Chapter III

Compliance Audit

CHAPTER III

3. Compliance audit observations

Important audit findings emerging from test check of transactions made by the State Government companies/ Statutory corporations have been included in this chapter.

Government companies

3.1 Implementation of Vizhinjam International Deepwater Multipurpose Seaport Project

Introduction

3.1.1 The project for developing an International Deepwater Seaport at Vizhinjam located on the south western coast of Kerala near the State capital Thiruvananthapuram is two decades old. The project was initially proposed to be implemented directly by Government of Kerala (GoK). The first global tender in 2003-04 issued by GoK did not succeed. Vizhinjam International Seaport Limited (VISL), a company fully owned by GoK, was constituted in 2004 as implementing Agency for the project. The subsequent tenders in 2007 and 2011 issued by VISL to execute the project through Public-Private Partnership (PPP) mode were also not successful. GoK approved (November 2013) a new model as suggested by the Technical Consultants, AECOM India Private Limited (AECOM) for development of the project. As per the new model, development and operation/ maintenance of Vizhinjam International Deepwater Multipurpose Seaport Project through PPP were proposed on Design, Build, Finance, Operate and Transfer (DBFOT) basis. The Project was to be implemented as a landlord port model, wherein the land procurement, external infrastructure and construction of breakwater[1] would be undertaken by GoK through VISL, the implementing agency for the project. The chosen private Concessionaire shall be responsible for funding and development of dredging and reclamation (53 hectares) of land from the sea, construction of berths, roads, substations, superstructure and equipment and for operation of the Port.

Accordingly, VISL invited (December 2013) two International Competitive Bids (ICB)/ Global Tenders; one for selection of PPP Concessionaire and one for selection of Engineering, Procurement and Construction (EPC) contractor for the construction of breakwater and external infrastructure. The tender for EPC was not pursued by GoK since it was included in the PPP part. Against Request for Qualification (RFQ) for selection of PPP Concessionaire, five[2]

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[1] Breakwaters are structures constructed on coasts as part of coastal defense or to protect an anchorage from the effects of both weather and long shore drift. Breakwaters reduce the intensity of wave action in inshore waters and thereby reduce coastal erosion or provide safe harbourage.

[2]Adani Ports and SEZ Limited, Comcast - Hyundai Consortium, ESSAR Ports Limited, Gammon Infrastructure Projects Limited and SREI- OHL Consortium.

applicants submitted RFQ and all were shortlisted based on the financial and technical qualification criteria. Three out of the five qualified bidders purchased the Request for Proposal (RFP). RFP document approved[3] by GoK was issued along with the Draft Concession Agreement (DCA) and Manual of Specifications and Standards to the three bidders. The estimated total project cost (TPC) of the project was pegged at ₹4,089 crore, excluding the cost of funded works. According to the terms of RFP, selection of bidder was to be based on the highest premium offered to GoK or lowest grant demanded from GoK. Maximum grant that can be demanded by way of Viability Gap Funding (VGF)[4] was capped at ₹1,635 crore, being 40 *per cent* of the TPC.

Adani Ports and SEZ Private Limited (APSPL) was the lone bidder with a quoted grant amount of ₹1,635 crore. The Letter of Award was issued (July 2015) to APSPL and the Concession Agreement was signed between Adani Vizhinjam Port Private Limited[5] (Concessionaire) and the GoK on 17 August 2015. The GoK also signed (16 January 2016) an agreement with VISL conferring VISL full powers and authority of the GoK under the Concession Agreement.

Features of the Project

3.1.2 Salient features of the project are highlighted in *Table 3.1.*

Table 3.1: Total cost of the Project and its funding

Sl. No.	Nature of work	Total cost (₹ in crore)	Funding pattern
1	Dredging and reclamation, development of berths, roads, substations, superstructure and equipment and operation	4,089	₹2,454 crore by the Concessionaire and ₹1,635 crore through VGF equally by Government of India and GoK. The project was to be implemented in four phases[6] with a rated capacity of 6 lakh (0.6 million) TEUs[7] on commercial operation date (COD), to be enhanced to one million TEUs within 10 years of COD. The port shall be capable of accommodating vessels with capacity up to 18,500 TEUs. The Concession period would be 40 years commencing from the Appointed Date[8] which shall be extendable for further 20 years at the option of the Concessionaire subject to capacity augmentation to three million TEUs by 30th year of the concession period.
2	Funding and Development of breakwater and fishing harbour	1,463	The construction of 3.1 kilometre (km) long breakwater and a new fishing harbour would also be done by the Concessionaire as "funded works" for which the GoK would finance the entire amount of ₹1,463 crore.
3	Cost of external infrastructure	1,973	Entire funding by GoK.
	Total	**7,525**	

[3] Vide Order No. G.O (MS) No.36/2014/F&PD dated 12 May 2014.
[4] Viability Gap Funding is designed to provide capital support to PPP projects which would not otherwise be financially viable. VGF has the effect of reducing the revenue required to recover costs and provide a financially attractive return for the private partner.
[5] Company incorporated as a subsidiary of APSPL.
[6] Phase I-1 MTEU, Phase II-1.5 MTEU, Phase III-2.2 MTEU and Phase IV-3 MTEU.
[7] Twenty Foot Equivalent Units.
[8] As defined in the Concession Agreement, the date on which Financial Close is achieved and every Condition Precedent is either satisfied or waived.

As per the terms of the Concession Agreement, the project shall commence commercial operation within four years of signing (August 2015) the agreement i.e., by 2019.

Government of India (GoI) granted in-principle sanction for VGF of ₹817.50 crore which shall be released within five years of the Appointed Date (5 December 2015).

- The GoK will receive one *per cent* of the total Realisable Fee annually starting from the 15th anniversary of Commercial Operation Date (COD) (i.e.,16 August 2019). Revenue share of the GoK will be increased by one *per cent* of the total Realisable Fee every subsequent year, subject to a maximum of 40 *per cent*.

  Twenty *per cent* of the annual revenue received by the GoK would be repaid to the GoI till full settlement of the VGF share of ₹817.50 crore.

- The Concessionaire can utilise 30 *per cent* of the land acquired for the project by GoK for "Port Estate Development" which may include residential and commercial buildings/ space. The Concessionaire would pay 10 *per cent* of the annual revenue earned from such ventures to the GoK starting from the seventh year after COD.

- The GoK would ensure availability of land for the project and also provide rail and road connectivity.

Against the above background, we analysed the conceptualisation, award of work and Concession Agreement. The audit objectives were to assess whether:

i. tendering process was competitive, equitable, fair and transparent; and

ii. the key clauses of the concession agreement were drawn up in such a way as to allocate risks and benefits between the Concessionaire and GoK in a balanced manner.

Revenue/ cash flows of the Vizhinjam project for 40 years of the concession period were estimated as part of the feasibility study conducted (April 2015) by Ernst & Young (E&Y), the financial consultants appointed by VISL. All calculations in respect of cash flows from the project included in succeeding paragraphs were based on the revenue projections appearing in the E&Y Report.

Audit Findings

3.1.3 Audit findings are discussed below.

Preparation of cost estimates and viability of the project

3.1.4 We examined the reasonableness of cost and viability of the project and the findings are discussed below:

- The TPC worked out (September 2015) for the development of Colachel Port in Tamil Nadu, which is proposed to be located at an approximate distance of 50 km from the Vizhinjam project site was ₹3,693.48 crore[9] for a capacity of 1.6 million twenty-foot equivalent units (MTEU), which translates to ₹2,308.43 crore per MTEU. Compared to this, TPC per MTEU for Vizhinjam Port was higher (₹3,271[10] crore), mainly due to unreasonable and unjustified rates adopted for estimating the cost of equipment as detailed below.

  ✓ Final TPC of ₹4,089 crore was worked out based on Basic Engineering Report (BER)[11] prepared by AECOM. While preparing the BER in December 2014, AECOM hiked the rates of equipment included in the Detailed Project Report (2013) from ₹631.87 crore to ₹934.61 crore. However, there was nothing on record to justify the increase. We worked out the reasonable cost of eight equipment by taking the rates in the DPR (2013) as base, allowing 5 *per cent* year on year escalation from 2013 to 2014 and adopting the exchange rate as 1 USD = 64 INR (Rate as on 31 December 2014) at ₹825.65 crore as detailed in ***Appendix 9.*** We observed that the equipment cost was unreasonably hiked by AECOM while preparing the BER. The net increase over reasonable cost was ₹130.85 crore[12]. This has also resulted in excess grant of ₹52.34 crore to the Concessionaire (40 *per cent* of ₹130.85 crore).

  GoK replied (August 2016) that the equipment meant for a Container Transhipment Port were generally imported and not indigenously developed by Indian manufacturers. Even if manufactured indigenously, it would involve significant foreign exchange component. As such, AECOM had also taken into account the fluctuation in foreign exchange for revision of cost.

  The reply was not acceptable since we accounted for the variation in exchange rates while working out the reasonable cost. Further, the actual basis of revision of cost of equipment was not made available by AECOM. VISL/ GoK accepted the estimates in the DPR/ BER prepared by the external consultants *in toto.*

  ✓ As per data collected by Audit, per unit cost of Rail Mounted Quay Crane (RMQC)[13], a major equipment for Container Transhipment, procured (2013) by Jawaharlal Nehru Port Trust (JNPT), Mumbai for their project was ₹32.26 crore. Even after allowing for year on year escalation, the rate would be ₹37.34 crore per unit in 2014, whereas base cost of the same equipment as included in the cost estimates of Vizhinjam project was ₹75.44

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[9] Excluding cost of breakwater and external infrastructure and interest during construction.
[10] Total Project Cost- ₹4,089 crore less Interest during construction - ₹818 crore.
[11] BER prepared (December 2014) by AECOM describes the basic engineering carried out for the various components of the port facility.
[12] ₹108.96 crore *plus* proportionate escalation and Interest During Construction.
[13] RMQC Specification: Super Post Panamax with outreach of 65 metres.

crore. Thus, for eight RMQCs required for the Vizhinjam project, there was excess cost estimation to the extent of ₹304.80 crore.

GoK replied (August 2016) that the RMQCs compared in the audit finding (that of JNPT) do not cater to design vessels of size 18,000 TEU and were, therefore, cheaper. GoK also asserted that the Consultants, AECOM, had arrived at the base cost of RMQC after taking into account budgetary proposals and experience of similar projects in the past.

The reply was not acceptable because the RMQCs installed at JNPT were of specification "Super Post Panamax" having an outreach of 65 metres. The RMQCs proposed to be procured for Vizhinjam Port are of the same specifications.

- ✓ Similarly, the cost of Reach Stacker per unit included in the TPC of Vizhinjam project was ₹3.31 crore (base price) whereas the Directorate of Ports, GoK had purchased the same item in March 2014 (delivered in March 2015) at a landed cost of ₹2.35 crore only.

  GoK stated (August 2016) that the Reach Stackers to be procured for Vizhinjam project were for heavy duty transhipment use. The reply was not acceptable because the reach stackers procured by the Directorate of Ports were capable of such use as evident from the specifications attached to the e-tender notice.

Development of funded works

3.1.5 Development of breakwater and fishing harbour was initially planned to be executed through Engineering Procurement and Construction (EPC) contract as a separate work. As per the terms of the tender, the Concessionaire had the right of first refusal (ROFR) for the EPC contract if its bid was within 15 *per cent* of the lowest bid. Subsequently, following adoption of Model Concession Agreement (MCA[14]) for PPP projects in the Ports Sector, tender for EPC contract was cancelled (August 2015). The construction of breakwater and fishing harbour was included as funded work as part of the PPP project to be executed by the Concessionaire at a cost of ₹1,463 crore. The entire cost of funded work was to be borne by GoK.

Due to cancellation of EPC tender, GoK could not assess the market rate for executing the work. The work was, thus, awarded to the Concessionaire at the estimated cost. We noticed that:

- the cost (₹767 crore) of breakwater and fishing harbour estimated (May 2013) by AECOM for EPC contract was revised (March 2014) to

[14] **MCA is a regulatory framework for sustaining private investment in PPP projects. MCA addresses issues such as mitigation and unbundling of risks, allocation of risks and rewards; symmetry of obligations between the principal partners; precision and predictability of costs and obligations; reduction of transaction costs; *force majeure* and termination (Source: www.planningcommission.gov.in/reports/genrep/overviewMCA.pdf).**

₹1,210 crore to account for exchange rate fluctuations. The cost was again revised (April 2015) to ₹1,463 crore after acceptance of the concept of funded works. There was no justification for applying exchange rate variation on indigenously sourced material such as rocks and concrete armour units.

GoK replied (August 2016) that the cost of funded work was earlier set as ₹1,210 crore at 2014 level. Considering the risks and cost involved, prospective bidders requested for an upward revision to the tune of ₹1,500 crore at 2015 level. Based on the recommendation of the Financial Consultant and the Technical Consultant, Empowered Committee (EC)[15] of Secretaries to GoK decided to revise the cost of Funded works to ₹1,463 crore at 2015 level. GoK also stated that cost of funded works was increased to minimise the VGF quoted in the PPP tender.

The reply was not acceptable because in spite of increasing the cost of funded works, only one bid was received and that too quoting the highest possible grant. Thus, increase in the cost of funded work did not result in lower grant. The reply is also silent about the justification for applying exchange rate variation to rocks, etc., to be procured indigenously.

- The cost estimates (₹312.85 crore) prepared by AECOM for the rocks to be used for the construction of breakwaters was on the higher side. The cost (₹250.48 crore) based on market rates prevailing in Kerala as per Harbour Engineering Department (HED) database was significantly low. The difference between rates worked out to ₹62.37 crore.

  GoK stated (August 2016) that considering the large volume, larger lead and difference in the method of placement of rock, method adopted for blasting, extraction, sorting, transportation, loading, unloading, inclement weather, etc., higher rates for rock in the case of Vizhinjam Project was not comparable with rates in HED database.

  The reply is not acceptable as we had compared only the cost of rocks of similar weight and other specifications included in HED database and AECOM's estimates.

Financial and Economic Viability of the Project

3.1.6 Net Present Value (NPV) shows the difference between a project's financial benefits and costs in current money terms. Only projects with positive NPV should be developed because negative NPV would mean that the costs are greater than the benefits. Internal Rate of Return (IRR) is the rate at which financial benefits accrue from an investment.

[15] **Constituted by GoK for evaluation of bids received.**

Economic IRR (EIRR) and Economic NPV (ENPV) also take into account the perceived economic costs and benefits of a project such as employment generation, infrastructure development, etc., in addition to financial costs and benefits. According to the guidelines issued by the Ministry of Finance, GoI for PPP projects, NPV and EIRR provide a decision criterion on whether the project should proceed at all. In general, a project with a negative NPV should not be pursued.

A comparison of investment and NPV/ IRR[16]/ EIRR[17] of GoK *vis-a-vis* the Concessionaire is given in *Table 3.2*:

Table 3.2: Comparison of investment and returns to GoK *vis-a-vis* the Concessionaire

Particulars	Value of investment (₹ in crore)	Undiscounted Cash inflow (₹ in crore)	NPV (₹ in crore)	IRR (*per cent*)
GoK	5,071 (67 *per cent*)	13,947	(-) 3,866.33	3.72
Concessionaire	2,454 (33 *per cent)*	1,30,706	607.19	15.00
Total	**7,525**	**1,44,653**		

Source: Feasibility report prepared by Ernst & Young (excluding NPV and IRR of GoK).

Thus, it could be observed that in spite of 67 *per cent* investment by the GoK, the NPV of its investment in the project is (-)₹3,866.33 crore and at the same time the NPV of the investment accrued to the Concessionaire for the 40 year period with 33 *per cent* investment is ₹607.19 crore. Further, ENPV[18] and EIRR from the project is (-)₹834.60 crore and 8.9 *per cent* respectively. Therefore, the financial benefit accruing to the State is not commensurate with its investment.

GoK replied (August 2016) that the cost of land acquisition should not be taken into account while computing the Return on Investment. GoK also stated that the economic benefits were also to be considered while considering the benefits to the State.

The reply is not acceptable. ENPV, worked out considering all probable benefits was negative and the EIRR, far below the IRR of 15 *per cent* fixed for the Concessionaire. Cost of land was factored in while computing the NPV/EIRR of GoK because the land was not Government land but acquired specifically for the project at high cost. Further, cost of land acquisition has been included in the calculation of NPV/IRR for Colachel project. GoK/VISL at no time had analysed the NPV/IRR/EIRR on the State's investment in the project. Even the EIRR included under Cost-benefit analysis in the Environment Impact Assessment (EIA) Report was worked out for the investment by the private partner only.

[16] IRR is the rate that equates the present value of cash inflows to the present value of cash outflows of the project.

[17] EIRR indicates the rate of return at which the present value of the economic costs and benefits of the project are equal. In other words, it is the discount rate at which the net present value is zero.

[18] The cash flows for economic benefits are taken from EIRR report prepared by M/s Deloitte Tohmatsu for VISL.

Termination Payment

3.1.7 As per Clause 38.3.5 of the Concession Agreement, termination payment equal to the product of 30 (thirty) and the Realisable Fee recovered for and in respect of the last month of the Concession Period shall be due and payable to the Concessionaire.

As per the Feasibility Report of the Vizhinjam project prepared by E&Y in April 2015 which was approved by GoK, the Realisable Fee during the 40th year of the concession would be ₹7,822 crore. Assuming that the Concession is terminated at the end of the prescribed concession period (without considering the 20 year extension), the termination payment payable to the Concessionaire in accordance with the above clause would be ₹19,555 crore[19]. The NPV of the payment worked out to ₹567.10 crore.

We observed the following:

- Based on the E&Y estimates, the total revenue that would accrue to GoK during 40 years of the concession period would be ₹13,947 crore. The termination payment of ₹19,555 crore would mean that the net receipts of GoK from the project after 40 years would be (–)₹5,608 crore.

- The project parameters, including the concession period, the amount of grant (VGF) and the revenue share payable to GoK were structured in such a way that the Concessionaire would get equity IRR of 15 *per cent* from their investment in the project. We, however, observed that the termination payment was not considered while working out the IRR/NPV. If the same is factored in, the IRR obtained by the Concessionaire for his investment of ₹2,454 crore in the project would be 16.08 *per cent* and the NPV of his investment would be ₹842.57 crore. At the same time, the financial IRR of the State Government would be negative and the NPV of the ₹5,071 crore invested by GoK in the project would be (-)₹4,441.40 crore.

- Further, the EIRR of the project as far as GoK is concerned worked out to 7.59 *per cent* only and the ENPV (-)₹1,409.70 crore.

- We also observed that clauses empowering similar termination payment as envisaged in the Concession Agreement for Vizhinjam project were not included in the Concession Agreements executed for other infrastructure PPP projects such as the Hyderabad Metro project, JNPT fourth terminal, etc.

VISL replied (March 2017) that the clause was incorporated as per the MCA. The reply is not tenable as the cash inflow to the Concessionaire on account of the termination payment had neither been estimated nor factored into the NPV/IRR calculation.

[19] **₹7,822/12*30.**

Award of project

3.1.8 According to the guidelines issued by the Central Vigilance Commission (CVC), prequalification criteria (PQ) should be framed with a view to attracting participation of reputed and capable firms with proper track record. Therefore, the PQ criteria should be exhaustive, yet specific and unambiguous.

We noticed deviations from these guidelines as discussed below:

Modification in Project Structure

3.1.8.1 VISL changed the entire structure of the project after pre-qualifying five bidders. The changes were made on the adoption of Model Concession Agreement (MCA) for State Ports issued by the Planning Commission of India and were intended to make the project more attractive to private investors. The significant changes in the project parameters consequent to adoption of the MCA, when compared to the same as per the RFQ, were as given in *Table 3.3.*

Table 3.3: Details of changes made to the structure of the project

Sl. No.	Particulars	RFQ	RFP/Draft Concession Agreement (DCA)
1	Model for project development	Land lord model	Combination of land lord and private services models.
2	Concession Period	Not specified	Specified as 40 years extendable by 20 years.
3	Total Project Cost	₹3,900 crore	₹4,089 crore
4	Construction of breakwater and fishing harbour	To be awarded as per EPC tender	To be done by Concessionaire as funded work at a total cost of ₹1,463 crore.
5	Port Estate Development	Not mentioned	30 *per cent* of project land to be given on licence to Concessionaire for commercial development including real estate development.
6	Mortgage of project assets	Not mentioned	Concessionaire allowed to mortgage project assets including land to finance the project.
7	Capacity of the Port	1 MTEU by COD	0.6 MTEU by COD and 1 MTEU within 10 years after COD.

As the changes were not incorporated in the RFQ/DPR/Master Plan made available to prospective investors at the RFQ stage, unfair advantage was given to the qualified bidders. We observed that by incorporating major changes in the project parameters after shortlisting the bidders, GoK/VISL had violated the spirit of the MCA in which it was stated that “All project parameters such as concession period, tariff, price indexation and technical parameters should be clearly stated upfront”[20].

GoK stated (August 2016) that none of the project elements or structure was changed after issue of the RFQ which significantly changed the attractiveness

[20] **MCA, Overview of the Framework (Page xxiv).**

of the project. The reply was not convincing because inclusion of provision for Port Estate development, enhancement of concession period from the standard 30 years to 40 years, inclusion of funded works, etc., were major changes altering the nature of the project. Since there were major changes in the project parameters, the tender process should have been cancelled and fresh global tenders invited. This would have increased the attractiveness of the project and ensured transparency in the award of work.

Concession Agreement

3.1.9 Concession in a PPP project is the exclusive right, license and authority to construct, operate and maintain the Project during the concession period. Concession period is ideally the minimum period required for collecting the required user fee such that the investment made by the private partner is fully recovered with interest thereon. Terms and conditions of the concession are governed by the Concession Agreement.

GoK adopted (12 May 2014) the Model Concession Agreement (MCA) for Ports issued by the Planning Commission of India for preparation of the Draft Concessionaire Agreement (DCA) of Vizhinjam project. MCA was only recommendatory in nature and it was not mandatory for GoK to adopt it since Vizhinjam Port is a minor port[21] falling within the exclusive jurisdiction of the State Government. Based on feedback from bidders, suggestion by PPP cell of Department of Economic Affairs (DEA), GoI and drafting changes suggested by the Planning Commission of India and Legal Consultants, certain changes were made to the DCA by VISL, with the approval of the EC, duly authorised by GoK. These changes were intimated to the bidders who had purchased the RFP by issuing Addenda 1 to 9.

Conditions not favourable to the interests of the State

3.1.9.1 Scrutiny of Concession Agreement executed with the Concessionaire revealed inclusion of conditions not favourable to GoK as discussed below:

- The standard concession period for PPP projects is 30 years. This was also fixed as the base concession period for projects with private participation in the policy on Ports and Shipping Development approved in 2005 by GoK. Further, in the study report on Vizhinjam project by the International Finance Corporation (IFC), the Concession period was recommended as 30 years[22] and the concession period was specified as 30 years in all the three tenders issued for Vizhinjam project prior to the 2013 tender. In the current agreement, however, the concession period was fixed as 40 years. By allowing 10 years' extra concession period, the Concessionaire would be collecting additional revenue of ₹29,217 crore[23].

[21] Major ports are ports notified as such by the Central Government as per the Indian Ports Act, 1908 while other ports are classified as minor ports and are administered by the respective State Government. Vizhinjam Project being a minor port is under the administrative control of State Government.
[22] Para 5.2 (iii) of the Strategic Options Report prepared by IFC in September 2010.
[23] Based on revenue estimates in Feasibility Report (April 2015) by Ernst & Young.

GoK replied (August 2016) that the concession period envisaged in the Concession Agreement was 40 years as per the MCA adopted for the project. GoK also stated that the standard Concession Period of 30 years was applicable for brownfield[24] terminal development projects where investment and risk were limited. For any major greenfield[25] development, the risk and cost involved would be significantly high. Further, a longer concession period would reduce the grant requirement of the project.

The reply was not acceptable as in the case of the proposed port at Colachel, a greenfield project similar to Vizhinjam project, the concession period has been fixed at 30 years. Further, there was no reduction in the grant demanded by the bidder even after the elongation of the concession period to 40 years.

- As per the Concession Agreement, the VGF (₹1,635 crore) was payable to the Concessionaire in two parts-equity support payable during the construction of the project and operation and maintenance (O&M) support payable after COD. Equity support was to be 150 *per cent* of the equity brought in by the Concessionaire subject to a limit of 30 *per cent* of the TPC.

  We observed that as per the MCA, for calculation of equity support, TPC was not to include amount payable as equity support. Accordingly, equity support payable to the Concessionaire was ₹943.62 crore[26] and the balance VGF i.e., ₹691.38 crore would be payable (as per Article 25.3.1 of the Concession Agreement) only as O&M support in quarterly instalments[27] after COD. But, in the Concession Agreement, TPC for calculation of equity support was, however, made inclusive of equity support and consequently, the amount payable as equity support by GoK to the Concessionaire increased to ₹1,226.70 crore (30 *per cent* of ₹4,089 crore). This modification was made (31 December 2014) by the Empowered Committee (EC) to improve "clarity" without any specific demand from the prospective bidders. Due to this modification, GoK had to pay excess equity support of ₹283.08 crore in advance resulting in interest loss of ₹123.71 crore[28].

  GoK stated (August 2016) that the modification was completely based on the opinion of the legal consultant for removing ambiguity. GoK also stated that the modification did not entail any additional financial outflow to GoK and non-modification may have decreased the viability, attractiveness and competitiveness of the project.

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[24] Brownfield projects are those projects where existing assets are developed further.

[25] Greenfield projects refer to projects on the unused lands where there is no need to re-model or demolish an existing structure.

[26] 30 *per cent* of the TPC of ₹4,089 crore less the equity support calculated as follows.
Let Equity Support = X and TPC=4,089.
Then X=(4,089-X)*0.30, i.e. X =4,089*0.3-0.3*X.
∴ 1.3X=1,226.70. Hence X =1,226.70/1.3 = 943.62

[27] Each quarterly instalment being 7.50 *per cent* of the Equity Support.

[28] Worked out at the rate of 10 *per cent* per annum for four years from December 2015 to November 2019.

The reply was not acceptable since there was no ambiguity in the Article in the Concession Agreement regarding computation of equity support. Further, there would be an indirect financial gain to the Concessionaire to the tune of ₹123.71 crore due to the modification.

- As per Article 41 of the MCA, Project Assets (which included right of way over the site) were excluded from the assets and rights which could be mortgaged or pledged to lenders as security for debt incurred by the Concessionaire. However, in the Concession Agreement (Article 41.5) executed, the Concessionaire was given the right to mortgage all assets (except funded works) on the ground that "*it would provide an additional layer of security to Lenders*", and that the Legal Consultants had opined that "*the change did not have any adverse impact on the financial obligations of the Authority*".

  We noticed that the request (March 2015) of one of the bidders for such a modification, prior to opening of bids, was rejected (March 2015) by the Empowered Committee (EC) of Secretaries to GoK on the basis of advice rendered by the Technical Consultant. Hence, the modification post award of concession was contrary to the advice of the Technical Consultant and conferred upon the Concessionaire the right to mortgage assets which includes land taken over by the GoK at a total cost of ₹548 crore.

  GoK stated (August 2016) that permission to mortgage Project Assets including land was only an enabling clause exercisable only on a request made by the lenders. GoK also stated that similar provisions were there in other MCAs such as Power Purchase Agreements (PPAs) in Power Sector.

  The reply is not convincing as the GoK/ VISL had adopted the MCA for Ports *in toto* and no such provision was envisaged in the MCA. GoK is treating the MCA as justification for providing additional benefits to the Concessionaire such as a longer concession period, but at the same time deviating from the MCA as pointed out above to provide undue benefit to the Concessionaire. Thus GoK was mixing and matching clauses as per convenience, all of which resulted in providing additional benefits to the Concessionaire. Further, the Legal Consultants had earlier opined that no such modification was necessary.

- As per Clause 3.1.1 of the Concession Agreement, the Concession Period of 40 years was extendable by 20 years on augmentation of capacity of the project to three MTEUs by the 30th year of the concession period and issuance of a notice by Concessionaire for extension during 36-37 year of the concession period.

  Draft Concession Agreement had initially limited Concession Period to 40 years, extendable by 10 years. The extension was allowed by the DEA, GoI on the request (24 November 2014) of the Chief Secretary to GoK on the ground of concerns raised by bidders in pre-bid meeting, Greenfield nature of the project, longer gestation period, mandatory capacity augmentation etc. Later, the DEA extended extendable period of Concession to 20 years.

We observed that if the GoK had retained the originally envisaged extension period of 10 years, additional revenue of ₹61,095 crore (Present Value - ₹353 crore) would have accrued to the State[29]. Further, as per the Master Plan approved for the project, the cost estimated for capacity expansion to three MTEUs was ₹3,390 crore. Since this expenditure is to be incurred by the 30th year, the cost may escalate to ₹14,651 crore[30] at the time of execution. As such, by incurring an expenditure of ₹14,651 crore, the Concessionaire would be benefited by ₹61,095 crore.

GoK stated (August 2016) that the financial analysis by Audit did not take into account the revenue sharing starting with 21 *per cent* at the beginning of extended period and ending with 40 *per cent* towards the end of the extended concession period. Considering such huge revenue share averaging to almost 30 *per cent*, the condition was actually not detrimental to the State. In fact, the condition facilitates continuity in the operation of the Port and better revenue share for the State.

The reply is factually incorrect since we had, in fact, factored in the revenue share of the State. GoK has not contradicted the fact that the Concessionaire, by spending ₹14,651 crore, would get 400 *per cent* returns.

- Article 26 of the Concession Agreement provides that the Concessionaire shall pay GoK by way of Concession Fee a sum of ₹1 *per annum* and an additional concession fee (premium) equal to one *per cent* of the total Realisable Fee from the 15th anniversary of COD. Thereafter, premium for the subsequent years shall be increased by one *per cent* of the total Realisable Fee, subject to a ceiling of 40 *per cent* of the total Realisable Fee in the respective year.

  We observed that as per the projected cash flow statements prepared by the consultants[31] engaged by VISL, the Concessionaire would recoup their investment of ₹2,454 crore by the eleventh year from COD, i.e., by 2030. Since GoK bears 67 *per cent* of the total investment required for the project, the revenue sharing with the Concessionaire should have commenced from the date on which the private partner recoups his investment i.e. from 2031. By postponing the commencement of sharing revenue to the fifteenth year after COD, GoK/ VISL has foregone revenue of ₹2,153 crore[32] and allowed undue benefit to the private

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[29] Net cash flow of ₹78,222 crore as per the feasibility report prepared (April 2015) by Ernst & Young as reduced by revenue share of ₹17,127 crore payable by the Concessionaire to GoK during the 50th year to the 60th year.
[30] Providing year on year escalation of five *per cent* per annum as assumed by VISL while working out the Total Project Cost of Phase I, ₹4,089 crore.
[31] Ernst & Young.
[32] Difference between total revenue from traffic to GoK if revenue share commenced from 11th year- ₹8,981 crore and revenue receivable by GoK from 15th year as per Concession Agreement - ₹6,828 crore.

partner. There was also no basis for fixing revenue share at one *per cent* on the 15^{th} anniversary of COD.

GoK replied (August 2016) that the period of commencement of revenue share to GoK was market determined and the 15 year period also related to the period provided by bank for project debt financing. GoK also stated that the development of port and its allied facilities would significantly contribute to the large scale growth of industry and economy in Kerala, besides generating direct and indirect employment opportunities.

The reply was not acceptable since it was clarified in the RFP that the payment of premium of one *per cent* shall commence either from COD or from any other date falling between COD and the 15^{th} anniversary whereas the date of commencement of revenue sharing was given as "from the fifteenth anniversary of COD" in the DCA submitted along with RFP. Further, the contention of the GoK in respect of the perceived economic benefits to the State from the project was doubtful, since as described in *Paragraph 3.1.6,* the ENPV of GoK's investment was negative.

- Clause 12.6.6 of the Concession Agreement empowered the Concessionaire to levy, collect and appropriate the User Fee payable in respect of funded works in lieu of its obligations relating to operation, maintenance, defect liability and other functions. But, in Article 12.6.10, it was stated that the operation and maintenance of the fishing harbour shall at all times be undertaken by GoK.

  We observed that the above two Articles were mutually contradictory and had the effect of enabling the Concessionaire to charge user fee on the fishermen for using the facilities in the fishing harbour constructed as funded work. Since the cost of the funded works (₹1,463 crore) was entirely borne by GoK this would be tantamount to conferring undue benefit to the Concessionaire at the cost of GoK.

  GoK replied (August 2016) that operation and maintenance of fishing harbour component did not form part of the obligation of the Concessionaire and as such the Concessionaire would not levy User Fee in respect of Fishing Harbour component of the Funded Work.

  The fact remains that the ambiguity in respect of User Fee on funded works exists and needs to be clarified by amending the Concession Agreement.

- According to the Concession Agreement, annual traffic estimated was six lakh[33] TEUs. Article 29 of the Concession Agreement provided for modification in the concession period if the actual Average Traffic during 20 years after COD increased or decreased by more than five *per cent* of target traffic. For every two *per cent* shortfall, the concession

[33] **Traffic equivalent to 60 *per cent* of the capacity of the port i.e. six lakh TEUs per annum.**

period shall be increased by one year subject to a maximum of ten years. Similarly, for every two *per cent* excess, the reduction in concession period shall be by six months; subject to a maximum of three years. Reduction in Concession period shall, however, be waived if the Concessionaire pays a further premium equal to ten *per cent* of the Realisable Fee in the respective years.

We observed that the above conditions in the Concession Agreement were skewed in favour of the Concessionaire as illustrated in *Table 3.4* (*The figures are for illustrative purpose only*).

Table 3.4: Impact of increase or decrease in volume of traffic

	Event	Impact
Scenario A	Actual Average traffic decreases by 20 *per cent* from target traffic.	Concession period extended by ten years i.e. up to 2066. Benefit to the Concessionaire would be ₹24,620 crore[34].
Scenario B	Actual Average traffic increases by 20 *per cent.*	Concession period reduced by three years. Benefit to GoK would be ₹7,386 crore[35].
Scenario C	Actual Average traffic exceeds target traffic by 20 *per cent* and Concessionaire opts to pay 10 *per cent* additional Realisable Fee for six years	Concession period not reduced and the Concessionaire is benefitted by ₹6,381 crore[36].

We also observed that the Department of Economic Affairs (DEA) had, while considering the VGF application submitted by GoK/ VISL, stated that the proposal of a two *per cent* trigger for traffic for adjustment of concession period was too small and that normally, a band of 10 *per cent* was factored in bids.

The DEA had, therefore, requested GoK to set the trigger at a reasonable level of 10 *per cent* which was not acted upon by GoK.

GoK replied (August 2016) that the unequal adjustment for decrease and increase in traffic was done to incentivise the Concessionaire.

The reply is not tenable since the Concessionaire stood to gain disproportionately both when the traffic increased and decreased.

- According to Clause 30.1.1 of the Concession Agreement, if a Government Instrumentality opens any competing port within 100 kilometres (km) of the Vizhinjam Port before the fifteenth anniversary of the Appointed Date, the Concessionaire shall be entitled to an additional concession period equal to three times the duration between the commissioning of the competing port and the fifteenth anniversary

[34] ₹2,462 crore (net cash inflow of the Concessionaire in 2056 from Traffic and Port estate) * 10 years.
[35] ₹2,462 crore (net cash inflow of the Concessionaire in 2056 from Traffic and Port estate) * 3 years.
[36] ₹7,386 crore being the net cash inflow for three years of reduction in concession period as reduced by ₹1,005 crore being the additional Realisable Fee payable by the Concessionaire for six years at the rate of 10 *per cent* per year of 2040 Realisable Fee of ₹1,675 crore.

of the Appointed Date (5 December 2015). Further, the Concessionaire shall be relieved of his obligation to undertake mandatory capacity augmentation. This condition would not apply if the average traffic exceeds 90 *per cent* of the existing capacity of the Port in any year.

We observed that the term "Government Instrumentality" as defined in the Concession Agreement included GoI which was significant as GoI decided (July 2016) to establish a Container Transhipment Terminal at Colachel in Tamil Nadu, 51 km away from Vizhinjam Port, at a total cost of ₹24,969 crore. As such, the Concessionaire would be legally within their rights to invoke the Articles relating to the establishment of a competing port.

GoK replied (August 2016) that the relevant clauses are as adopted from the MCA and the definition of "Government Instrumentality" is as provided by the MCA. The definition is clear and the applicability of the same shall be evaluated on a case to case basis.

Thus, there is a risk that the clause will be invoked if the proposed port in Colachel comes up and would cause additional elongation of the concession period.

- Clause 27.1.1 empowers the Concessionaire to collect fee at lower rates by giving public notice to the users, specifically in respect of all or any category of users. This clause would enable the Concessionaire to collect reduced or nil user fee from users of their choice which would adversely affect the revenue share of GoK. As such, the Concessionaire has been given the option to provide vessels of his choice to use the Port facilities free of cost.

- Clause 3.1.3 of the Concession Agreement conferred on the Concessionaire the right to undertake the development, operation and maintenance of the real estate and to exploit such development for commercial purposes (Port Estate Development) with the right to sub-license any or all parts thereof by means of Project Agreements. It was also stipulated in the Agreement that the land used for Port Estate Development shall not exceed 30 *per cent* of the total area of the Site and the maximum area used for residential purposes shall not exceed one-third thereof.

  We observed that:

  - ✓ DEA had granted in-principle approval to the VGF application submitted by GoK on the basis of the assurance furnished by GoK that all activities proposed in Port Estate Development are port related and envisaged as part of the requirements of the project. However, this condition was not incorporated in the Concession Agreement.

  - ✓ The permissible area for Port Estate Development as specified in Annex-IV of Schedule A of the Concession Agreement was 30 *per cent* of the total area of the "Site" and the maximum area used for residential purposes shall not exceed one-third thereof. The total area of the "Site" has not been quantified anywhere in the Concession Agreement. As such, the Concessionaire is entitled to claim for Port Estate Development, 30 *per cent* of the total area of the project which may include the reclaimed area (53 hectares) and even the area acquired/ to be acquired for road/ rail connectivity, etc.

✓ As per the Master Plan, total area to be acquired for the project is 296.40 acres. Computed at the average cost of acquisition of ₹2.62 crore per acre, the value of land (88.92 acres) to be handed over to the Concessionaire for Port Estate Development was ₹232.97 crore.

- DEA had opined that the commercial development rights should be made *pari passu*[37] and *coterminus*[38] with the concession period for the port and enable return of this development created to GoK.

  We, however, observed that as per Article 31.5 of the Concession Agreement, the Concessionaire is permitted to sub-license the Port Estate Development including residential buildings for a period co-existent with the concession period, and the sub-license would endure even if the Concession is terminated. This essentially means that the Port Estate Development including residential building was not made *coterminus* with the concession period as directed by DEA. Thus, VISL/ GoK failed to address the specific concerns raised by the DEA especially concerning return of land to GoK on completion of the concession period.

Non-compliance with provisions of Concession Agreement

3.1.10 Clause 3 of Schedule L of the Concession Agreement mandated GoK to appoint Safety Consultant within 90 days of agreement for carrying out safety audit of the Port at the design stage. We, however, observed that VISL had not appointed Safety Consultant in spite of the fact that the Concessionaire had commenced the construction activities from 05 December 2015 and as per information furnished to Audit, has completed works estimated at ₹16 crore as on date (April 2016).

GoK assured (August 2016) that Safety Consultant would be appointed at the earliest.

Conclusion

The technical and financial estimates prepared by external consultants were not scrutinised with due diligence resulting in inflation of cost estimates. The interests of the GoK were not protected adequately while drawing up the Concession Agreement.

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[37] On equal footing.
[38] Ending at the same time.

Recommendations

The GoK may:

1. **Subject cost estimates prepared by External Consultants for PPP projects to scrutiny by qualified and responsible Government officers/departments before approving the same.**
2. **Exercise due diligence to protect the interests of the Government while drawing up agreements in respect of PPP projects**.

3.2 Sub-contract Management by Public Sector Undertakings

Introduction

3.2.1 Public Sector Undertakings (PSUs) in Kerala carry out supply and installation of equipment and execution of civil works on behalf of Departments/ agencies of Government of Kerala (GoK). These PSUs in turn engage sub-contractors for procurement of equipment and execution of work awarded by Departments of GoK/ agencies.

In order to examine compliance with rules and regulations and transparency in sub-contract management by PSUs, we examined 50 works[39] relating to supply and installation of equipment and 107 works relating to civil construction in seven[40] PSUs during the period 2010-11 to 2015-16. Out of these, 29 work orders valuing ₹178.79 crore for supply and installation of equipment were issued to the PSUs by GoK on nomination basis of which 20 work orders costing ₹51.47 crore were issued to the PSUs without preparing cost estimate. The cost estimates for these works were prepared by the PSUs based on which, work orders were issued by GoK to them on back to back basis[41]. The cost estimate in respect of 10 work orders for ₹27.77 crore was prepared with the help of business partners of the PSUs to whom these works were later sub-contracted.

Audit findings are discussed below.

Audit Findings

Supply and installation of equipment

3.2.2 Kerala State Electronics Development Corporation Limited (KELTRON) and Kerala Small Industries Development Corporation Limited

[39] 41 works executed by Kerala State Electronics Development Corporation Limited (KELTRON) on behalf of 18 Departments/ agencies of GoK and nine works executed by Kerala Small Industries Development Corporation Limited (SIDCO) for one Department/ three agencies of GoK.

[40] Kerala State Electronics Development Corporation Limited, Kerala Small Industries Development Corporation Limited, Roads and Bridges Development Corporation of Kerala Limited, Kerala State Construction Corporation Limited, Kerala State Coastal Area Development Corporation Limited, Kerala Irrigation Infrastructure Development Corporation Limited and Forest Industries Travancore Limited.

[41] 'Back to back basis' is a term used by PSUs. It refers to purchases done by PSUs for GoK/ agencies whereby PSUs get orders from GoK / agencies who then pass it on to private parties with payment terms that PSU would make payment to private parties only after receipt of payment from GoK/ agencies.