

2018

**ACI POLICY  
HANDBOOK**  
9th Edition



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## Introduction

The ACI Policy Handbook contains the current policies of the organization, for use by the staff of Airports Council International (ACI) World and the regional offices, and by ACI representatives at international meetings.

In the absence of regulatory requirements, these policies identify actions and strategies that can help ensure sustainable, long-term growth. In this respect, the policies should be regarded as being in the self interest of the industry and should not need enforcement.

The following extracts from the ACI By-law (2015) explain the framework for ACI Policies:

**2.1.3** ACI World is responsible for liaison with other worldwide organizations and for worldwide policy and coordination between the members of ACI.

**5.1.1** The Governing Board shall determine the worldwide policies of ACI, which shall be implemented by the Executive Committee, and the Director General in accordance with this by-law and the decisions of the General Assembly.

**11.1.2** The General Assembly may perform the following duties, always subject to the requirements set out at Section **11.8.4** of this by-law:

(a) Approve the worldwide policies of ACI after their adoption by the Governing Board.

Disclaimer: The policies contained in this document describe means of addressing airport issues that, based on experience, are usually effective at mitigating or reducing adverse effects. The information is provided as guidance material. These policies are not legally enforceable and do not override any legal or regulatory requirement in any ICAO State or region. The word “should” is used to demonstrate a best practice, rather than defining an obligatory action.

## Organization and membership of ACI World

ACI World is the international association of the world’s airports - the “voice of the world’s airports.” It is a non-profit organization, and fosters cooperation among its member airports and with other partners in world aviation, including the International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA). Through such cooperation, ACI makes a significant

contribution to providing the traveling public with an air transport system that is safe, secure, efficient and environmentally compatible.

ACI presents the collective positions of its membership, which are established through committees, endorsed by the ACI Governing Board and reflects the common interests of the airport community. ACI has an observer status with ICAO and a consultative status with the United Nations' Economic and Social Council (UN/ECOSOC).

As of January 2018, provisional figures show that ACI serves 641 members operating 1,953 airports in 176 countries.

## **ACI has the following mission:**

ACI advances the collective interests of, and acts as the voice of, the world's airports and the communities they serve, and promotes professional excellence in airport management and operations.

## **ACI has the following purposes and roles:**

- a)** Maximize the contributions of airports to maintaining and developing a safe, secure and viable aviation industry in a responsible and sustainable manner;
- b)** Promote cooperation among all segments of the aviation industry and their stakeholders, as well as with governments, and regional and international organizations;
- c)** Influence international, regional and national legislation, rules, policies, standards and practices, based on established policies representing airports' interests and priorities;
- d)** Advance the development of the aviation system by enhancing public awareness of the economic and social importance of air travel and airport development;
- e)** Provide leadership in airport operations and management through the development of global technical standards and/or recommended practices;
- f)** Maximize cooperation and mutual assistance among airports;
- g)** Provide members with industry knowledge, advice and assistance, and foster professional excellence in airport management and operations; and
- h)** Build ACI's worldwide organizational capacity and resources to serve all members effectively and efficiently.

Source – Articles of Continuance of ACI under Canada Not-for-profit Corporations Act.

## ACI World standing committees

ACI has six standing committees which prepare policies in their specific areas of competence:

The Airport Information Technology Standing Committee, which covers information and communications technology infrastructure at airports; common use and self-service environments; Flight Information Display Systems (FIDS); Machine Readable Travel Documents (MRTDs); Advance Passenger Information (API); Radio Frequency Identification Systems (RFID).

The Economics Standing Committee, which covers airport charging systems; security, noise and passenger service charges; consultation with users; development of revenues from concessions; peak pricing; currency considerations; financial statistics; airport financing and ownership; State taxation; the impact on airports of airline deregulation and consolidation; air service agreements; competition between air transport and other modes of high-speed transport; collection of passenger and cargo traffic statistics; forecasts of future air traffic; and trends in airport privatization.

The Environment Standing Committee, which covers noise certification standards and procedures of jet aircraft, propeller aircraft and helicopters; noise-related operating restrictions; engine emissions and air pollution; land-use planning in the vicinity of airports; Auxiliary Power Units (APU) and engine ground testing noise; use of chemicals for anti-icing and de-icing; firefighting training facilities, fuel storage and spillage; site remediation; storm water management; waste management; natural resources management; and environmental management systems.

The Facilitation and Airport Services Standing Committee, which covers facilitation of passengers and their baggage, freight and mail; quality of service at airports (standards and measurement); automated services for passengers and baggage; use of information technology, automated systems and telecommunications to support business and operational processes at airports; surface access to airports and intermodal issues; measures to combat drug trafficking; slot allocation and schedule coordination; and the inter-relationship between facilitation and security.

The Security Standing Committee, which covers airside and landside security; measures related to access control; aviation security technology; the inter-relationship between security and facilitation;

security implications of code sharing; employee background investigations; security awareness programmes for the public; cargo security; and security in airport design.

The Safety and Technical Standing Committee, which covers airport planning and development; airspace and airport capacity and congestion; future air navigation systems; physical characteristics of runways, taxiways and aprons; visual aids for navigation; operational safety including airport equipment and installations; apron (ramp) safety and aerodrome vehicle operation; aerodrome emergency planning; rescue and fire-fighting; dangerous goods; the removal of disabled aircraft; aircraft/airport compatibility issues, including the impact of new large aircraft (NLA); and safety management systems.

Any questions about ACI policies should be addressed to the secretary of each World Standing Committee and Sub-Committee, as listed below:

**Airport Information Technology Standing Committee**

Serge Yonke Nguewo | Senior Manager, Facilitation and IT | [SYonkeNguewo@aci.aero](mailto:SYonkeNguewo@aci.aero)

**Economics Standing Committee**

Stefano Baronci | Director, Economics | [SBaronci@aci.aero](mailto:SBaronci@aci.aero)

**Statistics and Forecasting Subcommittee**

Patrick Lucas | Senior Manager, Economics and Statistics | [PLucas@aci.aero](mailto:PLucas@aci.aero)

**Environment Standing Committee**

Juliana Scavuzzi | Aviation Environmental Specialist | [JScavuzzi@aci.aero](mailto:JScavuzzi@aci.aero)

**Facilitation and Services Standing Committee**

Jean-Sebastien Pard | Manager, Facilitation and IT | [Jpard@aci.aero](mailto:Jpard@aci.aero)

**Security Standing Committee**

Nina Brooks | Head, Security | [NBrooks@aci.aero](mailto:NBrooks@aci.aero)

**Safety and Technical Standing Committee**

David Gamper | Director, Safety, Technical and Legal Affairs | [DGamper@aci.aero](mailto:DGamper@aci.aero)

# Table of contents

## 0

### Sustainability

Sustainability.....	10
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## 1

### Airport economics

1.1 General economic situation of airports ...	13
1.2 Airport ownership .....	15
1.3 Airport networks.....	16
1.4 Sources of investments in airports.....	17
1.5 Economic oversight.....	18
1.6 The cost basis for airport charges and.... airport charging systems.....	19
1.7 Rate of return.....	20
1.8 Minimum landing charges at congested airports .....	21
1.9 Passenger service charges .....	22
1.10 Costs associated with aviation security	23
1.11 Costs associated with aircraft noise.....	24
1.12 Consultation with users regarding charges and airport development.....	25
1.13 Non-aeronautical revenues and airport charges.....	26
1.14 Currency considerations.....	27
1.15 Airport accounting practices .....	28
1.16 Performance management .....	29
1.17 Government charges on civil aviation ...	30
1.18 Taxation on civil aviation .....	31

## 2

### Air transport regulation

2.1 General .....	34
2.2 Basic objectives of air transport regulation	35
2.3 Air service liberalization, airline market access, safety nets and safeguards .....	36
2.4 Air transport liberalization and national ownership and control of airlines.....	37
2.5 Airports and the broader regulatory environment: competition laws .....	38
2.6 Airline product designation systems and the traveling public.....	39
2.7 Airports and international traffic flows.....	40
2.8 Airport charges provisions in Air Service Agreements (ASAs) .....	41

## 3

### Facilitation and airport services

3.1 Quality of service .....	43
3.2 Airport capacity .....	44
3.3 Code sharing .....	45
3.4 Schedule coordination and slot allocation	45
3.5 Maximum clearance times at international airports .....	47
3.6 Illicit trade .....	48
3.7 Baggage delivery on arrival .....	49
3.8 Dual channel system of inspecting inbound baggage .....	50
3.9 Simplification of procedures for inbound passengers on international flights.....	50
3.10 Simplifying outbound passport and customs controls .....	52

3.11 Passenger service charges .....	53
3.12 Signage .....	54
3.13 Airport facilities for persons with disabilities and/or reduced mobility.....	54
3.14 Inadmissible passengers .....	57
3.15 Space and facilities for government inspection agencies at airports .....	58
3.16 Banks, ATMs and foreign-exchange facilities at airports .....	58
3.17 Vehicle parking facilities at airports .....	59
3.18 Duty-free shops on arrival .....	59
3.19 Facilities for general aviation .....	60
3.20 Airport handling arrangements .....	60
3.21 Landside transportation and inter-modality .....	61
3.22 Off-airport check-in facilities .....	62
3.23 Consultations between agencies on new procedures.....	63
3.24 National and airport facilitation committees.....	63
3.25 Government inspection services for cargo .....	64
3.26 Maximum clearance time for arriving cargo .....	65
3.27 Elimination of the paper cargo manifest and of paper air waybill, and use of Electronic Data Interchange (EDI).....	66
3.28 Release of operators of cargo facilities from liability .....	67
3.29 Storage facilities in cargo terminals (including special cargo) .....	67
3.30 Cargo handling times and other indicators of performance and quality of service .....	68

3.31 Cargo facility planning .....	69
3.32 Mail handling .....	70

## 4

### Airport Information Technology

4.1 General .....	72
4.2 Information technology infrastructure at airports .....	72
4.3 Systems and procedures—common use environment .....	74
4.4 Common-use wireless infrastructure at airports .....	76
4.5 Cargo automation .....	78
4.6 Flight Information Display Systems (FIDS)	79
4.7 Machine Readable Travel Documents (MRTDs) .....	80
4.8 Advance Passenger Information (API) .....	81
4.9 Radio Frequency Detection Infrastructure (RFID, Bluetooth, NFC and others).....	82
4.10 Biometric document identification systems .....	84
4.11 Baggage handling automation .....	85
4.12 Airport-airline data processing and Electronic Data Interchange (EDI) .....	86
4.13 Self-service check-in kiosk and bag drop	87
4.14 Surveillance and access control .....	88
4.15 Airport web sites .....	89
4.16 E-business .....	90
4.17 Aviation Community Recommended Information Services (ACRIS) .....	92
4.18 Airport digital transformation .....	93

## 5

### Airport planning, design, operation and safety

5.1 Aerodrome Regulation .....	95
5.2 Certification of aerodromes .....	95
5.3 Safety Management Systems (SMS) .....	96
5.4 Safety Buffers used in Aerodrome Design Specifications .....	96
5.5 Consultation with aircraft manufacturers on the accommodation of new aircraft types.....	98
5.6 Airport and airspace capacity .....	99
5.7 Airport Collaborative Decision Making (A-CDM) .....	100
5.8 Performance-Based Navigation (PBN) and Navigation aids.....	101
5.9 Drones and airports .....	102
5.10 Obstacle Limitation Surfaces, and effect on aircraft operations of real-estate development .....	102
5.11 Runway end safety areas and arresting systems .....	103
5.12 Runway safety teams .....	104
5.13 Contaminated runways - Friction measurement and reporting .....	104
5.14 Runway de-icing products .....	105
5.15 Runway inspections .....	105
5.16 Control of Foreign Object Debris (FOD) .....	106
5.17 Wildlife management at airports— operational aspects .....	106
5.18 Apron safety .....	107
5.19 Airside vehicle and driver permits .....	108
5.20 Ground handling .....	109

5.21 Disabled aircraft removal .....	110
5.22 Dangerous goods .....	111

## 6

### Environment

6.1 Environmental Management Systems ...	113
6.2 Noise .....	114
6.3 Local air quality .....	115
6.4 Greenhouse gas emissions and climate change .....	116
6.5 Energy and resources .....	117
6.6 Solid waste .....	117
6.7 Water.....	118
6.8 Land, soil, habitat and biodiversity.....	119
6.9 Spills, releases and other incidents.....	119
6.10 Monitoring and reporting.....	120
6.11 Training and information sharing.....	121
6.12 Stakeholder engagement.....	121

## 7

### Security at airports

7.1 General .....	123
7.2 States' responsibility for aviation security	125
7.3 Airport security programmes .....	127
7.4 Quality control of airport security programmes .....	128
7.5 Recruitment .....	129
7.6 Training.....	129
7.7 Preventative security measures.....	130
7.8 Measures relating to access control.....	131
7.9 Measures relating to aircraft .....	132
7.10 Measures relating to passengers and their cabin baggage .....	133



7.11 Behaviour detection .....	134
7.12 Risk-based differentiation.....	135
7.13 Measures relating to hold baggage .....	136
7.14 Measures relating to cargo, mail and other goods .....	137
7.15 Measures relating to special categories of passengers .....	138
7.16 Measures relating to the authorized carriage of weapons .....	138
7.17 Measures relating to disruptive persons .....	139
7.18 Measures relating to Man-Portable Air Defence Systems (MANPADS) .....	140
7.19 Public awareness of security .....	140
7.20 One-stop security .....	141
7.21 Innovation .....	142
7.22 Contingency measures .....	143
7.23 Landside security .....	144

## 8

### Emergency medical services, hygiene and sanitation at airports

8.1 Emergency medical services at airports...	146
8.2 Hygiene and sanitation at airports.....	146
8.3 Public health and animal and plant quarantine measures .....	147
8.4 Communicable diseases .....	148

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# Sustainability

Airports need permission to operate and grow, not only from regulatory and territorial authorities but also from the local and broader communities they serve. Under the principles of sustainability, airports can work towards this by balancing the economic, environmental and social costs and benefits of their development and operations, in a manner acceptable to key stakeholders, including shareholders (airport owners), staff, passengers, business partners and suppliers, regulators and nearby residents.

### Policy

Airports should be developed and operated sustainably, on the basis of operational safety, quality and efficiency, by:

- creating long-term added value to the airport organization, the aviation industry and the local, regional and global economies;
- striving to avoid, minimize or mitigate environmental impacts and the use of non-renewable natural resources;
- enhancing the living and working conditions for employees, partners and customers, as well as contributing to the social development of local and broader communities; and,
- ensuring comprehensive engagement with partners, authorities and neighbours.



### Comments

The three pillars of sustainability are economic development, social development and environmental protection. Achieving a balance between the costs and benefits of each pillar provides overarching principles for the development and operation of an airport. Traditional aviation pre-requisites of safety and security can be considered integral to the economic and/or social pillars.

Communication and community engagement provide the pathway to link sustainability efforts with developing community acceptance and permission to grow. Comprehensive reporting guidance is available, for example, from the Global Reporting Initiative (GRI) framework and the GRI's Airport Operator Sector Supplement (AOSS).

# Airport economics

This chapter outlines the general economic situation of airports and develops ACI's policies on a number of issues, including airport ownership, airport networks, economic oversight, determination of charges, and consultation with users. Essentially, ACI's main position on airport economics is that shifting away from single till to dual and hybrid tills induces cost efficiencies and commercial innovations. Economic oversight should be proportionate and light-touch, and regulatory interventions kept at minimum.

## 1.1 General economic situation of airports

### Policy

Airports are a critical part of the economy of the State within which they are located. They serve as engines of growth for their local, regional and national economies. In an increasingly commercial and competitive business environment, airports must be able to collect sufficient revenues to finance their investments in airport infrastructure and operations, and to maintain a level of service which is broadly acceptable to all airport users, including passengers and aircraft operators, and to support the economic interest of the surrounding community.



### Comments

Airports are asset-intensive businesses that require many years to recover the significant capital investments in runways and terminals. Consequently, airports must take a long-term perspective to their business and ensure that capacity improvements are made before constraints occur. In response, airports set competitive charges, offer incentives and rebates, invest in quality enhancements, and deliver improved surface access to expand their catchment area.

The deregulated and liberalized aviation environment and emergence of Low Cost Carriers (LCC) as drivers of growth have induced many airports to re-examine their traditional business model and focus on new commercial activities with a view to achieving self-reliance and financial independence, and to help support the development of their airport in line with the needs of all its customers, from airlines to passengers. Commercialization of airports, changing airline business models and liberalization of air traffic have caused airports to shift their focus to the passenger as the ultimate user and beneficiary of airport infrastructure.

Airport competition is a fixed feature of the industry, and the market power of airports has decreased as increasingly airlines pick and choose between various airports and destinations, moving aircraft, routes and bases. Airports compete with other airports for freight, connecting passengers, aircraft technical stops and for the services of low-cost carriers, and specifically with other airports in the same region for origin and destination (O&D) passengers. Indeed, airports are often competing with airports in other States or regions for low-cost bases. Airports also compete on a global scale for hub status of carriers or global alliances, and many of their commercial activities are subject to competition from local enterprises, such as restaurants, shops, hotels, convention centres and parking lots. However, constrained airport capacity in turn limits airline competition, allowing airlines that do operate at the airport to earn scarcity rents. The presence of these rents incentivizes individual airlines to oppose infrastructure investment, to the detriment of the airport, other airlines and, especially, consumers.

Airport performance is dependent on strong and effective airline customers. Airports can face the physical, financial and legal issues of failed or failing carriers, low-cost and start-up carriers, as well as the changing business models of existing carriers. Airline alliances, which have strengthened in recent years, have added complexity to the airport–airline relationship. Large alliances bring a high degree of airline market power to the consultation table, but their instability due to membership changes can complicate the airport planning process.

Since the early 1980s, except for temporary setbacks, the global airport industry has recorded continuous annual increases in traffic. At the same time, traffic at a number of major airports has reached levels which give rise to congestion and delays, creating barriers to airline industry competition and further economic development. The use of airport charges to invest in additional capacity is an essential means of addressing this, particularly since most forecasts, including ACI's, predict passenger movements to surpass 15 billion by 2030.

Despite these challenges and trends, according to the latest ICAO statistics, airport charges worldwide between 1993 and 2014 on average accounted for only 4.1% of total airline operating costs. Landing and associated airport charges, as a proportion of total operating expenses, have actually declined over the period 2009–2014, from 4.3% in 2009 to 4% in 2014.

## 1.2 Airport ownership

### **Policy**

Airports should be permitted to operate under a range of types of ownership. The type of ownership, and any participation by private capital, varies from airport to airport depending on local circumstances. The type of ownership at any individual airport should be such as to allow the airport flexibility in its business, and to ensure that the interests of airport users are protected by the application of sound economic principles to the airport's operations.



### **Comments**

The trend towards greater diversity in the ownership and governance of airports is solidifying. Direct State control has in some cases been superseded by the establishment of private or public autonomous entities, or public private partnerships. Different forms of airport ownership may be appropriate to the situation of different airports, recognizing that ownership structures must primarily serve the needs of the local community. Both private ownership and government ownership of airports have proved to be sound structures that can create efficiencies and innovation.

### 1.3 Airport networks



#### Policy

Airports should be permitted to operate under a wide range of management models, such as single airport, airport systems and airport networks, based on their specific mission, their business needs, and the local circumstances. Airport network operators should be given the flexibility to determine the most appropriate charging system that allows them to recover their costs, generate returns for their shareholders, and ensure the sustainable operation of the smaller airports in the networks.

#### Comments

Airport systems and networks can achieve economies of scale in providing services to meet the short- and long-term needs of the airport users and the economies they serve. In particular, airport networks give the advantage of economies of scale in developing commercial revenues, and in negotiating deals for retail and commercial purposes. There are some common characteristics in those countries where the airport-network concept is applied, for example, difficult access to remote regions without alternative means of transport, or the need to promote the economic and social cohesion of the various regions of a State. Airport networks and systems may also help to achieve a smoothly functioning hub-and-spoke system, enhance flight safety, and provide alternate airports for use in case of bad weather or other emergencies.

Another advantage of networks is what the improvement centralized management structures can bring in terms of efficiency and economies of scale. These synergies include joint procurement of equipment, sharing of research and development costs across the network, and establishing training facilities for employees across the network. In addition, best practices which are found to be beneficial at any airport in the network can quickly be adopted throughout the system.

Networks can often borrow in capital markets at favourable terms because the risk is spread over the entire system or, in many cases, due to the fact that the networks are State-run, thus benefiting from a sovereign guarantor.



Airport networks are created within the framework of national transport policy with the objectives of providing access to the air transportation network at a fair and reasonable cost, and ensuring regional development. In this context, they need to be in a position to apply a common system of airport user charges to support smaller airports in remote regions by way of cross-subsidization. Similarly, airport systems serving the same city or conurbation must be able to apply a common charging system for reasons of traffic distribution to relieve congested airports.

## 1.4 Sources of investments in airports

### Policy

Being fundamental gateways to countries, airports must be allowed access to sufficient funds to finance the investments which are needed to meet projected demand as well as pay debt and equity holders. In some cases, pre-funding of airport infrastructure projects through raising airport charges, during or before the period of construction, is appropriate, in line with the guidelines set out in ICAO Doc. 9082.



### Comments

The scale of current and forecast demand at many airports clearly indicates a need for increasing levels of investment to maintain and enhance capacity at an appropriate level of service quality. Airport charges and non-aeronautical revenues are major sources of funds for investment. Airports should be permitted to retain and invest these revenues to finance future investments or to pay to shareholders based on the finances of the airport. Any action to restrict this use of revenues, or to require all commercial revenues to be used solely to reduce current user charges, could conflict with this objective and inhibit much-needed investment.

In view of the significant levels of capital investment required for infrastructure development, to minimize price discontinuities, limit the amount and cost of debt, and test the market's willingness to pay, pre-funding is in many cases appropriate and cost-efficient.

### 1.5 Economic oversight

#### Policy

Economic oversight of airports should be applied at an optimal level to safeguard the long-term interests of the public. Competition issues should be addressed first and foremost by national competition law within the framework of the State's responsibility for economic oversight.



Economic regulation should be a reactive measure that should only be imposed when free market dynamics have proven to be insufficient. Economic regulation should only be introduced where, (1) there is evidence that the airport operator has or is likely to acquire and abuse substantial market power in a market, (2) competition law does not provide sufficient protection against the risk that the airport operator may engage in conduct that results in substantial abuse of market power, (3) for users of air transport services, the benefits of regulating the airport operator are likely to outweigh the adverse effect of market failure.

The interests of aircraft operators do not always equate to the interests of passengers or other airport users and should not supersede them.

#### Comments

Economic oversight is mostly appropriately applied in as light-handed a manner as possible to provide consumer (passenger) protection. The form of economic oversight which is appropriate should be determined on a case-by-case basis and take into account the level of airport competition, and the national legal, institutional and governance framework: first and foremost, competition law. The application of economic regulation (as one specific form of economic oversight) should only be applied if the airport has demonstrated market power (assessed on a case-by-case basis). Market power assessments of airports should be adequately resourced and should consider the specificities of aviation markets to ensure a reasonable determination. To reduce demands on regulators, simplified screening criteria may be used to offer initial indications of whether an operator could have, and/or could be likely to acquire, significant market power, before conducting a full market-power assessment. Any regulatory interventions should be kept at a minimum and need to be cost-effective, more specifically the direct and indirect cost of regulation should not outweigh its benefits.

Any right of appeal of aircraft operators against decisions by the airport should be consistent with the form of economic oversight or regulation adopted in the State. In a functioning market, the commercial freedom of airport operators should not be compromised by an appeal process potentially interfering with the airport's decision. Only in the event that market failure cannot be remedied, the decision of the airport should be subject to a review by an appeal body.

Any economic oversight of airports should be driven by established economic principles. In line with this, economic oversight should not be used as a means of artificially increasing the profitability of airlines, nor to support struggling airlines to a degree that the market would not incentivize. Such an approach is disadvantageous to the traveling public, as it both undermines healthy airline competition and typically comes at the expense of longer-term investment back into airport infrastructure and facilities.

In order to ensure predictability in economic terms, any economic oversight or regulation should be consistent with the concession contract signed by the competent authority with the airport operator.

## 1.6 The cost basis for airport charges and airport charging systems

### Policy

As commercial enterprises, airports have the right to determine their own economic and commercial policies, taking into account national and local public policy.



### Comments

The level of airport charges needs to be sufficient to cover the cost to operate the airport plus the long-term capital investment required to meet the current and anticipated demand. The level and structure of airport charges should be related to the full economic costs of airport operations, including a reasonable and sufficient return on assets and the development of appropriate reserves to deal with unforeseen adverse circumstances. The airport charge should ensure that airports are economically viable, that is, they can sustain their operations. It should be sufficient for attracting future investors in such projects.

The choice of charging systems is affected by many factors which vary from airport to airport. While aircraft weight is the basis for landing and parking charges in many airports, other economic principles may be applied in setting charges, in accordance with the guidance in the ICAO Airport Economics Manual and taking into account the opportunity cost of scarce airport capacity to ensure its efficient allocation. Charging policies of airports must take into account national and local public policy, the right of airports to determine their own economic policies, and their ability to be financially self-sustaining. Passenger Service Charges should be related to the overall cost of processing the passenger at the entire airport, not only for the use of specific facilities. Whereas passenger- and aircraft-related charges would remain cost related, enhanced flexibility within and between the individual cost bases is desirable to offset a certain degree of risk for the aircraft operator by making his cost more variable.

The introduction of flexible service options, such as low-cost terminals, or innovative charging schemes which rely on market economics to locate capacity where it is in short supply (e.g. in peak hours) should be permissible and is in line with ICAO policies. Such options, however, need to be transparent and available to all airport users, and must not discriminate against other users of the airport. The introduction of such options should be left at the discretion of the airport.

### 1.7 Rate of return



#### Policy

Airports are capital-intensive businesses and need to be able to set charges related to the full cost of the service, including a rate of return sufficient to finance the infrastructure and its operations and to satisfy investors and creditors.

#### Comments

Airports require a reasonable rate of return on capital employed to secure financing of new or expanded infrastructure and to remunerate their shareholders. Private equity and debt are the primary source of capital, as public funding is hardly available in many countries.

To ensure future investment in airport infrastructure, it is important that private and institutional investors maintain their confidence in airports as attractive investment targets. Introducing prescriptive and specific guidelines regarding the rate of return that airports are allowed to generate can damage investor confidence.

Reasonable rates of return should be determined on a case-by-case basis, including the cost of capital and development needs, and a reasonable profit margin for providing adequate future infrastructure. When calculating a reasonable rate of return, the various and potentially significant degrees of risk airports are exposed to must be taken into account. Airports are significantly exposed to the airline industry which is very susceptible to external circumstances forcing it frequently to revisit business models and strategies which immediately affect airports. The airports' ability to react to negative developments can be limited as airport infrastructure cannot simply be decommissioned. Airport infrastructure development is a long-term undertaking which must not be disrupted by short-term airline industry volatility.

Any methodology applied to calculate the rate of return should exclude the contribution of non-aeronautical revenues to the overall airport financial performance, as well as revenue derived from non-airport activity including real-estate monetization permitted for the airport. Non-aeronautical revenues should not be subject to any limitations on profitability as they are not derived from aircraft operators, and are generated in a competitive market environment.

## 1.8 Minimum landing charges at congested airports

### Policy

Given the increasing congestion at major airports, ACI supports appropriate non-discriminatory charging structures for airlines and general aviation. ACI also supports, in principle, the concept of minimum charges which adequately reflect the economic cost of congested airside and landside facilities.



### Comments

The concept of a minimum or fixed charge, for example at congested airports and during peak periods, is regarded as a means to signal the cost of investment in additional infrastructure and, as such, has been accepted by ICAO.

A minimum or fixed charge, combined with a variable charge based on aircraft weight or other criteria, more accurately reflects the true economic cost of providing airport facilities, by charging all users on a cost-recovery basis while also collecting the marginal costs associated with different aircraft types and operational characteristics.

## 1.9 Passenger service charges



### Policy

Passenger service charges are an essential source of funds for airports. While they are ultimately a charge levied by the airport on passengers, passenger service charges (and equivalent charges) should preferably be paid concurrently with the purchase of the airfare to facilitate collection of the charges.

### Comments

Revenue accrued from passenger service charges is essential to fund the operating and capital costs of the airport.

Passenger service charges are either collected directly from the passenger by or on behalf of the airport operator, or billed to the airlines and incorporated in fares. Regardless of how passenger service charges are collected, they remain a charge to the passenger and do not represent a charge and cost to the airline.

ACI supports ICAO's policies which emphasize the need for consultations between airport operators and airlines with a view to alleviating problems related to the collection of passenger service charges.

Direct collection from passengers slows down passenger flow and creates a need for bigger and more costly installations. Whenever the direct collection of passenger service charges gives rise to facilitation problems, they should be incorporated into the airline ticket, with such charges fully transparent to the passenger. Any airline fee necessary to incorporate the passenger service charge on the ticket should be provided on a cost-recovery basis.

## 1.10 Costs associated with aviation security

### Policy

States are responsible for ensuring the implementation of adequate security measures at airports. Terrorist acts against air transport are not directed at airports, airlines or air passengers, but aimed at States. It is therefore inequitable to single out the air transport industry for the payment of services designed primarily to protect the State.



### Comments

Under international law, it is the responsibility of the State to provide protection to all companies and individuals within its boundaries without discrimination. States should therefore bear the associated costs. If States insist upon recovering the costs of providing security at airports, these costs should be recovered in accordance with ICAO's Policies on Charges for Airports and Air Navigation Services (Doc 9082).

Any such charges or transfers of security costs must be strictly cost-related. Before any security costs are passed on by States, consultation must be held between all the parties concerned to ensure that the security standards established by the State are implemented in the most cost-effective manner and that the procedures are designed with facilitation in mind. Where security responsibilities are delegated by the State to airport operators, all associated costs which are not directly reimbursed by the State must be passed on to airport users. If any carrier or other entity requires services demanding a higher security standard than those established by the national security authority, that entity must pay the additional

costs incurred. There should not be any sharing of revenues from amounts collected as recovery of security cost, as this is for discharge of a sovereign function.

Upon the introduction of new security provisions or requirements, airports should be able to fully recover additional costs from the time when they were incurred.

### 1.11 Costs associated with aircraft noise



#### **Policy**

Airports experiencing noise problems should levy noise-related charges to encourage the development of quieter aircraft and expedite airline fleet renewals. In line with the 'User Pays Principle' airspace users should bear the costs associated with noise and, to the extent possible given local constraints, incentives may be set to reduce noise.

#### **Comments**

Airports have a major role in the mitigation of noise, in dialogue with the surrounding community, and many are actively working in this regard. Airport operators should not be deemed responsible for the consequences of aircraft noise, which is outside the control of the airport. Airports are entitled to reflect the costs incurred in implementing aircraft-noise alleviation measures in airport charges, and to encourage the use of quieter aircraft.

A specific noise-related charge may be levied which reflects the degree of noise nuisance produced by the aircraft, where legally allowed and appropriate under local circumstances. Several different systems of noise measurement and noise charging are in operation at States and their airports. The system chosen by an airport operator should reflect local objectives and be based on transparent criteria.

ACI encourages its members to apply the ACI Aircraft Noise Rating Index. The index matches current trends and technologies, and remains simple while at the same time reflecting more faithfully the specific situation at each individual airport.



## 1.12 Consultation with users regarding charges and airport development

### Policy

Consultation with users is an important element in the development of airport user charges and airport infrastructure planning. All parties involved have a responsibility to engage actively and constructively in the consultation process and should primarily take into account the current and future interests of passengers and other end users. Consultations by definition are different from negotiations and do not require an agreement between the parties. The airport provider shall retain its autonomy and freedom to set charges after considering the information obtained from users during the consultation process.



### Comments

Consultation is designed to increase the mutual understanding between providers and users, give them an awareness and knowledge of each other's plans and intentions and, ideally, it should result in all parties moving in the same direction to ensure necessary investment and funding.

Consultation is of value to both airport operators and their users. ACI supports ICAO's policies on airport charges that agreement between airports and airlines is desirable and that, in the case where agreement is not reached, the airport is free to impose the charges proposed. Airport operators are the sole decision-makers in such matters, since they are independently responsible for the management of their airports, and have a long-term responsibility which is not shared by airlines and which encompasses the interests of passengers as well as operators.

Airport operators should inform and consult airline users and operators on matters having an impact on the users' rates and charges. In return, airlines should inform and consult airport operators about planning which may affect the development of air traffic and the revenue of airports (fares, networks, etc.). Airport operators should give reasonable advance notice to airlines when contemplating any revision of charges. However, the length of the advance notice must be left to airports, subject to economic considerations and national regulations.

To develop and maintain up-to-date and realistic airport traffic forecasts, an airport and its airline users should: collect and exchange statistics and other information needed to produce forecasts; exchange and discuss their assumptions; consult on forecasting methodology; and release any forecasts produced (subject to commercial confidentiality). The process of cooperation and consultation should include direct contacts between forecasting experts of the airports and airlines concerned.

Dialogue between airlines and airports should be continuous, general, and not confined to consultation on specific charges. Airport capital expenditure and development programmes, for example, are better focused when discussed in detail with the airports' users. Airlines should inform airport operators of their future requirements, which will assist airports in achieving smooth expansion to accommodate increased traffic flow.

Many airports, however, experience difficulties with requirements imposed on them by aircraft operators at short notice which, in some cases, are later withdrawn after new facilities have been provided.

ACI strongly recommends that airlines regularly provide airports with regular short- and medium-term forecasts of: future types, characteristics and numbers of aircraft to be used; anticipated growth of passengers and cargo; special facilities which the airport users desire and are willing to pay for; and other relevant matters.

### 1.13 Non-aeronautical revenues and airport charges



#### **Policy**

Airports are strongly encouraged to develop non-aeronautical activities and maximize non-aeronautical revenues at their facilities. There should be no requirement to use non-aeronautical revenues to reduce airport user charges, a practice known as the "single till".

**Comments**

Airports should develop non-aeronautical activities at their facilities as far as practical, and should generate revenues from concessions, rentals and other commercial activities. These activities also include maximizing returns on scarce airport property from such activities as parking, industrial parks, hotels and convention facilities. Commercial activities should be developed to the maximum extent practical, with due regard for passenger service and profitability.

Including non-aeronautical revenues in the cost basis for the calculation of airport charges can constitute an unwarranted subsidy to air carriers from the airport operator. This practice, known as the “single till,” also acts as a disincentive to airports to develop non-aeronautical revenues.

ICAO’s policies specifically state that “it may be appropriate for airports to retain non-aeronautical revenues rather than use such revenues to defray charges.” The practice of using the “single till” is contrary to the objectives of cost-relatedness and the user-pays principle, which would require airport charges to cover all of the costs (including quantified and agreed external costs) of the services provided to users. Non-aeronautical and non-airport revenues thus can be considered among the sources of funding by the airport operator to finance new investment, to pursue new business opportunities or to remunerate airport stakeholders at the sole discretion of the airport operator.

## 1.14 Currency considerations

**Policy**

Where local currency is not convertible, or inflation is high, airports may need access to hard currency (i.e., use of a currency widely accepted around the world) to finance investment in equipment and facilities. Under these circumstances, there should be no prohibition on airports requiring that their charges be paid in such currencies.



### Comments

In countries where the national currency is freely convertible, airport charges are normally payable in local currencies. However, in some countries, charges are denominated or payable in hard currencies. This may be necessary where high inflation is causing rapid depreciation of the local currency. Hard currency may also be necessary to pay for the import of essential airport equipment needed for safety, security and passenger service, or for the purchase of services from other countries.

Requiring the use of local currencies by restricting the use of hard currencies could therefore lead to severe deterioration in airport service, as well as damage to airport finances. ACI therefore opposes any policy which prevents the payment of charges in hard currencies.

The issue of hard currency charging has been linked to the broader issues of countries blocking the remittance of revenues from local ticket sales, or restricting the currency of payment for ticket sales. These are separate problems, and approval of the payment of airport charges in hard currency should not be made contingent on their resolution. To do so could threaten the provision of airport facilities and damage airport finances.

## 1.15 Airport accounting practices



### Policy

Accounting practices must be adapted to local needs and regulations.

### Comments

Accounting systems must meet the requirements of the body charged with responsibility for the airport. They must be adapted to the type of airport facility, the scope of its operation and the nature of its various cost areas and activities. Accounting systems must also comply with national regulations as well as the generally accepted accounting principles in a country or State. They should also allow for the accurate allocation of costs to aeronautical and non-aeronautical activities so as to facilitate the operation of a dual till pricing structure.

## 1.16 Performance management

### Policy

The development of relevant and appropriate performance indicators represents a best practice for airport managers, and should be linked with an airport's strategic or business plan. Such performance indicators should cover activities by all service providers at an airport. Using airport performance indicators for benchmarking between or among airports or with other industries, however, should be done with caution as significant differences exist among airports and the comparability of the underlying data and its reporting is limited.



### Comments

The application of performance management systems is a common internal tool across the airport industry to enhance the performance and efficiency of an airport, airport system or network over time. Performance measures support the establishment of corporate goals and planning, identify areas requiring management attention and promote individual staff accountability. As many services critical to airport performance are outsourced to suppliers or undertaken by other providers, they should be included in the performance measurement system.

The incorporation of economic performance objectives as a form of economic oversight should only occur on a case-by-case basis and is the responsibility of the State within its economic oversight function. Such an intervention should be considered only in extreme situations and, where possible, such review should be left to the airport management. No two airports are the same, consequently there is no one-size-fits-all approach to airport performance management.

Airports are free to determine which individual indicators they wish to establish to ensure the organization's success. While reporting all performance indicators to users would be overly prescriptive and counterproductive, disseminating the information on some selected key performance areas should be part of the user consultation process.

The collection and reporting of performance indicators need to address the risk that the data will be misused for simplistic and inaccurate industry benchmarking exercises. The definition of performance measures varies significantly between airports, as costs are allocated and accounted for in different ways. Other variable factors are capacity, ownership structure, State requirements, age of airport infrastructure, airport size, layout and location, level of commercial activities and level of outsourcing. Moreover, there is no consistency in the collection and reporting of data. Performance indicators are an information tool specific to an individual airport—they are not designed to serve as the basis for industry benchmarking.

### 1.17 Government charges on civil aviation



#### **Policy**

Governments should impose charges only for services and functions which directly relate to and benefit civil aviation operations, and should not impose any charges for functions which are the primary responsibility of governments.

#### **Comments**

Government charges on air carrier traffic and air transport may be defined as levies or fees imposed by governments, intended to recover the cost of providing aviation facilities and services. Even though charges of this sort are sometimes erroneously referred to as ‘taxes’, under the above definition they should be referred to as charges.

ACI is concerned with the proliferation of government charges levied on air transport. Such charges should only be imposed for services and functions which have a direct relationship with or which explicitly benefit civil aviation operations, and which the civil aviation industry considers necessary and desirable. If these conditions are not satisfied, government charges may in practice simply amount to ‘stealth taxes’.

Governments should refrain from imposing charges which discriminate against civil aviation in relation to other modes of transportation. They should also refrain from imposing any charges for functions which are the prime responsibility of governments, such as security, immigration and customs.

Any charges, levies or fees imposed by a government authority on air transport should benefit the air transport industry and should not be used for other purposes. Charges, levies or fees levied to finance specific programmes should be withdrawn when these programmes are completed. All surplus income from these charges should be reassigned to support civil aviation in order to reduce any potential additional government charges. An increase in existing charges should be imposed only after consultation with the industry.

## 1.18 Taxation on civil aviation

### Policy

ACI is opposed in principle to all government taxation on air transport which may create impediments to the development of air passenger and cargo travel or hinder connectivity, and is extremely concerned over the proliferation of taxes imposed on international air transport. Taxation can possibly distort competition between airports located in different countries.



### Comments

A tax has been defined by ICAO as “a levy that is designed to raise national or local government revenues which are generally not applied to civil aviation in their entirety or on a cost-specific basis.”

ACI recognizes that imposition of general business, sales, income or use taxes levied fairly and uniformly on the conduct of all businesses within a political jurisdiction should be considered the legitimate right of governments. ACI’s policy is to oppose the proliferation of taxes imposed solely on air transport and used for non-aviation purposes.

ACI endorses only those taxes on international air transport that are justified, equitable, non-discriminatory and in accordance with the Chicago Convention and ICAO resolutions, preferably developed in consultation with the industry, including airports and airlines. Any other form of taxation has a detrimental impact on airline and airport finances, and on consumers, and constitutes a material obstacle to the development and expansion of international travel and trade. Furthermore, taxation solely on air transport

for non-aviation purposes contributes to the erosion of the universally accepted system of reciprocal exemptions from multiple and unfair taxation. ACI also opposes those taxes which discriminate in favour of transport modes which compete with aviation.

ACI strongly urges all States to uphold and actively support the implementation of ICAO resolutions on the taxation of international air transport (Doc. 8632: ICAO's Policies on Taxation in the Field of International Air Transport). Accordingly, ACI urges all States to impose levies only to recover the costs of providing services and functions which directly relate to and benefit civil aviation operations.



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# 2

## Air transport regulation

This chapter outlines ACI's policies on air transport liberalization. Airports should be represented in national delegations to air services delegations while liberalization should seek economic development for the parties involved.

### 2.1 General



#### Policy

Liberalization should be welcomed to improve connectivity to the benefit of the economy and the society. New regulatory arrangements should take account of airport capacity considerations and other interests in determining service levels, and should not erode or restrict airport proprietary rights. Airports should be represented in national delegations to air services negotiations.

#### Comments

Regulation of air transport is one of the most fundamental issues of international aviation and is therefore of great interest to all airport operators. Regulation policies affect the volume and character of air transport services and thus have a major impact on airports. Furthermore, the availability of adequate levels of high quality, safe and secure airport facilities is critical if the goal of the liberalization of air transport is to be achieved. For these reasons, airports should be fully involved in the process.

Progressive liberalization of international air transport should be welcomed as it contributes to the growth of air transport on a sound and stable economic basis. Adequate and effective safeguards must be in place to ensure safety and security. This continuity and stability is also essential for airport operators which must finance and implement the expansion of airport capacity, and ensure quality of service for passengers and cargo shippers on a long-term basis.

Consistent with liberalization, rules on the foreign ownership of airlines and airports should be relaxed. Governments, however, should closely monitor the effects of liberalization measures, and should be prepared to take action if they result in a reduction in competition to levels below those which are necessary to maintain adequate service and consumer choice.

Liberalization presents airports with new challenges for their operation, planning and development, and financing. The need for airports to have both the flexibility and financial resources to meet those challenges should therefore be recognized. In order to enhance their ability to properly establish and match airport capacity with the development of traffic, airports should be involved in the process of the determination of air services by governments, by being represented in national delegations to bilateral and multilateral air services negotiations.

Any move to replace the current bilateral air service system with arrangements between or within trading blocs or groups of States (such as the European Union) should allow for traffic services to be adapted to the capacity considerations of individual airports or regions. Similarly, any moves towards multilateral agreements should not inhibit the ability of each State to take account of airport capacity considerations.

Governments should not allow new forms of air service agreement, whether bilateral or multilateral, which are aimed at restricting or eroding the proprietary rights of airports as established under the present laws, regulations and contracts which govern airport–airline relationships.

## 2.2 Basic objectives of air transport regulation

### Policy

Regulation may be appropriate to help States adapt to the changing aviation business environment, and to avoid unjustified over-regulation.



### Comments

The world aviation industry is moving towards globalization, liberalization and private market responsiveness. Regulation may be appropriate to help States adapt to, participate in, and play a flexible and creative role in, such an environment. For these reasons, issues such as market access, ownership and control, and fair competition should not be defined in such a way as to return to the heavily

regulated system that existed in the past, where national interests played too strong a role in regulating competition.

### 2.3 Air service liberalization, airline market access, safety nets and safeguards



#### Policy

Caution should be exercised to ensure equitable delineations of market access when trying to design new regulatory arrangements. New regulatory arrangements should seek broader, mutually beneficial economic development.

#### Comments

Market access is the most important element in the regulatory framework of international air transport. ACI supports the conclusion of the 1994 Worldwide ICAO Air Transport Conference that one of the underlying purposes of any future market access arrangements should be, in the long run, to optimize efficient and economical trade and communication links among States and to promote to the fullest extent national and regional growth and development. ACI considers that if the quality and quantity of air transport services are increased, the wider benefits to communities, users, trade and economic development will more than offset any apparent inequity arising from specific situations with respect to market shares.

Great caution should be exercised to ensure equitable market access when trying to design new regulatory arrangements. Effective dispute resolution mechanisms must be in place and many already exist in national regulations and laws. New regulatory arrangements should not only focus on balancing the interests of providers of services but should seek to promote broader, mutually beneficial economic development.

Unrestricted market access should be promoted as long as the means of access, in particular the airline product designation systems, code-sharing operations and joint services, do not mislead the traveling public.

ACI agrees with the regulatory arrangement on a safeguard mechanism adopted by the 1994 Worldwide ICAO Air Transport Conference, and subsequently refined and incorporated in the ICAO Manual on the Regulation of International Air Transport (Doc. 9626).

## 2.4 Air transport liberalization and national ownership and control of airlines

### Policy

The criteria of national ownership and control are no longer valid in the current context of increasing globalization of industries and services, and should be significantly modified, if not abolished altogether in the future.



### Comments

States need to devise ways of pursuing the liberalization of air transport policies while assuring an adequate quid pro quo in negotiations. This will require a substantive review of bilateral agreements and flexibility in designating airlines, while ensuring that they are under the regulatory control of the designating State. This has implications for market access, safety and security.

Regulation that limits the possibilities for non-national ownership can be discriminatory and limit competition. However, if States consider that the modification or abolition of national ownership and control could lead to unfair competition, this could be dealt with under safeguards or applicable competition law.

### 2.5 Airports and the broader regulatory environment: competition laws



#### Policy

Regulation, if at all desirable, should aim to encourage the efficient, competitive and non-discriminatory functioning of the market. It should not erode airport operators' proprietary rights and should accommodate the divergent needs of airports worldwide. Where airline competition is threatened, government action should be considered to maintain competition at an acceptable level.

#### Comments

In sectors of rapid change like air transport, traditional ex-ante regulation can create major distortions and generate unjustified additional costs. Any attempt at re-regulation or at broadening the regulatory environment should be considered very carefully at a time when the globalization of the industry is dependent on less intrusive regulation. Regulation should aim to improve transparency and avoid any distortion of competition. Such government involvement in the air transport industry should not interfere with an airport operator's right and ability to manage its proprietary affairs locally, and should be broadly tailored to accommodate the divergent needs of airports worldwide. A number of existing clauses in air service agreements should be modified accordingly in order to give specific recognition to the proprietary rights of airports.

It is important that, before embarking upon a new, broader regulatory environment, the regulatory bodies responsible should be clearly identified and an explicit distinction should be made between the authorities responsible only for regulatory issues and those entrusted with the assessment of taxes or charges. Several governments and groups of countries, such as the European Union, see the application of competition laws as a tool for achieving air transport objectives. In line with the spirit of the ICAO Policy and Guidance Material on the Economic Regulation of International Air Transport (Doc. 9587), it is ACI's view that competition laws should create a fully competitive environment for all parties. Where competition is threatened, government action should be considered to maintain competition at an acceptable level.

## 2.6 Airline product designation systems and the traveling public

### Policy

The airline product designation system should be made more responsive to the needs of the traveling public. Flight information displays in computer reservations systems (CRS) should be transparent, accessible and complete.



### Comments

The proliferation of airline product designations has had the effect of confusing and misleading the public, while adding to the complexity of the bilateral negotiation process and to the difficulty of gaining acceptance by third-party States. Such products include, for example, code-sharing, change of plane and change of gauge with single flight numbers, single flights with multiple flight designations, interline restrictions, etc. Many of these arrangements are a response to biases built into the standards for flight information displays in computer reservations systems, but are not consistent with the principles that underlie the ICAO Code of Conduct on CRS.

ACI fully supports the ICAO Code of Conduct for the Regulation and Operation of CRS presented in Doc. 9587 (Second edition—1999). CRS displays should be made transparent, accessible and complete, in line with the revised ICAO Code.

## 2.7 Airports and international traffic flows



### **Policy**

The principle of market forces determining international traffic flows should be pursued and implemented, whether through liberalized bilateral agreements, multilateral agreements or other international arrangements. To achieve this result, ACI supports the principles of effective market access, transparency, non-discrimination and fair competition.



## 2.8 Airport charges provisions in Air Service Agreements (ASAs)

### Policy

Air Service Agreements (ASAs) are neither necessary nor appropriate mechanisms for the control of airport charges.



### Comments

The primary purpose of bilateral or multilateral air service agreements is to permit and regulate the type and amount of air services between the contracting States to the agreement. Practical ground operational issues are generally left to normal commercial negotiations between airlines and service providers.

Most ASAs therefore contain only a general provision on airport charges restating the non-discrimination requirement of Article 15 of the Chicago Convention. A small number of agreements contain more detailed airport charges provisions, but these are rarely invoked. Where they have been invoked the process has proved slow, expensive and of limited value.

In most of the States which account for large volumes of air traffic, there are effective domestic legal systems which protect against excessive or discriminatory airport charges. As a result, airport charges have been a remarkably small and constant component of airline costs. There is therefore no need for any general policy covering the introduction of detailed provisions on airport charges into air service agreements.

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# 3

## Facilitation and airport services

ACI's objective in the area of facilitation and services is to cover the end-to-end passenger journey and experience, as well as safeguarding the interests of passengers; developing policies and positions aimed at continuously improving service quality at airports; simplifying and speeding the flow and processing of passengers, baggage, cargo and mail through airports; while bearing in mind the different requirements of various authorities with particular regard to safety, security, illicit trade and dangerous goods.

## 3.1 Quality of service

### **Policy**

Service quality should be a key component in an airport's business strategy and operations management.

### **Comments**

Service quality should be about aligning the different interests of the airport and the passenger to generate value for both the company and the customer. Airport operators should monitor a wide range of qualitative and quantitative factors related to airport service quality and the passenger experience at airports, according to the needs of users and the characteristics of the airport with the objective of improving the services delivered. Where airports have no direct control, they should strengthen their existing cooperation with all other organizations and agencies which have a guardian role for service delivery at the airport, in order to develop a seamless airport service with agreed minimum service standards. They should also develop airport business continuity plans which are comprehensive and coordinated with all parties. Airport operators should adopt clear passenger service propositions based on the continued development of existing and new passenger services aiming to improve passengers' experience and the generation of additional revenues. An agreed minimum service level needs to be defined locally in order to determine the ability to process passengers at the time required. In addition, an agreed service quality target score for perceived service quality indicators should be defined and agreed on with the partners involved.

## 3.2 Airport capacity



### Policy

Airport operators should promote the efficient use of existing airport capacity, in consultation with airlines and other stakeholders.

### Comments

Despite the best efforts of airport operators to expand airport capacity to meet demand and remove artificial capacity restrictions, the phenomenon of traffic peaking may reduce the effects of such efforts, and has been the subject of increasing concern by airport operators around the world. Traffic peaking at airports generates severe economic penalties, such as under-utilization of costly airport facilities and services, opportunity costs from direct and indirect impact of lost services, and delays to aircraft and passengers.

Significant improvements can be obtained by attempting to redistribute traffic through effective consultation between the interested parties (i.e., airlines, airports and government authorities). ACI and IATA have jointly produced a booklet entitled Guidelines for Airport Capacity/Demand Management, and the Airport Development Reference Manual, to assist both airports and airlines to combat the problem of traffic peaking and the resulting adverse effects, and maximize the utilization of airport facilities and other resources for the benefit of all parties concerned.

## 3.3 Code sharing

### Policy

Airport operators should facilitate the use of the same terminal facilities for code-sharing and alliance airlines whenever feasible, without jeopardizing overall terminal operation and services.



### Comments

Collaborative and code-sharing arrangements should be fully transparent to passengers. Airlines should inform passengers and airport operators well in advance of all the logistical details involved in a particular collaborative or code-share arrangement, including changes of aircraft at an intermediate airport or changes from an international to a domestic terminal (or vice versa), required on the same flight number.

With regard to the display of different code-share airline identifiers and flight numbers on the FIDS, it is recommended that, where required, these be shown on a rotating basis in an additional column (e.g., 'Remarks'), on the same line.

## 3.4 Schedule coordination and slot allocation

### 3.4.1 Policy

Airport slots should be allocated in a manner that promotes efficiency in the use of the infrastructure that airport operators build.



#### Comments

Excess demand is a matter of fact at many airports and is likely to remain an issue. This requires coordinated use of limited infrastructure, to avoid operational problems to the disadvantage of passengers, airlines and airports. The airport operator is best placed to define and declare airport capacity for runways (aircraft movements), terminals (passenger movements) and aprons (number of aircraft parking stands), in consultation with ATC and other appropriate authorities as necessary.

#### 3.4.2 Policy

##### **Four guiding principles have been developed:**

- 1)** ACI and airport operators need to be appropriately involved in the further development of the IATA Worldwide Slot Guidelines and their implementation;
- 2)** Consideration must be given to the interests of airport operators and their surrounding regions, when aiming for efficient use of airport infrastructure;
- 3)** The definition of a slot should be explicit, not only as an aircraft operator's permission to use the infrastructure at a given date and time, but also its obligation to use the capacity the way it has been allocated. The permission and obligation to use the slot do not constitute property rights; and
- 4)** ACI supports the development of alternative capacity allocation methods for airports where demand exceeds supply.



#### Comments

Slot allocation procedures should take into account historical precedence, new entrants, frequency of service on certain routes and aircraft size, aircraft noise or other environmental restrictions and under-utilization of allocated slots. The procedures should be both transparent and fair. It is also important that provisions on sanctions are included to counteract abusive use of slots (i.e., repeated and deliberate operation significantly outside the allocated slot time).

The direct involvement of airports in slot allocation is essential for the efficient movement of persons and goods and to ensure that airports play a leading role in the economic development of the communities and regions they serve. Airport characteristics vary and it is therefore important that the allocation rules allow for the establishment, with active participation of the airport operator, of local rules that can take such characteristics into account.

Airports slots are important for access to the infrastructure resources of an airport, and the airport operator must play a leading role in the efficient allocation of slots to airlines, taking into account issues such as destinations served, aircraft seat capacity, competition, delays to aircraft and/or level of service in terminals.

## 3.5 Maximum clearance times at international airports

### 3.5.1 Policy

Airports, cooperating closely with government agencies and airlines, should aim towards a maximum passenger processing time of 45 minutes or less for normal arriving passengers.



### Comments

ACI supports Recommended Practice 3.41 in ICAO Annex 9, which calls for a goal for clearance within 45 minutes from disembarkation, for all arriving passengers requiring not more than normal inspection, regardless of aircraft size and scheduled arrival time. This goal is so important to the efficiency of international air transport that ACI will continue to press for it to be upgraded to a standard.

Passengers should be provided with information concerning the entry requirements of customs, immigration and other authorities, so that clearance procedures are not unnecessarily delayed. Airport operators, airlines and control authorities should take every opportunity to ensure that this information is readily available and brought to the attention of passengers.

Considering that border control is a State obligation, national authorities should therefore deploy the necessary resources and staff to fulfil this obligation and meet maximum clearance times.



#### 3.5.2 Policy

Airports, cooperating closely with government agencies and airlines, should aim towards a maximum passenger processing time of 60 minutes or less for normal departing passengers.

#### Comments

ACI supports Recommended Practice 3.38 in ICAO Annex 9, which calls for the setting of a goal 60 minutes for completion of departure formalities for departing international passengers. The total time should be calculated from the passenger's arrival at the first processing point at the airport (self-service kiosk, check-in desk, baggage drop-off point, security control or other control) to the scheduled time of flight departure.

ACI strongly suggests the review of Recommended Practice 3.36 to better reflect the reality of the passenger process time, from arrival at the airport to entering the security restricted airside area for departure.

## 3.6 Illicit trade



#### Policy

Airports should cooperate with customs administrations to interdict illicit trade and other contraband.

#### Comments

Customs administrations have a vitally important role to play in the field of illicit trade. Airport operators can assist them, provided that there is a reasonable level of understanding between customs and



airport management. The measures taken against illicit trading should be integrated into a seamless arrivals process, not to cause undue delays. Airports have to fulfil many obligations in relation to various authorities, and there is a possibility that some of these obligations may conflict with each other. A good relationship, reinforced by a memorandum of understanding, guidelines or other instruments agreed at the local level may help in the resolution of any problems. ACI has signed a Memorandum of Understanding (MoU) with the World Customs Organization and agreed the contents of the associated guidelines. These can form the basis of local MoUs and agreements. These checks should be integrated into a seamless arrival process, and not cause undue delay to baggage delivery for inbound passengers.

### 3.7 Baggage delivery on arrival

#### Policy

Passengers' reasonable expectations on baggage delivery time should be taken into account when agreeing on SLAs with airlines and/or ground handlers.



#### Comments

In order to improve baggage delivery, ACI recommends that:

- the baggage delivery system feed points be located as close as possible to the aircraft;
- wide, fast and reliable baggage belts, conveyors and baggage transporters be employed; and
- the design of baggage delivery areas allows for flexibility and expansion.

ACI also recommends that the appropriate authority should establish and monitor compliance with delivery standards for baggage at each terminal, and that performance records should be exchanged between airports, airlines and/or ground handlers. Computer systems should be employed to monitor and control baggage delivery and to guide passengers. Information regarding the delivery status should be made available to passengers using the appropriate flight information displays.

## 3.8 Dual channel system of inspecting inbound baggage



### Policy

The dual channel system should be introduced and made available where legally allowed under government-defined requirements and local circumstances.

### Comments

The merits of the dual channel or red/green system of customs clearance have been well proven at many airports around the world and the system should be implemented in all countries in order to speed up passenger flow. Guidelines should be drawn up for the most appropriate design of dual channel facilities which offer customs administrations the maximum surveillance possibilities of passengers awaiting their checked baggage (Standard 3.51, Annex 9, ICAO). Moreover, additional guidance should be given to passengers on the functioning of the system, including the description and quantities of duty-free goods which are allowed through the green channel. This information should be presented in various languages. Emphasis should be placed on the passenger's legal responsibility when selecting the green channel.

## 3.9 Simplification of procedures for inbound passengers on international flights



### 3.9.1 Policy

The inspection of arriving passengers on international flights should be limited to travel document examination, provided that a sufficient number of immigration officers and/or Automated Border Control facilities be made available and visa waiver arrangements be extended to the maximum number of countries possible.

**Comments**

States should not require any information in writing (such as a disembarkation card) supplementary to or in repetition of that presented in their identity documents, from temporary visitors traveling by air, or from operators on their behalf. Where identity documents are machine readable, document readers should be used to capture relevant information. If such information is captured before flight departure, it can be sent to the destination airport in advance of the flight, in the form of Advance Passenger Information (see Chapter 4, paragraphs 4.8 and 4.9 concerning machine-readable travel documents and advance passenger information). At the local level, airport and airline consultative bodies, such as facilitation or airline operators committees, should jointly work together to simplify the arrivals process.

Irrespective of national rules, regulations and procedures, States should provide necessary government inspection services (personnel and/or automated systems) free of charge at all international terminals, at any time, in response to reasonable commercial demand, not just during pre-established working hours, as stated in ICAO Annex 9, Standard 6.42. ACI will continue to advocate for this change.

Where appropriate, separate immigration channels should be established for nationals and foreigners in order to speed the flow of passengers through controls and minimize congestion. Where appropriate, separate immigration channels should be made available to persons with disabilities and families traveling with children.

ACI supports ICAO Annex 9, Standard 3.44, which states that the public authorities “shall expeditiously accept passengers and crew for examination as to their admissibility into the State”. However, ACI believes that a clarification should be added to the Standard, stating that the provision is intended to ensure that arriving passengers are not held on aircraft due to a lack of clearance capacity on the part of public authorities.

ACI supports ICAO Annex 9, Standard 6.21 which states that “Contracting States shall make arrangements for a sufficient number of control channels so that clearance of inbound passengers and crew may be obtained with the least possible delay. Additional channel(s) shall be available if possible to which complicated cases may be directed without delaying the main flow of passengers”. However, the wording “in operation” should be added after “control channels” in the first sentence, with the intention of ensuring that all installed channels are used when needed to meet the clearance time goal of 45 minutes.



#### 3.9.2 Policy

Where there is a requirement to undertake routine quarantine and health inspections on arriving passengers, these should be designed and implemented efficiently.

#### Comments

These checks should be integrated into a seamless arrivals process, not cause undue delay to inbound passengers and, where possible, be temporary procedures, particularly regarding response to health emergencies and pandemic outbreaks.

### 3.10 Simplifying outbound passport and customs controls



#### Policy

States should critically review the need to conduct outbound passport and customs controls; and eliminate them where possible.

#### Comments

At some airports, queues at inspection points prior to departure lead to apron (ramp) and terminal congestion and aircraft departure delays, with consequential heavy financial losses to the airlines and disadvantages for passengers, especially those making interline connections. Elimination of departure controls, with due regard to security considerations, would not only facilitate the movement of passengers and their baggage, but would also permit the simplification of layout and routings within airport terminals. If departing passengers have to present their travel documents, their movement can be facilitated if there are separate channels for nationals and aliens. ACI further believes that embarkation cards should be eliminated where possible.

## 3.11 Passenger service charges

### Policy

For reasons of facilitation, efficiency and convenience, passenger service charges should be included in air fares.



### Comments

Passenger service charges are either collected directly from the passenger or incorporated in fares. It is always preferable for charges to be included in air fares (indirect collection), because direct collection from passengers slows down passenger flow and creates a need for bigger and more costly installations. There are two methods of indirect collection: either the airport bills the airline for the total number of passengers on each flight, or the airline charges the passengers directly and remits the proceeds to the airport operator.

Where it is unavoidable to collect passenger service charges directly from the passenger, payment of such charges should be possible either in local currency or in foreign currencies which are acceptable in the region, or by credit card. For customer convenience and to minimize facilitation problems at the airport, advance notice of these charges should be given to passengers at time of booking (see also chapter 1, section 1.4).

## 3.12 Signage



### Policy

Directional signage for passengers should be easy to understand, clearly visible, and whenever possible, be made accessible to people with disabilities.

### Comments

Experience shows that continued development of new pictographic systems is not the most effective or economical way of improving the information provided to passengers at airports. When airports contemplate introducing pictographs, they should consider integrating existing sign systems, such as the ICAO system described in ICAO document 9636, into their existing branding identity. Airports should also enhance the value of pictographic information by restricting its use to items of major importance to the passengers, including those with disabilities.

## 3.13 Airport facilities for persons with disabilities and/or reduced mobility



### Policy

Airport facilities must be accessible to persons with disabilities and/or reduced mobility.

### Comments

As regards air transport in particular, ICAO and ECAC use the following definition: “any person whose mobility is reduced due to a physical incapacity (sensory or locomotor), an intellectual deficiency, age, illness or any other cause of disability when using transport, and whose situation needs special attention and the adaptation to the person’s needs of the services made available to all passengers”.

Aviation, like all other transport modes, needs to recognize and accommodate this growing passenger segment. Persons with disabilities and/or reduced mobility have the same international rights as other citizens, such as accessibility and the full and effective participation and inclusion in society, including freedom of movement and freedom of choice (UN Convention on the Rights of Persons with Disabilities, articles 3c and 3f). Persons with disabilities should have opportunities for air travel comparable to those available to able-bodied citizens.

The needs of persons with disabilities and/or reduced mobility, determined in accordance with national and international requirements and recommendations, should be borne in mind by architects and engineers responsible for designing new structures or modifying existing ones, and by those responsible for operating the airport in question, with a view to the provision of suitable means to ensure easy and comfortable access to all facilities by passengers with disabilities, at a suitable level of quality of service.

All procedures forming part of the journey of air travel, including check-in, immigration and customs, security clearance, embarkation and debarkation, departure, air carriage, and arrival should be adapted to the needs of persons with disabilities and/or reduced mobility in order to facilitate clearance and air transportation of such persons in a dignified manner.

More detailed recommendations are contained in ACI's handbook, *Airports and Persons with disabilities*, and the supplement published in 2010. ACI supports ICAO Doc. 9984, *Manual on Access to Air Transport by Persons with Disabilities*.

#### EC Regulation No. 1107/2006

In Europe, the EC Regulation No.1107/2006 concerning the rights of disabled passengers and passengers with reduced mobility when traveling by air took effect on 26 July 2008. This regulation transfers the overall responsibility for providing assistance services from an airline to the airport operator. The regulation seeks to establish uniform service levels at all European airports.

#### Air Carrier Access Act (ACAA) -14 CFR Part 382

The ACAA affects US air carriers, as well as facilities owned, leased or operated by them. The ACAA also affects non-US carriers on flights to and from the US, and on code-share flights with US carriers anywhere in the world. It prohibits discrimination against persons with disabilities. The most recent, dating from May 13, 2008, is entitled “Non-discrimination on the basis of disability in air travel; Final Rule”.



## 3.14 Inadmissible passengers

### Policy

Inadmissible passengers are the responsibility of the airline that transported them. Procedures should be implemented by airlines and border control authorities to ensure that inadmissible passengers are identified and processed in an efficient and expeditious manner.



### Comments

Travel documents should be simplified and standardized so that airlines can provide more effective assistance to these authorities. Passports and visas should be fraud-proof and machine-readable. The necessary automatic readers should be installed by the appropriate authorities. Advance Passenger Information (API) systems can also assist in the early identification of inadmissible passengers.

If passengers arrive in a State with fraudulent or forged travel documents, or are no longer in possession of their documents, or are otherwise declared persona non grata on arrival, immigration authorities in that State should arrange for their deportation or detention. Selective screening at the point of embarkation could be used to minimize the flow of potentially inadmissible passengers.

Persons other than identified passengers should not have access to areas where they could switch, remove or destroy the travel documents of passengers who have already been cleared. When necessary, a document check can be made immediately prior to aircraft boarding.

## 3.15 Space and facilities for government inspection agencies at airports



### Policy

Space and facilities for the authorities in charge of clearance controls should be provided at government expense.

### Comments

Government inspection and control requirements relating to passengers, baggage and cargo generate a need for space allocation, as well as certain specific facilities and services. Although it is no longer mentioned in ICAO's Annex 9, ACI strongly recommends that space and facilities for the authorities in charge of clearance controls should, as far as possible, be provided at government expense.

## 3.16 Banks, ATMs and foreign-exchange facilities at airports



### Policy

Banks, ATMs and foreign-exchange facilities should be provided at international airports and be in service at times when passenger flights are operating.

### Comments

Such facilities should be easily accessible to both arriving and departing passengers. If the volume of traffic at certain times does not justify the opening of manned counters, other facilities such as vending machines (ATMs) should be made available. It is important that ICAO-recommended signs for such facilities be used, where possible and according to local branding policies.

## 3.17 Vehicle parking facilities at airports

### Policy

Adequate parking facilities should be provided to meet the needs of all passengers, (including persons with disabilities and/or reduced mobility), crew, staff and members of the public using the airport facilities.



### Comments

When designing and planning parking facilities, the speed and convenience of access to the terminals should be considered. Airports should provide for online reservation of parking spaces in advance. Procedures, location and pricing scheme should be indicated on airports' web sites. Availability of parking spaces should be displayed as soon as possible before the entrance to the specific car park. Vehicle access from the public road system should be clearly indicated.

## 3.18 Duty-free shops on arrival

### Policy

Duty-free shops for arriving passengers should be made available where possible according to local requirements.



### Comments

An increasing number of airports have established duty-free shops for arriving passengers, to reduce the necessity for passengers to carry items on board aircraft, and to increase passenger convenience and airport commercial revenues.

## 3.19 Facilities for general aviation



### Policy

Where general aviation operations are permitted at an airport, adequate facilities and procedures should be in place for their facilitation.

### Comments

Owing to the constraints imposed by air transport movements, airports may need to impose restrictions on general aviation, both in terms of access and the services provided. As general aviation may require more airport infrastructure (on a per-passenger basis), an airport may consider it necessary to adopt different charges for general aviation, in order to recover its costs.

## 3.20 Airport handling arrangements



### Policy

Airport operators should retain the right to approve ground handling services at their facilities.

### Comments

ACI supports ICAO Annex 9 Recommended Practice 6.5 which states that aircraft operators should be permitted to choose how, and by whom, their ground handling operations should be carried out. While agreeing with this RP, ACI wishes to point out that airport operators must retain the right to set limits on the number of Ground Handling Services Providers (GHSPs) and self-handling airlines at their facilities. The uncontrolled proliferation of handling agents and equipment could create check-in area and ramp congestion, and safety and security hazards.

If an airline is not allowed or does not wish to provide its own services, it should ideally have more than one choice of GHSP available.

ACI supports free and fair competition between GHSPs, so as to give a choice to airlines, provided that space at the airport allows. If the airport operator itself provides handling services, it should also compete on a non-discriminatory basis.

For additional policy related to safety of ground handling, please refer to section 5.20.

To take account of the different situations at airports, and in line with ICAO Council Statements on Charges for Airports and Air Navigation Services (Doc. 9082), ACI maintains that equal treatment for all user airlines implies that a concession fee should be charged on all providers of ground handling services, including the local carrier when it provides such services to other carriers.

## 3.21 Landside transportation and inter-modality

### Policy

Ground transportation arrangements to, from, between and within airports are vital to all users and should be planned and operated in a coordinated manner with the various bodies involved.



### Comments

As airports grow and develop to meet the increasing demand for air transport, it is essential for surface access facilities and services to respond to this rise in demand. Airports should be linked in an efficient and user-friendly manner to the markets which they serve. Such facilities and services may include public transport access by road, rail and any other applicable modes, as well as private transport, including private vehicles, rental cars, taxis, courtesy buses and commercial vehicles. Employees have needs, and

non-vehicular modes of transport, as well as vehicle-sharing (transportation network companies) should not be overlooked. A balance should be struck between the needs of all airport users, bearing in mind the local pattern of traffic needs, resources and priorities.

Information on public transport services, including fares and schedules, should be readily available to arriving and departing travelers. Where fares are charged, in order to expedite the service, arrangements should be made enabling travelers to purchase tickets before boarding.

Transportation within airports is as important as transport to and from airports. Where the distance between airport terminals, car parks, car rental facilities and public transport services is significant, transport connections should be considered, including the possibility of installing people-mover systems. Because of the need to maintain frequent and regular transport schedules within airports (between terminals), and because international connecting passengers often do not possess local currency, such transport should preferably be provided without direct charge to travelers.

There should be full consultation at the earliest possible stage between the airport operator and all agencies and operators involved in surface access to the airport, such as local transport authorities, municipalities and licensing authorities, to encourage increased coordination in the planning of surface access and the provision of relevant information to passengers.

## 3.22 Off-airport check-in facilities



### Policy

ACI concurs with ICAO Recommended Practice 6.16 that governments should allow the provision of off-airport check-in facilities, with due regard to the necessary security precautions and (border) control requirements.

**Comments**

Furthermore, ACI believes that governments, airlines, airport operators and other relevant organizations should actively consider how such facilities can be developed, taking into account the facilitation of baggage transportation to and from the airport. Some of the most likely off-airport locations are railway stations, hotels and airline city-centre terminals.

### 3.23 Consultations between agencies on new procedures

**Policy**

Governments should consult with airport operators, control authorities and groups representing airport users, at the earliest possible stage whenever new government-mandated procedures require changes in facilities, including changes of layout within existing facilities.

**Comments**

ACI recommends establishing an Airport Facilitation Committee according to the ICAO Standard 8.19, Annex 9, where these consultations should take place.

### 3.24 National and airport facilitation committees

**Policy**

State authorities should establish a national air transport facilitation committee in accordance with Annex 9, Standard 8.17.



#### Comments

Appendix 12 to Annex 9 sets out guidelines for the establishment and operation of these committees. Airport operators should take the leading role in convening and conducting meetings of airport facilitation committees.

## Cargo facilitation

### 3.25 Government inspection services for cargo



#### Policy

Government inspection services for cargo should be available and adequate to facilitate the expeditious clearance of cargo consignments in accordance with Annex 9, Standard 4.1.

#### Comments

International air cargo hub operations have evolved into a 24-hour-per-day, 7-day-per-week business, and the air cargo industry is catering for increasingly time-sensitive shipments. The just-in-time concept has given rise to the need for fast, cost-effective and seamless transport chains. Moreover, the rapid growth of traffic in perishable cargo creates a requirement for the streamlining of procedures, not only for the physical handling of goods, but also for the timely inspection and release of cargo. Governments should move to enhance the speed advantage of air cargo by making available government inspection services whenever they are needed.

ACI believes that compatibility must exist between the requirements of the relevant government inspection agencies at the origin and destination of a consignment. Procedures related to the movement of air cargo, as well as those related to intermodal transportation (air, sea, rail and road), must be developed on an international level to allow for the standardization of documentation and handling methods. These procedures should recognize the desirability of the eventual replacement of processes now in existence in favour of automation and a paperless environment.



Governments should also encourage the development of international communications networks allowing for the transmission of data between governmental agencies within a country and between countries. At airports where there is a lack of capacity for expansion, the airport operator may wish to develop off-airport facilities for initial acceptance, storage, distribution, consolidation, de-consolidation and final receipt and clearance of goods. In these cases, the cooperation of control authorities is sought to facilitate the establishment of off-airport clearance and storage facilities for bonded goods.

### 3.26 Maximum clearance time for arriving cargo

#### Policy

Maximum clearance times for different categories of cargo should be established by the customs authorities, in consultation with airports and airlines, and should meet or better the recommended performance standards in Annex 9 Chapter 4, Section D.



#### Comments

In particular ACI supports ICAO Annex 9 Recommended Practice 4.31 establishing a target customs clearance time of three hours for arriving general cargo not requiring examination, from the time proper documentation, or a legally acceptable electronic equivalent, is presented. In line with ICAO Annex 9, Standards 4.27 to 4.29, shipments such as perishable goods, live animals, personal effects and low-value goods should be cleared promptly on arrival. As provided under ICAO Annex 9, Recommended Practice 4.30, goods imported by authorized persons who have demonstrated compliance with customs regulations, and who supply advance information, should be released immediately on arrival.

ACI recommends that physical examination of cargo by customs should always be based on targeting and risk assessment criteria.

### 3.27 Elimination of the paper cargo manifest and of paper air waybill, and use of Electronic Data Interchange (EDI)



#### **Policy**

State authorities should reduce or eliminate the requirements for hard-copy manifests or air waybills and leverage EDI and new technologies to facilitate the more expeditious processing and clearance of cargo.

#### **Comments**

Cargo manifests are unnecessary, since the same information can readily be obtained from air waybills in either paper or electronic form. The use of Electronic Data Interchange (EDI) for the submission of waybill information has significant cost and facilitation benefits for all parties involved in the cargo process. A further benefit is that information on incoming goods can be obtained by Customs in advance of the arrival of the aircraft. Accepted international standards and protocols for EDI messages should be used (see ICAO Annex 9, Standard 4.17).

Whether information appears in the cargo manifest or in air waybills, it is essential to limit the description of the nature of goods to the 15 characters set aside for this purpose. The use of more than one line of information per shipment is contrary to the goal of facilitation.

ACI supports Montreal Protocol no. 4, which entered into force in 1998, and provides a statutory basis for electronic submission of air waybills. It would be helpful if the number of signatory States would increase.

## 3.28 Release of operators of cargo facilities from liability

### Policy

Governments should absolve both airlines and airport operators or cargo warehouse operators from liability for customs duties, taxes and other charges at such time as goods are transferred, with the approval of the authorities, into the possession of a third party.



### Comments

ACI believes that this release from liability should apply regardless of whether the third party has a security or guarantee on file with the customs authorities.

## 3.29 Storage facilities in cargo terminals (including special cargo)

### Policy

Cargo terminals should be designed to facilitate the safe, efficient and secure processing and storage of cargo, including clearance by customs authorities.



### Comments

All goods stored in cargo terminals should be protected against unauthorized access at all times, by means of appropriate and secure access-control processes, supported by video surveillance and tied to measurable airport security standards under government regulations, where airport security and police can monitor and respond to violations. Wherever practicable, airports should be equipped with appropriate storage facilities for special cargo, including valuable goods, perishable shipments, live animals, human remains and dangerous goods, including radioactive materials.

### 3.30 Cargo handling times and other indicators of performance and quality of service



#### **Policy**

Airports should monitor the performance of the cargo operations on its ramp areas in order to implement a continuous improvement process.

#### **Comments**

Airports attach great importance to minimizing ground handling and dwell times for air cargo. In order to monitor an airport's performance and gain knowledge of where corrective action may be necessary, spot checks or periodical surveys should be carried out by recording the times of: on-block-time of inbound aircraft; shipment check-in completed (time when goods and documents are available for action by consignee or his agent); entry procedure initiated (application for clearance filed with the customs and other control authorities; customs clearance completed; and collection of goods.

ACI recommends more extensive use of ULDs to reduce staff injuries and handling time, prevent damage, eliminate the incidence of missing cargo, and contribute to airport capacity.

Airports should take a leading role in measuring and monitoring the performance of airport cargo facilities and services. The airport should, in collaboration with tenants and operators through a local committee, continuously assess processes and compliance so that areas of concern can be addressed or planned for through future development. Elements such as fast processing (average dwell time), high space utilization (e.g., tonnes of cargo handled per year per square meter of warehouse space), low manpower requirements (e.g., tonnes of cargo handled per year per employee) and effective ramp control (e.g. a written plan or agreement between stakeholders to coordinate all ramp movements, should be among the criteria used for assessing economic and efficient cargo handling.

## 3.31 Cargo facility planning

### Policy

Airports should ensure that the future needs of air cargo are adequately covered in facility development plans.



### Comments

Airport operators should review the present and future demand for facilities and the space available at their airport prior to deciding how to accommodate operators' needs within their facility planning, possibly including cargo operations with new large aircraft.

Airport operators may find it advantageous to develop common-use facilities for use by several airlines or a neutral handling agent, in view of the diminishing space available at many airports for the construction of exclusive-use facilities. Common-use facilities permit greater utilization of buildings, ramps and handling areas, and may provide better economic justification for the construction of advanced handling systems, etc. However, existing principles of competition must be adhered to.

## 3.32 Mail handling



### **Policy**

Airports should facilitate, as far as practicable, the safe, efficient and secure processing and storage of mail consignments.

### **Comments**

ACI recommends that airport operators should be flexible with regard to the needs of postal authorities, other mail operators and airlines for warehouse space and systems, and controlled access to apron areas for the handling of mail.

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# 4

## Airport Information Technology

### 4.1 General



#### **Policy**

The role of the airport operator should be to promote and implement standardized shared solutions and systems. Centralized management of these systems by the airport operator is recommended wherever possible.

#### **Comments**

Information Technology (IT) plays a vital role in the operation of airports and the facilitation of traffic, passenger processing and security. The role of the airport operator is to coordinate development of automated systems. In most cases, airport operators are also involved in or responsible for their provision and operation.

The airport operator should also ensure that the necessary communications infrastructure is provided, and that all necessary systems and procedures can be installed and operated. It is essential that information exchange between all airport users is coordinated and agreed upon, taking into account the technological solutions and standards best suited to each particular situation, and in accordance with international standards.

### 4.2 Information technology infrastructure at airports



#### **4.2.1 Policy**

The role of the airport operator should be to promote and implement standardized shared infrastructure. Centralized management of these systems by the airport operator is recommended wherever possible.



**Comments**

Centralized management of this IT infrastructure by the airport operator is recommended.

It is the accepted role of the suppliers of major physical facilities at an airport to equip those facilities with various utilities (such as electricity, air-conditioning, heating) to be shared by the tenants of the facility. In light of technological developments, cost factors and the dynamic nature of airport tenants, it is recommended to equip facilities with information and data communication systems provided by the airport operator. This approach enables current and future users of the facility to use information systems and communicate with local and/or remote computers and databases in a coordinated manner, without having to re-invest in new infrastructure when there is a change of tenants or changes in airport infrastructure. Such systems should be based on international standards and recommended practices.

**4.2.2 Policy**

All data processing and communication activities and requirements at an airport which affect airport management and operations should be coordinated, and/or approved, by the airport operator.

**Comments**

The development and installation of shared use data communications systems at an airport should be the result of careful coordination between all parties involved (users, suppliers, operators) in order to achieve the most cost-effective and operationally desirable technical and functional solutions for all airport users and customers.

Airport operators should develop standards and install a general multi-purpose infrastructure, in order to avoid heterogeneous and incompatible operations and information. These systems should include, but are not limited to: shared cabling infrastructure, Local Area Networks (LANs), Wide Area Networks (WANs), wireless technologies, radio-frequency-based technologies and cellular technologies.

In environments where a shared common-use IT infrastructure is installed, it is necessary to have adequate IT security procedures and operational contingency planning.

The aviation operating environment is by nature very sensitive to problems affecting their operational efficiency. In addition, the fact that various different partners will utilize IT infrastructure, often simultaneously, requires that careful attention be paid to IT security—both physical and logical—as well as general IT operational availability.

IT Service Level Agreements should include standardized, agreed-upon security aspects, as well as the establishment of a contingency plan which takes into consideration airline and airport operational levels under different contingency situations.

### 4.3 Systems and procedures—common use environment



#### **Policy**

In order to ensure optimal, economic use of airport physical infrastructure, the airport operator should promote and prioritize the use of common-use systems wherever possible and justifiable.

#### **Comments**

The airport operator should discourage the use of dedicated systems, wherever clearly defined benefits can be achieved from applying economies of scale for the provider and users of the facilities, thus avoiding unnecessary and costly capital investments in airport and IT infrastructure.

Common-use systems provide various benefits for both the airport and airline, including standardized, cost-efficient operations, maintenance and optimization of airport infrastructure. Economies of scale can be realized by applying a one-to-many versus one-to-one approach, where it is more cost effective to distribute the initial investment and recurring costs amongst the users of IT infrastructure as opposed to investing in and maintaining different IT solutions.

The airport operator should take a leading role in promoting these systems to the airlines and other potential airport stakeholders.

Given the different options—both technical and contractual—for the commissioning of these systems, it is important that the airport stakeholders work in partnership to define the most adequate options for a particular airport environment, in line with IATA and ICAO standards.

In any airport terminal, dedicated equipment for departure control systems can waste scarce resources and confuse passengers. In such circumstances, the installation of shared-use equipment for the terminal may have conclusive advantages.

Where possible, automated local departure control systems should be utilized in order to ensure a reliable, auditable record of passenger check-in and aircraft boarding.

The airport operator should promote the use of these systems for each airline, and provide an airport-based system for those companies which do not have access to such systems, especially in cases where common-use equipment is available.

Common-Use Passenger Processing Systems (CUPPS) Recommended Practice (ACI RP 500A07), developed as the evolution of IATA's CUTE RP 1797, with ACI, A4A and IATA support, provides airports the benefits included in its six foundational principles:

1. Applications should run on any platform;
2. CUPPS facilitates rather than mandates business processes;
3. The CUPPS platform will have minimum, defined functionality;
4. Affordability;
5. Serviceability; and
6. Predictability.

(More information can be found on [www.cupps.aero](http://www.cupps.aero) and [www.aci.aero](http://www.aci.aero))

### 4.4 Common-use wireless infrastructure at airports



#### **Policy**

Airport operators should control the proliferation of independent Wireless Local Area Networks (WLANs) on the airport premises.

#### **Comments**

In order to avoid potential security and control deficiencies, duplication of investment, disturbance and interference, a shared-use approach is essential.

Airport operators should coordinate and manage the development and implementation of an integrated WLAN service infrastructure.

Companies operating at airports are increasingly demanding the installation of WLAN (also referred to as Wi-Fi) access points to optimize their activities. At the same time, airlines are increasingly demanding wireless ground-to-air and gate-to-cockpit applications. Furthermore, mobile telephony operators and Wireless Internet Service Providers (WISPs) are demanding the installation of WLAN access points at airports. WLAN services offer many current and potentially promising new applications for passengers and airport staff. The implementation of WLAN infrastructure allows different service providers to deliver this service to potential users.

However, airport operators should control the proliferation of independent WLAN installations on the airport premises. There is a risk of security and control deficiencies, potential operational disturbance and radio-frequency interference, as well as duplication of investment. Thus the airport community should adopt a common-use policy enabling a service provider or tenant to offer services on the WLAN infrastructure at the airport.

Due to the security and operational requirements of the WLAN, the airport operator should undertake the professional management (itself or via a third party) of this wireless environment/infrastructure that ultimately services both the tenants and public.

When developing WLAN services, a neutral infrastructure should be implemented. There must be clear rules how the services can be offered and installed. A multi-service provider environment should be realized via a common portal for public access.

Airport, airlines and other airport stakeholders are increasingly using WLANs in support of critical operational requirements for services such as baggage reconciliation and mobile check-in. It is important that these critical functions are given priority access over less critical services such as public Internet access. Therefore, the design, implementation and management of the WLAN must consider multiple aspects of performance and security.

The airport operator, which has final responsibility for the consistency of different services, should coordinate and manage the wireless environment professionally. This can be achieved through a single infrastructure or a combination of different infrastructures of which the technical installation is evaluated and coordinated by the airport.

Airport operators should constantly evaluate competing technologies, so as to maintain low costs and increase capacity in line with demand, for the benefit of all tenants, concessionaires and others.

### 4.5 Cargo automation



#### Policy

Airport operators should promote automation to improve facilitation in international cargo.

#### Comments

The role of the airport operator should be to promote and implement standardized shared solutions.

In view of the proliferation of computer-based systems for the handling of cargo at airports, the objective of airports should be to promote the use of standardized common systems. However, it is recognized that this may not be easily achievable in the foreseeable future. ACI also advocates, where applicable, the development of integrated airport systems covering all modes of transport at an airport, including sea, road and rail.

There is an acknowledged need for standardization in the development of new systems. For example, Radio-Frequency Identification (RFID) standards for cargo information must be defined at three levels: consolidated unit cargo, home airway bill and house airway bill, in order to facilitate automation for cargo movement. There is also a need to establish interface requirements between existing and planned systems to facilitate information and traffic flows between a port system, its local cargo community, clearance authorities where appropriate, and ultimately systems at other ports. The role of the airport operator in this respect should be to coordinate system development, even if the airport operator does not itself provide the cargo system.

A successful system enables airports, as well as other airport stakeholders, to achieve a more efficient use of physical capacity by virtue of a faster throughput of international cargo. This makes air cargo more competitive in comparison with other modes and leads to the deferment of capital-intensive alternatives.

## 4.6 Flight Information Display Systems (FIDS)

### Policy

FIDS should be carefully tailored to the airport environment, and should be as simple and clear as possible.



### Comments

Centralized management of these systems by the airport operator is recommended.

ACI generally favours standardization, but believes that the form, degree of detail and location of displays should depend to a great extent on the architectural design of the terminal and on the centralization (or decentralization) of particular operations.

It is important to standardize the presentation (i.e., the order of the various items of information) and to adopt and use standard abbreviations, designations and remarks. The systems should be as simple, clear and direct as possible.

All airport stakeholders involved in the operation of flights, including airlines and air traffic control authorities, should provide the relevant information on flights, including last-minute changes, to the terminal operator responsible for the operation of the flight information display system, on a timely and rapidly updated basis. The terminal operator should be responsible for establishing the list of data elements needed for this operation, and the means of communicating them.

The displayed flight numbers should be preceded by the airline prefix codes as they appear on airline timetables, passenger tickets and boarding passes. In airport terminals used by only one airline, the airline prefix can be omitted. Where the national language is not written in the roman alphabet, provision should be made for repetition of the display information in the relevant characters and/or numerals. It is recommended to display flight information in English as well as the national language.

The use of flashing signals and colours should be kept to a minimum. Flashing signals should be restricted to the “remarks” column, and to information which requires passenger action. Slow scrolling (upwards/downwards or sideways) should be done in such a way that the passenger notices that more information is available. Different colours should be used logically, to highlight data elements which are important for passenger action (e.g., gate/time). A maximum of 4 to 5 colours should be used.

Airport FIDS systems may use various methods of displaying code-share flights. ACI recommends that, wherever possible, the preferred method should be to display the code-share flight numbers successively on a single line of a display monitor, or at most two lines.

Such flight numbers can be alternated, wiped or scrolled, and each flight number should be displayed for sufficient time to be clearly legible to all passengers. Given also that the cycle time should not be excessive, a maximum of two or three flight numbers per display line is suggested. An alternative method which may be found useful is to reserve a separate monitor for the display of code-share flights only—with reference in the main display.

Similar recommendations can also apply to the following systems:

1. BIDS : Baggage Information Displays Systems;
2. CIDS : Check-In Information Displays Systems; and
3. GIDS : Gate Information Displays Systems.

## 4.7 Machine Readable Travel Documents (MRTDs)



### Policy

ACI supports the worldwide issuance of MRTDs, in accordance with ICAO/ISO standards, as recommended in ICAO Annex 9.



**Comments**

Airports should implement systems that take advantage of MRTD technology.

In order to automate and expedite the clearance of passengers through government controls with increased security, an ICAO group (on which ACI is represented) has adopted, and continues to improve, worldwide standards for machine-readable passports, machine-readable visas, machine-readable official travel documents and machine-readable crew-member certificates, including biometric identification .

It also urges the installation of automated document readers linked to border-control systems at international airports, thus enhancing security and obtaining the intended efficiency of automated controls. Even States which do not issue MRTDs can benefit from installing automated arrival controls for the inspection of the MRTDs of foreigners.

## 4.8 Advance Passenger Information (API)

**Policy**

ACI supports advance passenger information collection.

**Comments**

ACI supports the collection, prior to passenger departure, of internationally standardized API data (in accordance with World Customs Organization/IATA guidelines, as amended by ICAO) for transmission to the destination government authorities, in order to expedite the clearance of passengers by immigration and customs authorities on arrival.

### 4.9 Radio Frequency Detection Infrastructure (RFID, Bluetooth, NFC and others)



#### Policy

Airport operators should coordinate and manage the development and implementation of radiofrequency detection infrastructure.

#### Comments

Airport operators are concerned about the possible proliferation of independent radio-frequency detection equipment, infrastructures and related networks (radio-frequency detection installations) on the airport premises. In order to avoid potential security deficiencies, duplication of investment and interference, a shared-use approach is essential.

Companies operating at airports are increasingly demanding the installation of radio-frequency detection equipment and infrastructure to optimize their activities. Radio-frequency detection-based services offer many current and potentially promising new applications for all stakeholders.

However, airport operators are concerned about the proliferation of independent radio-frequency detection installations on the airport premises. There is a risk of duplication of investment, of over-usage of valuable space through the proliferation of detection equipment in frequently used areas, as well as the potential for operational disturbance through radio-frequency interference or security infringement. Thus the airport community should adopt a shared-use policy enabling a stakeholder to offer services on the basis of a single infrastructure provided by the airport.

Due to the operational requirements of infrastructure such as network and equipment used by the detection devices, the airport operator needs to be responsible for the professional management of such infrastructures. The airport should also establish a procedure to approve and register all radio frequency detection based applications and hardware.

The parties concerned should consider if the airport should take the role of installing and maintaining a common-use infrastructure. There should be clear rules as to how the services can be offered and installed.

The airport operator, which has final responsibility for the consistency of different services, should coordinate and, if necessary, manage the radiofrequency detection environment. This can be achieved through the implementation of a single infrastructure or a combination of multiple infrastructures, of which the technical installation is evaluated and coordinated by the airport. In addition, airport operators should constantly evaluate competing technologies, so as to maintain low costs and increase capacity in line with demand, for the benefit of all tenants, concessionaires and others.

Airports request that stakeholders wishing to install radio-frequency detection systems consult and coordinate with the relevant airport services on the costs and design of the systems to be implemented. Costs should either be entirely borne by the stakeholders or on a cost-sharing model between the various project stakeholders. For example, airports are within their rights to charge a rental fee to airport stakeholders for the usage of airport facilities and infrastructure.

Examples of such radio-frequency technologies are:

1. RFID;
2. Near-Field Communication (NFC); and
3. Bluetooth (including Bluetooth Low Energy used for beacons).\*

\*Terminal beacons are Bluetooth Low Energy (Bluetooth LE/BLE/Bluetooth Smart) devices that broadcast their location to nearby portable electronic devices. The technology enables smartphones, tablets and other devices to perform actions when in close proximity to a beacon. A beacon uses Bluetooth proximity-sensing to transmit a universally unique identifier picked up by a compatible app or operating system. The identifier can be used to determine the device's physical location or trigger a location-based action on the device, such as a check-in on social media or a push notification.

### 4.10 Biometric document identification systems



#### Policy

ACI supports the worldwide use of ICAO's internationally standardized globally interoperable biometric system for MRTDs which uses face as the primary interoperable biometric for machine-assisted identity confirmation with an MRTD.

#### Comments

ACI recognizes the benefits of using biometrics to confirm personal identity for border control, airport passenger processing and airport access control, to improve security, efficiency and facilitation. Identity can be verified using a biometric of the individual against reference data securely recorded on an MRTD, a smart card, or stored in a database. These methods, together with Advance Passenger Processing (APP) and API, can enhance security, speed up clearance and alleviate congestion and delays at airports.

An optional secondary biometric, either fingerprint or iris, may be added to the MRTD. ICAO's standard MRTD and biometric specifications are published in ICAO Doc. 9303.

The ICAO toolbox contains highly developed standardized specifications for MRTDs, in particular those for ID, credit-card sized cards and biometrics, and their use in confirming a person's identity and facilitating inspection. The specifications also offer significant advantages for other uses at airports such as airport access control, ID cards for airport personnel and crew members, passenger processing, and lookout checking systems. The specifications also cover security features, data presentation and recording formats, and standardized placement of technologies for data storage on documents, which encourage standardization and global interoperability.

ACI encourages ICAO and governments to continue to promote the use of the ICAO globally interoperable biometric for MRTDs and the use of the globally interoperable data formats for the three biometrics specified in the ICAO Standard (face, fingerprint, and iris). Also important, is the promotion of the installation of ICAO-compliant document-reading systems and biometric capture and authentication

systems at airport border-control points to assist in identifying the rightful holders of MRTDs. Data privacy concerns should be taken into account in implementing biometric identification systems.

## 4.11 Baggage handling automation

### Policy

The licence-plate concept should be normalized by airlines, airports and handling agents.



### Comments

The licence plate, linking the Baggage Source Message (BSM) to the baggage handling system, includes a coded baggage-tag (barcode and/or RFID) with a unique number, which can be read automatically and transmitted electronically by means of standardized messages between airlines, airports and handling agents. It enables these parties to provide higher quality baggage sorting and handling services. Passenger–baggage reconciliation applications (reference ICAO Annex 17) can also use the same data elements.

This concept is being put into practice by airlines, airports and handling agents, with major consequences for investment by airports in baggage systems. It is essential that any changes in the concept and definition of the licence plate are compatible with equipment at airports, so that airport investment is not wasted.

Airport operators should improve the quality and efficiency of baggage processing to bring considerable benefits for passengers, airlines and airports. The concept should be adopted by as many airlines, airports and handling agents as possible within the shortest possible time-scale.

### 4.12 Airport-airline data processing and Electronic Data Interchange (EDI)



#### **Policy**

All systems which use aircraft movement information, as well as security systems, should obtain the same information from common, verifiable data sources, obtaining real-time updates as changes occur.

#### **Comments**

In order to maximize the benefit of new technology, the airport community has a need to share certain data relating to flights, including flight schedules and updates, airport facility allocation (such as aircraft stands, gates, check-in desks and baggage belts), including real-time updates, aircraft details, actual times, delays and aircraft load data. Most such exchanges are currently implemented by technically obsolete means. In order to ensure optimal airport resource allocation, cover all security requirements in and around the airport environment, ensure orderly airport passenger flows and customer service, it is essential to establish safe and reliable information exchange between the partners.

To meet the ever-growing requirements for on-time, real-time information, it is important that airport operators take a leading role and guide concentrated efforts to ensure the maximum level of integration between all informational and operational systems, ensuring data integrity and delivery within the airport environment. In this respect, Airport Operational Data Bases (AODBs) provide a powerful and practical solution for the centralization of airport information and should be considered as a single repository for all aircraft movement information- both planned and real-time.

A standard format for such messages exists, complying as far as possible with UN/EDIFACT definitions. Other standards are also being introduced, such as XML and other web-based techniques (Airport Community Recommended Information Services—ACRIS).

Aviation Information Data Exchange (AIDX) Interface Recommended Practice (ACI RP 501A09) developed in conjunction with IATA and A4A describes the interface specifications and standards by which airlines,

airports and other participants can exchange flight-related information within or between their systems, using defined XML schemas. It ensures that the data receiver obtains the correct flight information in a timely and reliable manner.

(More information can be found on [www.cupps.aero](http://www.cupps.aero) and [www.aci.aero](http://www.aci.aero))

## 4.13 Self-service check-in kiosk and bag drop

### Policy

ACI recommends a common-use approach in developing and implementing self-service check-in and bag-drop infrastructure wherever possible and justifiable.



### Comments

Airport operators should avoid proliferation of airline-dedicated self-service kiosks and bag drops to reduce floor space requirements. To make optimum use of available floor space and kiosk capacity, and to offer passengers greater ease of use and airlines an integrated self-service environment, a common-use approach is essential in developing and implementing self-service check-in and bag-drop infrastructure.

Airport operators should promote and recommend that airlines develop and implement off-site check-in solutions for their customers. This type of implementation should allow airport operators to save floor space and optimize passenger processing.

Nevertheless, airlines are increasingly demanding the installation of self-service kiosks and bag drops at airports. Self-service check-in kiosks and bag drops can reduce the time required to process passengers, increase passenger choice, and assist airlines and airport operators in dealing with increasing passenger volumes. The implementation of self-service check-in kiosks and bag drops allows airports and airlines to increase their check-in capacity without investing in new facilities.

It is therefore recommended that a common-use policy is adopted by the airport community when a self-service check-in and bag-drop infrastructure is implemented with CUSS, web check-in and Airport Community Recommended Information Services (ACRIS) Web Services.

ACI recommends that suppliers of CUSS kiosks should design and certify their products according to CUSS technical standards maintained by IATA on behalf of the industry. This will ensure both interoperability and a competitive market for the procurement of CUSS kiosks, with a choice of suppliers.

### 4.14 Surveillance and access control



#### **Policy**

Airports should give careful consideration to the security requirements when planning and implementing new facilities or enhancements to existing facilities. Where appropriate, airports should use technology to optimize the effectiveness of security measures.

#### **Comments**

Airport operators should take a leading role in the implementation of automated security systems, in close collaboration with the entities responsible for airport security. The implementation of closed-circuit television (CCTV) cameras, access control, fire detection and building management systems in particular, must take into account security requirements and any infrastructure modifications which are being planned or executed so as to optimize airport security.

In addition, planning should take into consideration the interactivity and integration of security and other airport systems and how the different security systems complement each other, in order to provide a maximum level of security. As an example, baggage screening technology can be complemented by CCTV technology to provide a process that covers security requirements for both content-screening and handling of baggage in the airport environment. Close coordination between IT and physical security is



necessary. The integration of different security systems gives the security authorities a powerful tool for monitoring the airport environment centrally, capturing events, setting thresholds to highlight contingency situations (alarms) and providing centralized recording of all events according to criteria pre-defined by the security authorities.

Wherever possible, the implementation of these systems should be centrally coordinated and managed to maximize economies of scale, ensure adhesion to airport and/or government-defined requirements and policies, as well as to ensure a uniform level of service.

Even if the airport operator is not the provider or is not involved in the coordination or implementation of the systems, its role should take into account complementary needs such as flight and resource allocation information, as well as the communications infrastructure which may be required.

## 4.15 Airport web sites

### Policy

Airports should harness the power of the Internet and use airport web sites as a means to communicate and interact with the traveling public



### Comments

Airport web sites provide an attractive and practical solution to the diffusion of airport information and various transactional activities. The natural attraction of flight information generates a high level of visits by local and international users alike.

Airport operators should consider web site content in such a manner that the airport environment is adequately represented, working closely with all airport partners to ensure consistent, up-to-date and compatible content for informational as well as commercial purposes, taking into account both local and international site visitors.

As for other airport-specific systems, the airport operator should take a leading role or direct responsibility for the definition, development and management of the airport web site, applying technological standards and ensuring the highest level of security.

Airport operators should consider a responsive-design approach to best accommodate web site accessibility from smartphones, tablets and other such devices.

### 4.16 E-business



#### **Policy**

Airport operators should recognize the significance of electronic or e-business, which encompasses all forms of business activity which can be facilitated by electronic information technology. It includes electronic commerce (e-commerce) and collaborative commerce (c-commerce).

#### **Comments**

E-business is reshaping the economy and changing the very notion of business itself. Airport operators should recognize and promote the transformational power of e-business and accelerate adoption of e-business principles. E-business encompasses all forms of business activity which can be facilitated by electronic information technologies, including marketing, supply chain management, research, product positioning and online customer support.

E-commerce is a sub-set of e-business, using electronic information technologies to conduct business transactions. C-commerce is another sub-set of e-business, which can enhance the productivity of teams using web-based document management, workflow and project productivity tools.

Many airports have public Internet sites, but most are first-generation sites. They are not e-commerce-enabled, and convey simple one-way communications from the airport to the general public. By gaining transactional capability, a website can provide sufficient income to become a profit centre rather than a cost centre. It can also provide responses to queries from airport customers and stakeholders. Additionally, many airports have an internal intranet, a closed site with access given only to airport employees, used to improve internal collaboration, including management of important documents and critical workflow. Airports also use extranets, to provide an e-commerce work space for airport trading partners. The synthesis of Internet, intranet and extranet is sometimes known as an enterprise portal.

### **Business to Consumer (B2C)**

Airports are not only using the e-business model to improve transactional efficiencies, but also to enhance and/or exploit new business opportunities. Examples include offering travel services, currency exchange, retail shopping, car parking and other premier services. Airports should allocate resources to facilitating e-business development, and will benefit by better protecting existing revenues, and by tapping into new income streams.

### **Business to Business (B2B)**

Some major airports are embracing new B2B models. Airports now can move core commercial transactions online, to streamline procurement and selling processes. Airports can develop their own applications or capitalize on efficient, collaborative e-business hubs, which organize complex business processes between multiple internal and external participants into a virtual commerce community or marketplace.

Business process owners should play a key role in the development of an airport's e-business strategy and the management of technology. The business units of the airport, rather than IT professionals, should manage the content of the web site and exercise dynamic control over the information included.

### 4.17 Aviation Community Recommended Information Services (ACRIS)



#### Policy

It is recommended that, when an airport, airline or associated service provider plans to exchange information between two or more IT solutions, ACRIS Web Services should be applied.

#### Comments

ACI ACRIS is an initiative from the ACI World Airport IT Standing Committee (WAITSC). To establish this, the ACI WAITSC founded a Working Group in 2009.

The vision behind ACI ACRIS is “the consistent adoption of Service Oriented Architecture (SOA) principles across the world’s airport community in a coordinated effort”.

The mission of the ACI ACRIS WG is “to deliver recommendations, requirements and technical specifications that enable airports, airlines, partners and suppliers to exchange and process data in a standardized and service oriented way.”

The main objectives for the ACI ACRIS WG are:

- To define service descriptions for usage scenarios such as Passenger Status; Business to Business (B2B) Airport Status; Airport Collaborative Decision Making (A-CDM); Common-Use Bag Drop.
- To provide supporting documentation regarding
  - IT Security;
  - Design, Installation and Operation guidelines;
  - Semantic model for the aviation–airport domain; and
- To complement and use existing IT and process standards.

## 4.18 Airport digital transformation

### Policy

It is recommended that, airports should be prepared to adopt digital transformation



### Comments

Digital transformation is not only about technology; it is about business transformation in a digital world.

Digital transformation is the implementation of new technologies and the integration with existing technologies, processes and services to deliver a better experience to passengers and customers.

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# 5

## Airport planning, design, operation and safety

This chapter outlines ACI policies related to Airport planning, design, operation and safety. Safety is ACI's top priority.

## 5.1 Aerodrome Regulation

### **Policy**

Safety regulation should be evidence-based, using data that reflects the current performance of aircraft. Where regulation is determined to be required, ACI supports the development of performance-based regulation and believes that regulations should not be written in an excessively prescriptive manner. Airport operators should have the flexibility to mitigate risk in different ways, applying a safety assessment process consistent with SMS practices.



## 5.2 Certification of aerodromes

### **Policy**

ACI supports the principles for certification of aerodromes put forward by ICAO in Annex 14 and Procedures for Air Navigation Services—Aerodromes (PANS—Aerodromes) Doc. 9981, which require aerodromes used for international operations to be certified for safety purposes.



## 5.3 Safety Management Systems (SMS)



### Policy

ACI supports the ICAO Standard which requires States to ensure that the operators of all aerodromes used for international operations implement an SMS, with the goal of continuously improving their safety performance. Airport operators are required to establish an SMS, including an audit process, covering all safety-critical operations under its control or oversight. ACI supports the principle of a “just culture” to encourage reporting.

### Comments

Sources of information to assist with the introduction of SMS include ICAO Annex 19, the ICAO Safety Management Manual and the ACI SMS Handbook as well as national regulations where they are available. In addition, the ACI SMS handbook is specifically adapted to the aerodrome-operator domain, describing the components of an airport SMS and offering guidance in the planning, implementation, and operation of an SMS, and detailed information on how to carry out the necessary SMS processes.

## 5.4 Safety buffers used in Aerodrome Design Specifications



### Policy

ACI supports the reduction of safety buffers in ICAO Annex 14, where they can be shown to be in excess of safety requirements. Design standards should be data-driven, and based on hazard analysis that takes into account the probability and severity of all foreseeable hazards.

### Comments

Reduction of buffers should maximize opportunities for space-constrained airports to accommodate larger



aircraft; minimize the need for operational restrictions; and reduce the cost of construction of new, and expansion of existing, airports e.g. reduced taxiway separations applicable from November 2016 and reduced runway and taxiway dimensions for applicability in 2018. As in ACI General Assembly resolution no. 6 of 2015, the basis of such efforts will be the study of relevant safety data, thereby aiming to obtain consensus across the industry and among regulators to amend Annex 14. The focus should be on managing risk to As Low As Reasonably Practicable (ALARP) to prevent accidents, fatalities, injuries or significant damage.

The definition of ICAO aerodrome reference code letters (based on wingspan and outer main gear span) should only be changed in exceptional situations, based on a regulatory impact assessment, because a change may result in aerodromes designed to a code-letter specification becoming non-compliant with the same code.

### **Runways**

The runway width recommended by ICAO for Aerodrome Reference Code Letter E is 45 metres, and for Code Letter F is 60 metres. ACI believes that existing 45-metre runways may also safely handle Code F operations, provided that adequate shoulder width and aircraft guidance systems are provided. For Code Letter F operations at existing airports, an inner and outer runway shoulder may be provided, adding up to a total paved width of 75 metres. The function of the inner shoulder (extending from 45 to 60 metres' width) is to provide sufficient strength for the occasional passage of an aircraft, while that of the outer shoulder is limited to avoiding ingestion damage to outer engines, or erosion damage to the shoulder from jet blast.

### **Taxiways**

The taxiway width recommended by ICAO for Aerodrome Reference Code Letter E is 23 metres, and Code Letter F is 25 metres. ACI believes that existing 23-metre taxiways may also safely handle Code F operations, on the condition that adequate aircraft guidance systems are provided.

The width of a taxiway bridge should not be less than that of the width of the pavement plus shoulder (exclusive of shoulder provided for FOD protection). The width of a taxiway bridge should if possible extend to the strip width of the connecting taxiway. Jet-blast protection and other forms of shielding (e.g., for security purposes) should be considered, based on the use and service characteristics of the area under the bridge. Attention should be paid to the possible role of the bridge regarding access by rescue and fire-fighting vehicles, and the width required for potential deployment of emergency chutes on the bridge.

## 5.5 Consultation with aircraft manufacturers on the accommodation of new aircraft types

### Policy

ACI believes that aircraft manufacturers should consult with ACI and airport operators on their plans for new aircraft designs, giving details of the characteristics of the new aircraft at the earliest stage possible. Manufacturers and airlines should take account of dimensions and characteristics of proposed new aircraft as they may be critical for airports, including length, fin height, wheelbase, outer main gear wheel span, outer engine span, jet blast, weight, Aircraft Classification Number (ACN), seating capacity and ground power and handling requirements.



ACI considers that any New Large Aircraft (NLA) should not be planned to exceed Code F wingspan (80 meters) or a length of 80 meters, since larger wingspans and lengths may prove prohibitively expensive and difficult to integrate into existing airports.

Aircraft manufacturers should also design all future aircraft types and derivatives to avoid greater stress to pavements than current aircraft create.

In accordance with the ICAO principle that “users shall ultimately bear their full and fair share of the cost of providing the airport” (see ICAO Doc. 9082), the cost of modifications to airports to accommodate new aircraft types should be recovered from airport users (see also Economics chapter).

### Comments

Accommodation of new aircraft types may be made under aircraft type-specific approval, as described in chapter 4 of the ICAO Procedures for Air Navigation Services—Aerodromes, whereby the characteristics of the critical aircraft for the airport, together with standard safety buffers, are used to design the airfield layout, possibly using dedicated taxi routes for the critical aircraft.

## 5.6 Airport and airspace capacity

### Policy

ACI believes that technical and operational means should be developed to improve airport and airspace capacity at existing facilities, in addition to the building of new airport capacity where economically justifiable.

ACI supports closer cooperation with Air Navigation Service Providers (ANSPs) and governmental agencies in control of airspace, which should improve airspace capacity and quality of service by fully exploiting the capability of aircraft systems. Airspace capacity should keep pace with airport capacity.

ACI supports the ICAO concept of Aviation System Block Upgrades described in the ICAO Global Air Navigation Plan, and particularly Performance Improvement Area 1: Airport Operations, which includes:

- ACDM: Improved Airport Operations through Airport CDM;
- APTA: Optimization of Approach Procedures including vertical guidance;
- WAKE: Increased Runway Throughput through Optimized Wake Turbulence Separation;
- RSEQ: Improved Traffic Flow through Sequencing (AMAN/DMAN); and
- SURF: Safety and Efficiency of Surface Operations (A-SMGCS).



### Comments

Within Performance Improvement Area 1, ACDM is the component over which airport operators are likely to have the most control (see next policy on A-CDM). However, the other components are also of great importance to maximize efficiency and throughput of the system, and airport operators can influence them through discussion with their ANSP.

As regards WAKE, ACI supports efforts to reduce aircraft separations on approach and departure, while maintaining safety. Runway occupancy times should be minimized by optimizing runway and taxiway infrastructure, such as determining the optimal location of rapid exit and access taxiways, and their lighting and marking.

As regards RSEQ, ACI supports the use of Arrival Managers (AMAN) and Departure Managers (DMAN), which are tools to manage arrivals and departures in order to maximize runway capacity. AMAN/DMAN are also essential for future benefits in terms of efficiency, environment and safety aspects. Time-based metering may be adopted to sequence departing and arriving flights efficiently regardless of wind conditions.

As regards SURF, ACI supports the development and implementation of Advanced Surface Movement Guidance and Control Systems (A-SMGCS) to bring airport capacity during Instrument Meteorological Conditions as close as possible to the capacity achieved during Visual Meteorological Conditions, without prejudice to safety standards.

ACI supports development of better models, tools and procedures, and considers that a useful measure of the performance of airports or airspace management can be derived from a careful assessment of delay information.

### 5.7 Airport Collaborative Decision Making (A-CDM)



#### **Policy**

ACI supports the implementation of A-CDM and further evolutions that incorporate passenger, baggage and cargo processes. The benefits accruing from implementation of A-CDM will vary according to the type and intensity of operation.

**Comments**

A-CDM is easiest to implement at airports that have an effective Airport Operational Data Base (AODB) giving a common view of flight data, and it is desirable to have an Airport Operational Control Centre to facilitate stakeholders working together. Target off-block time must be updated during the turnaround and ground handling process. It is desirable to include information from passenger, baggage and cargo processes, including any delays at security, immigration and customs which may affect passenger flow.

## 5.8 Performance-Based Navigation (PBN) and Navigation Aids

**Policy**

ACI supports ICAO's Performance Based Navigation (PBN) concept, and the ICAO resolution on state PBN implementation plans. Airport operators must be involved in the development of any new or modified Standard Instrument Departures (SIDs) and Standard Terminal Arrival Routes (STARs), and local communities should be consulted on any such proposal.

**Comments**

Aircraft Operators, ANSPs and airport operators should collaborate on the design of such new routes and procedures. ACI is working with ICAO, IATA, CANSO and other organizations to promote the introduction and use of PBN approaches and departures. The introduction of a Ground-Based Augmentation System (GBAS) at the airport may assist in the implementation of PBN.

## 5.9 Drones and airports



### Policy

ACI supports the development of national civil aviation regulations for the operation of drones that will ensure their safe and secure use for the civil aviation community, and society as a whole, as well as the control of the risks presented by uncooperative drones. ICAO should promote international consistency of regulations for drones.

### Comments

ACI is working with international organizations to coordinate policy and alert all stakeholders to the safety and security risks of operating drones in the vicinity of airports.

At airports where the airport operator itself desires to use drones to assist airport operations, such as for inspections, ACI calls for the introduction of suitable regulations to permit such use. ACI encourages the development of cost effective drone detection, alerting and locating technology that will reduce the risk of any safety or security hazard.

## 5.10 Obstacle Limitation Surfaces, and effect on aircraft operations of real-estate development



### Policy

Obstacle Limitation Surfaces (OLS) should be protected by regulation and enforcement action. Temporary penetration of the OLS such as by cranes during development may be permitted by the airport operator, subject to a safety case.

All proposed new buildings, structures and changes of landscaping in the vicinity of aerodromes should be evaluated for their effect on the safety and efficiency of aircraft operations including, but not limited to, aerodynamic, optical, electromagnetic, and obstruction effects.

**Comments**

Airport operators should be consulted on all development planning applications, both inside and outside the airport boundary, which have the potential to conflict with the airport's OLS. This evaluation should be carried out by the airport operator together with the air navigation service provider, at the expense of the developer. Instrument Landing System (ILS) and radar reflection problems should also be evaluated.

## 5.11 Runway end safety areas and arresting systems

**Policy**

ACI endorses the Standard in ICAO Annex 14 that a runway end safety area (RESA) must extend 90 metres beyond the end of a runway strip (for code number 3 or 4 runways), which corresponds to 150 metres beyond a runway end or stopway.



Where it is not possible to comply with the ICAO standard of 90 metres, or compliance is achieved but a particular risk exists, alternative solutions may include providing an arresting system or other equivalent mitigating measures.

**Comments**

A focus on stabilized approaches has been demonstrated to reduce the likelihood of runway excursions, therefore ACI supports following guidance on stabilized approaches available from various organizations such as CANSO, FSF and IATA.

## 5.12 Runway Safety Teams



### Policy

ACI supports the establishment of a Runway Safety Team (RST) at every airport, which should be established, coordinated and led by the airport operator.

### Comments

Runway safety, especially the prevention of runway incursions and runway excursions, as well as prevention of Foreign Object Debris (FOD) and wildlife hazards is a key priority for airport operators, aircraft operators, and air navigation service providers.

For further information see the ACI Runway Safety Handbook and the ICAO RST Manual.

## 5.13 Contaminated runways - Friction measurement and reporting



### Policy

The normal coefficient of friction of a runway surface must be measured and maintained above the minimum friction level determined by the State.

When a runway is contaminated, ACI supports the use of the international standard method of friction measurement and reporting, the ICAO Global Reporting Format, adopted in 2016 for applicability by 2020.



## 5.14 Runway de-icing products

### Policy

ACI supports the use of pavement de-icing products that respect safety and environmental standards, while minimizing any effect on aircraft systems such as corrosion and carbon-brake oxidation. The minimum quantity necessary to ensure safety should be used.



### Comments

For further information see the ACI briefing note on Pavement De-icing Products (PDP) and Carbon-Brake Catalytic Oxidation (CBCO).

## 5.15 Runway inspections

### Policy

Airport operators should comply with ICAO Annex 14 standards and recommended practices for movement area inspections.



### Comments

ACI also supports the statement in ICAO PANS—Aerodromes part 2 (to be published) that the frequency and detail of aerodrome inspections should be commensurate with the level of risk identified in the aerodrome SMS, the volume of traffic and the scope of the inspection.

## 5.16 Control of Foreign Object Debris (FOD)



### Policy

Airport operators should ensure that active measures are taken to keep airside areas clear of loose objects and debris in order to protect aircraft against damage, and in particular the risks of ingestion of debris by aircraft engines, and damage to aircraft tires.

### Comments

ACI recommends that regular consultation take place with the Airside Safety Committee to obtain widespread support for FOD prevention measures and that a written FOD Management Programme be established setting out the practices and procedures required to prevent FOD. It is recommended to collect and measure the amount of FOD found on the airside at regular intervals, determine its origin, and take appropriate improvement measures. Records should be kept of all incidents where damage has occurred due to FOD and the follow-up measures taken by all parties concerned.

## 5.17 Wildlife management at airports—operational aspects



### Policy

Airports should have a Wildlife Hazard Management Plan that is based on a wildlife risk assessment. The plan should include reference to the resources and the training required to meet the plan objectives (see ACI Wildlife Hazard Management Handbook).

### Comments

Some elements of wildlife hazard to the safety of aviation will always remain, despite dissuasive environmental measures - see chapter on *Airports and the environment*. Airport operators therefore need to take operational steps to manage these hazards in a humane and responsible manner.

## 5.18 Apron safety

### Policy

Apron areas must be designed and managed to safely accommodate passenger, personnel and aircraft movements, as well as demanding and complex ground-handling activities, under time and space constraints. Apron planning and design, integrating these constraints and operational requirements, is critical.



ACI recommends that airport operators establish an Apron Safety Committee to coordinate between the various stakeholders involved in apron safety.

### Comments

For further policy recommendations, please refer to the ACI Apron Safety Handbook.

## 5.19 Airside vehicle and driver permits



### Policy

Airport operators should establish an airside vehicle and driver permit system governing all vehicles and mobile-equipment operations on the airside. In addition, airport operators should establish a programme to ensure that everyone working on the airside receives appropriate safety and security training, which highlights the hazards and risks associated with working airside.

### Comments

Airport operators should establish a system for monitoring and enforcing airside driving regulations. They should encourage voluntary, non-punitive reporting, reserving penalties for more serious, deliberate or repeated infringements.

All workers who are required to operate vehicles or equipment airside should be trained and issued with an Airside Driving Permit (ADP) to demonstrate the necessary level of competence. In addition, drivers required to operate on the manoeuvring area should undertake specific training, including radio telecommunication procedures, and demonstrate their competence. The airport operator may delegate training and testing of drivers on the aprons to other parties, including airlines and handling agents, subject to standards determined by the airport operator (including audits of third-party programs) and subject to the airport operator remaining as the issuer of all ADPs.

All vehicles used on the airside should display an Airside Vehicle Permit (AVP) issued by the airport operator. The airport operator should ensure that vehicles are safe for intended use and regularly maintained, through an oversight process.

## 5.20 Ground handling

### Policy

Airport operators should actively manage all organizations operating airside through contracts, licences or concession agreements, as appropriate and in accordance with the airport operator's business model. Agreements should detail and govern the relationship between the airport operator and the service provider and, at a minimum, cover aspects such as scope of services provided, safety management, security, environmental requirements, equipment requirements, insurance and liability, performance standards for safety and service delivery, adherence to local rules, regulations and permit requirements, and cost recovery.

Ground-handling service providers operating at an airport should develop and maintain a Safety Management System (SMS) that is commensurate to their operations on the airport and consistent with the airport operator's SMS. In addition, the airport operator's SMS should monitor and provide safety oversight of activities and services conducted as defined in the ground-handling licence provided to the ground-handling service provider.



### Comments

The ACI Ground Handling Policy Paper dated 2016 contains ACI's general policy, and the Apron Safety Handbook contains further information on ground handling issues. For additional policy related to facilitation and competition in ground handling please refer to section 3.20.

## 5.21 Disabled aircraft removal



### Policy

The safe and timely removal of any disabled aircraft and returning the movement area speedily to fully operational status, are vital especially at a single-runway airport. The airport operator should require every aircraft operator to have a plan for removal of disabled aircraft, and should establish a reserve plan for the removal of an aircraft, disabled on or adjacent to the movement area, designating a coordinator to implement the plan. The plan should identify key parties, their responsibilities and the lines of communication. In addition, the airport operator should request a copy of the disabled aircraft removal plan of each aircraft operator prior to the latter commencing regular operations at the airport. The airport operator should maintain and constantly update its database of relevant contacts in aircraft operators' operations centres.

### Comments

The ICAO Airport Services Manual, Chapter 5, provides information on the removal of a disabled aircraft.

## 5.22 Dangerous goods

### Policy

Aerodrome emergency response plans should contain appropriate contingency measures for handling incidents involving dangerous goods, including contact details within airlines, in case of incidents or accidents. Airports should liaise with airlines and handlers to ensure that they are providing adequate facilities and training to deal with the spillage of dangerous substances. Procedures should be developed for dealing with situations in which the presence of dangerous goods is detected by security staff.



### Comments

The transportation of properly documented and packed consignments of dangerous goods is regulated by the ICAO Technical Instructions on the Carriage of Dangerous Goods by Air (Doc. 9284).

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# 6

## Environment



This chapter outlines the elements and aspects of environmental stewardship. It is structured in three main sections: environmental management systems, environmental aspects and support issues.

For aviation as an industry, safety and security remain paramount. Avoiding, minimizing and mitigating environmental impacts are increasingly being recognized as equally crucial and a fundamental pillar of the industry.

While an airport operator may not have the authority to regulate all entities at an airport, it may nevertheless work to guide and influence other stakeholders and authorities.

ICAO has principles that environmental mitigation measures should be technically feasible, economically reasonable and environmentally beneficial, while taking interdependencies into account. This can guide the approach to defining, assessing and implementing measures.

## 6.1 Environmental Management Systems (EMS)

### Policy

Airports should adopt a systematic approach to environmental management by means of an EMS. Where appropriate, a best practice is for airports to seek wider recognition by certification of their EMS, individual infrastructure or accreditation of specific environmental programmes.



### Comments

Systematic environmental management is key to understanding and managing adverse environmental impacts from the development and operation of airports, and for ensuring support from the top to bottom of the airport organizational structure.

A range of standards and recognition frameworks are in place to support environmental management. This includes ISO 14001 (Environmental Management System) or EMAS (Environmental Management Audit Scheme) and others. More specific frameworks include ISO 50001 (Energy Management) or building performance certifications such as LEED, BREEAM and DGNB.

In the area of carbon management, Airport Carbon Accreditation allows for the recognition of the performance of the environmental management systems.

## Environmental aspects

### 6.2 Noise



#### **Policy**

Airports should strive to minimize or mitigate the adverse effects of aircraft noise on communities.

#### **Comments**

Aircraft noise near most airports is the environmental issue with the greatest impact on local communities and the item most likely to generate public opposition to the operation and development of an airport.

The response of a community to aircraft noise is complicated, as it is not always solely related to physical noise levels. Other factors such as community perception, attitude and expectations can influence how people react to noise and aviation activities. Communications and community engagement are particularly important for an airport managing its noise impacts.

Desirable outcomes in aircraft noise mitigation can only be made with the close collaboration and cooperation of the airport, the Air Navigation Service Provider (ANSP) and the airlines.

ICAO provides some guidance in Doc. 9829: Guidance on the Balanced Approach to Aircraft Noise Management. There are a wide range of national, regional and local policies, frameworks and regulations relating to aircraft noise in the vicinity of airports.

### 6.3 Local Air Quality (LAQ)

#### Policy

Airports should assess and understand emissions from all airport-related sources, their contribution to the local air quality and their effect on compliance with local air quality regulations.

Airports should take the lead in working with stakeholders to adopt measures to reduce emissions in all areas—aircraft, ground support, airport infrastructure and landside access traffic.



#### Comments

The development and operation of an airport cause gaseous and particulate emissions from different sources including aircraft, ground support equipment, airport infrastructure and landside access traffic.

Emissions standards refer to the performance of individual pollution sources or vehicles, so it is the polluter who owns and uses the equipment that must comply.

LAQ refers to the resultant pollutant concentrations at any downstream location. LAQ standards or regulations are generally imposed by a regional authority to protect health and the environment.

An airport will usually be only one of a number of contributors to LAQ so an airport operator will need to understand the relative contributions of airport, airport-related and other emissions sources. An airport operator can manage and mitigate its own emissions and work with aviation partners to reduce their emissions.

For assessment and evaluation of airport local air quality issues, comprehensive guidance is available from ICAO Doc. 9889 (Airport Air Quality Manual).

### 6.4 Greenhouse gas emissions and climate change



#### **Policy**

Airports should assess, minimize and mitigate greenhouse gas emissions under their direct control, while guiding and influencing other aviation stakeholders at the airport to assess, minimize and mitigate theirs. An airport operator's ultimate goal regarding greenhouse gas management should be to achieve carbon neutrality.

#### **Comments**

Climate change is a global issue and needs global action. An airport operator may start by addressing emissions sources under its direct control (Scopes 1 and 2, according to the WRI Greenhouse Gas Protocol), and progress to providing guidance and seeking to influence other airport-related (Scope 3) emissions. Achieving carbon neutrality (Scopes 1 and 2) will require reducing emissions and possibly purchasing off-setting certificates for unavoidable, residual emissions.

The global airport industry framework for addressing greenhouse gas emissions and its management is Airport Carbon Accreditation.

## 6.5 Energy and resources

### Policy

Airports should minimize the energy demand of their infrastructure and operations, and move towards less polluting modes of energy and fuel use, including generating and using energy from renewable sources.



### Comments

Airports are entities using significant amounts of energy for developing and operating an airport. As energy is a significant cost factor, an airport operator should prioritize reducing energy and fuel consumption, using the energy more efficiently and increasing the use of renewable energy.

Guidance and instruments are provided by building certification schemes (often comprising more than just energy efficiency) and the ISO Norm 50001 (Energy Management System).

## 6.6 Solid waste

### Policy

Airports should promote the culture of avoiding solid waste generation and, where possible, extracting value from remaining waste with the ultimate goal of sending zero waste to landfills.



### Comments

The waste hierarchy is to avoid, reduce, reuse, recycle waste, with the goal of eliminating the waste going to landfills. Value may be recovered, for example, by recycling valuable materials, or by converting waste to energy, biofuels or compost.

## 6.7 Water



### Policy

Airports should work to minimize the use of potable water, to process waste water (de-icing and sewage) in the most efficient way possible, reuse of treated water and to manage the quantity and quality of storm water run-off.

### Comments

Potable water is a precious resource, increasingly scarce in many regions.

Sewage treatment can be conducted on site or by local municipal facilities. Treated water could be directed to non-potable water uses.

Certain types of waste water are unique to airports such as aircraft toilet sewage, aircraft maintenance waste water and aircraft and pavement de-icing products.

Storm water management should avoid the pollution or contamination of surface and underground water bodies. In most jurisdictions, the quality and quantity of water flowing from an airport site (via streams, pipes or seepage) are subject to strict regulation and monitoring. This includes controlling flow to receiving waters and avoiding excessive impermeable surfaces and run-off contamination.

## 6.8 Land, soil, habitat and biodiversity

### Policy

Airports should preserve and enhance the land, soil, water bodies and habitat on and near their properties to preserve the ecology and biodiversity, but without compromising the safety of aircraft operations.



### Comments

This management will require finding a balance between sometimes conflicting requirements. Natural and endemic wildlife should be preserved and enhanced while avoiding and managing wildlife hazards to aviation. Practices should prevent erosion and suppress dust while minimizing the need for irrigation. Operations must avoid soil contamination and contaminated sites should be cleaned.

## 6.9 Spills, releases and other incidents

### Policy

Airports should evaluate environmental risks from their operation, and adopt prevention and intervention mechanisms to avoid, reduce or mitigate environmental damage to water, soil and air caused by incidents.



### Comments

Based on thorough risk assessments, priority should be put on proactive prevention through appropriate facility design and operational practices, rather than reactive cleaning-up after an event.

Responses are usually provided by fire services or technical units to contain emissions or effluents and reduce the chance of secondary incidents (such as a fire starting from a fuel spill).

## Environmental support issues

### 6.10 Monitoring and reporting



#### **Policy**

Airports should monitor their ecological footprint and its inputs, outputs and impacts, and provide the information for planning and managing purposes, as well as a basis for comprehensive reporting.

#### **Comments**

Measuring and monitoring is essential to be able to plan, control and assess environmental activities and measures. Under a regulated regime, compliance monitoring and reporting of emissions, pollutant concentrations, noise and the like, will be required. For voluntary actions, reporting would be tailored for stakeholders and the wider public using the most appropriate range of available communication channels.

Comprehensive reporting guidance is available from ISO 14001 and 50001 and other channels such as annual reports and web sites.



## 6.11 Training and information sharing

### Policy

ACI and airports should improve environmental awareness, training and sharing of information within the airport and among airports worldwide.



### Comments

Staff training and promoting awareness are key in multiplying efforts to reduce adverse environmental impacts from airports and aviation.

Sharing of information among airports worldwide helps dissemination of best practices to better understand the scope and variety of environmental issues and thus provide an additional platform for ecological innovation.

## 6.12 Stakeholder engagement

### Policy

ACI and airports should promote understanding, cooperation and collaboration with aviation stakeholders, especially the community at large.



### Comments

Communication, along with stakeholder and community engagement, is key to linking sustainability efforts with community acceptance and permission to operate and to grow.

## Security at airports

*(cf. ICAO Annex 17—Security, ICAO Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference, Doc. 8973)*

## 7.1 General

### 7.1.1 Policy

ACI considers aviation security a top priority for its airport members, along with the stakeholders involved as well as the public both travelling and visiting airports.

ACI strongly condemns all acts of unlawful interference with civil aviation wherever they may occur, and by whomever they may be perpetrated, particularly where they result in the loss of life, injury, or the abduction of passengers, crew members, ground personnel and others.



ACI calls on States to intensify their efforts to mitigate such unlawful acts by complying fully with the specifications of Annex 17 to the Chicago Convention.

### Comments

Where ICAO Annex 17 standards are not fully implemented, any party who becomes aware of such non-compliance should advise his own State of the shortcomings, so that appropriate steps can be taken, including additional security measures at receiving airports. Those States should also bring any shortcomings to the attention of the deficient State and ICAO.



### 7.1.2 Policy

Aviation security measures should be risk-based and outcome-focused.

#### Comments

When there has been a new type of attack or threat, a regulator should review holistically the current set of measures in place, prior to applying additional measures. Measures should be based on risk, globally, nationally and locally, and measures appropriate to the environment introduced in cooperation with industry stakeholders.

Aviation security measures may have an adverse effect and unintended consequences on system capacity, safety and facilitation. The requirements made by governments in this context should therefore realistically match the assessed risk.

Governments must also consider the implications for existing airport facilities when introducing new security measures, and work closely with airports to determine the most appropriate and practical solutions. Older terminal buildings were not designed for current levels of security, and additional security measures may be difficult and expensive to implement. Flexibility in implementation is therefore required, with a focus on security outcome rather than prescriptive process and technology requirements.

## 7.2 States' responsibility for aviation security

### 7.2.1 Policy

States have the unequivocal responsibility to protect their citizens from acts of terrorism or other acts of unlawful interference against civil aviation.

It is the responsibility of States to undertake the formal threat and risk assessment. The level of threat should be kept under review at all times.

The cost of aviation security should be borne by the State.



### Comments

ACI endorses ICAO resolutions on aviation security and will continue to cooperate to the maximum extent possible with ICAO and other international organizations in this vital area. ACI fully supports ICAO's programme of universal, mandatory security audits of States' aviation security programmes and of airport compliance with Annex 17.

The funding of aviation security is a controversial topic. While some States do contribute substantial sums towards the cost of aviation security, many do not. The user-pays principle is often put forward as a reason by such governments, but this is often shown to be inconsistent with the same government's approach to protecting other forms of public transport or the protection of public buildings and monuments.

When measures to enhance security at airports are funded through a tax or charge on the passenger, such charges must be directly related to the cost of the service provided.



### 7.2.2 Policy

ACI urges law enforcement agencies to share intelligence with each other and, when such intelligence concerns a threat to civil aviation, that the threat information be promptly shared with the airport operators concerned.

#### Comments

Procedures and points of contact should be established for the regular sharing of information with intelligence agencies, civil aviation authorities and law enforcement agencies.



### 7.2.3 Policy

When international or national regulations call for more stringent security at airports, such measures should be developed in full consultation and coordination with airport operators, airlines and other segments of the industry. Airlines and airport operators should provide the supporting facilities required by the security services.

#### Comments

A number of States have instituted security measures beyond the Standards and Recommended Practices contained in ICAO Annex 17. Some of the measures affect existing bilateral aviation agreements and cause legal difficulties because of their extra-territorial applicability. In advance of enacting such measures, prior consultation by governments with airport and airline operators can alert governments to some of the complications arising from extra-territorial measures.

It is crucially important for the level of threat to be identified and met with appropriate measures. It is equally important for this assessment to be monitored on a continuing basis to ensure that measures

do not remain in force unnecessarily. This requires regular consultation among all parties involved in international civil aviation, including airport operators, the airlines and the appropriate State agencies.

Lack of constant review of the level of threat will prevent necessary adjustments to security measures and could lead to an over-extension of resources, thus diminishing their effectiveness. This could in turn destroy the long-term economic sustainability of civil aviation, damaging the service offered to the public whom the special procedures are intended to protect.

### 7.3 Airport security programmes

#### Policy

A documented airport security programme should be established at each airport based on national civil aviation security programme requirements.

An authority at each airport needs to be designated with responsibility for coordinating airport security measures.

An airport security committee should be established to advise on the development and implementation of security measures at each airport



#### Comments

Guidance on the structure and content of an airport security programme is provided in the ICAO Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference, Doc. 8973.

## 7.4 Quality control of airport security programmes



### Policy

Quality control programmes, which should include audits, tests, survey and inspections, should be carried out on a regular basis to verify compliance with regulatory requirements and performance objectives set in the airport security programme

### Comments

Persons conducting audits, tests, survey and inspections should be properly trained and have the necessary authority to carry out these activities and enforce corrective actions.

A process should be established to record and analyze the results of these quality control activities.

Deficiencies should be identified, analyzed and corrected, as part of a continual improvement process.

A Total Quality Management System or Security Management System (SeMS) should be implemented to enhance the security culture throughout the airport, and to effectively monitor and assess the effectiveness of the implementation of security measures.



## 7.5 Recruitment

### Policy

The selection of security staff should be based on systematic, objective and fair means of testing that ensure that candidates have the right aptitude for the task. Competency should be maintained and enhanced through additional in-service training and regular performance review.

Security vetting on security personnel is mandatory and regular re-vetting is recommended



## 7.6 Training

### Policy

Aviation security staff should be properly trained and supervised to ensure that they are consistently able to carry out their duties in a highly proficient manner.



### Comments

The highest priority must be given to the quality of security staff and their professional training, including regular refresher training and proficiency training on new equipment and techniques. Certification standards can be applied for certain security functions. Particular attention should be paid to commitment and motivation, bearing in mind the pressures involved in carrying out work that is often by its nature very repetitive. Even higher standards must be applied to the selection and training of those selected to fill supervisory positions, who must be capable of assuming the considerable responsibilities involved.

States, airports and their contractors should ensure that staff employed for civil aviation security duties have clearly defined job descriptions, and are trained to a level of proficiency that will enable them to perform their assigned tasks and have knowledge and understanding of the threats to civil aviation. Those responsible for training such staff should verify that the requisite standards have been attained.

Training for security staff should comprise a combination of classroom and practical instruction taking into account the latest known threats, and utilizing equipment and techniques in use at the airport where the security staff will be employed. Training should be followed by a period of on-site training.

Refresher training and recertification (where appropriate) should be provided at frequent intervals. This training should be aimed at improving techniques, knowledge and motivation.

Separate supervisory training programmes should be established. These programmes should include “supervisory and management skills”. Training personnel should be qualified instructors and certified as appropriate.

### 7.7 Preventative security measures



#### **Policy**

Measures should be established to prevent prohibited articles such as weapons, explosives or any other dangerous devices, articles or substances, the carriage and bearing of which is not authorized, and which may be used to commit an act of unlawful interference, from being introduced by any means whatsoever on board an aircraft engaged in civil aviation.

#### **Comments**

This is the objective of the preventive security measures as stipulated in ICAO Annex 17, Standard 4.1.

## 7.8 Measures relating to access control

### Policy

Security restricted areas should be established at each airport. The separation between security restricted areas and other areas should be clearly defined. The zoning of security restricted areas should be introduced to reduce unauthorized staff movement within the airport, whilst maintaining a practical and auditable system for access control.

An airport permit or identification system should be established for persons and vehicles to prevent unauthorized access. The identity of the bearer and the validity of the permit need to be verified before access is allowed.



Security vetting should be conducted by the relevant government authorities on persons other than passengers granted unescorted access to security restricted areas.

As a minimum, a proportion of airport supplies and in-flight supplies, along with persons other than passengers being granted access to security restricted areas, together with items carried, need to be screened or inspected.

### Comments

The number of zones will depend on the size and structure of the airport but zoning into many sub-areas may be counter-productive in terms of manageability. An automated system that allows access according to zones on an airport identification card may assist in ensuring that staff can only access the areas to which they are authorized.

People who are not authorized, or appear not to be authorized, to be in the area should be challenged and, if their presence cannot be satisfactorily explained, should be reported to the appropriate law enforcement authority.

Persons (such as visitors) who have not undergone security screening should be escorted at all times within the security restricted area.

Persons issued with airport permits or identification cards should be subject to periodic security vetting by the relevant government authorities. Ideally, security vetting should be continuous and ongoing in order to manage the risk of unlawful interference by authorized persons.

The issue of identity documents (IDs) should be limited to those who need to enter the security restricted area. IDs should have a specific period of validity, and the bearers should wear them visibly at all times in security restricted areas.

Screening methods for persons other than passengers may include those applicable to passengers, but alternative solutions such as random use of explosive-trace detection may provide a solution that is both more efficient and more relevant to the threat from explosives.

### 7.9 Measures relating to aircraft



#### **Policy**

Commercial air transport operators are responsible for implementing security measures to protect their aircraft and the persons and articles transported on them.

#### **Comments**

This includes the implementation of access controls to their aircraft, conducting security checks of aircraft and authorized personnel, ensuring that disembarking passengers do not leave items on board aircraft, and securing the cockpit, which are required in ICAO Annex 17.

## 7.10 Measures relating to passengers and their cabin baggage

### Policy

Passengers and their cabin baggage need to be screened prior to boarding an aircraft departing from a security restricted area.

This applies equally to transfer passengers, unless the alternative arrangements described in ICAO Annex 17, Standard 4.4.2 are implemented.



### Comments

ACI advocates innovation in security screening to enhance detection capability, increase efficiency and improve the passenger experience, all of which should consider and encompass technology as well as human factors and processes.

Measures should be implemented to protect passengers and their cabin baggage that have been screened from unauthorized interference, from the point of screening until they board their aircraft. If mixing or contact does take place with unscreened passengers, the passengers concerned and their cabin baggage need to be re-screened before boarding an aircraft.

### 7.11 Behaviour detection



#### **Policy**

Airports should consider implementing a behaviour-detection programme, or training for staff, to help identify suspicious behaviour.

Behaviour-detection techniques should not take into account race nor religion, rather behavioural indicators such as unusual behaviours, travel plans, baggage and documentation.

#### **Comments**

Aviation security measures have traditionally focused on detecting weapons and similar prohibited items, rather than on identifying persons with malicious intent that would jeopardize the safety of civil aviation. There is growing recognition of the importance of the need for security staff, law enforcement personnel and airport staff in general to be more conscious of the behaviour of persons around them. It is therefore useful to include behaviour-detection and questioning techniques in the training of security staff, as well as general knowledge about suspicious behaviours and vigilance for all airport staff.

Persons who arouse suspicion through their behaviour or after being questioned should be subjected, together with their baggage, to more detailed inspection. Reporting mechanisms should be established and suspicious behaviour should be reported to the relevant authority. Feedback should be provided to encourage reporting of suspicious behaviour.

## 7.12 Risk-based differentiation

### **Policy**

Risk assessment of passengers (based on national legislation) may be used to apply different levels of security controls to different passengers and their belongings.

Processes should be developed to facilitate the movement of passengers who, through appropriate risk assessment, are deemed to pose a low security risk, in order to focus security resources on higher risk passengers.



### 7.13 Measures relating to hold baggage

#### **Policy**

Measures should be implemented to ensure that originating hold baggage is screened prior to being loaded onto an aircraft engaged in commercial air transport operations, from a security restricted area.

Measures should be taken to ensure that all hold baggage to be carried on a commercial aircraft is protected from unauthorized interference, from the point it is screened until it is entrusted to the air carrier or its ground handling agent. If the integrity of hold baggage is jeopardized, it needs to be re-screened before being handed to the airline or its representative. Transfer hold baggage should be screened prior to being loaded onto an aircraft engaged in commercial air transport operations, unless the alternative arrangements stipulated in ICAO Annex 17, Standard 4.5.4 are implemented.



The commercial air transport operator is normally responsible for ensuring that only items of hold baggage which have been individually identified as accompanied or unaccompanied, screened to the appropriate standard, and accepted for carriage on that flight by the air carrier, are transported. All such baggage should be recorded as meeting these criteria and authorized for carriage on the flight.

#### **Comments**

Guidance is provided in the ICAO Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference, Doc. 8973.

Baggage-handling systems and make-up areas should be protected and access restricted to authorized staff, in order to prevent pilferage, interference with items of baggage and the introduction of unauthorized items of baggage. Such areas should normally form part of the security restricted area.



ICAO Annex 17, Standard 4.5.4 provides that transfer hold baggage may be exempt from screening at the transfer airport if there is a validation process and procedures are continuously implemented, in collaboration with the other contracting state where appropriate, to ensure that such hold baggage has been screened at the point of origin and subsequently protected from unauthorized interference from the originating airport to the departing aircraft at the transfer airport.

## 7.14 Measures relating to cargo, mail and other goods

### Policy

Security controls need to be applied to cargo and mail, prior to their being loaded onto aircraft engaged in commercial air transport operations, and are the responsibility of the air carrier.

In-flight supplies intended for carriage on passenger commercial flights need to be subjected to appropriate security controls and thereafter protected until loaded onto the aircraft. This responsibility should normally rest with the commercial air transport operator.



### Comments

Air carrier and other relevant stakeholders are required to have standard operating procedures addressing the security of their respective supply chain and, in so doing, incorporate the relevant requirements of the airport security programme.

### 7.15 Measures relating to special categories of passengers



#### **Policy**

Persons traveling under judicial and administrative control may present a higher risk than normal passengers. It is the responsibility of governments to ensure that procedures at the airport are agreed with the airport operators and the commercial air transport operators. Governments should also ensure that their agencies strictly implement these procedures.

#### **Comments**

Persons who are under judicial or administrative control (e.g. deportees, prisoners, etc.) present a higher risk than normal passengers. Governments need to work with airports and commercial air transport operators to establish procedures covering advance notification of travel, access arrangements to the security restricted area, additional screening requirements, guard or escort requirements and coordination. Governments should also ensure that their control authorities strictly implement these procedures.

### 7.16 Measures relating to the authorized carriage of weapons



#### **Policy**

It is the responsibility of governments to establish and enforce a policy in respect of the carriage of weapons, at the airport and on board aircraft, by law enforcement officers and other authorized persons.

**Comments**

Where the carriage of weapons is permitted, procedures need to be established to ensure that these weapons are under proper control, while the aircraft is on the ground or when such officers carrying weapons are undergoing arrival or departure processing.

## 7.17 Measures relating to disruptive persons

**Policy**

Airports should ensure that procedures are established for dealing with disruptive persons (usually requiring law enforcement), that staff are trained appropriately and that these procedures are practised.



Airport employees have an obligation to notify airline and law enforcement personnel when they observe a person who appears to be disruptive, inebriated or agitated.

### 7.18 Measures relating to Man-Portable Air Defence Systems (MANPADS)



#### **Policy**

It is the responsibility of the State to protect aircraft operating in or through airspace over the territory of that State. This includes mitigation against the risk of attack by Man-Portable Air Defence Systems (MANPADS) and Surface-to-Air Missiles (SAMs) against aircraft operating at vulnerable altitudes, particularly during the takeoff and landing phases at airports in that State.

### 7.19 Public awareness of security



#### **Policy**

The understanding and cooperation of the traveling public contributes to effective aviation security. The traveling public should be encouraged to report suspicious activity or items.

#### **Comments**

Aviation security measures may cause congestion in airport terminals and add to the possibility of flight delays. Passengers can help themselves and those of the civil aviation industry if they understand the general approach adopted by governments to prevent acts of unlawful interference. It is also of vital importance that they be made aware that they should remain vigilant so they do not become unwitting accomplices to the introduction of explosive devices onto an aircraft or into terminal facilities.

Public awareness programmes by States and the air transport industry are needed to assist passengers to comply with aviation security requirements including:

- to be familiar with items that may not be carried in baggage;
- to abide by specific requirements such as liquid, aerosol and gel restrictions;
- not to leave their baggage unattended; and
- to report suspicious behaviour.

A mechanism (such as a telephone number) should be publicized to facilitate the reporting of suspicious behaviour or items.

## 7.20 One-stop security

### Policy

ACI supports one-stop security which, by eliminating the need for redundant security checks on transfer, could speed the flow of transfer passengers and baggage to their ultimate destinations. States need to develop, either bilaterally, unilaterally, or multilaterally, the criteria for the recognition of equivalency of security measures vis-à-vis other States.



### Comments

One-stop security—the concept that a passenger and his baggage undergo only one initial security check even on a journey involving multiple airport transfers—has a number of potential benefits for airport operators.

ACI recognizes that the financial and logistical benefits of one-stop security, as well as improved customer service, multiply exponentially with each State that enters into a one-stop security agreement based on the recognition of equivalency of its measures.

In order for one-stop security to be effective, customs and immigration processes should be integrated and complementary. Either additional or automated facilities should be provided to cater for transferring passengers or provision made for customs and immigration-free transit.

One-stop security can also be applied to hold baggage alone, without the involvement of passengers in the one-stop process. A cost-benefit analysis needs to be undertaken in each case to identify the numbers of passengers and hold baggage that would benefit from the arrangement and the practicality of making infrastructure changes.

### 7.21 Innovation



#### **Policy**

States and the industry should continuously and jointly develop and adopt the better use of technologies, processes and human factors along with an appropriate regulatory framework to address new security threats to civil aviation.

#### **Comments**

States should combine resources in a cooperative manner to share information, research and development costs for explosive detection technology and other technologies to enhance current systems of screening passengers and baggage. Airports, commercial air transport operators and regulatory authorities should jointly develop measures that would improve the flow of passengers and their baggage through security checkpoints. States should formulate policy to support new technology and processes in view of airport operation and facilitation needs.

## 7.22 Contingency measures

### Policy

States should ensure that contingency and business continuity plans are developed in conjunction with airports (and other stakeholders) and resources are made available to safeguard airports and civil aviation operations.

States need to ensure that authorized and suitably trained personnel are readily available for deployment at its airports to assist in dealing with suspected, or actual, cases of unlawful interference with civil aviation.



Airports should develop their own contingency plans to dovetail with State plans. Staff need to be trained in these plans and procedures, and the effectiveness of these plans should be verified through regular tests and exercises involving all relevant stakeholders.

### Comments

Airports should implement a business continuity management approach that comprises preventive measures, contingency measures and business recovery measures. Any incident, whether security related or not, has the potential to cause major disruption to normal airport operations. Airports need to plan to mitigate and manage such disruption.

### 7.23 Landside security

#### **Policy**

Airports should agree on scope, responsibility and accountability for landside security measures with their appropriate regulatory authorities.

Effective landside security should consider infrastructure and airport design features with the goal of mitigating the threat from attack, harm to personnel or disruption of airport operations.

Airports should collaborate with appropriate authorities to agree on a definition of 'landside' which might include gathering areas inside or close to the terminal.

States should review and coordinate with airports to identify the appropriate physical and procedural measures that match their specific threat scenario.





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# 8

## Emergency medical services, hygiene and sanitation at airports

## 8.1 Emergency medical services at airports



### Policy

Emergency medical services should be provided for passengers and other persons, and arrangements should be made for supportive medical facilities, locally and regionally, in accordance with the World Health Organization's (WHO) International Health Regulations.

### Comments

As regards medical services required for major airport emergencies, ACI advocates that the Aerodrome Emergency Plan should contain details of all these arrangements, and that regular training drills be carried out with the external agencies concerned, as well as a full-scale emergency exercise at intervals not exceeding two years (see also section 5.10 of the Policy Handbook on Aerodrome Emergency Planning).

## 8.2 Hygiene and sanitation at airports



### Policy

Although airport operators in many countries are not responsible for sanitation programmes at airports, ACI recognizes the need to maintain high standards of hygiene.

### Comments

Health inspection at airports should be undertaken by the competent local health administration, in cooperation with airport operators and the airport tenants and users involved. Procedures for the procurement, preparation, handling, storage and delivery of food and water supplies intended for consumption, both at airports and on board aircraft, and for the removal and safe disposal of waste materials should not unnecessarily interfere with airport ground operations nor should they inconvenience passengers, for example by delaying their embarkation or disembarkation.

## 8.3 Public health and animal and plant quarantine measures

### Policy

Governments require adequate space and facilities to be made available at international airports for the administration of public health and animal and plant quarantine measures, in respect of aircraft, passengers, crew, baggage, cargo, mail and stores. The necessary space and facilities, as well as staffing, should be provided at government expense, not at the expense of the airport operator.



### Comments

ACI supports ICAO Recommended Practice 6.35 and 6.37 with regards to available access to appropriate facilities for administration and maintenance of public health, including human, animal and plant quarantine at international airports.

## 8.4 Communicable diseases



### Policy

As regards provision for the management of any outbreak of communicable disease in which airports are involved, ACI supports the guidelines set out by the WHO in the International Health Regulations.

### Comments

In accordance with the WHO International Health Regulation guidelines, airport operators, in communication with all other parties involved, should prepare a section of their emergency plan to cover the management of outbreaks of communicable disease involving the airport.

The ***Airport preparedness guidelines for outbreaks of communicable disease*** was issued by ACI and ICAO (revision April 2009). These guidelines outline measures to be taken by airport operators and national authorities against communicable diseases that might pose a serious risk to public health. As stated in this document, the responsibility for management of the risk of communicable diseases at airports rests primarily with the local/regional/national public health authority and the relevant airport operator. It is recommended that airports and national health authorities work together to achieve greater predictability and international coordination of preparedness measures, as the key to success in reducing the risk of spread of any communicable disease.





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