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*International Civil Aviation Organization*Eighth Meeting of the Aerodromes Operations and  
Planning Sub-Group (AOP/SG/8)*Bangkok, Thailand, 15 to 19 July 2024***Agenda Item 4: Provision of AOP in the Asia/Pacific Region****– Planning & Design of Aerodromes****THE AIRPORT MASTER PLAN DESIGNING**

(Presented by India)

**SUMMARY**

Airport master plan document provides a road map for efficiently meeting aviation demand through the foreseeable future while preserving the flexibility necessary to respond to changing industry conditions. Airport Master Plan is a critical planning tool for determining the future requirements of an airport and provides a vision for realizing its ultimate potential. The primary purpose is to establish an orderly development concept to guide the airport's short, medium, and long-term measures and assist airport management and stakeholders in making informed decisions.

**1. INTRODUCTION**

1.1 The airport master plan document describes and depicts the overall concept for long-term development of AAI airports. It presents the concepts graphically in airport layout plan (ALP) drawing set and reports the data and logic upon which the concept is framed in the airport master plan (AMP) report. The goal of the master plan document is to provide guidelines for future airport development that will satisfy aviation demand in a financially feasible manner, while at the same time balancing the aviation, environmental and socioeconomic issues in the community with respect to the airport.

**2. DISCUSSION**

**2.1 Capacity Enhancement:** Increase airport's capacity to handle more passengers, aircraft movements, and cargo, considering future growth projections. AAI has planned for 118 airports to have uniform growth across India.

**2.2 Airside:**

- Policy and planning objectives specifically focused on the development of the airside facilities, including runways, taxiways and other aircraft operational areas.
- Preserve existing Airport land boundaries and identify new land for future airfield facilities to ensure that long-term aviation goals of the region can be achieved.
- Minimize airside and airspace congestion and delays for aviation aircraft operations through procedural changes and/or provision of additional navigational aids.
- Evaluate the need, timing and viability of future development through appropriate environmental review.

### **2.3 Terminal:**

- Policy and planning objectives for enhancing the passenger terminal facilities and airline areas, including passenger processing, security and passenger amenities. Ensure passenger comfort and convenience in all plans by considering factors such as walking distances, terminal-to-terminal connections, amount and variety of concessions and hold room space planning.
- Promote additional international passenger service by providing appropriately located and sized facilities for the processing of international passengers consistent with projected demand.
- Promote increased passenger safety by integrating evolving security requirements. Develop passenger terminal facilities that provide for expansion needs of existing carriers and new entrants.

### **2.4 Commercial and Economic Development:**

- Policy and planning objectives for the development of airport-owned properties to spur economic growth in aviation and non-aviation related areas.
- Identify appropriate locations for commercial and business development opportunities that advance long-term economic interest in the Airport and the region and are consistent with the land use planning and development objectives of local governments.
- Develop an inventory of vacant building space and land available for industrial and commercial development as well as the site-specific attributes of all Airport-owned properties and/or buildings.
- Provide opportunities for Airport-related collateral development, such as hotels, offices, retail and other commercial development that enhance economic development in the region and are compatible with Airport operations.
- Promote a development strategy to attract cargo operations and storage by providing market-driven facilities for cargo products. Ensure cargo facilities are convenient and sufficient.

### **2.5 Financial:**

- Policy and planning objectives that reflect the Airport's desire to be fiscally responsible in its long range planning.
- Establish priorities for Airport projects and programs, phasing for capital budgeting purposes, and allocations of financial resources to ensure that required improvements can be implemented when needed at affordable levels.

### **2.6 Key Benefits**

- Identifying trigger points ensures that development phases are initiated based on specific criteria and minimizes ad-hoc decision-making and ensures a structured growth trajectory.
- By forecasting facility needs until 2047 and earmarking land accordingly, AAI can prevent potential conflicts over land use, especially in regions where urban sprawl may encroach upon airport operations.

- Incorporating airport master plans into city planning frameworks ensures coordinated development of transport infrastructure, supporting economic growth and urban connectivity goals.
- Collaboration with State Governments and UTs is crucial for securing necessary approvals and aligning development plans with broader regional interests. It fosters a conducive environment for infrastructure expansion and economic development.
- Adherence to No Objection Certificate Application System (NOCAS) ensures that airport expansions meet safety and environmental standards, fostering sustainable growth while mitigating potential risks to public safety and environmental impact.

## 2.7 The Master Planning Document: Concept



## 3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
- a) note the information contained in this paper; and
  - b) discuss any relevant matters as appropriate.

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