

**59<sup>TH</sup> CONFERENCE OF  
DIRECTORS GENERAL OF CIVIL AVIATION  
ASIA AND PACIFIC REGIONS**

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AGENDA ITEM 5: AVIATION SECURITY & FACILITATION

**PRIVATIZATION OF AIRPORTS IN THE PHILIPPINES AND  
THE NEED FOR GUIDANCE ON SECURITY BY DESIGN**

(Presented by The Philippines)

**SUMMARY**

Security should never be an after-thought. Most often, airports resort to retrofitting to enable the installation of facilities for security, such as access control and screening checkpoints. Also, the allocation of resources, be it material, financial, technical, or human, seems to be fixed. These are often aligned towards aspects that would generate income, such as commercial facilities and establishments within an airport.

Again, security is pushed down the list of priority areas for development.

The concept of security-by-design is aimed at mitigating security risks by reducing weaknesses or vulnerabilities and increasing resilience. Security should be integrated and incorporated as early as in the planning and design stage of any airport project, be it the development of a new airport, expansion, or rehabilitation of existing ones.

As work on promoting security culture in civil aviation progresses, the Philippines would like to strongly suggest the development of training and guidance materials for security-by-design. As this concept presents a multifaceted area, adoption, integration, and implementation would require the commitment and active participation of the entire hierarchy of a State's civil aviation organization.

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**1. INTRODUCTION**

1.1 An airport, as defined in ICAO Document 8973 — Aviation Security Manual, is any area in a Member State which is open for commercial aircraft operations.

1.2 Airports are the aptly called "gateways" to a State. Building architecturally beautiful airport facilities that showcase our respective State's destination - environmentally and culturally, the balance must be maintained - between passenger facilitation and security. Passenger experience at an airport creates and leaves a lasting impression to travelers. And as we put premium on passenger experience, it is imperative that equal value be placed for security in airport development, expansion, maintenance, and rehabilitation projects.

1.3 Security-by-design is a technique to design out vulnerabilities, design in resilience, and optimize security outcomes.

**2. DISCUSSION**

2.1 Annex 17 – *Security*, Standards and Recommended Practices (SARPs) do not prescribe security-specific measures. ICAO Member States determine how they will implement the SARPs. These decisions are made on a risk-based approach utilizing a threat and vulnerability assessment

2.2 Annex 17 SARPs relevant to Security-by-Design<sup>1</sup> Standard 3.2.4 requires: "Each Contracting State shall ensure that airport design requirements, including architectural and infrastructure-related requirements necessary for the implementation of the security measures in the national civil aviation security programme, are integrated into the design and construction of new facilities and alterations to existing facilities at airports." In addition, security-by-design are relevant to the following Standards:

<b>SARPs</b>	<b>Relevance to Security-by-Design</b>
Standard 3.2	The NCASP and supporting policy and guidance can be used to regulate and influence the adoption of security by design.
Standard 3.2.2	The airport authority is ultimately responsible for ensuring security, including security by design. The key point of contact for security at the airport is the airport manager.
Standard 2.1.3	The design of an asset can influence how efficiently and effectively additional security measures can be deployed and used. How and what additional security measures might be deployed during a period of heightened threat should be considered during the design phase so in the event this need arises and the asset can facilitate (or at least not inhibit) efficient and effective additional security measures.
Standard 4.7.4	Ensuring that facilities and location of facilities are provided at the airport and that design is appropriate for the secure storage and movement of weapons on and off aircraft
Standard 4.8.1	Because there are a few state-level compliance requirements specific to landside security, the importance of a risk-based approach to design is even more critical to ensure that security is addressed by design teams.
Standard 4.8.2	
Standard 4.8.3	
Standard 5.2	Demand for space and operations change during incident response. It is therefore important to understand how the incident response will occur.

<sup>1</sup> Security by Design in Airport trainee reference book; training delivered by ARUP, sponsored by Australian Home Affairs.

	Based on that understanding, space and assets can be designed to take account of specific needs during incident response.
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2.3 The modifications and advancements in security measures, as a result of evolving threats and changing risks, have required facilities to take up space and require additional personnel to operate these facilities in airports. Such changes impinge additional costs - capital and operating, and affect passenger facilitation. In consideration of these factors, and others, existing facilities that were not originally designed to house equipment and processes have turned to retrofitting, which sometimes, is not completely suitable to address all security risks unique to an airport or asset.

**2.4 Airport Projects in the Philippines**

2.4.1 In recent years, the Philippines saw the rise in privatization of airports through the Public-Private Partnership (PPP) Program of the Government. Airports operated and/or managed by private industries or corporations are bound by a concession agreement whereby details of the project scope and how these shall be undertaken are thoroughly defined. Such projects, involving existing airport facilities, typically follow a Rehabilitate-Operate-Expand-Transfer framework.

2.4.2 To date, there are five (5) airports operating under the PPP program, and twelve (12) in the pipeline:

(a) Operating under PPP program:

	Name of Airport
1	Godofredo P. Ramos (Boracay) Airport
2	Clark International Airport
3	Mactan-Cebu International Airport
4	Cagayan North International Airport
5	Ninoy Aquino International Airport

(b) Future PPP projects:

	Name of Airport		Name of Airport
1	Puerto Princesa International Airport	7	Bacolod-Silay Airport
2	Bohol-Panglao International Airport	8	Davao International Airport
3	Laguindingan Airport	9	Siargao Airport
4	Kalibo International Airport	10	Surigao Airport
5	Iloilo International Airport	11	Sangley Airport
6	Bicol International Airport	12	Francisco B. Reyes (Busuanga) Airport

**2.5 Issues and Concerns**

2.5.1 The Philippines National Civil Aviation Security Program 2024 Edition echoed the Annex 17 Standard for airport operators to integrate airport design requirements necessary for the implementation of security measures detailed in the airport security programs. However, the absence of national guidelines for aviation/airport security design is notable. The guidelines provided to entities are from Document 8973 — Security Manual and copies of the Philippine Civil Aviation Risk Context Statement, along with an advice to undertake a security risk assessment.

2.5.2 While there are publicly accessible (unclassified) guidance materials and references on how to address the SARPs in airport design, these may not be enough to provide guidelines to a multidisciplinary design team. An airport design team could be composed of the following specialists, which may not necessarily have an in-depth appreciation of aviation security, necessary for the incorporation of security requirements in designing a facility:

Architect	Cost consultant	Public Health Engineer	Geotechnical Engineer
Airport Planning and Security	Digital or IT, Communications, & Technology	Structural and Civil Engineers	Environmental Consultant
Transport Planning	Fire Safety	Public Health Engineer	Retail Consultant
Acoustics	Lighting	Electrical Engineer	Mechanical Engineer
Security Consultant		Human Factors Consultant	

2.5.3 There is a need to:

- a. understand the basis of a design which comprises, among other things:
  - Threat and vulnerability assessment
  - Compliance requirements
  - Good practice and future-proofing
  - Stakeholder requirements
  
- b. Understand how to take into account additional security measures for periods of
  - Heightened threat
  - Incident response
  - Business recovery

2.5.4 Examples of elements that could be incorporated into a guidance template for airport security-by-design principles is included at Annex 1 to this paper.

**3. ACTION BY THE MEETING**

3.1 The Conference is invited to note the information contained in this paper and support the development of relevant guidance material and training opportunities relating to airport security-by-design.

— END —

## Elements for Incorporation into a Template for Guidance Material for Airport Security-by-Design.

<b>Chapter Heading</b>	<b>Purpose of the Section</b>	<b>Considerations</b>
Foreword	Lend credibility to the document	Should illustrate the importance of the document. This should be signed by an individual of significance e.g. Minister, Director General
Executive Summary	Summary of Document's content	Should address the document's audience, describe its purpose, and how it is to be used
Introduction	Sets the scene for the entire document's purpose	Should address: <ul style="list-style-type: none"> <li>- Purpose of the document;</li> <li>- Identify the target audience; and</li> <li>- How the document will be used by both airport security and design communities</li> </ul>
Risk-based security	To provide a baseline understanding of what risk-based security is.	Should include the differences between compliance and risk-based security and the business benefits of risk-based security
Security-by-Design	To provide a baseline understanding of what security-by-design is. Including the design process and what is expected at each stage of the design process	Include benefits of risk-based security, the value of considering security early in the process, demands on design in the context of heightened security threat, incident response, and business recovery
Roles in security-try-design	To set out the expectations of key stakeholders in the design process e.g. airport, security consultants (in the design team), aviation security regulators, emergency services	
Risk context statement	Provide a baseline understanding of the threat and the national risk context for aviation	Subject to the complexity of the National Risk Context Statement, this may be a "translation" of the national risk context statement into a language that is more digestible for non-security practitioners
Landside Security	Provide the security design guidance for individual components of landside e.g. approach roads, deliveries, carparks, critical facilities, etc.	Include definitions and the objectives of security; and  Provide examples of the local environment where this can be applied
Terminal Security	Provide the security design guidance for individual components of the terminal e.g. forecourt, public areas, security	Include definitions and the objectives of security

Annex 1 to 59/DP/5/4

	restricted areas	
Passenger Screening Checkpoint	Provide the security design guidance for individual components of a security screening checkpoint e.g lighting acoustic, throughput, floor loading, staff well-being, passenger facilitation, queuing, contingency planning	Include definitions and the objectives of security
Boundaries	Provide the security design guidance for boundaries e.g. access control for passengers, non-passengers, vehicles, goods, perimeter	Include definitions and the objectives of security; and Provide examples of the local environment where this can be applied
Cargo	Provide the security design guidance for cargo, e.g. consolidation centers	Include definitions and objectives of security
Transport Hubs	Provide the security design guidance for cargo e.g. displacement of risk, congestion points, harmonization of emergency response procedures and design.	Include definitions and the objectives of security