

Airport Development Best Practices

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Operations, Safety and Security

Asia Pacific

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About IATA

Our mission is to represent, lead, & serve the industry

Who we are

Since 1945, we are the leading air transport non-profit association that helps formulate industry policy and develops global standards upon which the air transport industry is built.

Our vision

To work together to shape the future growth of a safe, secure, and sustainable air transport industry that connects and enriches our world.

IATA in numbers



300+

member airlines

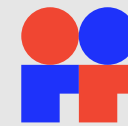
83% of total air traffic



\$466B

handled annually

by our financial systems



1,500

full-time staff

in 56 offices



The IATA Airport Development team . . .

. . . drives global best practices to promote airport developments that are:

Affordable <ul style="list-style-type: none">- Infrastructure that is cost efficient to construct and maintain	Demand driven <ul style="list-style-type: none">- Sized according to realistic forecasts- Phased to meet future needs	Fit for purpose <ul style="list-style-type: none">- Scope and design efficiently delivers user requirements
Flexible <ul style="list-style-type: none">- Adaptable to future needs and technological change- Follows a modular approach	Efficient to operate <ul style="list-style-type: none">- Enables resilient and efficient airline operations while providing an optimum level of service	Linked to a Master Plan <ul style="list-style-type: none">- The product of rigorous analysis and linked to a larger plan that allows incremental expansion

IATA Airport Development's Key Activities

Airport Consultation – Campaigns

- Airport campaigns/ consultation on a range of topics
- Airport Consultative Committees (ACC)
- Sharing guidance on best practices

Industry Standards & Tools

- Airport Development Reference Manual (ADRM)
- ICAO Annex 14 Master Planning Guidelines
- Policy Guidance - Airport Development position papers
- Level of Service (LoS)
- Airport Service Level Agreements (SLA)

Commercial & Training Support

- Airport Peer Reviews
- IATA Training: provide instructors for many IATA training courses
- IATA Consulting: Provide expertise to support IATA Consulting airport projects

Airport Consultation

Airport infrastructure has a fundamental impact on airlines

- Capex is THE major factor influencing airport charges
- Impacts passenger experience, operations, MCT, OPEX, sustainability etc.
- Influencing investments early is *essential* to align capex with airlines needs in short to longer term



Over USD50bn of airport capex planned next 5 years at airports prioritized by IATA with airlines inputs

IATA Airport Capital Investment Priorities



Bubble size = Value in USD of capital expenditure planned until 2025

Airport Consultation

IATA Airport Development promotes consultation between airports and airlines.

- ▶ Helps establish **Airport Consultative Committees (ACC)** which can meet over a wide range of topics including the efficient planning of capital investments.
- ▶ Effective Capex consultation depends on exchanging adequate information at important stages in the planning process to inform decision-making.
- ▶ IATA helps facilitate and may play the role of Chairperson, Secretariat or both.
- ▶ For specific issues experts are brought in or working groups formed.
- ▶ A consensus view and recommendations will be developed to help form the basis of a dialogue with the Airport.

The benefits of Airport-Airline Consultation

More informed
decision-making

Consolidates airline views and provides a view of operational and passenger impacts and analysis of costs and benefits.

Generates new
ideas

Often sheds light on inefficiencies and produces ideas on how to improve the functionality of existing or planned infrastructure.

Safeguards
functionality

Ensures that planned infrastructure is flexible, functional and able to adapt to changes in the industry and technology.

Provides a quality
check

Helps measure progress against expectations and global best practices.

Alignment

Airlines have a greater willingness to support investments when they have an opportunity to engage.

Airport Consultation engagements

- ▶ PKX - Beijing Daxing
- ▶ HKG -Hong Kong International Airport
- ▶ BKK – Suvarnabhumi
- ▶ India - - DEL, BLR, BOM
- ▶ London Heathrow
- ▶ Manchester Airport
- ▶ CDG - Paris
- ▶ AMS – Amsterdam
- ▶ Stockholm Arlanda
- ▶ Solidarity Transport Hub Poland
- ▶ South Africa - ACSA

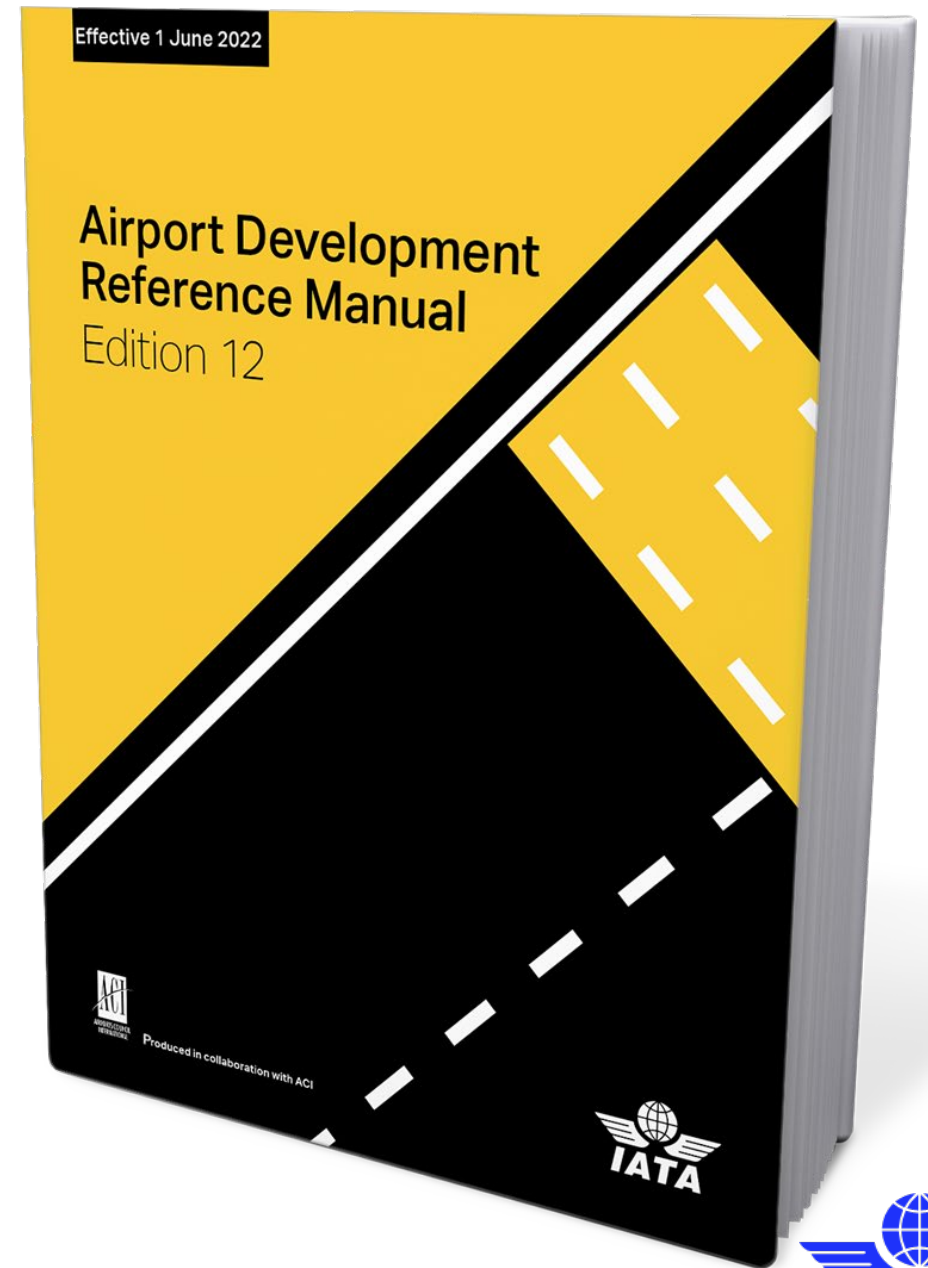


Industry Standards & Tools

ADRM 12th Edition

- Latest version of our universal & comprehensive airport design and development manual
- Provides a framework of best practice planning guidance
- Developed by a global collaboration involving airport architects, planners, and operators

Link: <https://www.iata.org/en/publications/store/airport-development-reference-manual/>



Major changes in 12th Edition

Airport
Environmental
Sustainability



Peak Demand
Guidance



ConOps &
Construction
Delivery



Covid impacts

Pandemic
Resilience &
Healthy
Buildings

Universal
Design



Other changes – Passenger Terminal, Airside Infrastructure, BHS, Forecasting, International Cost Variations, Wayfinding, Technology, Simulation, Landside Efficiency, A-CDM

IATA Best Practice Papers

Link: <https://www.iata.org/en/programs/ops-infra/airport-infrastructure/airport-development/>

- Provides guidance on various airport planning principles and practices

[Airport Infrastructure Business Cases \(pdf\)](#)

[Airport Infrastructure Investment – User Consultation \(pdf\)](#)

[IATA Airport Peer Review \(pdf\)](#)

[IATA Level of Service Paper Best Practice \(pdf\)](#)

[Operational Readiness and Airport Transfer \(pdf\)](#)

[Passenger Terminal Design \(pdf\)](#)

[World Class Airports - Best Practice \(pdf\)](#)

[Airport Master Planning \(pdf\)](#)

[Demand Triggers for Airport Investments \(pdf\)](#)

[Airport Environmental Sustainability Policy \(pdf\)](#)

[Airport Service Quality Frameworks \(pdf\)](#)

Commercial & Training Support

IATA Airport Development Training

- Airport Development training courses offered on a commercial basis
 - Airport Master Planning
 - Airport Terminal Planning and Design
 - Airport Development and Infrastructure Design
- 5-day courses provided in-house or externally to airports, airlines and industry professionals



Airport Terminal Planning and Design

5-day Classroom and In-Company Course (40 hours)

This course can be customized for your company and delivered at the location of your choice.

Explore the principles of terminal design, optimal flows and capacity. Learn how infrastructure design can support your terminal operations.

Objectives

Upon completion of this course you will be able to:

Participate actively in planning and optimization projects by addressing terminal design issues

Improve how you integrate user and technical infrastructure requirements into your terminal

Identify terminal capacity and Level of Service (LOS)

Identify opportunities for infrastructure improvements that can increase passenger convenience and revenue

Target audience

- Facility planners
- Engineers
- Terminal operators

Recommended level

- <add levels here>

Prerequisites

Participants should have prior knowledge of:

<add any prerequisites here>

Key topics

- Airport terminal conceptual design
- Forecasting
- Terminal capacity, demand analysis and LOS
- Computer simulation of terminal flows
- Terminal operations support systems
- Baggage handling systems
- Terminal security planning and facilitation
- Airport access and landside facilities
- Automated People Mover (APM) and Passenger Boarding Bridge (PBB)
- Low cost terminal design concept

Activities (or other info)

- <Optional section
- List>

Certificate awarded

An IATA Certificate is awarded upon successful completion of the course and final examination.

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IATA Training [link](#)



About IATA Consulting

Our capabilities span the whole industry



AIRLINES

Solutions to achieve real and lasting results in every aspect of airline commercial and operational management



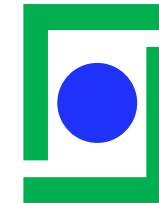
SAFETY & CIVIL AVIATION

Solutions for aviation organizations and airlines to improve safety, efficiency and air transport operations.



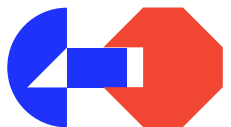
AIRPORTS, PASSENGER & SECURITY

Solutions to plan your airport efficiently to avoid costly mistakes and profit from untapped opportunities.



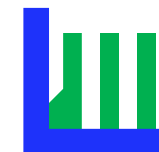
ENVIRONMENT

Solutions for governments and industry stakeholders to improve environmental sustainability in the aviation industry.



GROUND HANDLING & CARGO

Solutions to optimize your operations and improve your safety and security while reducing costs.



TOURISM ECONOMICS

Solutions to support sound public policy and business decisions based on robust economic analysis of air transport markets.

Our airport services | Our advisory services to airports, airport groups, and airport investors

STRATEGY DEFINITION & TRAFFIC FORECASTING



- SWOT Analysis, Strategy options and positioning
- Passenger, Cargo and ATM forecasts
- Design day schedules
- COVID-19 traffic impact assessment and recovery

AIRPORT OPERATIONS & OPEX FORECASTING



- Fast Travel blueprint and implementation
- Level of Service assessment
- Passenger experience improvement
- Operating expenditure forecasts

REVENUE DEVELOPMENT & FORECASTING



- Airport economic regulation
- Air Service Development
- Aeronautical revenue forecasts
- Non-aeronautical revenue forecasts

TRANSACTION ADVISORY SERVICES



- Pre-due diligence / red flag assessment
- Traffic due diligence
- Technical due diligence

AIRPORT DEVELOPMENT & CAPEX PLANNING



- Capacity assessment
- Terminal and airport master planning
- CAPEX forecasts

SECURITY PLANNING & OPERATIONS



- Smart Security blueprint and implementation
- Threat and risk assessment
- SeMS definition and implementation

About IATA Consulting | We have advised airports up to 80M+ passengers per annum

Traffic forecasting

- Heathrow Intl. Airport (U.K.)
- Bangkok Suvarnabhumi Intl. Airport (Thailand)
- Aeroporti di Roma (Italy)
- Sao Paulo Guarulhos Intl. Airport (Brazil)
- Vancouver Intl. Airport (Canada)
- Singapore Changi Intl. Airport (Singapore)
- Dubai World Central (UAE)
- Hong Kong Intl. Airport (China)

Airport capacity & LoS

- Jakarta Soekarno-Hatta Intl. Airport (Indonesia)
- Tokyo Narita Intl. Airport (Japan)
- Shanghai Pudong Intl. Airport (China)
- New Abu Dhabi Intl. Airport (UAE)
- Guarulhos Intl. Airport (Brazil)
- El Dorado Intl. Airport (Colombia)
- Curaçao Intl. Airport (Curaçao)
- Edmonton Intl. Airport (Canada)
- Bangkok Suvarnabhumi Intl. Airport (Thailand)
- Amman Intl. Airport (Jordan)

Master planning

- Suvarnabhumi Intl. Airport (Thailand)
- Tokyo Narita Intl. Airport (Japan)
- Hong Kong Intl. Airport (Hong Kong)
- Dubai Intl. Airport (UAE)
- Gatwick Intl. Airport (U.K.)
- Cambodia Intl. Airports (Cambodia)
- Toluca Intl. Airport (Mexico)
- Prague Intl. Airport (Czech Republic)
- Krasnoyarsk Intl. Airport (Russia)
- Vatry Cargo Airport (France)
- Air navigation master plan for DGCA (Indonesia)

Transaction advisory

- U-Tapao Intl. Airport (Thailand)
- Toulouse-Blagnac Intl. Airport (France)
- Kansai Airports (Japan)
- Vladivostok Intl. Airport (Russia)
- Sydney Intl. Airport (Australia)
- ANA Airports (Portugal)
- Lima Intl. Airport (Peru)
- National Government (Algeria)
- National Government (Egypt)
- National Government (Maldives)

Air service development

- Suvarnabhumi Intl. Airport (Thailand)
- Korean Airports Corporation (South Korea)
- Nantes-Atlantique Intl. Airport (France)
- Narita Intl. Airport (Japan)
- Singapore Changi Intl. Airport (Singapore)
- Dubai World Central (UAE)
- Karaganda Intl. Airport (Kazakhstan)
- Munich Intl. Airport (Germany)
- San Francisco Intl. Airport (USA)

Discussion / Suggested Next Steps

- ✓ Get in touch – share plans and engage
- ✓ Ascertain the type of support needed
 - Peer review
 - Airport Consultative Committee (ACC) formation
 - Training
 - Consulting



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