in the tariff proposal, it is likely to impact the economic viability of the project.

This aspect may kindly be looked into.

(ii). Escalations

To be indexed with CPI instead of WPI. CPI captures the escalation in various cost heads including the manpower cost which are relevant for O & M of the proposed facilities.

(iii). Land earmarked for Tank farm:
Whether the reclamation and site development activities are complete, please confirm.

(iv). Tank farm/ Storage:
When would the earmarked land of 50 Ha be made available to the developer?
Please clarify whether the developer is free to build the storage capacity as and when required fully or partially.
Please clarify if the developer is free to charge the storage rentals at the market determined rates.

(v). Statutory clearances for Tank Farm
Please clarify whether securing all statutory clearances for the proposed tank farm will be undertaken by the Port.

(vi). Construction period:
In the tariff proposal the construction period is estimated as 3 years from the date of award of concession.
Since securing approvals within the timeframe stipulated is beyond the control of concessionaire, construction period of 3 years after securing all approvals may be provided

(vii). Connectivity to existing tank farm:
In the tariff proposal the construction period is estimated as 3 years from the date of award of concession.
Since securing approvals within the timeframe stipulated is beyond the control of concessionaire, construction period of 3 years after securing all approvals may be provided.

(viii). Connectivity to existing tank farm:
Can existing tank farms establish connectivity to the proposed berth facilities?

(ix). RFQ:
Please clarify if now the project demands a fresh RFQ Submission

3.3. The JNPT has not responded on the comments furnished by IOTL.

4. The comments received from IMC Limited (IMCL) on the revised proposal dated 3 July 2015 and 4 July 2015 of JNPT and the response of JNPT thereon are tabulated below:

Sr. No.	Comments of the users/ user organizations/ prospective bidders	Comments of JNPT thereon
1.	**IMC Limited**	
(i).	In the earlier revised proposal, crude oil traffic was not taken into account. The berths were designed to receive upto 55,000 DWT vessels. In the latest proposal, crude oil has been included and the vessel sizes have been increased to 120,000 DWT. Please clarify the basis for these major changes in project structure and the design parameters.	The changes in regard to design vessel of 55000 DWT to 1,20,000 DWT has been done based on the DPR.
(ii).	**Berthing Structure**:	
	The recommended design vessel size is 120,000 DWT, however the depth considered for the berth pocket is only -15.5 meters, which is not sufficient for berthing such large tankers. What is the basis for the vessel size of 120,000 DWT?	The changes in regard to dredging depths have been made based on the design vessel of 1,20,000 DWT.
(iii).	**Traffic Forecast**:	
	From Table 1.1, it is noted that the traffic potential for year 2034-35 is 6.79 million tonnes. However, the optimal berth capacity is 10.98 million tonnes per annum, which is the basis for arriving at the cargo handling rates. It appears that the traffic considered for arriving at the tariff rates is much higher than the potential traffic in 2034-35. We request you clarify the basis for suggesting the unit tariffs based on such high traffic volumes.	The traffic forecast has been made based on the current market scenario. The optimal capacity has been calculated based on the guidelines issued by the TAMP.
(iv).	**Cargo Handling Charges**:	
	It is noted that these charges include the loading on to trucks/vessels. Loading into trucks and vessels will be done from the storage facility, However, the storage facility and operations are delinked from the revised proposal. Kindly clarify the actual scope of services that are included in the Cargo Handling Charges	The cargo handling charges are included in the Tariff. However, the land to be leased out will be on the basis of annual lease rental.
(v).	Certain specific liquid cargoes require special facilities such as heating, refrigeration, inert gas blanketing. Kindly clarify if the BOT Operator can levy separate charges for such facilities provided based on customer demand	BOT operator can levy extra charges for rendering special services for the handling specific liquid cargo with due approval of the TAMP.
(vi)	Storage Facilities are delinked from the earlier proposal. Please clarify whether the BOT Operator will be free to decide on the storage charges.	Yes, BOT operator will be free to decide for storage charges.
(vii)	From Table 4, it is not clear whether dock pipelines have been considered in the project cost estimates. However, in the Reference Tariff Schedule, the Cargo Handling Charges appears to include pipeline transportation charges. It is requested to clarify whether the investment and operating cost for the dock	The cost toward laying of pipelines has not been included in the estimate.

	lines have been considered in computation of the Cargo Handling Costs.	

5. Since the JNPT had made substantial changes in its proposal of July 2015 vis-à-vis the April 2015 proposal, it was decided to hold another joint hearing in the case in reference on 20 July 2015 at the office of this Authority. At the joint hearing, the Consultant of JNPT i.e., RITES had made a PowerPoint presentation of the proposal on behalf of the JNPT. The submissions made by the concerned users/ organization bodies at the joint hearing is given below:

Jawaharlal Nehru Port Trust (JNPT)

Our proposal is final and we do not intend to make any modifications to the proposal.

Vopak India Private Limited (VIPL)

(i). Considering that the traffic forecast in the year 2035 itself is only 7 MMTPA, creating a facility with about 11 MMTPA capacity at the very beginning of the project is very much unrealistic. The traffic of 11 MMTPA is impossible to achieve.

(JNPT: We are giving the project on PPP mode to attract traffic. The traffic forecast is at a minimum level. The successful bidder should take efforts to attract traffic and run the project taking into account the various risks involved in the project.)

(ii). The size of the vessel considered by the JNPT is very unrealistic. The size of the vessel should be determined based on the past five years data of JNPT. With the reduction in the GRT of the vessel, the berth hire charges would go up.

Adani & Inc.

(i). Tariff at the adjacent berth of BPCL is lower than the tariff proposed for the project. It is difficult to attract traffic.

(JNPT: Tariff is at ceiling level. You can allow discount to attract traffic.

Adani: But, revenue share is to be paid on the ceiling tariff.)

(ii). From where will the Crude oil come and for what will they come. Two refineries of BPCL and HPCL have reached capacity.

(JNPT: New Refinery plans are there.)

(iii). Considering the rate of handling chemical as proposed by the JNPT, it can be said that the said project will not attract any chemical cargo.

(iv). The handling rate for Crude oil considered at 5000 tonnes per hour is not possible.

(v). The ratio of foreign cargo and coastal cargo considered at 64:36 is also unrealistic.

(vi). The liquid vessels generate very negligible income from the levy of berth hire, as these vessels at the most stay for a maximum of 12 hours at the berth. Based on this position, the proposed levy of berth hire charges is totally insufficient.

(JNPT: The successful bidder has to take into account all these aspects, related to the project. Our proposal is final.)

Adani

Crude Vessels with 72000 GRT are unheard of. In the current scenario, a Panamax Vessel with an average GRT of 42000 can only visit JNPT.

IMC Ltd.

Overall, the project does not appear to be realistic.

6. The comments received from the prospective bidders on the revised proposal dated 24 July 2015 of JNPT and the comments of JNPT thereon are tabulated below:

Sr. No	Comments Received from users/ prospective bidders	Comments of JNPT
	Vopak India Private Limited (VIPL)	
(1).	The proposed tariffs are based on the optimal berth capacity (i.e. 10.98Mn T), which is ~62% more than the maximum foreseeable incremental traffic (i.e. 6.79Mn T) over the next 20 years. Since the optimal berth capacity does not represent the realisable traffic, we suggest that the tariff estimation should be based on the projected incremental traffic and not the optimal berth capacity.	Not agreed. As per the TAMP guidelines, the calculation of the tariff is to be based on optimal terminal capacity and not on traffic projections.
(2).	Proposed cargo handling and berth hire charges are derived by assuming 10.98 MnT traffic from Year 1, which is not practical. Practically, the traffic will grow in phases over the years and therefore, the proposed tariff should be calculated based on the phased ramp-up of the traffic.	Not agreed. Please refer to Sr. No.1 above.
(3).	Could you pls share the underlying assumptions for arriving at the traffic projections as mentioned in *"Table: 1 of the tariff proposal".*	The traffic projection is based on the current traffic projection and a brief note on project structuring is enclosed.
(4).	The specifications of the facility should be such that it allows handling of all categories of cargo. However, the trestle length is too long for handling of chemical products which generally come in small parcels. We suggest that the trestle length to be reduced by at least 50% which will enable handling of chemical products (which is an important product category for the hinterland of JNPT) and also, contribute to making the project viable by reducing its complete dependence on Crude Oil and POL.	The Port Authority has put their maximum efforts to minimize the trestle length from earlier 7.2 Km to 6.13 Km and the same is feasible based on the model studies.

(5).	**Cargo Handling Charges** The cargo handling charges are calculated in direct proportion of projected traffic per cargo type, while the actual traffic per cargo type could be very different from the break-up mentioned in "*Table:10 of the tariff proposal"*, over the traffic projection period. The proposed cargo handling charges are extremely low/low for crude oil and POL respectively. At the same time, we appreciate JNPT's proposal for setting up the higher tariff cap (i.e. Rs 456.19/- per MT for foreign cargo) for "Other Liquids", since this provides greater flexibility to the terminal operator. From the operations perspective, the terminal operator will have to put similar resources and efforts for handling of the cargoes irrespective of its category i.e. crude oil, POL or other liquids. Therefore, for the purpose of setting up the cargo handling charges, we suggest that the charges are kept same for all types of cargo and in the same range of "Other Liquids".	Not agreed. The tariff for each cargo is estimated based on TAMP guidelines, which is derived from percentage share of capacity of each cargo and handling rates for each cargo.
(6).	The average GRT assumed for calculating berth hire charges appears much higher than the actual average GRT witnessed at JNPT currently. We suggest that the actual average GRT should be considered for calculating the berth hire charges.	The average GRT is based on vessels sizes projected in DPR.
(7).	The reclaimed back area of 50 hectares will be allotted for setting up of storage yard on lease, at a rate of Rs19.42 per sq. mtr. per month, to the same successful bidder who will be responsible for "Development of Additional Liquid Bulk Terminal". Pls confirm if this understanding is correct.	Land area for liquid storage shall be provided to the successful bidder. The area to be allotted shall be finalized at a later stage and the rates shall be as per land policy.
(8) (a) (b)	If yes to pt (7) above, then pls confirm if there is any condition w.r.t. to the timing and size of the storage capacity that the successful bidder will have to follow for construction of tank farm. The storage rates for the tank farm have not been proposed. Will it be the prerogative of the successful bidder to set the storage rates, without any limitation of minimum and/or maximum limits?	(a). This is to be decided by the successful bidder based on the market demand. (b). Yes.
(9).	The land lease charges for 50 hectares of land area to be allotted for setting up of storage yard, has not been considered in the "O&M costs" for cargo handling activities ("*Table:6 of the tariff proposal"*). Could you pls clarify the rationale?	The annual power cost for land area (50 ha) as per TAMP guidelines works out as (50 ha.) x (240000 Units/Ha) x (14.5 ₹ /Unit) = ₹ 17.4 crores. The annual lease rental for land area works out as (50 Ha) x (10000 sq.m/Ha) x (₹ 19.42/sq.m-month) x (12 months) – ₹ 11.7 crores. From above it is clear that O&M cost of land area is approximately 57% of total

		O&M cost and is therefore a significant cost. The Transaction Advisor M/s RITES Ltd has opined that the O&M cost of land should not be included in the handling charges as there will be some cargo which will be handled but not stored. Also if JNPT includes the O&M cost of land in current proposal and also allows the operator to collect the storage charges separately, it will be a double recovery from the concerned users and therefore the cost towards storage (i.e. lease rental and electricity) should not be included in working out of tariff for handling charges.
(10).	Pls clarify if the "Gross Berth Output" will be the sole parameter of Performance Standards for Performance Evaluation.	Yes.
(11). (a) (b)	Pt. 5 of Annex : General Notes to Section 2 to 4 Pls. confirm, if the proposed cargo handling, berth hire charges and miscellaneous charges are the base rate for Jan 1st 2013. Assuming the commercial operations of liquid terminal starts on 1st April 2018, for clear understanding of the tariff escalation formula, could you pls. confirm if the escalation will work out as under: (i) That the tariff caps for the period 1st April 2018 to 31st March 2019 will be calculated based on 60% of WPI variation between 1st January 2013 and 1st January 2018. (ii). That the tariff caps for the period 1st April 2019 to 31st March 2020 will be calculated based on 60% of WPI variation between 1st January 2018 and 1st January 2019. This mechanism will follow for subsequent years.	(a). It may be modified as January 2015. (b).(i). No. It shall be 60% variation between 1st January 2015 and 1st January 2016. (ii). Yes.
2.	**Adani Ports and Special Economic Zone Limited (APSEZL)**	
(1)	**Introductory para:** De-linking the tank farm facilities from the proposal is not appropriate change. Presently proposed high cargo handling tariffs compared to prevailing rates which are composite in nature (including handling and storage charge) would not make it viable proposal. In market practice, tariffs for liquid terminal are quote as composite including handling and storage charges for one month period. Proposal only states that area of 50 Ha would be earmarked for the tank farm for which JNPT would collect lease rentals. However, no specific mechanism has been discussed	The land area for storage shall be provided to the successful bidder. The area to be allotted shall be finalized at a later stage and the rates shall be as per land policy.

	regarding allotment of the land for development of tank farm.	
(2)	**Traffic Forecast:** Traffic forecast details does not provide justification for projected traffic. Especially, crude traffic envisaged for foreign imports does not have any substance or base in view of already saturated refineries of HPCL and BPCL within Mumbai. Only coastal crude could be expected. However, quantity envisaged for the same also is not justified with any basis. POL product traffic does not provide any details regarding commodities to be handled within POL segment.	The traffic forecast has been made based on the current market condition.
(3)	**Development Plan (A) Berthing Structure:** Approach trestle length, a biggest obstacle in sound design for this project, has been proposed with 6.3 km length. The same is still very long. Such a long approach trestle does not only cost high but also creates difficulty in pumping the small parcel size of various chemical cargoes. Cargoes ranging from 300 to 1500 MT may probably remain in the pipeline only. This would require pigging of the pipeline and ultimately would hurt the efficiency of the terminal. This has not been factored into present proposal	The Port Authority has put their maximum efforts to minimize the trestle length from earlier 7.2 Km to 6.13 Km and the same is feasible on model studies. The necessary pigging arrangement has to be made by the tank farm operators.
(4)	**Development Plan (A) Berthing Structure:** Expected berth-days calculation envisages the parcel sizes to the tune of 13250 MT, 9550 Mt and 13700 MT for POL, Edible Oil and Molasses respectively. These assumptions are on quite higher side. Presently, average ship day output at JNPT's existing liquid berth is observed at 9486 MT and 9623 MT for 2012-13 and 2013-14 respectively. Response during the hearing that it is based on DPR is not justified. Clarification with practical market situation is required to rely upon higher parcel sizes considered in the proposal.	The parcel size is based on vessel sizes projected in the Detailed Project Report.
(5)	**Project Capital Cost:** Approach trestle cost is very high burdening the project financials and tariffs. Such high cost would never allow the project to be viable proposition. In our view, first, layout plan should be revised to reduce the cost and then only, the proposal should be taken up for the traffic fixation. Further, capital dredging should also be borne by JNPT, even if revised layout warrants significant/ higher dredging quantities to rationalize the length of long approach trestle. Revisit of the cost and project layout is must for the viable project structure.	The option to reduce the length of the trestle was already explored. The layout is based on the model studies. The cost estimation for the revised layout has been done based on the current market rates. Please note that only capital dredging for berth pockets is considered in the estimate. However, the dredging of maneuvering area is considered under the scope of development of Fourth Container Terminal.
(6)	**Optimal Capacity:** Optimal capacity has been framed with very high handling rate for Crude Oil. 5000 MT/hr is generally achieved for SPM terminals.	The handling rates are as per TAMP norms.

	Liquid berths are never observed to be achieving such high throughput rates.	
(7)	**Cargo handling charges:** Cargo handling charges for Chemicals and other liquids are very high. These are around 50% higher than the composite rates including Cargo Handling Charges as well as storage charges together. Even if rates of wharfage prevailing at JNPT is compared with cargo handling charges, the rates of JNPT ranges from ₹ 57.71/MT to ₹173.16/MT for chemicals and other liquids. The proposed rate of ₹456/MT is almost 3 to 8 times of prevailing at JNPT. There are many chemical product which are not handled in JNPT/ Mumbai Port. The same are coming from Kandla Port which has got handling rates ranging from ₹ 30 to ₹ 40 per MT. Thus, at these handling rates, if the project in implemented, it would not remain competitive at all. Hence, in our view, cargo handling tariffs are not justified in any manner and must be framed after revising the project structure and layout after reducing the cost of the project.	The tariff is calculated as per TAMP guidelines
(8)	**Cargo handling charges- Formula for tariff fixation:** As informed during the Joint hearing also, the share of each cargo in expected berth-days has been used to allocate the optimal capacity as well as revenue requirement. However, it has been observed that the change in that ratio reflects the change in total as well as cargo wise capacity but does not show any changes in the tariffs of each of the commodity. Thus, this is against the basic logic of tariff fixation in all the TAMP Guidelines that change in capacity should affect the tariffs. The same position continues in the revised proposal also. It should be corrected in the revised proposal.	Not agreed. The revenue requirement for individual cargo is based on berth days required by each cargo. Since, the same is used in computing the optimal terminal capacity, there will be no change in tariff as both revenue requirement and terminal capacity changed similarly.
(9)	**Berth Hire Charges:** GRT envisaged and parcel sizes considered for the commodities proposed are very high. The issue was discussed during the Joint hearing on 20.7.2015. It was discussed that the same would be revised based on data of existing JNPT liquid terminal. However, the same remains pending to be reworked.	The average GRT is based on vessel sizes projected in DPR.
(10)	**Berth hire Charges- Ratio for Foreign and coastal:** During the Joint hearing, it was also brought to the notice of TAMP that there would not be same ratio for foreign cargo & coastal cargo and foreign vessels & coastal vessel. Both seem to be inadvertently considered as same i.e. 64:36. Any one of them could be incorrect. However, there is no change or clarification on that part also in the revised proposal.	The Foreign to Coastal ratio is based on previous TAMP order

(11)	**Performance Standards:** Performance Standard for Crude Oil envisaged to be handled at proposed berths cannot be 5000MT/hr. Please refer our comment no.6.	The performance standards proposed is as per MCA prepared by Ministry of Shipping.
(12)	**Land area for storage tank farm:** 50 Ha have been proposed to be earmarked for development of tank farm proposed capacity of 10.98 MMTPA and projected traffic of 7 MMTPA. However, as per recently built Tank Farm at Hazira which complies with latest PESO Guidelines for tank farm development, 50 Ha can be sufficient to develop tank farm of around 625000 KL only. If the same is applied with density of 0.85 and prevailing turnaround of 6 times, it can serve the traffic of only 3.2 MMTPA only. Hence, the area figured out for tank farm development for the proposed project is grossly incorrect. The same must be reworked in the revised proposal.	The area of 50 ha. earmarked for creation of liquid storage facility is seems to be sufficient.
3.	**IMC Limited**	
(1)	**Project Structure**: In the earlier revised proposal, crude oil traffic was not taken into account. The berths were designed to receive upto 55,000 DWT vessels. In the latest proposal, crude oil has been included and the vessel sizes have been increased to 120,000 DWT. Please clarify the basis for these major changes in project structure and the design parameters.	Crude vessels are to be handled at proposed berth, vessel size is considered as 1,20,000 DWT.
(2)	**Traffic Forecast**: From Table 1.1, it is noted that the traffic potential for year 2034-35 is 6.79 million tonnes. However, the optimal berth capacity is 10.98 million tonnes per annum, which is the basis for arriving at the cargo handling rates. It appears that the traffic considered for arriving at the tariff rates is much higher than the potential traffic in 2034-35. We request you clarify the basis for suggesting the unit tariffs based on such high traffic volumes	The optimum capacity of berth works out to 10.98 MTPA based on TAMP guidelines 2008, therefore unit tariff is based on an optimum traffic capacity at berth and not on traffic forecast.
(3)	**Crude Oil Traffic**: From the projections, it is observed that Crude Oil constitutes more than 30 percent of the total traffic. Please clarify the basis for Crude Oil traffic assumptions, the source of traffic and the main end user/s. Clarification is also requested as to whether the projected Crude Oil traffic is over and above the existing traffic at JNPT.	Yes, projected crude traffic is over and above existing traffic.
(4)	**Berthing Structure**: The recommended design vessel size is 120,000 DWT, however the depth considered for the berth pocket is only -15.5 meters. What is the profile of vessels expected and the maximum arrival draft considered? What will be the depth guaranteed in the entry channel?	The dredge depth has been calculated for the design vessel of 1,20,000 DWT with 14 m draft. The vessel upto 14 m draft can be navigated through the existing navigational main channel by using tidal window. Depth is maintaining at channel is 12.8 to 13.9 m below CD.

(5)	**Cargo Handling Charges**: We note that the scope of services for the Cargo Handling Charges is not indicated in the proposal. Kindly provide the scope details.	The scope of services for cargo handling charges are included in the proposed tariff.
(6)	Certain specific liquid cargoes require special facilities such as heating, refrigeration, inert gas blanketing. Kindly clarify if the BOT Operator can levy separate charges for such facilities provided based on customer demand	It is clarified that apart from levy of miscellaneous charges for services specified therein, no separate charges can be levied for certain liquid cargo such as heating, refrigeration, inert gas blanketing, etc.
(7)	**Storage Facility**: Storage Facilities are delinked from the earlier proposal. What is the proposed mechanism for allotment and use of the back-up land? Please clarify that the BOT Operator will be allotted land for development of the storage facility and that BOT Operator will be free to decide on the storage charges.	The area about 50 hectares is earmarked for proposed storage facilities required for subject project. This area will be leased to successful bidder for construction of tank farm on lease rental.
(8)	**Project Cost**: From Table 4, it is not clear whether dock pipelines have been considered in the project cost estimates. It is requested to clarify whether the investment and operating cost for the docklines have been considered in computation of the Cargo Handling Costs	Investment and operating cost for dock pipelines have not been considered in computation of the cargo handling cost.
(9)	It is noted that the capital dredging is Rs.4.42 Crores, while in the O&M costs, the capital cost is mentioned as Rs.4.62 Crores. Please clarify the basis for dredging costs and whether any maintenance dredging will be required.	The capital cost towards dredging is ₹ 4.42 Crores. The maintenance dredging will be under the scope of the Concessioning Authority.
(10)	**O&M:** The proposals indicated that 50Ha land will be allotted for a storage facility, however, the lease rentals have not been taken into account in the O &M cost which is a major item of the cost. Kindly clarify.	The lease rental shall be as per land policy 2014 / JNPT Schedule of Rates. A separate lease agreement will have to be entered with the successful bidder for allotment of 50 hectares area. The Transaction Advisor M/s RITES Ltd. has opined that the O&M cost of land should not be included in the handling charges as there will be some cargo which will be handled but not stored. If Concessioning Authority includes the O&M cost of land in current proposal and also allows the operator to collect the storage charges separately, then it will be a double recovery from the concerned users and therefore the cost towards storage (i.e. lease rental and electricity) was not be included in working out of upfront tariff for handling charges.
(11)	It is requested that full details of assumptions for the tariff calculations be furnished.	No specific comments furnished by the JNPT.

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