



# NAVI MUMBAI INTERNATIONAL AIRPORT

*Soaring towards economic growth*

## CIDCO - THE COUNTRY'S PREMIER TOWN PLANNING & DEVELOPMENT AGENCY

When Mumbai's population shot up by 40% in the decade of 1951-61 and by 43.80% in the following decade, it resulted in massive upheavals in routine life for the majority of the population living in the city. The required development projects could not be implemented



to satisfy the growing needs of the population, industry, trade and commerce. Problems of traffic congestion and lack of open spaces & play fields were growing reality. There was also an acute shortage of housing and over concentration of industry in the metropolitan and suburban areas of the city. All this had become detrimental to the all round growth of the mega city.

To try and remedy the situation, The City and Industrial Development Corporation of Maharashtra Limited (CIDCO) was incorporated on 17th March, 1970 under the Indian Companies Act, 1956. It was designated as the New Town Development Authority for the Navi Mumbai project covering 95 villages and admeasuring 344 Sq.km. CIDCO started functioning as a fully-owned Government of Maharashtra company and was entrusted with the daunting yet ambitious task of developing the necessary social and physical infrastructure to urgently ease the burden on Mumbai city. It was also entitled to recover all costs of development from the sale of land and constructed properties.

## NAVI MUMBAI

Navi Mumbai is a rapidly growing, modern metropolis on the mainland across the Mumbai harbour. The city is well connected not just to Mumbai but to other parts of the Mumbai Metropolitan Region (MMR) as well. It can boast of being the largest totally planned, fully self-contained,

well-balanced city in the world. The city is planned to accommodate a target population of 4 million and jobs of 2 million in near future in a series of self-contained nodes strung along an efficient Mass Rapid Transit System. The well-planned transport network consisting of roads, railways, waterways alongwith the proposed new airport makes the city ideal for living.

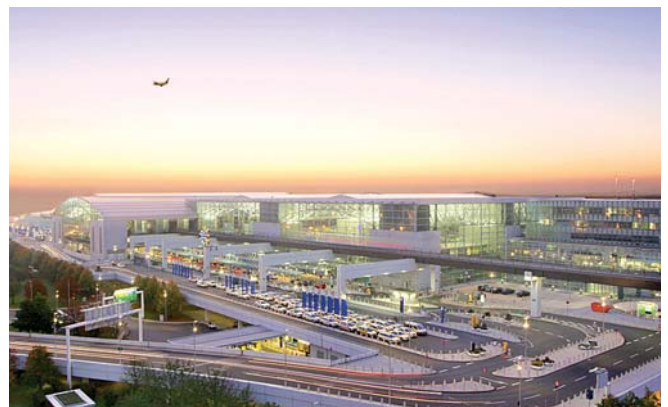
## NEED FOR SECOND AIRPORT

The existing airport at Mumbai, is fast reaching saturation level and scope for further enhancement of passenger and cargo handling facilities alongwith aircraft maintenance and city side facilities are very much limited. Enhancement of aviation facilities in MMR is essential for maintaining Maharashtra's leadership in attracting Foreign Direct Investment and cementing Mumbai's future as an International Financial Centre. The air travel demand forecasts for the Mumbai Metropolitan Region reveal that demand will grow from 29 million passengers per annum in the year 2010-11 to 119 million passengers per annum by 2030-31. The Mumbai airport will be unable to handle such an increase in demand. It is therefore imperative to build a second Airport for MMR.

## CIDCO OFFERS A SOLUTION

CIDCO has always strived to extend its scope of activities to all spheres of city development while trying to improve life of society in general. With this principle as the cornerstone of its development planning, CIDCO has emerged with the solution for a brand new state-of-the-art airport in Navi Mumbai.

This avant garde facility was first conceived in the year 1997. Since then it has gone through several changes



and modifications in the conceptual stage itself. It is now finally planned and waiting to be executed.

## MILESTONES IN THE PROCESS

Given below is the brief chronology of the Airport planning process from the time of its conception:

- **Nov. 1997:** Ministry of Civil Aviation (MoCA), Govt. of India (GoI) constituted a Committee to examine the various sites for second airport for Mumbai.
- **June 2000:** The GoI Committee, which had a Member from the Ministry of Environment & Forest (MoEF) recommended Rewas - Mandawa suitable since Navi Mumbai Airport was proposed with one runway.
- **Sept. 2000:** CIDCO / Govt. of Maharashtra (GoM) revised the proposal to provide for two runways and submitted a feasibility report.
- **Nov. 2000:** A sub-Committee constituted by AAI, examined the Navi Mumbai site and found it technically and operationally feasible, and suggested carrying out a detailed Techno Economic Feasibility Study (TEFS).
- **Sept. 2001:** CIDCO / GoM submitted TEFS comprising various technical studies. Various technical queries and clarifications raised by AAI have been successfully completed by CIDCO. AAI then suggested carrying out a Simulation Study to examine the inter-operability of two airports (Mumbai & Navi Mumbai) in single airspace.
- **Aug. 2006:** International Civil Aviation Organization (ICAO) conducted Simulation Study sponsored



jointly by CIDCO / GoM & AAI. The Study confirmed that simultaneous operation of two airports is possible with appropriate procedures in place.



- **Feb. 2007:** CIDCO / GoM submitting Project Feasibility and Business Plan Report to MoCA / GoI.
- **July 2007:** MoCA obtained in principal approval from the Union Cabinet for the 2nd Airport in Navi Mumbai and conveyed to GoM. GoI constitutes a steering committee to oversee the structure and implementation of NMIA Project.
- **Aug. 2007:** NMIA development by CIDCO approved by its board.
- **Aug. 2007:** CIDCO made application to MoEF for approval of Terms of Reference (TOR) for carrying out EIA.
- **Sept. 2007:** CIDCO appointed IIT Bombay, Mumbai, for Environment Impact Assessment (EIA) study and CW&PRS, Pune for conducting required hydraulic model studies.
- **Nov. 2007:** National Coastal Zone Management Authority (NCZMA) recommended amendment to CRZ Notification of 1991 to make Navi Mumbai Airport development permissible in CRZ areas with mitigation measures for environment damage.
- **Feb. 2008:** Maharashtra Coastal Zone Management Authority (MCZMA) recommended the proposal with compensatory forestation.
- **March 2008:** CIDCO appoints M/s. Louis Berger Group (LBG) consortium, USA as prime consultant for the proposed airport.

- **July 2008:** GoM granted approval and appointed CIDCO as the nodal agency for implementation.
- **Feb. 2009:** MoEF directed to obtain Hon. Mumbai High Court approval for amendment of CRZ regulations.
- **April 2009:** Hon'ble High Court at Mumbai allowed the Prayer of CIDCO / GoM for Amendment of CRZ Notification of 1991.
- **May 2009:** MoEF issued notification for amending the CRZ Notification of 1991 permitting Green Field Airport at Navi Mumbai in CRZ areas, subject to environmental safeguards.
- **June 2009:** CIDCO submitted fresh application for approval of TOR for carrying out EIA to MoEF & to MCZMA for approval of CRZ clearance.
- **July 2009:** MCZMA considered proposal for CRZ approval and recommended it to MoEF.
- **Aug. 2009:** MoEF conveyed the TOR for carrying out EIA study and IIT, Mumbai, commenced the preparation of EIA work in consultation with Central Water Power & Research Station (CWPRS), Pune and Mumbai University, Ground Water Survey Dept. Agency (GSDA), GoM, Gujarat Ecology Commission (GEC), Govt. of Gujarat, M/s. Hemant Sahai & Associates (Legal Consultant), M/s. DHI, India and M/s. Lewis Environmental Services, Inc. USA.
- **Dec. 2009 :** Expert Appraisal Committee (MoEF), visited the Navi Mumbai Airport site.
- **Feb. 2010 :** MoEF gave additional TOR for EIA study.



- **Mar. 2010 :** CIDCO submitted draft EIA report to Maharashtra Pollution Control Board (MPCB), for conducting Public Hearing.
- **May 2010 :** MPCB conducted Public Hearing and submitted the Public Hearing report to MoEF.
- **June 2010 :** CIDCO submitted final EIA Report incorporating observations of Public Hearing to MoEF.
- **July 2010:** MCZMA in its 63rd meeting approved minor modifications to CZMP and recommended it to MoEF.
- **July 2010 :** EAC considered the proposal in its 89th, 90th, 91st, 92nd and 93rd Meetings, spread over 5 months, starting from 21st July 2010 for granting Environmental and CRZ clearance.
- **Oct 2010 :** Ministry of Defense (MoD), GoI granted Defense clearance to NMIA project.
- **Nov. 2010 :** Environment and CRZ clearance granted by MoEF.



## NAVI MUMBAI INTERNATIONAL AIRPORT (NMIA)

The location of the proposed airport at Navi Mumbai has been based on several parameters. Prominent among these is the fact that Navi Mumbai is expected to absorb the future growth in population, business and commercial activity of MMR. The availability of excellent physical and social infrastructure coupled with an environment friendly site with least resettlement and rehabilitation makes the Navi Mumbai Airport project both technically feasible and financially viable.



The airport is one of the world's largest "greenfield" international state-of-the-art airports, currently being developed, offering world-class facilities for passengers, cargo, aircrafts and airlines.

The overall master plan will be sequentially developed, managed, and operated to internationally recognized standards. The design and development of high quality facilities will provide users with a high level of service through use of advanced technologies (online check-in and biometric passport control procedures etc.) with long life cycles and excellent performance.

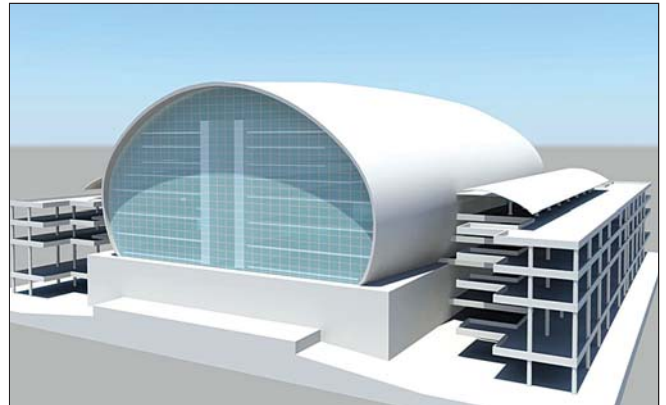
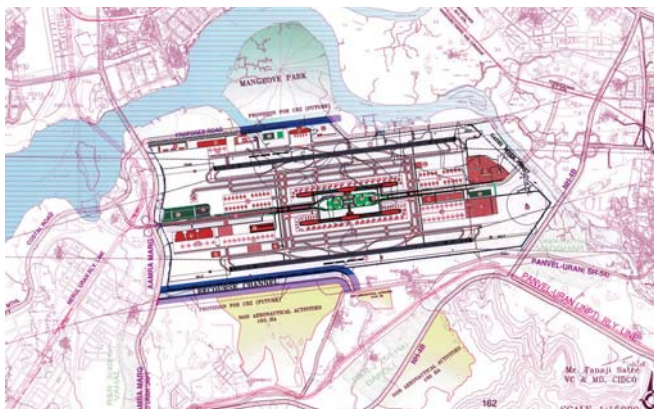
### The Location

The proposed Airport is situated on the National Highway No. 4B near Panvel, in the geographical centre of Navi Mumbai, having longitude of 73°4'.18" and latitude of 18°59'.33" and at a distance of approx. 35 km from the existing airport in Mumbai.

The National Highway 4B is the main road access to the Airport from the east, whereas the Aamra Marg provides road access to the Airport from the west. The Airport is also accessible from the existing Mankhurd-Belapur-Panvel commuter rail corridor from Khandeshwar Railway Station and from the Targhar railway station on the Nerul Uran Railway line currently being developed.

### The Expanse

As per the MoEF approved airport master plan, area of the proposed Airport zone is about 1,405 Ha. It consists of an On-Airport area for aeronautical use (1,160 Ha) and an Off-Airport area to be developed as Mangrove Park (245 Ha). The regeneration of mangroves in No



Development Zones, in an area of 310 Ha. at Kamothe and 60 Ha. at Moha Creek, are also proposed. The non-aeronautical activities related to the Airport have been planned to the south of the airport over an area of 276 Ha, spread over three pockets and offsite infrastructure such as interchanges, access roads etc. in about 279 Ha of area.

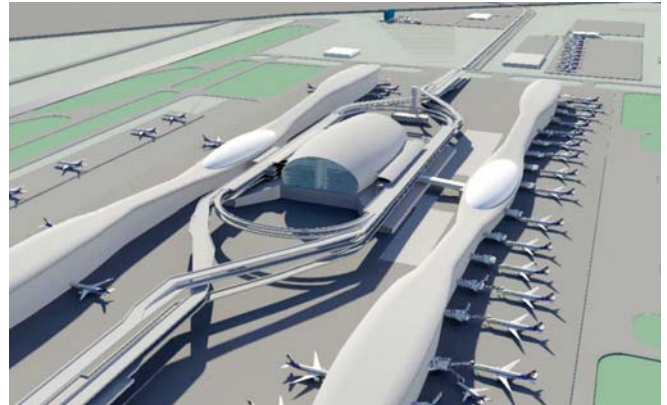
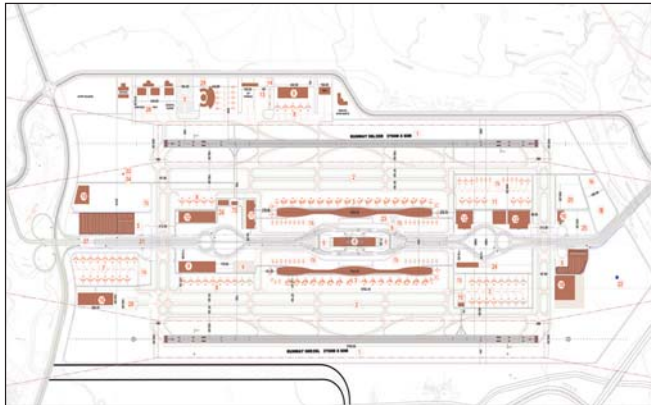
Thus, the total land area earmarked for Airport



development is 2042 Ha, which includes the airport zone area, land for offsite infrastructure works, land for non-aeronautical activities and Mangrove Park area. Out of this, 1306 Ha (64 %) land is in possession of CIDCO, about 251 Ha (12 %) of Govt. land is being transferred to CIDCO and about 485 Ha (24 %) is private land which is to be acquired.

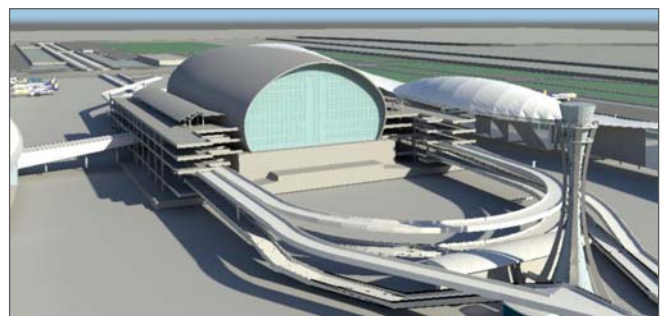
### AIRPORT PROJECT DETAILS IN A NUTSHELL

1. Location : Navi Mumbai
2. Airport Area : 1,160 Ha. (2,867 acres)
3. Aerodrome code : 4-F
4. Runway : Two, (Independent operation)



- Orientation : 08/26
- Dimension : 3700 m x 60 m with holding bays
- 5. Taxiway : Full-length parallel taxiways
- 6. Parking apron : 110 A/C stands
  - a. Contact Gates : 81
  - b. Remote Stands : 29
  - c. Cargo : 20
  - d. Others : Service Bay - 7, Long Term Parking - 16, Isolated Parking - 1.
  - e. Hangars : 3
- 7. Terminal building  
5,23,000 sq. m in modules, centrally air-conditioned, aerobridges, automated baggage handling system.  
Annual Capacity : 60 MPPA in phases
- 8. Cargo Complex  
Covered area : 1,30,000 sq. m in modules  
Air Mail : 10,000 sq. m  
20 parking stands to handle wide-bodied aircraft, ULD(Unit Load Device), Parking area, Hydrant refueling, Cold room for Perishables, Palletisation / Depalletisation, Vertical computerised storing, Custom bonded warehouses.
- 9. Aircraft : Hangars for aircraft  
Maintenance : Maintenance regular and turn around maintenance, space for private air lines base.
- 10. Communication & Navigational Aids : VHF-RT, Land-line, Fax, Direct Speech Circuit, Doppler Very High Frequency Range (DVOR), Distance Measuring Equipment (DME), ASR / MSSR, Instrument landing System (Cat-I) with provision

- 11. Ground lighting : High Intensity Runway Edge Lights (HIREL), Apron Flood Lights (AFL) for upgrading to Cat-II, Technical Building with Control Tower (1.6 Ha.)
- 12. GSE Maintenance: 25,000 sq. m. (Ground Service Equipment)
- 13. Catering : 25,000 sq. m
- 14. Fuel Farm : 1,51,000 sq. m. (in phases)
- 15. Air Rescue and Fire: 2 No, Category-9 level of service, Fighting (ARFF) 1,200 sq. m (One Stn.)
- 16. Baggage : Online check in, Handling Integrated Baggage System, Baggage Claim Area Area - 13,290 sq. m
- 17. General Aviation  
Apron area : 32,000 sq. m
- 18. Parking  
Total area : 2,13,380 sq. m  
VIP Parking : 30  
Employee Parking : 3,000  
Public Parking : 4,000  
Taxi Parking : 4,500  
Lounge Parking : 25  
Bus Terminals / Auto Stands : 2





19. Accessibility : National and State Highways, Rail, Water Transport, Metro & BRTS

20. Financial Features

- a. Revenue Parameters  
Landing Fees, Parking fees, Passenger Service fee, Aerobridge fee, User Development Fee, Terminal Lease, Cargo Revenue, Aircraft maintenance revenue, Concessions / Rentals Revenue, Hangar Fees, Vehicle Parking Fees etc.
- b. Expense Parameters  
Airport Development Cost, O & M Services, Insurance Costs, Administration & Management Support Costs.

21. Implementation

Phase	Operations Year	Traffic (MPPA)	Project Cost (Rs. In Crores)
1	2015	10	9150
2	2020	25	1031
3	2025	45	3036
4	2030	60	1356
<b>Total</b>			<b>14,573</b>

The various Airport facilities would be developed in phases. In the first phase north runway, attached taxi way system, terminal building & concourse (2,69,000 sqm), Contact gates - 15, Remote gates - 5, General Aviation Apron 6,000 sqm., Technical building and ATC Tower, Cargo complex (part) will be developed. The above facilities will be enhanced in modules to suit the air traffic demand.

22. Project Consultants

Sr. No.	Agency	Scope of work
1	M/s Louis Berger Inc., USA	Preparation of Master Plan, DPR and Financial and Transaction advisory services (sub consultant M/s KPMG)
2	Central Water & Power Research Station (CW&PRS), Pune	1D & 2D mathematical hydraulic studies alongwith Physical modeling study
3	M/s. Lewis Environmental Services (LES) Inc., USA	Prepare detailed plan for development of mangrove park on Vaghivali island and regeneration of mangroves
4	M/s. Consulting Engineering Services (CES)	Recommend the appropriate methodology for hill cutting and reclamation/filling work for land development
5	M/s Lea Associates South Asia	Preparation of master plan for enhanced regional and local airport connectivity
6	National Institute of Disaster Management (NIDM), New Delhi	Preparation of Risk Assessment & Disaster Management Plan for Airport
7	Bombay Natural History Society (BNHS), Mumbai	To carry out the Avian Fauna Study and suggest methods for safe airport operation and also preserve avian habitat.

**STATE-OF-THE-ART FACILITIES**

- The scale on which the Navi Mumbai International Airport has been planned is humongous. No stone has been left unturned to demonstrate the sheer grandeur and technical competence of all the concerned stake holders in the project.



- It is a complete 'Greenfield' airport with a capacity to cater to 60 million passengers per annum. This makes it the largest of its kind in the country.
- Its modernistic design allows it to serve the ever growing needs of the air travel industry and accommodate the new large aircrafts like A-380, B747-8.
- It boasts of 2 parallel runways (3,700 m x 60 m with a runway end safety area of 240 m x 120 m and approach lighting of 900 m) spaced at 1.55 km apart for independent air traffic movements. This by itself is unique for the city of Mumbai. The airport conforms to ICAO Aerodrome Code 4-F.
- The proposed terminal design is both distinct and aesthetically pleasing while being functionally efficient. The terminal will be built in the middle of both runways and will have full and complete access from either side - a unique feature.
- The conveniences of air passengers have been accorded high priority while designing and planning the airport. It boasts of a high percentage (80 %) of contact gates, which is considered to be amongst the highest in the world today. Further, full length parallel taxi ways (3,890 m x 25 m for each runway), which run parallel to each of the two runways are proposed.
- The airport will be a boon not just for the air passenger but will also greatly facilitate cargo operations with state-of-the-art facilities to load and unload up to several tons of cargo daily.
- The airport will be easily accessible by all major modes of transport including the highway network,

the metro rail, the suburban railways and even via the proposed hovercraft service.

- About 276 Ha of area has been dedicated for non-aeronautical activities to provide the support services required for the operation of a world class airport.
- The natural environment around the airport will be greatly enhanced through the development of 245 Ha of Mangrove Park/ Bio - diversity zone. The presence of a large water body will also add to the scenic beauty of the surroundings.

### The Terminal Building - Epicentre of Airport

- Every major operation needs a nerve centre to drive it on a daily basis and the airport Mid-Terminal designed to fit between the two parallel runways is a clear example of the same.
- Proposed Terminal is a one-of-its-kind unique structure, which is provided ground access from both sides namely the east and west sides, hence facilitating ease and convenience for both the air passengers and meeters - greeters.
- Passenger terminal building and supporting facilities have been designed to support up to 60 million passengers per annum during the ultimate phase of development.



- Main passenger processing facility has five levels, including two mezzanines & three level office complex located at its centre. This facility processes both international and domestic passengers.
- Terminal has access from both the east and west sides and has three curbs on each side, one on grade and two elevated. The first level curb is dedicated to the commercial vehicles, the second level curb is for arrivals and the third level curb is for departures.



**The main characteristics of the passenger terminal building are:**

- H-Shape Concept (central processing unit and two concourses)
- Total Area (including all levels): About 5 lacs sq. m
- Number of Contact Aircraft Positions: 81
- Number of Remote Aircraft Positions: 29
- 350 plus counters for the ease and convenience of the passengers

**Main Processing Unit**



The main passenger terminal building processing unit described by levels is given below:

**Level 1**

- Baggage sorting area
- Commercial Ground transportation curb access lobby
- Commercial Ground transportation curb
- Train Station & vehicular parking

**Level 2 (mezzanine)**

- In-line explosive detection screening areas



- Bridge connections to parking areas and train station
- Offices and mechanical rooms

**Level 3 (Arrival Level)**

- International baggage claim and government inspections
- Domestic baggage claim
- Ground transportation / commercial lobby
- International meeters / greeters area
- Domestic meeters / greeters area
- Public arrivals curbs

**Level 4 (mezzanine)**

- Departure passenger access to concourses
- Arrival passenger access from concourses to claim areas
- Bridge connections to parking areas

**Level 5 (Departure Level)**

- Passenger check-in Lobby
- Well-wishers area

**Level 6 (centre of building)**

- Concessions area
- Access to office building

**Levels 7 & 8 (centre of building)**

- Offices

**Concourses**

There are two concourses, the north concourse and the south concourse. During Phase 1 and 2, the north concourse will be divided in two, processing both international and domestic passengers. In later phases, the south concourse will serve as the international





concourse and the north as the domestic concourse. Following is a description by level of both the north and south concourses:

**Level 1**

- Remote gate lounges & bus pick-up
- Remote gate bus drop-off and sterile corridor access
- Ramp / Airline support
- Mechanical areas
- Diplomatic Lounge



**Level 2**

- Sterile arrivals corridor
- Contact gate departure lounges
- Transit / Transfer airline counters
- Transit / Transfer security and concourse access
- Business Class lounges
- Immigration counters (south concourse)
  - Contact gate fixed connection bridges

**Level 3**

- Concessions
- Security screening
- Exit passport control (south concourse)
- Departures access corridor
- A380 Departure Lounge (int'l. concourse)

**Cargo**

**Provisioning for Cargo**

The Airport has been designed to accommodate the various requirements that bulk cargo loading and unloading would require.

- Apron Area (Ultimate Condition): 2,00,000 sq. m (International and Domestic)

- International Cargo Building (Phase 1): 23,700 sq. m
- Domestic Cargo Building (Phase 1): 33,000 sq. m
- Cargo Apron: 20 wide-body aircraft stands

**AIRPORT GROUND ACCESS**

The primary airport access roads will provide access to the airport from the abutting arterial road system. There will be two main primary ground access roads to NMIA, from western and eastern fronts of the airport. The western primary access road will have the following elements:

- Dual Five lane divided road having total lane width of 17.5 m on either side.
- Pedestrian walkway on either side (3m - 6m).
- Single lane undivided service road with width of 7 m, serving ancillary facilities like cargo, aircraft maintenance hangars, jet fuel farm, etc. on either side.



- Service corridor of 5 m width on either side for electrical, mechanical and telecommunication facilities.
- Single line central metro corridor with right of way of 12 m.
- Total right of way of 100 m, for western primary access road, will be required in the ultimate phase of NMIA development.

The eastern primary access road will have the following elements:

- Dual four lane divided road having total lane width of 14 m on either side.
- Pedestrian Walkway on either side (3m - 6m).
- Single lane undivided service road with width of 7 m,



servicing ancillary facilities like cargo, aircraft maintenance hangars, jet fuel farm, etc. on either side.

- Service corridor of 5 m width on either side for electrical, mechanical and telecommunication facilities.
- Total right of way of 88 m, for the eastern primary access road, will be required in the ultimate phase of NMIA development.

### PRE DEVELOPMENT PROJECT ACTIVITIES & OFF-SITE INFRASTRUCTURE

The project involves various mandatory pre development activities to be undertaken before commencement of core airport development work. They include land development by blasting of hills in the project area, filling / reclamation, re-coursing of the Ulwe river flowing through the airport area and shifting of EHVT lines crossing airport land. Also, development of facilities for non-aeronautical activities, off-site physical infrastructure in terms of roads, interchanges, water supply, STPs, power stations and other utilities required for the airport are also to be taken up alongwith the airport development. A mangrove park / bio-diversity zone is also proposed to be developed on Waghivali Island admeasuring 245 Ha. It will help protect the environment and ecology in the vicinity of airport.

### ENHANCEMENT OF AIRPORT CONNECTIVITY

Efficient, quick and reliable multi modal transport linkages form the backbone for successful development and operation of major traffic generator like the airport. The NMIA is likely to receive around 0.45 million person trips per day in the ultimate phase (2030-31) of which

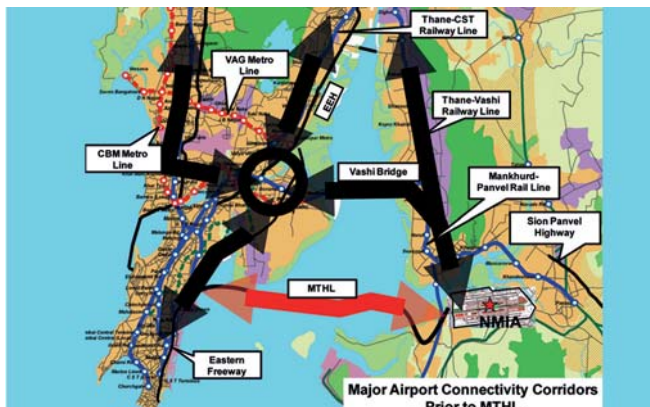
around 0.15 million person trips are expected in the morning peak period. As per the trip distribution, around 60% of the air passengers' have origins or destinations connected to Mumbai and its suburbs. Thus, it has been ensured in the connectivity master plan for NMIA that quick, efficient and reliable airport connectivity options are provided from both south Mumbai and the western & central suburbs of Mumbai both by road and rail / metro. Also, it is expected that around 85% of the air travelers would use private mode of transport to access the airport. Therefore, the major arterial road network in the vicinity of airport is being widened and interchanges are being provided at major junctions for the smooth flow of traffic. The transport connectivity to the airport has been



planned in such a way that any person in MMR should be able to access the airport in about 1-1/2 hours maximum. These planning parameters have guided the preparation of the master plan for providing enhanced multimodal connectivity for NMIA.

The major proposals in enhanced connectivity for NMIA are as follows:

- (a) Widening of arterial roads and highways feeding traffic to NMIA like Aamra Marg, NH-4B, SH-54 and NH4 including interchanges for smooth flow of traffic.
- (b) Widening of Sion-Panvel Highway to improve accessibility from central Mumbai and Pune.
- (c) Road connectivity to NMIA from MTHL which provides fast access to traffic from the island city of Mumbai and central Mumbai.
- (d) Metro connectivity from Ghatkopar to Panvel via Mankhurd, Vashi, Belapur and NMIA interchanging with the metro lines M1: Versova - Andheri - Ghatkopar and M2: Charkop - Bandra - Mankhurd being developed by MMRDA.





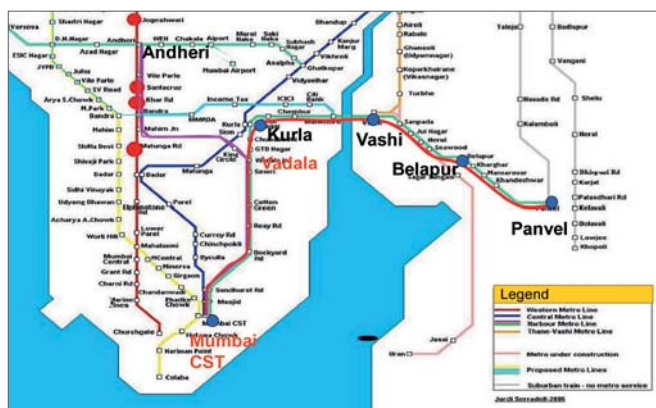
- (e) Metro corridor M3: Colaba-Siddhivinayak-Mahim, Siddhivinayak-Sewri, Sewri-Kharkopar (along MTHL) and Kharkopar-NMIA to facilitate operation of metro services from Colaba to NMIA and vice versa.
- (f) Implementation of CST-Panvel fast sub-urban rail corridor along harbour line.
- (g) Implementation of Virar-Alibaug Multimodal Corridor to provide fast access from Kalyan and Dombivli areas.
- (h) Implementation of regional Passenger Water Transport (PWT) routes providing connectivity from Island city to NMIA.
- (i) Development of Panvel as major Inter-City Rail Terminal and Doubling of Tracks on Panvel-Karjat for running sub-urban operations.

These recommended projects are now being followed up with the respective stakeholders for phasewise implementation.

### Recommended Alignment for Metro Corridor from Mankhurd to Panvel



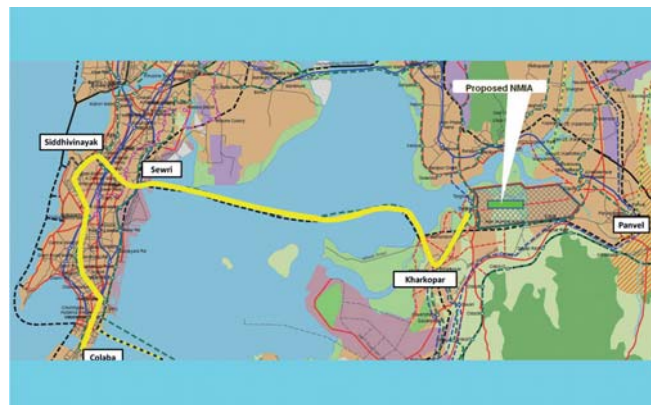
Index Map showing the Alignment of CST-Panvel Fast Sub-urban Corridor



### Alignment of MTHL from Sewri to Chirle and Connectivity to NMIA



### Metro Connectivity between Island City and Navi Mumbai



### Regional PWT Routes from Island City to Navi Mumbai & Belapur





## Identified Major Transport Corridors and Major Intersections



## PROJECT RE-SETTLEMENT & REHABILITATION (R&R)

To bring any large infrastructure facility to reality involves changes in the existing demographics of the project area and the proposed Airport is no exception. The NMIA project is going to affect number of households, minor business activities and structures located in the vicinity of Airport area, and the same are required to be re-located. A preliminary estimate indicates that approximately 5,000 families will have to be re-located due to the NMIA project.

CIDCO being a committed socially responsible organization has prepared the Draft R&R Policy for Airport Project Affected Persons (APAP) in line with the Central and State Government's policies. The Gaothans of villages of Panvel Taluka proposed for the Airport project R&R are as under:

Name of Village	Name of Padas
Targhar	Targhar, Kombhadbhuje
Ulwe	Ulwe, Ganeshpuri
Owle	Vaghivilivada, Upper Owle
Pargaon	Koli
Kopar	Kopar
Vadgar	Chinchpada
Waghivali	Waghivali

The R&R entitlement include the allotment of fully developed plot of area equivalent to loss, besides other benefits in accordance with the above policy. The R&R Policy will be implemented after obtaining State Government's approval.

## SUSTAINABLE GREEN DEVELOPMENT

### Our Responsibility

CIDCO has stressed enormously on the preservation and enhancement of the natural environment in the development of the city of Navi Mumbai, which is now synonymous with all round growth and development.

### Measures Taken

The measures taken by CIDCO to maintain and enhance the natural environment in the vicinity of the airport and to keep the nearby area green and beautiful are definitely applause worthy.

- Development of 245 Ha mangrove park/bio - diversity zone, along with regeneration of lush green mangroves in an area of 310 Ha. at Kamothe and 60 Ha. at Moha Creek are being proposed, thus preserving the ecological balance of the area.
- A large water body in north is also being retained.

## BOOST TO COMMERCE & EMPLOYMENT

### Impact beyond Air Travel

- The Navi Mumbai International Airport has a huge employment - generation potential. It is estimated that the airport will generate 1 lakh new jobs directly, along with another 2 lakh jobs on an indirect level.
- The Airport would boost industrial development along the Mumbai - Pune - Ahmednagar Corridor, the Konkan belt along the triangle connecting Mumbai - Nashik - Pune, which would in turn ensure a steady growth rate in air traffic.
- This boost in industrial development in turn, would assure steady revenue to the investors, and attract further investments in the region.
- Further, enhanced cargo facilities will open up a huge opportunity for export of the State's agriculture produce, floriculture and hi-tech value industries to the world market.
- Proposed airport will also make the export / import of time-critical cargo more economical, efficient and fast from the proposed Navi Mumbai Special Economic Zone.

## THE OPPORTUNITY

The Navi Mumbai Airport is proposed to be developed through public-private participation (PPP).

The growth in population in Navi Mumbai, rapid development of its Central Business District, coupled with



major economic generators in the vicinity such as Special Economic Zone, Jawaharlal Nehru Port Trust, Thane-Belapur and Taloja industrial areas along with the huge existing catchment area of MMR, Pune & Nashik would assure a steady growth rate in traffic at the new airport, thereby ensuring healthy return on equity to the investors. In addition, the project opens up the State's vast hinterland rich in agriculture, floriculture, and high-tech high value industries to the world market. Thus the airport will act as a focal point for the emergence of a new trans-shipment centre in the Asian region.

### PROJECT APPROVAL COMMITTEES

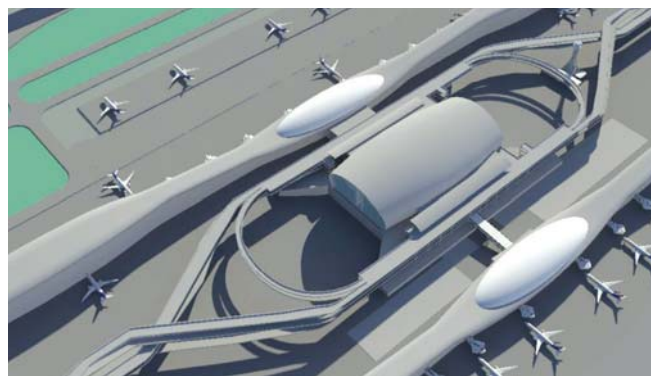
1. Union Cabinet, GoI gave in-principle approval for NMIA project and appointed Steering Committee headed by Secretary MoCA, comprising senior officials from the Central as well as State Govt. to oversee the structure and implementation of NMIA project
2. State Cabinet, GoM approved development of NMIA project, appointed CIDCO as Nodal Agency and constituted Project Monitoring Committee (PMC) headed by Chief Secretary, GoM to monitor and give guidelines on project related issues.

### RECENT MILESTONES

1. **Dec 2010:** CIDCO applied to Forest Dept. to obtain clearance for the construction on the Airport site considering mangroves in project area. The proposal has been processed by Dy. Conservator of Forests and being examined by CCF, Thane & PCCF, Nagpur. The proposal is in final stage of approval.
2. **Jan 2011:** CIDCO Board approved modifications to Navi Mumbai Development Plan (NMDP) for airport zone.
3. **Feb 2011:** MTSU appointed M/s. Lea Associates South Asia for preparation of Master Plan for enhancement of Regional and Local Connectivity for NMIA Project. M/s Lea Associates have carried out a

comprehensive examination of the Air Travel requirements for NMIA with special emphasis on enhancing connectivity with the island city and suburbs of Mumbai. They have examined the proposals of all stakeholders involved in developing Road, Rail, Metro and Water Transport infrastructure in MMR. The Consultants have recommended transportation systems to access NMIA in 1 to 1 ½ hrs from any part of MMR. Detailed discussions have been held with MTSU, MMRDA, CIDCO, NMMC, Commissioner of Police, Navi Mumbai on the draft final report (DFR). The feedback from the stakeholders has been obtained and incorporated in the final report. The final report will be submitted to GoM alongwith recommended projects to be implemented before commencement of Phase 1 of Airport operations.

4. **April 2011:** GoM constituted Project Monitoring Committee for NMIA to monitor and give guidelines on project related issues.
5. **May 2011:** GoM constituted the High Level Advisory and Monitoring Committee as per the Environment and CRZ Clearance issued for NMIA by MoEF to monitor and advise on environmental issues. The first meeting, held on 4th June 2011 under Chairmanship of Principal Secretary, U.D., GoM, monitored the progress on the compliance of various Environmental Conditions given by MoEF. The minutes of the meeting are put up on CIDCO's website.
6. **May 2011:** Committee constituted under Chairmanship of Divisional Commissioner, Konkan Division, to finalize R & R package and land acquisition. Eight meetings have been held with Airport PAP Associations and local MLAs to discuss the R&R package and also compensation for land acquisition. Notifications under Land Acquisition Act have been issued for 650 Ha. and joint measurement in one village is commenced. To assess the entitlements for R&R, socio economic survey in the settlements falling in NMIA project area has also commenced. Further, Govt. land of 250 Ha. is in final stage of transfer.





7. **May 2011:** Steering Committee, MoCA for NMIA at its 7th meeting held at New Delhi granted approval to Revised Master Plan.
8. **July 2011: M/s. Consulting Engineering Services (India) Pvt. Ltd,** Mumbai appointed as consultant for land development of Airport area by hill cutting and reclamation/filling. The Consultant has submitted the inception report. Four meetings have been held and various methods for blasting of hill and development of site by filling with resultant material are being explored by the Consultant, for execution of the work in a short time span of 1 ½ years. Thus, by taking up the land development of Airport Site in advance, it is possible to commence Phase-I Airport operations by 2015 .
9. **Aug. 2011:** DGCA constituted committee comprising officials of AAI, DGCA, CIDCO for examination the shifting of EHVT lines from Airport area required for safe operation of Aircrafts. A meeting was convened by DGCA in the month of August 2011 wherein various options of shifting - fully by duct, partial ducting or fully Over Head, considering the time and cost factors were discussed. It is opined that shifting of lines by re-routing (Overhead) i.e. away from the Airport area by observing height control norms is permissible. Subsequently, CIDCO held meetings with TATA and MSETCL for detailed examination of Over Head re-routing option. MSETCL is now carrying the detailed feasibility study of Over Head re-routing option to take up for implementation of same.
10. **Aug. 2011:** Proposal for CRZ clearance for Off-site infrastructure approved by MCZMA and recommended to MoEF.
11. **Aug 2011:** CIDCO filed civil application in Hon'ble Bombay High Court for development of site considering the presence of mangroves.
12. **Sept 2011:** M/s. Lewis Environmental Services Inc., USA, providing expert advice on development of Mangrove Park and regeneration of mangrove areas, submitted Report for development of Mangrove Park in Vaghivali which will now be taken up by Forest Dept. for its early implementation.
13. **Sept 2011:** Bombay Natural History Society (BNHS) has been appointed to carry out Avian fauna study. BNHS made site visit to project area and commenced the work.
14. **Oct 2011:** CIDCO Board approved the appointment of CIDCO as Special Planning Authority (SPA) for regulation of development in the airport influence zone of 25 km radius.
15. **Oct. 2011:** DGCA constituted a Committee comprising officials of AAI, DGCA, IAF and CIDCO for working out airspace requirements for Navi Mumbai

airport . The first meeting of the Committee was held on 5th October 2011 at Delhi wherein the Air Space requirement for NMIA were discussed.

16. **Oct 2011:** Prime consultant M/s. Louis Berger Group Inc., USA submitted the draft RFQ bidding document for selection of strategic partner for the development of Airport.
17. **Nov 2011:** The draft DPR and business plan prepared by the prime Consultant M/s LBG Inc., USA is under examination.

## ORGANISATION FOR EXECUTION

For rapid, successful implementation of this major and vital project, a Special Purpose Company (SPC) will be set up with CIDCO, AAI, financial institutions, banks, non-banking finance companies and experienced private entrepreneur of repute as equity holders.



### SPC will

- Plan, design & obtain development approvals
- Arrange required resources
- Build and operate the Airport
- Transfer back after concession period

The SPC would also be entitled to special benefits / incentives currently available to infrastructure development projects.

The SPC mission would be to build and operate an airport that will become exemplary worldwide, committed to providing top quality services, maintaining highest safety standards and above all, firm commitment to customer satisfaction.

## STATUS

The project has approval of Union and State Government. All the clearances except Forest clearance have been obtained. Draft RFQ bidding documents are being finalized and efforts are being made to commence Phase 1 of Airport by 2015.



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