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Introduction
The IATA Airport Development Reference Manual (ADRM) is the industry’s most important guide for airlines, airports, government authorities, architects and engineering consultants who are either planning new or extending existing airport facilities. The ADRM’s information is an invaluable consultation of best industry practice with respect to the development of world-class airports through better briefing and design. Its content represents the consolidated recommendations of world-renowned industry specialists and organizations seeking to promote the development of world-class airports.

The previous 9 editions of the ADRM (9th Edition published 2004) have published in traditional bound paper format. The traditional format has some obvious constraints; most notably the difficulty of refreshing quickly to what is an inherently dynamic, fast-changing industry as well as the editorial need to limit the published material to manageable proportions. The latest manual adopts a completely different web-based approach which will allow both for regular updates and linkages to a vast array of material contained in other relevant publications and databases prepared and monitored by recognized industry specialists, authorities and organizational partners.

In order to take full advantage of the opportunities offered by this new approach the structure of the new manual has been completely revised and reformatted though much of the material contained in earlier editions has been retained and developed as appropriate.

One of the key aspects of the new manual is the ability to offer a comprehensive overview of the many complex topics that are inevitable involved at any airport, especially larger international airports. However, the complexity associated with all airport developments means that the information contained within the manual must be treated with great care as it is currently there are many variables from which it is possible to define several different interpretations. With strong recommendations that any commissioning airline, airport or government authority should experience professionals to assist them, there are many variables across the world where well-meaning but inexperienced architects and consulting engineers have misunderstood or misinterpreted complex data and consequently delivered wholly inappropriate solutions.

ACI strongly recommends that every commissioning airline, airport or government authority seeks the assistance of world-renowned industry specialists and organizations seeking to promote the development of world-class airports. However the complexity associated with all airport developments means that the information contained within the manual must be treated with great care as it currently there are many variables across the world where well-meaning but inexperienced architects and consulting engineers have misunderstood or misinterpreted complex data and consequently delivered wholly inappropriate solutions. The web-based format allows the new ADRM to adopt a flexible structure that can be adjusted as and when required. The initial format is based upon the three primary themes/chapters: (1) Forecasting, (2) Master Planning and (3) Passenger Terminal.

The new edition of the ADRM is being released in joint collaboration with ACI. Airlines and airports are very close business partners. A collaborative working relationship with ACI ensures that the ADRM meets the needs of the aviation community as a whole. Intrinsically, best practice airport planning, including the affordability of major airport developments, is beneficial for airline customers and passengers.

New LOS Framework
Facility Requirements (Analytical Approach, Capacity Equations, Sample Calculations)

Self-Service Facilities – Check-in
Baggage Drop Facilities
Passport Control
Security Screening
Boarding Gates
Baggage Claim
Customs Processes
Public Halls

How to Better Manage Capacity and Passenger Expectations?
Managing capacity and passenger expectations is not an easy task to help make better in-flight experience. The ADRM can become a critical element for airport communities agreements where airlines need to meet minimum service levels as well as airports trying to differentiate themselves from their competitors. The best way to address this challenge is to rely on good and relevant information as well as on benchmarks.

Technical passenger perception surveys combined with on-site measurements and observations of queuing patterns and facility layouts is an efficient exercise to get such information.

Typical Data Gathering Program

Sample Results

Collected data can also be used for benchmarking purposes. Benchmarks are helpful if one wishes to compare regions or airport types/class with one another. Benchmarking data can include: average process times; passenger arrival rate profiles, # of desks per flight; ratios of self-service kiosks/traditional desks, etc.

IATA, with the support of AECOM has already started a data gathering exercise to help airports better manage their capacity. A reliable set of technical surveys will be used to cover a wide range of airports size and geography. Airports interested in passenger perception surveys may enquire further to Mr. Brazeau or Ms. Marot.

Targeted Sample of Airports