

### 4.1 Increase in Project Costs estimates

The original transaction documents (OMDA/SSA) did not mention a cost estimate for the project. The initial estimate (prepared in 2006) of the project cost of ₹5,826 crore was revised upward by MIAL progressively in 2008, 2010 and finally in 2011 to ₹12,380 crore. A summary of project cost estimate prepared in October 2006, and its revision in July 2008, October 2010 and October 2011 by MIAL is shown in the table below:

**Table 1: Project cost estimates prepared in October 2006, July 2008, October 2010 and October 2011 by MIAL**

Details of Project costs	Initial estimates in October 2006	July 2008	October 2010	October 2011
	Estimated costs (₹ in crore)			
<b>Hard costs:</b> Airside Projects, Terminal 1 & 2 projects, Miscellaneous projects and Technical Services & Consultancies Escalation/ Contingencies, Landside projects, AAI works taken over	4,417	7,487	7,982	9,172
<b>Other Costs/ Soft Costs:</b> Capital Expenditure for Operations, Capitalised Interest/ Interest during Construction, Pre-operative expenses, Upfront Fees to AAI	1,409	2,315	1,820	2,366
<b>Additional Project:</b> ATC Equipment & Technical Block, Sahar Elevated Access Road, Mithi River re-alignment, Relocation of Shivaji Statue	—	---	651	651
<b>New Projects:</b> Airside Projects due to NATS study , AAI-NAD Colony development, Cost Settlement of Land	—	---	—	191
	<b>5,826</b>	<b>9,802</b>	<b>10,453</b>	<b>12,380</b>
Note: Complete details of Project costs estimates made in 2006 are not available and, hence, the figures have been summarised based on available information.				
Source: MIAL's letter (July 2008) to AAI, Technical Auditor's and Financial Auditor's Reports (September 2012)				

Progressive cost escalations were largely, on account of the following:

- **2008:** The project cost increased by 68 per cent in comparison to 2006 estimate. The major contributor to the increase was revision of plan to build a new integrated terminal complex at Sahar as against the initial plan of modernising and expanding the existing facilities. This factor alone accounted for a cost increase of ₹2,565 crore though it did not enhance the capacity of the airport. In addition, estimates for support services,

consultants, contingency, escalation and interest during construction (IDC) were enhanced based on longer project implementation schedule consequent to the change in plans.

- **2010:** The project cost estimates were again revised in October 2010 due to loading the cost of Air Traffic Control Tower and Technical Block on the project as well as including contribution to Mumbai Metropolitan Region Development Authority (MMRDA) for Elevated Access Road, cost of widening of Mithi River (as per directions of Government of Maharashtra) and relocation of Chhatrapati Shivaji Maharaj statue in the project cost.
- **2011:** The project cost estimates were further revised by MIAL to ₹12,380 crore in October 2011. IDC expenses had significantly increased (an increase of ₹546 crore) and additional provision for contingencies was made by MIAL (₹445 crore) along with a set of minor scope changes of both airside and terminal projects.

Examination in audit revealed that:

- There was no provision in OMDA/SSA for MOCA to place a ceiling on project costs. As a result, there were frequent revisions which contributed to nearly doubling of estimates in 5 years.
- The Independent Engineer's duties (Schedule 21 of OMDA) did not contain any provision for monitoring project costs on a regular basis, except to review the 'benchmarking' exercise carried out by MIAL for the project specifications and costs vis-à-vis national and international airport projects of similar scope and nature.
- The major increase in cost estimates was for developing a new integrated common user terminal as recommended by AAI and MOCA which also extended the project schedule. This, however, did not alter the capacity constraints of the airport though it led to significant time and cost over-run in execution of the project.
- MIAL stated (October 2011) that the project had been delayed by 17 months for relocation of Shivaji Maharaj statue at the airport site leading to a cost escalation of ₹1,250 crore (on IDC and pre-operative cost, increase in costs of false ceiling and column cladding works for check in hall, additional cost for PMC and other consultants and provision for additional contingencies). The statue was located in the demised premises of CSI Airport, Mumbai that was handed over to MIAL in May 2006. MIAL was, therefore, in possession of the site and ought to have planned its relocation suitably in advance.
- The project cost estimates of ₹12,380 crore were later restricted by AERA to ₹11,647.46 crore for the period upto 2013-14 as part of the Authority's tariff

determination exercise for CSI Airport, Mumbai for the said control period<sup>1</sup> (under section 13(2) of the AERA Act, 2008). As such, the approved estimates are only for the period ending March 2014. Some significant items of expenditure such as re-development of AAI-National Airports Division colony and Air Traffic Control equipment with estimated cost of ₹422.34 crore, were not included in this estimate. This would imply that the project cost would continue to increase beyond 2014 and impact the tariff adversely in future control periods too.

AAI stated (July 2013) that OMDA did not contain any provision for approval of project cost by AAI/MOCA. Further, the scope of work of Independent Engineers also did not contain any provision for monitoring the project cost.

MOCA stated that

- (i) delay in completion of the project was beyond the control of MIAL because shifting of Shivaji statue was a complex issue and took lot of time to resolve.
- (ii) a cap was possible for smaller projects but was difficult for larger projects like CSI airport, Mumbai.

Though OMDA did not provide a cap on project cost or monitoring such costs, such control nevertheless is a desirable good practice, particularly in view of the very significant cost escalations in the project which were largely being funded through additional levies on passengers.

## 4.2 Assessment of efficiency of capital expenditure

The airport charges are to be decided by the airport regulator, AERA. Besides, as the project cost had increased significantly, MIAL had requested approval to the levy of Development Fee (DF) in order to meet the financing gap. AERA accordingly directed an audit of the process/ approach, cost estimates and expenditure incurred for the period upto March 2014 under the provisions of AERA Act, 2008. The Audit Reports of the Technical Auditor and Financial Auditor so appointed are dealt with in AERA's consultation paper of October 2012. The salient features include the following:

As part of AERA's tariff determination exercise for CSI Airport, Mumbai for the said period (under Section 13(2) of the AERA Act, 2008) the Technical Auditor

<sup>1</sup> **AERA considers a control period for tariff determination. Such a period is a five year period as defined in the AERA Act. As per the Section 13(2) of the AERA Act, 2008, "The tariff shall be determined once in five years and may, if so considered appropriate and in public interest, amend, from time to time during the said period of five years, the tariff so determined." The tariff order issued by AERA in January 2013 considered the five year control period upto 2013-14 for which the project cost was taken as ₹11,647.46 crore.**

(M/s. Engineers India Ltd.) and Financial Auditor (M/s. Ved Jain & Associates), conducted the audits and submitted their reports in September 2012. In their reports, the auditors recommended rationalisation / disallowance of some specific items included in the project cost by MIAL. A significant observation of the auditors was that certain items of work that had been included in project estimates for the period upto March 2014 were unlikely to be implemented in this period and ought to be considered in the subsequent periods. AERA had taken on board these specific observations and disallowed a cost of ₹310.20 crore and deferred cost of ₹ 422.34 crore to subsequent periods. This has restricted the project cost estimates to ₹11,647.46 crore for the period upto 2013-14.

The Technical and Financial Auditors have also highlighted a set of process related concerns, the effects of which have not been quantified. The process related concerns which could have a significant impact on the project costs, as pointed out by the Technical and Financial Auditors are as below:

- *The risk premium of all major contributors in the project implementation is remarkably high which has been shared by MIAL in totality. It seems that the main contractor, sub-contractors /vendors had worked out their rates by considering a substantial risk premium.*
- The Technical Auditor has also pointed out shortcomings in the sub-contracting processes. It has been highlighted that tendering for all the sub-contract work packages were done by M/s. L&T along with the MIAL team. However, no estimation has been done either by MIAL or by M/s. L&T. *Negotiations have been done with all the techno commercially successful bidders on random basis and MIAL did not have their own cost estimates to compare the quotes given by sub-contractors.*
- MIAL awarded the EPC contract for construction of the project to M/s. L&T. The Financial Auditor has raised the following concerns regarding the contracting process:
  - During the contracting process, the two shortlisted bidders had estimated the project cost differently and had quoted their fee based on such estimated project cost (the fee had a variable component which was a percentage of the total project cost). MIAL had not computed any cost estimates for the EPC work and considered a rough average of the cost estimates for comparing the bids. Based on this average cost of ₹5,000 crore, M/s. L&T emerged L1 bidder and was awarded the contract. The auditor however observed that as the variable fee quoted by M/s. L&T was higher than its competitor, the fees payable to M/s. L&T would increase with increase in project cost. Beyond an EPC cost of ₹6,180 crore, it would turn out to be the more expensive alternative. The auditor also pointed out that the

total cost estimated for the EPC portion is ₹5,759 crore (as on July 2011).

- The contract with M/s. L&T was a cost plus contract. It had been intended to fix the contract sum within 14 months from the contract date (i.e. by December 31, 2008). However, based on the nature of the site, MIAL and L&T adopted the approach of breaking down the whole project into small activities and awarding separate contracts for each individual activity after completion of the design for the respective package instead of the program as a whole. The Financial Auditor commented that this change in approach after the award of the contract led to the contract cost being open ended, with its impact not possible to be quantified.
- The site overheads recoverable by M/s. L&T were not finalised which would mean that it was an open ended contract.
- The contract with M/s. L&T provided for a maximum cost for the structure at ₹1,100 per sq. ft. The Financial Auditor had pointed out that there was inadequate basis to decide on this provisioning in the absence of any design and comparative working at the time of the contract.

*AERA considered these issues along with the submissions of MIAL and noted that 'MIAL is a Board- managed company with representations from AAI and MoCA at sufficiently senior levels. It was also noted that the most of the contracts in this project were already awarded and that the project was under advance stage of implementation. Therefore, any corrections or remedial measures did not appear to be feasible at this stage of the project. In view of the inability of the auditors to further quantify or identify losses in monetary term due to process issues, the authority had found itself unable to take any further action in the matter.'*

During our Audit, details of action taken by AAI on reports of the Technical and Financial Auditors regarding non preparation of detailed cost estimates by MIAL prior to contracting, and deviations from normal tendering processes in selection of EPC contractor were sought for. In reply AAI stated that there was no such provision in OMDA for AAI to call for information on selection of contractors including preparation of cost estimates by MIAL.

As the financial effect of these process related concerns could not be specified, its effect on the expenditure remains vague. The efficiency with which capital expenditure is undertaken is therefore not comprehensively assessed. Besides, as evident from the response of AAI, no mechanism was designed in the agreements to go into the appropriateness of the processes/ systems followed by MIAL. Audit did not have access to these records.

MOCA would need to review the issues highlighted above for necessary action to derive an assurance that interests of Government and that of the passengers are protected adequately.

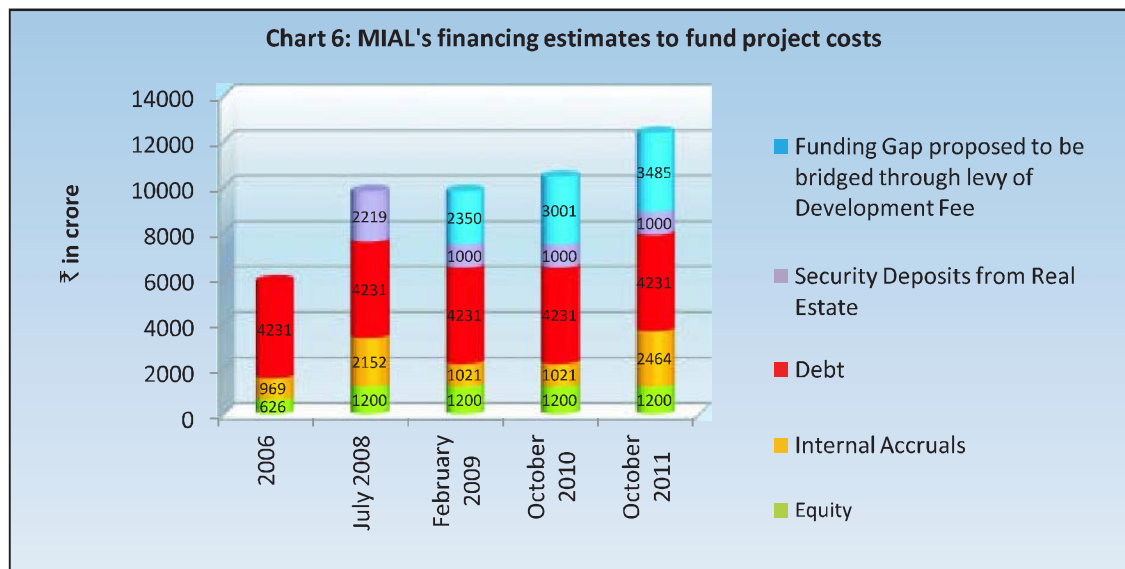
### 4.3 Gap in funding and Development Fee

As per Article 13.1(a) of OMDA, MIAL should arrange for financing and / or meeting all financing requirements through suitable debt and equity contributions in order to comply with its obligations including development of the airport pursuant to the Master Plan and the Major Development Plan. Further, Article 2.5(d) of OMDA provided that MIAL may, if its development funding necessitated, procure the listing its shares on the Mumbai and/ or the National stock exchange(s) at any time. As per the initial financing plan, the project cost of ₹5,826 crore was to be financed entirely through equity, internal accruals and debt.

As the project cost increased to ₹9,802 crore, MIAL projected a funding gap of ₹2,350 crore and requested (February 2009) levy of Development Fee (DF) to meet the gap. MOCA allowed (order dated 27 February 2009) levy of DF upto an amount of ₹1,543 crore on an ad-hoc basis for a period of 48 months effective April 2009. With the creation of AERA in May 2009 the matter was referred to them. Meanwhile, MIAL intimated (January 2011) that the project cost had further increased to ₹10,453 crore (in October 2010) and to ₹12,380 crore (in October 2011) and requested for finalisation of DF citing the increasing funding gap. Interestingly, the equity stake of the private promoters increased merely from ₹463 crore to ₹888 crore and the debt exposure of MIAL remained un-altered even as the project cost had more than doubled.

Changes in the funding pattern with progressively increasing project costs are shown in the chart below:





Source: MIAL's correspondence with AAI/ MOCA, Technical Auditor and Financial Auditor Reports, AERA's Order December 2012

As can be seen from the chart, MIAL, in October 2011, estimated a gap of ₹3,485 crore and sought permission to levy DF on passengers to bridge the same. MIAL had earlier requested (January 2011) for levy of DF at the rate of ₹200 and ₹1,375 per departing domestic and international passenger respectively for a three year period April 2011 to March 2014 to bridge this gap.

AERA determined (December 2012) the project cost (upto March 2014) as ₹11,647.46 crore and funding gap of ₹4,219.05 crore. Of this, AERA allowed funding of ₹3,400 crore through levy of DF and directed that MIAL would arrange for additional financing to address the balance gap of ₹819.05 crore. However, as MIAL would require the funds immediately and DF was mandated for collection over the period January 2013 to April 2021, this amount was to be securitised by MIAL, obtaining a loan with a commensurate interest cost. Thus, the actual DF that would be levied on the passengers would include the interest cost and be higher. Actual DF that would be collected from the passengers would be ₹4,589.45 crore.

Examination in Audit revealed that:

- Levy of DF as a means of financing was not envisaged in OMDA. Article 13.1 of OMDA enjoins upon MIAL to find the entire funds necessary for the project through equity and debt - "it is expressly understood that the JVC shall arrange for financing and / or meeting all financing requirements through suitable debt and equity contributions in order to comply with its obligations hereunder including development of the airport pursuant to the Master Plan and the Major Development Plans". The financing risk for the project had, thus, been transferred to MIAL through the PPP

arrangements formalised in the OMDA. In levying DF to meet the financing gap for the escalated project cost, this financing risk of MIAL was diluted.

- Despite specific provision in OMDA {Article 2.5(d)} that MIAL could list its shares on the Mumbai and/ or the National Stock Exchange(s) at any time for funding the project, neither did MIAL explore this option nor did MOCA or AAI insist upon MIAL to explore this option for raising funds.
- While fixing DF at ₹3,400 crore, AERA in its order dated 21 December 2012 stated that a justification for the DF was the comparable size of investment by Delhi International Airport Private Limited (DIAL) and MIAL and the fact that DIAL was allowed a DF of ₹3,415 crore. However, it cannot be denied that the two projects are entirely disparate with DIAL having completed the project on schedule while the CSI Airport has been delayed and remains incomplete, though the international terminal has since been inaugurated.

AAI stated (July 2013) that DF has been determined by AERA as per the provisions of AAI Act (clause 22A) and AERA in its order for levying DF had provided detailed reasoning for approval of DF.

MOCA stated (November 2013) that GOI cannot assign the power to levy DF through an agreement and that DF can only be levied through statutory provisions which were known to all bidders upfront before issue of RFP. MOCA also stated that the listing option was found not feasible, considering that it would result in reduction of strategic interest of various stake holders.

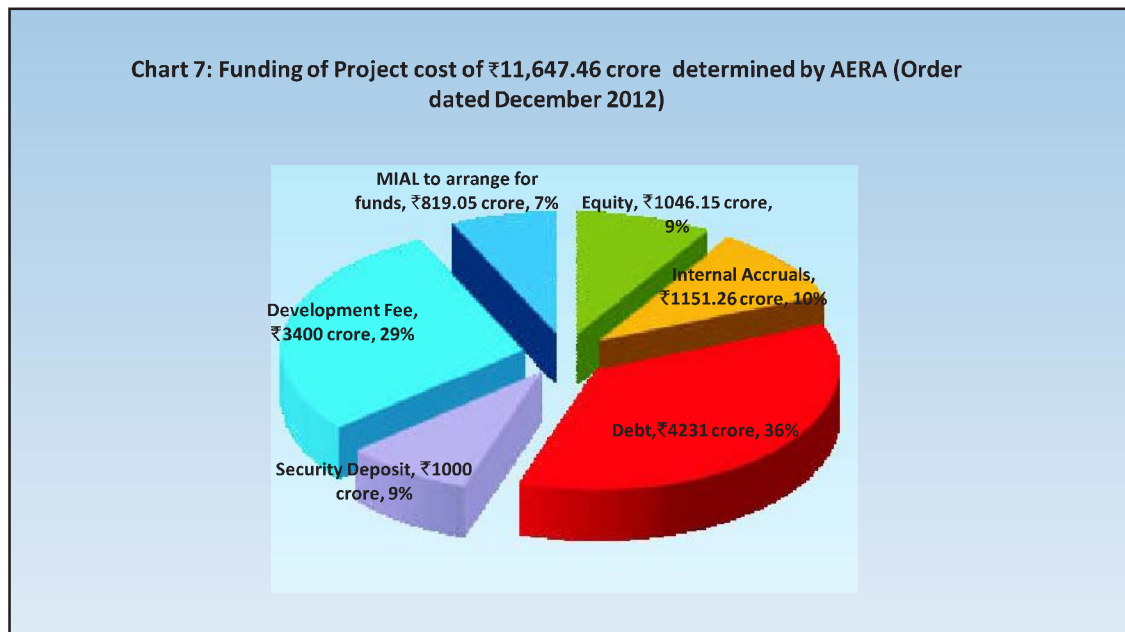
While levy of DF may not be violation of statute, it cannot be denied that OMDA is unequivocal in respect of finding funds for the project which was specified as through equity and debt. Thus, levy of DF to enable MIAL meet the funding gap amounted to burdening the passengers at the cost of more effectively persuading the latter to follow through the equity/debt route as provided for in the concluded contract. Besides, MOCA's contention that listing was not feasible as it would reduce strategic interest of stake holders, ignores the fact that dilution of ownership to raise funds was specifically intended under Article 2.5(d) of OMDA, with conditions duly specified.

It is pertinent to note, in this connection, that PAC in their report presented to Parliament on 06 February 2014, on the Audit Report No. 5 of 2012-13 that dealt with Implementation of PPP in Indira Gandhi International Airport, Delhi, on the same issue, commented that the action of MOCA enabled the private partner to garner post contractual benefits in contravention of the provisions of OMDA.



## 4.4 Financing the project

The funding pattern for the project in the present control period (ending March 2014) based on the summary of project cost that AERA considered is presented in the chart below:



The contribution of the private partners of MIAL<sup>2</sup> through equity is a meagre ₹888 crore<sup>3</sup> or only 7.6 per cent of total cost (₹11,647.46 crore).

AERA in its order (December 2012) on DF stated that shareholders of MIAL had expressed their inability for any further infusion of equity share capital. MIAL had also submitted (September 2012) the extract of its Board meeting of 26 July 2012 where inability to infuse more equity from the shareholders (ACSA Global, Bid Services, GVK group and AAI) was noted.

It is, however, noticed that AAI in its letter of 26 October 2012, had informed AERA their willingness to infuse additional equity in MIAL. Later in December 2012, AAI informed that AAI Board has approved infusion of equity amounting to ₹293 crore in MIAL as and when cash call was made by MIAL. AAI, however, did not receive any cash calls from MIAL. In November, 2012 MIAL informed AERA that after detailed deliberations by the Board of Directors of MIAL, it had been decided that there was no possibility of bringing any additional equity.

<sup>2</sup> Private partners of MIAL-GVK Airport Holdings Private Limited, Bid Services Division (Mauritius) Limited, ACSA Global Limited.

<sup>3</sup> Out of MIAL's paid up equity of ₹1,200 crore, the private partners' contribution amounts to ₹888 crore (74 per cent).

In this regard, Clause 3.3.2 of Shareholders Agreement states that “the Private Participants hereby undertake and agree to subscribe to such number of Equity Shares as may be called upon to do so by JVC, proportionately in accordance with their respective shareholding in the JVC or in such other proportions as may be mutually agreed.” With reference to Clause 3.3.2 of Shareholders Agreement, it appears that Government of India (acting through AAI) was ready to infuse additional equity in the JV. As per Shareholders' Agreement, other private parties ought to have come forward and contributed proportionately which would have reduced the burden of DF on the passengers. This did not happen as the private parties did not take the financing risk.

The financing arrangements in 2006 envisaged the entire project funding through equity, internal accruals and debt. This reduced progressively in the subsequent estimates of February 2009, October 2010 and October 2011 as shown below:

**Table 2: Source of Fund**

Source of Fund	Year			
	2006	February 2009	October 2010	October 2011
Equity, Internal Accruals and Debt funding to total funding (in per centage)	100	76.00	71.30	71.90

Compared to the equity investment of the private promoter, the collection through DF is much higher (the DF being nearly four times the equity stake of the private promoter). At ₹3,400 crore, DF accounts for 29.19 per cent of the total funding. This gives an impression that the project risks could have been transferred to the private partner more effectively as the latter does not appear to have any incentive to control costs, be efficient or complete the project on time.

While agreeing that all the risks associated with MIAL had to be borne by the private partner, MOCA stated (November 2013) that irrespective of various risks, AAI would be earning revenue as per OMDA provisions. Besides, MOCA pointed out that Audit had not considered the internal resource generation of MIAL of ₹1,151 crore.

One of the objectives of developing the project on PPP basis was to find private investment for the project. In the instant case, private partners of MIAL had invested a mere ₹ 888 crore which is only 7.6 per cent of the total project cost and the burden has shifted to travelling passengers through levy of DF. Internal resource generation by MIAL is the surplus generated through operations which is not an investment by the private partner and, hence, has not been considered in the equity comparison.

## 4.5 Assessment of funding gap

In response to the proposal of MIAL (October 2011) seeking approval to the levy of DF, AERA had determined (December 2012) the actual funding gap as ₹4,219.05 crore as against MIAL's own estimate of ₹3,485 crore. The major reason for the difference in estimates was that internal accruals of MIAL were assessed differently by MIAL and AERA. MIAL had assumed an internal accrual of ₹2,464 crore, as their total estimated retained earnings in 2014 (August 2014 being the targeted project completion date).

The Financial Auditor had estimated the same internal accrual at ₹4,021 crore after adding depreciation and deferred tax liability to profit after tax estimated to be achieved in 2014. AERA pointed out that accruals estimated by MIAL were based on their tariff expectations which were uncertain. AERA also noted that assessment of gap in the means of finance has an inter-linkage between determination of DF and tariff. AERA, accordingly, estimated an internal accrual of as ₹1,151.26 crore for the period upto March 2014, considering the actual cash balance (as on March 2012) and adding projected depreciation (for two years, 2012-13 and 2013-14 alone). The lower estimation of internal accrual resulted in a higher funding gap which in turn has led to levy of a larger DF on passengers.

In reply, MOCA pointed out that AERA has assessed the funding gap and determined DF as per provisions of AERA Act, 2008. It also stated that higher internal accrual calculated by independent auditor was based upon increased tariff sought by MIAL. As AERA has allowed much lower tariff (164.29 per cent as compared to 881.29 per cent sought), internal accruals had to be reduced correspondingly.

The contention of MOCA needs to be viewed against the facts that

- (i) Actual internal accruals were higher in 2011-12 and 2012-13 even at the earlier lower rates of tariff.
- (ii) Internal accruals as on March 2013 would be ₹1,408.49 crore which is higher than the internal accrual projected at ₹1,151 crore upto 2013-14 by AERA.
- (iii) Had a higher internal accrual been assumed by AERA, DF could have been suitably rationalised. DF is a means of last resort as acknowledged by AERA and minimising its quantum would have reduced the burden on passengers.