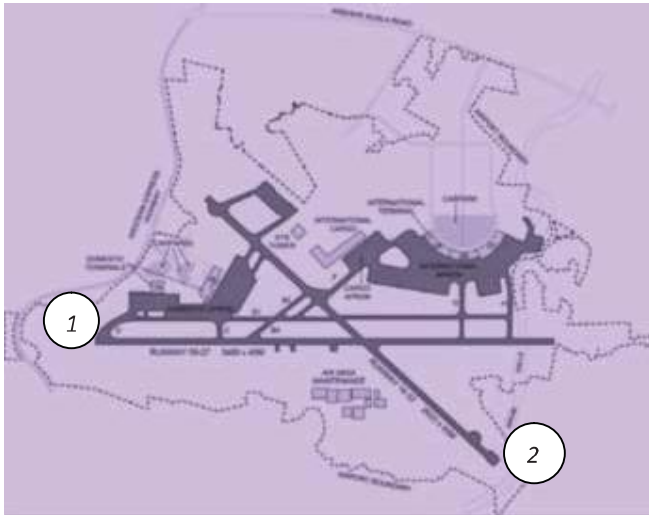


### 3.1 CSI Airport -Mumbai



**Picture 1: Runways of CSI Airport, Mumbai**

CSI Airport, Mumbai has two intersecting operational runways designated 09/27 and 14/32 (No.'s 1 and 2 in picture) which intersect at approximately their mid points. CSI Airport, Mumbai had essentially been operated as a 'Single Runway' airport with most operations handled throughout the year on runway 09/27 with runway 27 end being duty runway for 85 per cent of the year due to

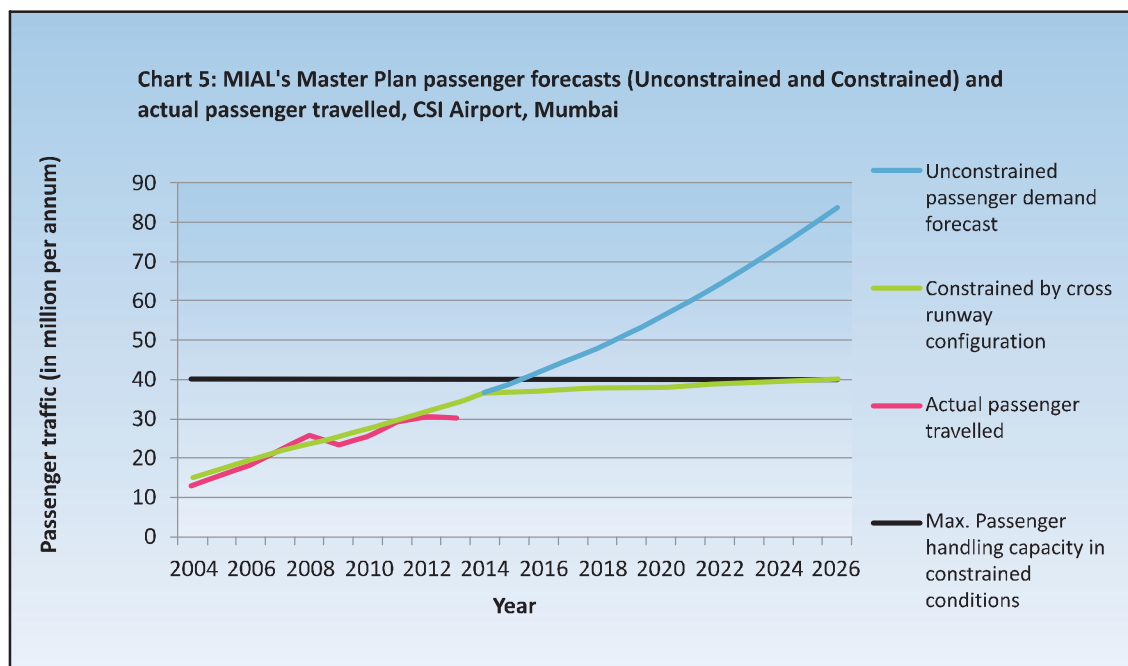
prevailing wind direction. Cross runway operations were introduced at CSI Airport, Mumbai with effect from 01 January 2006 on trial basis and regularised from 27 March 2006. On account of their cross design, simultaneous operation of both runways, however, is not possible. This, in turn, places a design constraint on the handling capacity of runways.

### 3.2 Design constraint to capacity

In the Initial Development Plan submitted by the GVK led consortium (JV partner) at the time of bidding, an additional parallel runway (situated south of runway 09/27) was envisaged to increase the runway capacity of the airport. However, this involved large scale relocation of facilities and acquisition of privately owned land which rendered such development and its schedule uncertain. As a result, the Master Plan submitted by MIAL (03 October 2006) shelved the proposal for the additional parallel runway. Thus the design constraint of the cross runway configuration in CSI Airport, Mumbai remained, restricting the overall traffic handling capacity of the airport.

Given this constraint, MIAL estimated (Master Plan 2006) that the maximum passenger traffic that could be handled at the airport was 40 million passengers per annum (mppa). The demand forecast (based on Air Traffic Forecasts Reports of M/s. NACO) for passenger travel through Mumbai was, however, expected to reach close to 40 mppa by 2015 and exceed 80 mppa by 2026. Thus, even after modernisation and up-gradation, the airport

would not be able to meet the growth of demand. This gap between demand and capacity was expected to be visible from 2014 onwards as indicated in the chart below.



Source: MIAL's Master Plan 2006, actual passenger travelled as per traffic data in the Multi Year Tariff Proposal submitted (October 2011) by MIAL to AERA

AAI agreed (July 2013) that due to various constraints in developing new facilities/ area, there is a limit to increasing passenger handling capacity of the Airport.

While stating that the parallel runway option was cost-prohibitive and time constrained, MOCA replied (November 2013) that after the initiatives taken by MIAL, airside capacity had improved and it was expected that the present airport could serve the capacity to some extent beyond 40 mppa. Further, MOCA also stated that the Navi Mumbai airport and Juhu airport which were at the planning stage, would address the congestion at CSI Airport, Mumbai.

The response needs to be considered in light of the Master Plan 2011 prepared by MIAL which stated that even after significant improvement of infrastructure in CSI Airport, Mumbai, the current airport site cannot match the traffic volume forecast for the region, given the constraint of runway capacity. In fact, the improved runway system using high intensity runway operations would be approximately 3 lakh air traffic movements per year which would translate into a traffic handling capacity of 40 mppa for the airport. Besides, both the Navi Mumbai airport and Juhu airport are presently at planning stage even as the traffic at CSI Airport, Mumbai is expected to reach its maximum capacity of 40 mppa by 2015.

### 3.3 Delayed second Airport at Navi Mumbai

In view of the limitation in traffic handling capacity of CSI Airport, Mumbai, a second airport was intended to be developed at Navi Mumbai. The Greenfield airport project was proposed to be developed in the Public-Private Partnership (PPP) mode by setting up a Special Purpose Company (SPC) with equity participation from City and



Picture 2: Site for International Airport Navi Mumbai

Industrial Development Corporation of Maharashtra Limited (CIDCO), AAI, Financial Institutions and an experienced private entrepreneur of repute as equity holders. The SPC would plan, design, obtain development approvals, arrange required resources, build and operate the airport, and finally transfer the assets back after the concession period. The SPC would be entitled to special benefits and incentives which were currently available to infrastructure development projects.

The proposal for Navi Mumbai International Airport (NMIA) was mooted in November 1997. Ten years later in July 2007, MOCA obtained an 'in principle' approval from the Cabinet for setting up the second airport. CIDCO was appointed as the nodal agency for implementation in July 2008. Though the Detailed Project Report and Business Plan for the project had been prepared (February 2007), the project was yet (July 2013) to take off. NMIA was to be developed in phases with the first phase intended to be put into operation by 2015 with a traffic handling capacity of 10 mppa. However, in view of its present status, meeting this milestone seems unlikely. Considering that CSI Airport, Mumbai is expected to reach saturation by 2015, this would imply increased congestion at the airport in near future.

MOCA replied (November 2013) that the delay in construction of NMIA was due to time taken for acquisition of required land and rehabilitation of 5000 people by the State Government.

### 3.4 Right of First Refusal for NMIA

The State Support Agreement for development of CSI Airport, Mumbai allows the Right of First Refusal (ROFR) to MIAL for a second airport planned within a 150 km. radius of the former. For the ROFR to apply, MIAL has to participate in the bidding process for the new airport. In the event of MIAL being

unsuccessful in the bidding with its bid within a 10 per cent range of the most competitive bid, it would be allowed to match the first ranked bid for the second airport, provided that MIAL has performed satisfactorily without any material default under any project agreement at the time of exercising the ROFR. This condition would be applicable for the first 30 years. Allowing such ROFR in relation to second airport is likely to thwart competition and provide MIAL with an advantage on the second airport. It is pertinent to note that MIAL has incorporated a subsidiary company, M/s. Navi Mumbai Airport Developers Limited, in 2007.

MOCA replied (November 2013) that ROFR was considered as an imperative to mitigate the significant risks to which MIAL making substantial investments in CSI Airport, Mumbai, would be exposed in the event of traffic diversion to the competing airport in close vicinity. MOCA also asserted that the provision does not thwart competition as the existing MIAL gets a chance only if their performance till the time of the bid was satisfactory and in the event of the bid being within 10 per cent of the highest bid offered for the second airport.

The concern of MOCA regarding significant investments made by MIAL needs to be viewed vis-à-vis the actual equity capital invested by the concessionaire in CSI Airport, Mumbai which amounts to a mere 7.6 per cent as against 29.19 per cent of the investment being funded out of development fees (as elaborated at para 4.4 of the report). The risk carried by MIAL is further mitigated by what would appear to be rather an unconditional extension of term upto 60 years that has been allowed in SSA as discussed in a subsequent paragraph. Besides, as PAC has remarked in its report on Indira Gandhi International Airport, Delhi, the new airport would be under the regime of AERA and would not have the benefit of dual or hybrid till system which may further affect the competitiveness of a new bidder for NMIA. Thus, the ROFR condition limits the risk to MIAL further, even as it has the potential to restrict competition and provides an advantage to MIAL on the second airport.

MOCA submitted before PAC with regard to similar provision in the arrangement of ROFR in SSA relating to Indira Gandhi International Airport, Delhi with the concerned JVC, namely, Delhi International Airport Private Limited (DIAL) mentioned in Audit Report No.5 of 2012-13, that safeguards had been provided to ensure transparency and competitiveness. This would need to be ensured in the case of MIAL too.

MOCA also assured the Public Accounts Committee (PAC) that the second airport in Mumbai may not be needed till the traffic reaches the saturation point of 40 mppa. Adequate safeguards would need to be provided and ensured so that interests of competitiveness and transparency are not sacrificed especially as the traffic is expected to reach 40 mppa in 2015 itself.

### 3.5 Concession Period

Article 18.1(b) of OMDA gives MIAL the unilateral right to extend the concession period for another 30 years 'on the same terms and conditions', provided no event of default had taken place during the 20<sup>th</sup> to 24<sup>th</sup> year of the first concession period. Absence of review clause, thus, virtually allows MIAL the right to extend the term for another 30 years and the right to operate the airport for a period of 60 years with the terms and conditions frozen in OMDA.

MOCA stated (November 2013) that a financial consultant was appointed and as per their advice, a period of 30 years was considered reasonable for the investors to recoup their investment. MOCA confirmed that the Cabinet was informed (vide note dated 09 September 2003) that the lease period of 30 years could be extended by another 30 years subject to mutual agreement and negotiation of terms. MOCA also stressed that the Inter Ministerial Group (IMG) and EGOM which finalised the detailed terms of the agreement had also intended the renewal of term to be subject to satisfactory performance of the JV in the first term. MOCA stated in the Exit Conference that non-inclusion of provision regarding extension of concession period for 30 years beyond the initial term of 30 years subject to mutual agreement and negotiation of terms was a conscious decision and it was not intended to include such provisions in future too.

PAC in their report presented to Parliament on 06 February 2014 on the Performance Audit of Implementation of PPP in Indira Gandhi International Airport, Delhi contained in Audit Report No. 5 of 2012-13, have, inter alia, on the same issue, desired to be apprised how the Joint Venture (in Delhi airport) would pave the way for future airport development and modernisation in the country. MOCA would need to devise an appropriate strategy to effectively comply with the concern expressed in the above recommendation of PAC, especially in view of the benefit conferred upon the Airport Operator (MIAL) which would translate into almost an automatic extension of the initial concession period to another 30 years, without renegotiation of terms. A regular and well documented review of the performance of MIAL by MOCA would not only safeguard the interests of Government but also get MIAL to deliver the committed outputs.



### 3.6 Changes in Master Plans for CSI Airport, Mumbai

As per OMDA (Articles 8.3.5 and 8.4.2) for development of CSI Airport, Mumbai, Master Plan and Major Development Plan were to be submitted to AAI for its information and MOCA for its review and comments before the expiry of six months from the date of execution of OMDA. Specific schedule for MOCA's suggestions and MIAL's action thereupon leading to firming up of the plans is laid out in the SSA (Clauses 3.5.2, 3.5.3 and 3.5.4). Final Master Plan would be binding on MIAL and would govern the operations, management and development of the Airport. AERA would also accept this Master Plan and Major Development Plan as the final document for tariff fixation purposes (SSA Schedule 1).

MIAL submitted the initial Master Plan and Major Development Plan to AAI and MOCA on 03 October 2006. The Global Technical Advisor (GTA) appointed by AAI for implementing the restructuring of metro airports was to offer comments on the plans of MIAL as per their terms of appointment. However, GTA did not carry out this function. AAI has withheld 25 per cent of GTA's fees, because of non-completion of technical review of Master Plans by GTA. In the absence of GTA's opinion, AAI offered a set of interim comments which were forwarded by MOCA to MIAL within the stipulated period of 30 days. MIAL, however, submitted the revised Master Plan and Major Development Plan late (in 2007), after seven and thirteen months respectively as against the time limit of 15 days specified in SSA. There was no evidence of any action being taken by MOCA against delay by MIAL from the records made available to Audit. Subsequently in March 2011, MIAL submitted a modified Master Plan. Details of project are in Table 1 in para 4.1.

Thus, the Master Plan for the project remained flexible for over five years (October 2006 to March 2011). MOCA accepted changes in Master Plans and did not comment about the delay in submission of the same. In the Master Plan 2011, the constituent projects were restructured and re-scheduled—a major change in completion schedule for the terminal building from 2010 in the Master Plan of 2007 to 2013 (international) and 2014 (domestic). The delay also added to the project cost.

AAI stated (July 2013) that OMDA did not contain any specific provision for approval of Master Plan as well as its monitoring by AAI. MOCA added (November 2013) that depending upon the changed circumstances and change in scope of work, the Master Plan was revised.

The reply needs to be viewed against the fact that the procedure for finalisation of Master Plan including its schedule was laid down in OMDA and SSA. That a final Master Plan was to be in place within a specific time period which would be binding on MIAL, pointed to monitoring mechanism in AAI/MOCA for arriving at applicable Master Plan in accordance with the agreements and its timely implementation. The obligation of MIAL to develop

the airport as per applicable Master Plan prepared in accordance with the time limits set out in the agreements stood diluted as the Master Plan was delayed. Article 8.3.8 of OMDA also mandated an 'approved' Master Plan which implied the need for firming up of Master Plan with target dates for individual facilities. The fact that no action had been taken by AAI/ MOCA despite inordinate delays on the part of MIAL beyond the schedule specified in SSA highlights deficiency in monitoring.

### 3.7 Change in scope of work

Initial Master Plan of MIAL for CSI Airport, Mumbai (03 October 2006) had proposed a terminal building for all international passengers and 60 per cent domestic passengers at Sahar which was intended to be completed by 2010. For this, the existing international terminal was to be refurbished and partly reconstructed. MOCA (on the advice of AAI), suggested having a common user terminal for all passengers, both domestic and international. Accordingly, MIAL submitted a revised Master Plan in May 2007 centralizing passenger handling facilities at Sahar. The same plan for a common user terminal was reiterated in the subsequent Master Plan of March 2011. The Master Plan of March 2011 incorporated some changes vis-à-vis the Master Plan of May 2007 in re-location of some of the facilities (e.g., ATC technical block, MET farm, cargo terminal), as well as changes necessitated due to certain land pockets becoming un-available (e.g., land under P&T ownership) and operational requirements. There was delay in implementation of the individual projects which led to their re-scheduling in the Master Plan 2011 which has been separately commented at paras 3.8 and 3.9 of the report.

The change in scope of work for construction of a 'one roof' terminal building on the advice of AAI and MOCA led to increase in costs and contributed to delay in project execution. Audit was not provided dis aggregated details of cost for examination. However, this did not alter the capacity constraint of the airport as capacity remained at 40 mppa. Net benefit of the altered scope thus remains uncertain even as the project suffered cost and time over-run on this account.

AAI stated (July 2013) that after reviewing the Master Plan submitted by MIAL, MOCA/AAI considered development of an 'ultimate' terminal under one-roof at Sahar. AAI further stated that MIAL considered various advantages of a common terminal such as:

- a) It would provide far greater passenger convenience and a significantly more operationally efficient cum flexible design as compared to split operations in Sahar and Santacruz;
- b) Existing terminals were not harmonious and efficient.

- c) Feasibility study of existing terminals revealed that existing piles required substantial structural modifications.

MOCA stated that though the ultimate capacity of the existing airport would remain around 40 mppa, a second airport was in any case planned on its saturation. MOCA also asserted that the change in scope advised was within the OMDA framework.

AAI/MOCA's contention that the integrated design provided for greater passenger convenience and efficiency needs to be viewed vis-a-vis the present plan of retaining both the domestic terminals, i.e. T 1A and T 1C which is a departure from the integrated terminal plan. Further, investigations by the consultant, appointed by MIAL at the time of preparation of the Master plan, had revealed that the technical condition of the existing terminal was sound and the structure could be adapted to the latest building regulations to allow for large voids and addition of a new structure to create a much better passenger experience and world class structure. This would indicate that modifications to the existing structure had been found to be feasible by MIAL. It has not been denied that the intermittent change in scope had contributed to delay and cost over-run.

### 3.8 Status of Mandatory Capital Projects

In line with OMDA, the Master Plan 2006 prepared by MIAL conceptualised a phased development of CSI Airport through MCPs and other capital projects in the following manner:

- Interim Measures: to be completed by 2008
- Phase 1: to be completed by 2010
- Phase 2: to be completed by 2015
- Phase 3: to be completed by 2020
- Phase 4: to be completed by 2026

(a) 32 Mandatory Capital Projects (MCPs) were included in Interim Measures and Phase-1 to be completed by March 2010. Of these, MIAL was required to complete 28 projects within two years from the effective date of 03 May 2006.

Clause 1 of Schedule 6 of SSA, allowed a nominal increase of ten (10) per cent over the base airport charges for calculating aeronautical charges for the third year after the effective date as an "Incentive", provided MIAL duly completed and commissioned MCPs required to be completed during the first two years from the effective date. Thus, MIAL would be eligible for a 10 per cent increase in base airport charges if it had completed 28 MCPs by May 2008.



MIAL did not complete one MCP (project code: S-06 for realigning the B-1 taxiway) within the stipulated period of two years. MIAL had initially requested (June 2007) for deferment of the work citing resultant operational constraints for airlines. This was agreed to by MOCA (August 2007) and completion date was re-scheduled to March 2010. MIAL again requested (May 2009) extension of the completion date and MOCA approved a further extended schedule up to 31 December 2010 treating it as a onetime waiver. The work was finally completed by December 2010.

MIAL was, thus, not eligible for the 10 per cent increase in base airport charges as per the provisions of SSA. However, MOCA approved (12 December 2008) a 10 per cent increase in base airport charges w.e.f. 1 January 2009 as an incentive to MIAL though one of its MCPs remained incomplete.

AAI /MOCA stated (July/November 2013) that increase in tariff in airport charges had been approved considering justifications given by MIAL for the delayed completion of capital works. The fact, however, remained that in allowing rise in tariff despite non-completion of MCPs, SSA was violated.

(b) All 32 MCPs were to be completed by 31 March 2010. One of these projects (project code: S 09) is, however, yet to be completed. The project envisaged refurbishment and reconstruction of existing international terminal as per initial Master Plan. With change of plan in 2007, the scope of work of this MCP was also revised to provide for amalgamation of Terminals 2B and 2C, expansion by adding gates, demolition of Terminal 2A and construction of South West Pier. The schedule for completion of the project remained unchanged as March 2010. MIAL was unable to complete even this reduced scope of work under the project. An extension was allowed by MOCA for completion of the project by March 2012 by which time, the project with its reduced scope was completed.

However, the original scope of the project which intended to make the international terminal ready for operations by March 2010 could only be completed in January 2014 (terminal inaugurated on 10 January 2014) which was 21 months beyond the date of its intended completion.

AAI stated (July 2013) that except these two works, other MCPs were completed in time. AAI also stated that the reasons for delay were examined through an Independent Engineer based on whose recommendations and request of MIAL, competent authority found the delay justified.

In addition, MOCA replied (November 2013) that the delay in completion of MCPs was attributable to circumstances and situations beyond the *control* of MIAL as the works were being carried out with significant operational constraints.

The reply needs to be considered in the light of the inordinate delay of two years in completion of the reduced scope of project S-09. Such delays raise serious doubts on the achievement of efficiency advantages expected from the PPP arrangement, especially as the terminal facilities for international operations remained incomplete till January 2014 as against the original intent of completion by March 2010.

*MOCA/AAI may ensure that incentives such as increase in base airport charges are not allowed as a matter of course, when inordinate delays take place in completion of projects.*

### 3.9 Status of other capital projects

In addition to MCPs, Master Plan 2007 listed a set of 45 other capital projects which included airside works, terminal works and city side development which were necessary for overall execution of the project. These works were to be executed in three phases:

- Phase 1: upto 2010
- Phase 2: upto 2015
- Phase 3: upto 2020

Targeted completion dates for these works were progressively pushed into later phases in Master Plan 2011 in the following manner:

- 20 capital works were to be completed by Phase 1 as per Master Plan 2007. Of these, eleven were shifted to Phase 2, one was shifted to Phase 3 and one work was deleted in Master Plan 2011. One work was brought forward from Phase 3 to Phase 1 leaving a total target of 8 works to be completed by 2010.
- 14 capital works were to be executed in Phase 2 (2010-15) as per original plan (2007). This increased to 25 with additions from left over works of Phase 1.
- The works scheduled for Phase 3 continued to remain eleven.

Actual progress of work was even slower. It was noticed (from progress reports of Independent Engineer) that only three works had actually been completed in Phase 1 as against targeted eight as per Master Plan 2011. Two projects of Phase 2 and one project of Phase 3 had since been completed. Of the total of 44 capital works, progress had been reported in only 13 by the Independent Engineer indicating tardy progress. Reasons for delay were not brought out in the report. Audit did not have access to the original records of MIAL in this regard.

As per OMDA, target dates for construction of individual facilities as incorporated in the Master Plan had to be fully met by MIAL. In the event of delay in commencement or completion of projects, AAI had the right to levy liquidated damages on MIAL (Article 8.3.8). However, no communication from AAI to MIAL for levying of liquidated damages or urging that MIAL speed up the work was on record. The progressive re-scheduling of capital works to a later date contributed to an overall delay of the entire project even as inaction on the part of AAI and MOCA point to a gap in monitoring and oversight on the project.

AAI stated (July 2013) that OMDA did not contain any provision requiring AAI to monitor other capital projects and that the provision under Article 8.3.8 applies only to Major MCPs.

MOCA replied (November 2013) that development of CSI Airport, being a land constrained airport, heavily depended on timely availability of various land pockets and relocation of existing facilities. Further in absence of any linkage to traffic trigger, the imposition of Liquidated Damages under Article 8.3.8 was not applicable. MOCA also pointed out that Mumbai airport had a large number of inherent problems which were specific to the airport which caused delay and that MIAL could not be blamed for the same.

The reply needs to be viewed against the following:

*As per Article 8.3.8 of OMDA ‘...to the extent not already covered under article 8.2.2, in the event that a project set out in the approved master plan is not commenced at the designated traffic trigger or such other trigger and there is no explanation provided by the JVC to AAI that is satisfactory to AAI, shall have the right to levy liquidated damages on JVC equivalent to 0.5 per cent of the estimated capital cost of the project for each week the project is delayed on the JVC.’ This meant an exercisable right by AAI to levy liquidated damages for all capital projects (mandatory capital projects as well as other capital projects) and had the responsibility of monitoring all such projects.*

*There is a need for MOCA and AAI to devise a time bound and regular monitoring structure related to progress of work in any future PPP arrangements. Similarly, there is a need to improve the assessment of construction risk allocated to JVCs.*