The updated IATA Airport Development Reference Manual

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International Air Transport Association

Trade association for the world’s airlines, supporting many areas of aviation activity and helping formulate industry policy on critical aviation issues.

Vision: “To be the force for value creation and innovation driving a safe, secure and profitable air transport industry that sustainably connects and enriches our world”.

Mission: To represent, lead, and serve the airline industry

Membership
- 287 airlines in 120 countries
- Flights by IATA members represent 83% of total scheduled air traffic
Global Presence

- IATA has 54 offices in 53 countries
- Head Office: Montreal, Canada; Executive Office: Geneva, Switzerland
- Regional Offices: Amman, Beijing, Madrid, Miami, Singapore
Why is IATA interested in Airport Infrastructure?

- IATA expects 7.8 billion passengers to travel in 2036, a near doubling of the 4 billion expected to fly this year.

- While growth on this scale brings opportunities, it will also put pressure on airport infrastructure that is often already struggling to cope with demand. Many airports are becoming constrained, causing delays, crowding and poor service levels.

- Planning for growth and ensuring adequate infrastructure is in everyone’s interest and requires effective cooperation among stakeholders including airports, governments, and airlines.
Therefore, IATA is involved in many different aspects of Airports

- Airport Charges
- IATA Training
- Airport/Airline Codes
- Ground Operations
- Passenger Facilitation
- Airport Slots
- Fuel
- IATA Airport Consulting
- Global Baggage
It is important to strive for airport development that is...

- Affordable: Development that is within means to construct and maintain.
- Flexible: Adaptable to future needs and technological change.
- Demand driven: Sized to realistic forecasts, correctly timed and predictable to meet needs.
- Efficient to operate: Enables a resilient and efficient airline operation and provides an optimum level of service.
- Fit for purpose: Suitably scoped to deliver user requirements.
- Linked to a Master Plan: The product of rigorous analysis and linked to a larger plan that allows incremental expansion.

↑ via Collaboration and Consultation
IATA Airport Development Reference Manual
What is the Airport Development Reference Manual?

- Recognized globally as the aviation industry’s guide for planning new airports or expanding existing infrastructure
- Joint publication from Airports Council International (ACI) and IATA and endorsed by both organisations
  - The interests of airports and airlines are closely linked, as business partners
- Currently, the 10th edition is in circulation since 2014
  - 5th release, last updated in May 2017; 1st edition in 1995
- Application on CD, Software for Windows, Floating License with update function and recently Mobile was added
The ADRM brings together the recommendations of leading industry experts on the best practices for the development of sustainable and efficient ‘world class airports’

A key reference manual to “future proofing” i.e. links to “NEXTT”

Recognized as one of the aviation industry’s most important guides for planning new airports or expanding existing infrastructure

Supported by the ADRM community

To be used in conjunction with:

- ICAO Airport Planning Manual (Document 9184)
- ICAO Aerodrome Design Manual (Document 9157)
- ICAO Airport Services Manual (Document 9137)
- And many other International and National guidelines and standards
Who uses the ADRM?

The ADRM is a global product and is used by a wide range of professional teams such as:

- Airport Planners, Airport Consultants
- Airlines and Airports
- Architects, Structural and Mechanical Engineers,
- Airport Security Planners, Government Authorities and Airport Authorities

and others involved in airport development and planning, capacity planning, terminal planning, apron design and more.
Overview of the ADRM

Key chapters

 ➤ Forecasting

 ➤ Planning
  ➤ Master Planning
  ➤ Airside Infrastructure
  ➤ Passenger Terminal
  ➤ Cargo Terminal
  ➤ Airport Support Elements
  ➤ Surface Access Systems
  ➤ Airport Simulation
IATA’s recommended Master Planning Process

1. Pre-Planning (scope/terminology of reference)
2. Air Traffic/Demand Forecast [scale & timing of development]
3. Site Evaluation/Inventory [existing facility/service assessment & capacity analysis]
4. Requirements Analysis [demand vs existing capacity]
5. Strategic Choices [identify primary strategic drivers]
6. Development of Options/Site Selection
7. Preferred Option [primary weighting]
8. Online Development Program [short (0 - 5 yrs) to medium (5 - 10 yrs) term]
9. 10 yr. Rolling CAPEX Program
10. Financial Analysis
11. CAPEX Program Affordability [Projected Impact on Airport Charges]
12. Proceed with Development Program

If development is not affordable then:
- look to minimize costs & make efficiency savings
- review options & reprioritize as required
- break large projects into smaller more manageable phases
- simplify the architectural engineering solution
Why update the ADRM?

- The ADRM needs to keep evolving to meet industry needs and developments
- Through the ADRM Community and many industry experts a further update to the ADRM was warranted
- 11th Edition is being working on now
# ADRM 11th Edition – Content and Changes

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<td>‣ Introduction</td>
<td>‣ Updates to most sections</td>
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<td>‣ Forecasting</td>
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<td>‣ Improve approach to Level of Service in gate holdrooms</td>
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<tr>
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- Simulation
- IT
- ORAT
- NEXTT
ADRM Update Highlights

- Forecasting (inclusion of the Design Day Schedule)
- Planning
  - Master Planning (Review and update)
  - Airside Infrastructure (updates to MARS stands and Electric Ground Service Equipment (GSE))
  - Passenger Terminal
    - Update LoS section related to Gate Occupancy considerations
    - New and Simplified Formulas
    - New section on Commercial Development
    - New Section on Wayfinding and Signage
    - New expanded Section on Baggage Handling Systems
    - Overall review of the text
ADRM Update Highlights

- Cargo Terminal (Review and update to include Warehouse of the Future)
- Review of Airport Support Elements (New section on Fuel)
- Review of Surface Access Systems
- Revised and updated section on Airport Simulation
- New Section on IT
- New Section on ORAT
- Airport of the Future / NEXTT (Integrated in each section)  
  https://nextt.iata.org/

눌 New section on Economics/Finance
# ADRM 11th Edition – development schedule

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<tr>
<td>ADRM Task Force Review</td>
<td>Oct 2018</td>
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<tr>
<td>Copy Editor &amp; Review</td>
<td>Nov 2018 – Dec 2018</td>
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<td>Publishing</td>
<td>Dec 2018 – March 2019</td>
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Thank you!

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