

Passenger Terminal Design

An airport's terminal building is the primary processing interface that lies between the various modes of surface access and aircraft. As such, its design is fundamental to the success of airlines and their airport partners.

SITUATION

A passenger's level of satisfaction gained while passing through the airport when departing, transferring or arriving will, to a large extent, impact the willingness of the passenger to repeat the experience of flying with the airline operating from that country or airport again.

From a passenger's viewpoint, basic expectations rarely exceed the provision of quick, easy and comfortable transfers from one point in the terminal to another.

In contrast, building aesthetics, that can add unnecessary cost and related charges, tend to be the determining factor when awarding construction contracts, with functionality often a secondary consideration at best.

IATA POSITION

To the airline, the speed at which their passengers and baggage are processed is fundamental to their overall operational effectiveness.

Delays caused by factors outside airlines' control, e.g. at security, customs or passport control, beyond agreed service level standards (when applicable), are unacceptable.

To many airport authorities, the terminal building is the means by which they maximise revenue from the airport users, namely the airlines and their passengers. While the airlines accept that a degree of commercialisation is required, particularly if this is implemented within a "single till" mechanism, they cannot accept facilities that may adversely impact on the speed of passengers moving through the terminal and the efficiency of their routine operations. In short, all revenue earning facilities should be "on the way", and not "in the way" of the passenger.

RELATED AIRPORT CHARGES PRINCIPLES

Single Till. Under this principle, all airport activities (including aeronautical and commercial) are taken into consideration when determining the level of airport charges. See IATA Position Paper on [Single Till](#)

Security charges must not recover more than the costs involved in providing airport security. See IATA Position Paper on [Security Charges](#)

Passenger based Airport Charges. Airports should progressively recover aeronautical infrastructure costs through direct passenger based charges instead of other aeronautical based charges. See

IATA Position Paper on [Passenger based airport charges](#)

Pre-funding capital projects through charges is costly, unfair and inefficient. A properly structured financing package for new investments will ensure that the costs of financing are kept to a minimum and that airlines only pay for agreed investments on an "as and when used" basis. See IATA Position Paper on [Pre-funding](#)
[IATA position papers on aviation charges.](#)

PLANNING GUIDELINES

- Capital expenditure proposals to extend, construct or refurbish passenger terminal facilities should be substantiated by a business case and cost benefit analysis that has been vetted and agreed with the users. The business case must demonstrate clear benefits in terms of enhanced capacity to satisfy current and projected demand, improved operational efficiency that results in cost savings to the user or an improved/enhanced customer experience for the passenger
- The passenger terminal complex should be considered as a series of interconnected subsystems, each capable of accommodating incremental expansion, without impacting on other sub-systems, when demand dictates
- A modular design philosophy is required such that capacity enhancements can be easily and quickly added to individual subsystems without unnecessarily disrupting airline operations and/or terminal functionality
- Wayfinding and passenger orientation can be enhanced by reducing the number of choices to an absolute minimum; e.g. one terminal complex, by adopting a transparent building philosophy; e.g. clear line of sight through the building and by provision of direct passenger flow routes; e.g. no backtracking or changes in direction greater than 90 degrees. All decision points should be binary to make the wayfinding as intuitive as possible, and reduce the confusion for the customer
- Any walking distance in excess of 300 meters should be provided with moving walkways that reduce unaided walking distances
- Departing, arriving and transferring passengers should, wherever possible, stay on one level. Where level changes are unavoidable, a combination of ramps, escalators, elevators and stairs will provide the passenger with the most comfortable journey
- Non secure arriving and transfer passengers must be segregated from security screened departing passengers
- Piers, satellites and their adjacent aprons should have expansion zones reserved in order to have the ability to accommodate larger aircraft, should airlines employ more capacity on individual routes and as aircraft dimensions vary due to technological advances