





# Airports

#### Policy Brief No. 15 September 2024





#### **AUTHOR**

**Cherry Lyn S. Rodolfo** is the lead convenor of Safe Travel Alliance, a coalition of stakeholders advocating for stronger transport institutions in order to promote safe and secure travel of passengers. She serves as Member of the Board of Advisors of the Asian Institute of Management Dr. Andrew L. Tan Center for Tourism and Member of the Review Committee of the Tourism Knowledge Center of Rajah Travel Corporation. She previously served as Co-Chair of the Networking Committee on Transport and Logistics of the Export Development Council. She is author of 2017 Airports policy brief and co-author of the 2019 Tourism policy brief - both of which were published by The *Arangkada* Philippines Project.

POLICY BRIEF	Managing Editor:	<b>Research Assistant:</b>
EDITORIAL TEAM:	Sarah Gomez	Julius Asilum
	Copy Editor: Katherine Stuntz	<b>Cover:</b> Tin Tuguigui

The 2024 Airports Policy Brief explores updates in Philippine air transport infrastructure post-pandemic. It revisits reform proposals that are still pending and discusses additional recommendations proposed by stakeholders to strengthen the vital functioning of airports and carriers and the inter-linkages with the rest of the economy.



The 2017 Airports policy brief is about the state of the three "A's" of Philippine air transport infrastructureairlines, airports, and air traffic management-and the regulatory and institutional infrastructure that binds these pillars together. It explores recommendations in addressing key issues affecting the Philippines' ability to be a preferred investment destination for air transport and related industries such as tourism.

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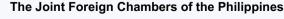
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The research included participation of over fifty experts in the aviation, infrastructure, and tourism sectors and representatives of companies in the sector, whom, however, neither approved in advance nor necessarily agree with all views expressed in the policy brief.

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## AIR TRANSPORT INFRASTRUCTURE: POLICY BRIEF UPDATE

#### I. INTRODUCTION

The Philippine Development Plan (PDP) 2023-2028. on the government's anchored long-term development plan AmBisyon Natin 2040, envisions a modern, productive, and sustainable air transport infrastructure. The provision of fast, accessible, safe, seamless, and secure movement of people and goods to, from, and within the archipelago will facilitate economic and social transformation. Improved air transport infrastructure will connect the Philippines and its global markets, connect domestic markets to one another, and connect Filipino families here and abroad. A highly customer-centric air transport sector will position the Philippines as a (1) tourism powerhouse in Asia.<sup>1</sup> (2) leading investment destination and source of high value goods and services,<sup>2</sup> and (3) regional hub<sup>3</sup> with high domestic and international air transport connectivity to support global supply chains and to serve as a lifeline during crises and disasters.

Global and mega trends such digitalization, climate change impacts, use of sustainable aviation fuel, and technology-driven processes influence the strategic directions of airlines, airports, and government. Headwinds such as supply chain issues, power interruptions, and the breakdown of air navigation systems hampered the ability of the air transport sector to achieve fast recovery from the pandemic.

This policy brief explores updates in Philippine air transport infrastructure post-pandemic and recommendations proposed by stakeholders to strengthen the vital functioning of airports and carriers and the inter-linkages with the rest of the economy. Air transport infrastructure covers the network of physical structures (e.g. airports and air traffic control), providers (e.g. airlines and auxiliary services), and institutions that create processes, coordinate, and manage the use and allocation of resources. Since the last policy brief was published in 2017, changes have been implemented in the institutional landscape. This brief revisits reform proposals that are still pending and discusses additional proposals that can further improve the state of Philippine air transport infrastructure.

This policy brief includes discussions and recommendations made at roundtables in August 2023 and June 2024 at the American Chamber of Commerce of the Philippines, as well as inputs from interviews with key government officials, industry experts, and the independent research of the author.

#### **II. CONTRIBUTIONS OF AIR TRANSPORT**

According to the Air Transport Action Group (ATAG), if the global aviation sector were a country, it would rank as the 17th largest economy in the world. In 2020, ATAG also reported that the air transport sector accounted for US\$3.5 trillion or 4.1% of global GDP (including direct, indirect, induced, and tourism impacts) and for 87.7 million jobs worldwide (including 11.3 million direct jobs).

In 2023, the Philippine air transport industry directly generated PHP 106.3 billion of gross value-added (GVA) in real terms, equivalent to 89.4% of its pre-COVID contributions (Figure 1).

Figure 1. Gross Value-Added of Air Transportation, Philippines, 2008-2023, in PHP billion



Source: Philippine Statistics Authority (PSA). https://psa.gov.ph/statistics/nationalaccounts/data-series. Retrieved 30 June 2024.

National Tourism Development Plan 2023-2028. Presentation of DOT Secretary Christina Garcia Frasco during the formal unveiling of the NTDP (15 March 2023) and the budget hearing in the House of Representatives (20 August 2024).
 Philippine Export Development Plan 2023-2028. <u>https://pdp.neda.gov.ph/wp-content/uploads/2023/01/PDP-2023-2028.pdf</u>

Philippine Export Development Plan 2023-2020. <u>https://pdp.neda.gov.ph/wp-content/uploads/2023/01/PDP-2023-2020.pdf</u>
 PDP 2023-2028, Chapter 7 Reinvigorating Services Sector. <u>https://pdp.neda.gov.ph/wp-content/uploads/2023/07/Chapter-07.pdf</u>

From 2008 to 2023, the air transportation sector's contributions posted the highest growth of 5.3% per year, followed by land and maritime transportation. It accounted for 19.8% of the GVA of the transportation sector, second to land transportation's 73.4%, and contributed 0.5% to the Philippine GDP. Every one peso increase in demand for air transportation translates to an increase of PHP 2.72 in the economic output due to its direct and indirect effects.<sup>4</sup> Outside of the direct air transport businesses,

#### **III. CATALYTIC EFFECTS OF AIR TRANSPORT**

Catalytic effects capture the extent to which air transport contributes to a national/regional economy beyond any effects that are directly or indirectly associated with the air transport industry itself (ATAG, 2016; Dimitrios & Sartzetaki, 2018).

**TOURISM.** The World Travel and Tourism Council (WTTC) estimated a 9.1% share of the sector to the global GDP in 2023, a 23.2% increase from 2022, and only 4.1% below the 2019 pre-pandemic level. An additional 27 million new jobs were generated in 2023, reflecting a 9.1% increase compared to 2022 and only 1.4% below the number of jobs in 2019. Air transport enables the travel of more than 58% of international tourists worldwide, who contributed to the benefits generated by tourism (ATAG, 2020).

In 2023, Philippine tourism contributed PHP 2.1 trillion in tourism direct gross value-added (TDGVA) (8.6% of GDP) and employed 6.2 million Filipinos (12.9% of national employment).<sup>6</sup> Its growth rate of 47.9% over the 2022 record was the highest growth in TDGVA since 2000. The country hosted 5.45 million international tourist arrivals in 2023, and 99% of them entered by air, stimulating a catalytic impact of about PHP 690 billion from the PHP 697 billion in international tourism expenditures. The top five foreign markets that accounted for 58.5% of the tourist arrivals were South Korea (26.6%), the USA (16.6%), Japan (5.6%), Australia (4.9%), and China (4.8%).

NAIA as the capital gateway retained its dominant position as the main entry point of international tourist arrivals (Table 1).

the major suppliers that benefit the most from this growth are the industries of petroleum, support activities for transportation (storage and warehousing), retail trade, call centers, and real estate.

We need to look beyond the 0.5% share of air transport to the GDP and consider its broader impacts through tourism and trade – the major customers of air transport.

It accounted for 68.4% of total air visitor arrivals in 2023, followed by Cebu (17.3%), Clark (6.5%), Kalibo (3.6%), and Bohol (3.2%). While the volume of international tourists entering through NAIA increased from 2013 to 2019, its share of total international arrivals decreased from 73.2% in 2013 to 62.8% in 2019. International tourists enjoyed more options offered by Cebu, Kalibo, Clark, and other gateways. In 2023, NAIA's share rose to 68.4% because international flights to the other gateways have not yet recovered from their 2019 prepandemic level. Bohol emerged as the 5th gateway of entry by international tourists in 2023, driven by the entry of Korean air carriers and charter flights. The proximity of resorts to the airport has made Bohol an attractive destination for the Korean market.

Table 1. International Tourist Arrivals by Air and by Port of Entry,2013 vs. 2019 vs. 2023, by thousands of tourists

Airports	2013	2019	2023
NAIA	3,393	5,088	3,709
Cebu	671	1,684	941
Kalibo	350	773	197
Clark	207	436	352
Puerto Princesa	0.33	67	7
Davao	8	37	29
Bohol	-	11	173
lloilo	4	4	-
Subic	-	-	1
Caticlan	-	-	17
Laoag	4	-	-
Total	4,637	8,100	5,426

Source: Department of Tourism (DOT)

<sup>4</sup> Output multipliers of land and maritime transportation are 2.33 and 2.12. Source: PSA Input-Output Tables. https://psa.gov.ph/statistics/supply-and-use-input-output/tables

<sup>5</sup> https://wttc.org/research/economic-impact/. Retrieved 30 June 2024.

<sup>6</sup> PSA. 2024. Philippine Tourism Satellite Accounts 2023. https://www.psa.gov.ph/statistics/tourism. Retrieved 15 July 2024

Compared with its counterparts in Southeast Asia, in 2019, the Philippines had the highest level of dependence on air transport (98%), followed by Thailand (83.9%), Vietnam (79.8%), and Singapore (77.8%), for the development of its international tourism market based on UN Tourism data. As the Philippines does not share common borders with the rest of the region, and cruise tourism is still in the infancy stage and caters to a niche market, air transport is critical for connectivity and for tourism to arow.

TRADE. When we consider the volume of global trade, the amount carried by air (estimated by the International Air Transport Association or IATA at close to 61 million tons of freight in 2019) is very small, at less than 1%. However, the value of air cargo was estimated at US\$6.5 trillion in 2019, making up 35% of global trade in terms of value (IATA, 2020). Air cargo is the fastest and most reliable transport mode over great distances and in moving light, perishable, or other time-sensitive goods like agricultural products and medical supplies such as vaccines, and other high-value commodities.<sup>7</sup> In the Philippines, data from the PSA revealed that

0.3% of the international trade volume in 2023 was moved by air, but its value accounted for 35% of the total trade of US\$199.83 billion. High-value export products include electronic integrated circuits, semiconductor devices, aircraft engines and spare parts, guavas, mangoes and mangosteen, watches, clams, hearing aids, and dresses, among others. products were flown to buyers and These manufacturers in Hong Kong, China, the USA, Singapore, Japan, Korea, and the Netherlands. In Southeast Asia, Singapore (53%) has the highest share of trade by air followed by the Philippines (35%) and Malavsia (31%).

Air transport supports the mobility of the Overseas Filipino Workers (and their families), who contributed around US\$37.2 billion in 2023, highest to date, to the Philippine economy, 8.5% of the GDP, and 7.7% of the Gross National Income.9

The catalytic effects of air transportation to the economy through critical sectors like tourism and trade depend on the quality of the air transport infrastructure. The next section explores the critical pillars of the air transportation sector.

#### IV. AIR TRANSPORT SYSTEM: AIRPORTS, AIR TRAFFIC **MANAGEMENT, AIRLINES, ENABLERS**

The Department of Transportation (DOTr) is the lead agency in developing the air transport infrastructure of the country. Two attached agencies - the Civil Aeronautics Board (CAB) and the Civil Aviation Authority of the Philippines (CAAP) - serve as the economic and technical regulator, respectively. CAB exercises general supervision, control. and jurisdiction over air carriers, general sales agents, cargo sales agents, and air freight forwarders, as well as their property, property rights, equipment, facilities, and franchise (RA 776 as amended by PD 1462 and EO 217). The mandate of CAAP is to provide safe and efficient air transport and regulatory services, to restructure the civil aviation system, to promote, develop, manage, and operate airports in the country, and to regulate the technical, operational, safety, and aviation security functions under the authority (RA 9497). also issues the air operator certificate to air carriers and the certificate of airworthiness for aircraft. It is a governmentowned and controlled corporation (GOCC) attached

to DOTr for policy and program coordination, and one of 118 GOCCs (including other airport authorities) under the jurisdiction of the Governance Commission for GOCCs by virtue of RA 10149.

#### **PHILIPPINE AIRPORTS:** NETWORK AND MANAGEMENT

The Philippines has a network of 90 airports across the archipelago, classified into 9 international, 20 principal class 1, 20 principal class 2, 38 community airports, and 3 airports that are not yet operational (Table 2). Out of the total network, 48 airports have commercial flights and 23 are categorized as nightrated airports.

CAAP supervises the country's airport network through 12 area centers that are responsible for the management of airports in accordance with national and International Civil Aviation Organization (ICAO) standards and recommended practices.

https://www.astrid-online.it/static/upload/air-/air-connectivity.pdf Source of data for Singapore and Malaysia: https://www.aseanstats.org/

https://www.bsp.gov.ph/SitePages/MediaAndResearch/

CAAP manages 75 airports including 6 international airports, namely Davao, Kalibo, Laoag, Iloilo, Puerto Princesa, and Bohol-Panglao. There are four airport authorities in the country today: Manila International Airport Authority (MIAA), Mactan-Cebu International Airport Authority (MCIAA), Davao International Airport Authority (DIAA), and the Bangsamoro Airport Authority (BAA).

On January 10, 2023, CAAP officially transferred the power and functions over six airports to the BAA (created under RA 11054). The transfer to the BAA involves full turnover of the properties, assets, powers, and functions pertaining to the landside management of six airports (existing) and planned airports in the region. The six airports are: Malabang (non-operational), Wao Airport Airport (nonoperational), Cotabato Airport, Jolo Airport, Sanga-Sanga Airport, and Cagayan de Sulu Airpoft. Meanwhile, the transfer of CAAP functions to DIAA (created under RA 11457) is still in the transition phase.

Table 2. Airport Classification and Managing Authorities (as of April 2024)

(83.0	ГДрії	2027)		
Classification and Description	CAAP	Airport Authorities	Concession Agreement	Total
International Airports with border control facility used for international flights	6		3 , Clark, Cebu)	9
Principal Class Airports used for domestic flights serving jet aircraft such as B737 and A320 with 100 or more passengers	16	3 Subic, Cotabato, Sanga-Sanga)	1 (Caticlan)	20
Principal Class 2 Airports used for domestic flights serving propeller aircraft or jet aircraft smaller than in Class I with 19 to 100 passengers.	18	2 Jolo, Cagayan North/ Lal-lo	Lal-lo (JVA)	20
Community Airports used for General Aviation aircraft	35	3 San Fernando, Bantayan, Cagayan de Sulu		38
Sub-total	75	11	1	87
Not yet operational				3
Grand Total				90
Source: CAAP		*Join	t Venture Agreer	ment (JVA)

Clark International Airport Corporation (CIAC) was reverted as a subsidiary of the Bases Conversion Development Authority (BCDA) in 2017 and made subject to the policy supervision and operational control of the DOTr over the Clark Airport under EO No. 14 s. 2017. BCDA is the implementing agency for the Clark International Airport Public-Private Partnership (PPP). On November 7, 2022, DOTr instructed CIAC to exercise regulatory supervision and oversight of activities occurring within the Clark Civil Aviation Complex, including the Clark International Airport.<sup>11</sup>

There are seven live airport PPP contracts namely: NAIA, Cebu, Clark, Caticlan, Cagayan Lla-lo, New Manila (Bulacan), and Sangley Point (Cavite). While Caticlan Airport and Cagayan Lal-lo Airport are not rated international, they have handled regional flights on an intermittent basis in the past years. Royal Air served the Taipei-Caticlan, Hong Kong-Caticlan, and Macau-Cagayan routes using charter services.

Mactan-Cebu Airport is the first airport PPP project for a major international gateway of the country. Clark International Airport is the first airport project to be tendered under the Philippine government's hybrid PPP policy in 2019<sup>12</sup>

Last March 18, 2024, the government signed the landmark PPP concession agreement (15-year concession period, which may be extended for another 10 years) with New NAIA Infrastructure Corporation (formerly SMC-SAP & Company Consortium) to modernize the capital gateway airport of NAIA, expand its capacity, and make it compliant with ICAO and other internationally accepted standards.

The project, with an estimated cost of PHP 170.6 billion aims to expand the capacity of the airport — from 35 million passengers per annum to 62 million passenger per annum, and from 40-42 air traffic movements per hour to 48 per hour – and deliver internationally benchmarked performance to provide excellent service for its passengers.<sup>13</sup>

<sup>10</sup> CAAP formally transferred its airport ownership and operations of airports to the BAA (created under RA 11054) through the signing of the Memorandum of Agreement on September 20, 2022. The transfer involves full turnover of the properties, assets, powers, and functions pertaining to the landside management of the airports. CAAP will retain authority on airside operational control and consequently of runways, taxiways, ramps, airport control towers, power plants, and flight service station buildings. https://bangsamoro.gov.ph/

<sup>11</sup> https://ciac.gov.ph/about-ciac/

<sup>12</sup> The 25-year concession of Luzon International Premiere Airport Development Corporation (LIPAD) Consortium in Clark involved the equipping and full management of the entire Clark airport facility, following the engineering, procurement, and construction (EPC) public-private partnership (PPP) concluded in 2017.

<sup>13</sup> https://ppp.gov.ph/press\_releases/smc-sap-company-consortium-signs-naia-ppp-concession-agreement-first-ppp-contract-to-be-awarded-since-effectivity-of-ppp-code



CLASSIFICATION	AIRPORT NAME	LOCATION	CLASSIFICATION	AIRPORT NAME	LOCATION
	1. Ninoy Aquino International Airport / Manila International Airport	Metro Manila	Principal Class 2	46. Sayak Airport / Siargao Airport	Surigao del Norte
	2. Mactan-Cebu International Airport	Cebu	(20)	47. Surigao Airport	Surigao del Norte
	3. Clark International Airport	Pampanga	(30-49)	48. Tandag Airport	Surigao del Sur
	4. Kalibo International Airport	Aklan		49. Jolo Airport	Sulu
(-)	5. New Bohol International Airport / Bohol-Panglao International Airport	Bohol		50. Jorge Abad Airport / Itbayat Airport	Batanes
(1-9)	6. Francisco Bangoy International Airport	Davao		51. Palanan Airport	Isabela
	7. Puerto Princesa International Airport	Palawan		52. Vigan Airport	llocos Sur
	8. Iloilo international Airport	lloilo		53. San Fernando Airport	La Union
	9. Laoag International Airport	llocos Norte		54. Lingayen Airport	Pangasinan
	10. Tuguegarao Airport	Cagayan		55. Rosales Airport	Pangasinan
	11. Cauayan Airport	Isabela		56. Bagabag Airport	Nueva Vizcaya
	12. Subic Bay International Airport	Zambales		57. Dr. Juan C. Angara Airport / Baler Airport	Aurora
^	13. San Jose Airport	Occidental Mindoro		58. Iba Airport	Zambales
$ \longrightarrow $	14. Naga Airport	Camarines Sur		59. Plaridel Airport	Bulacan
$\sim$	15. Bicol International Airport	Albay			Quezon
	16. Godofredo P. Ramos International Airport / Caticlan	Aklan	$\smile$	60. Alabat Island Airport	
	International Airport / Boracay Airport			61. Jomalig Airport	Quezon
	17. Roxas Airport	Capiz		62. Lubang Airport	Occidental Mindord
Principal Class 1	18. Bacolod–Silay International Airport	Negros Occidental		63. Mamburao Airport	Occidental Mindord
(20)	19. Sibulan Airport / Dumaguete Airport	Negros Oriental		64. Calapan Community Airport	Oriental Mindoro
(10-29)	20. Daniel Z. Romualdez Airport / Tacloban City Airport	Leyte		65. Pinamalayan Airport	Oriental Mindoro
	21. Dipolog Airport 22. Zamboanga International Airport	Zamboanga del Norte		66. Wasig Airport	Oriental Mindoro
	23. Pagadian Airport	Zamboanga City Zamboanga del Sur	Community	67. Bagasbas Airport / Daet Airport	Camarines Norte
	24. Labo Airport / Ozamis Airport	Misamis Occidental	Airports	68. Bacon Community Airport	Sorsogon
	25. Laguindingan Airport	Misamis Oriental	(38)	69. Bulan Airport	Sorsogon
			(50-87)	70. Bantayan Airport	Cebu
	26. Awang Airport / Cotabato Airport	North Cotabato		71. Ubay Airport	Bohol
	27. General Santos International Airport / Tambler Airport	General Santos City		72. Siquijor Airport	Siquijor
	28. Bancasi Airport / Butuan Airport	Agusan del Norte		73. Biliran Airport	Biliran
	29. Sanga-Sanga Airport / Tawi-Tawi Airport	Tawi-Tawi		74. Borongan Airport	Eastern Samar
	30. Basco Airport	Batanes		75. Guiuan Airport	Eastern Samar
	31. Cagayan North International Airport / Lal-lo International	Cagayan		76. Catbalogan Airport	Samar
	Airport	Dennis O'le		77. Hilongos Airport	Leyte
Λ	32. Loakan Airport	Baguio City		78. Panan-awan Airport / Maasin Airport	Southern Leyte
$\bigtriangleup$	33. Sangley Point Airport / Cavite Airport	Cavite		79. Liloy Airport	Zamboanga del Nor
	34. Marinduque Airport	Marinduque		80. Siocon Airport	Zamboanga del Nor
	35. Tudgan Airport	Rombion		81. Ipil Airport	Zamboanga Sibuga
Principal Class 2	36. Cuyo Airport	Palawan		82. Maria Cristina Airport / Iligan Airport	Lanao del Norte
(20)	37. Francisco B. Reyes Airport / Busuanga Airport	Palawan		83. Malabang Airport	Lanao del Sur
(30-49)	38. San Vicente Airport	Palawan		84. Mati Airport	Davao Oriental
	39. Virac Airport	Catanduanes		85. Allah Valley Airport	South Cotabato
	40. Moises R. Espinosa Airport / Masbate Airport	Masbate		86. Bislig Airport	Surigao del Sur
	41. Evelio B. Javier Airport / Antique Airport	Antique		87. Cagayan de Sulu	Tawi-Tawi
	42. Ormoc Airport	Leyte			
	43. Catarman National Airport	Northern Samar	Not Yet	88. Casiguran Airport	Aurora
	44. Calbayog Airport	Samar	Operational (3)	89. Wao Airport	Lanao del Sur

Table 3. Current Philippine Airport Network, as classified by CAAP (as of April 2024)

Source: CAAP

#### Table 4. New airport development projects in the government pipeline, as of June 2024

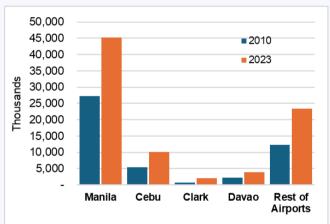
ON-GOING         91. New Manila International Airport / Bulacan International           ON-GOING         92. New Sangley Point International Airport           APPROVED         93. New Durnaguete Airport Development Project / Bacong I           FOR APPROVAL         94. New Zamboanga Airport           PROJECT PREPARATION         95. New Masbate Airport Development Project	Cavite	PPP PPP ODA - Korea
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PROJECT PREPARATION 95. New Masbate Airport Development Project	Zamboanga del Sur	GAA
	Masbate	GAA
PROJECT PREPARATION 96. New Siargao (Sayak) Airport	Surigao del Norte	ODA - TBD
PRE-PROJECT PREPARATION 97. New Cagayancillo Airport	Palawan	ODA / PPP
PRE-PROJECT PREPARATION 98. New Baguio Airport	Baguio	ODA / PPP
PRE-PROJECT PREPARATION 99. Bukidnon Airport Development Project		GAA

Source: NEDA, PPP Center

#### **AIRPORT TRAFFIC**

The Philippine airport network registered an increase in passenger movements from about 48 million in 2010 to 85 million in 2023. The three airport hubs of Manila, Cebu, and Clark account for more than twothirds of the total passenger traffic movements of Philippine airports. The rest of the airports in the network increased their combined shares from 30% in 2010 to 32% in 2023. However, several airports such as Davao, Iloilo, Caticlan, Bohol, Kalibo, Puerto Princesa, Busuanga, General Santos, Zamboanga, Laguindingan, and Siargao are already operating near or beyond their design capacities, which impacts the service levels for passengers and flow of goods.

Figure 3. Passenger movements in Philippine airports, 2010 vs. 2023, in thousands of passengers



Sources: CAAP, MIAA, MCIAA, CIAC, LIPAD

The airports have served as catalysts for the development of export products such as fresh aquatic products, high value fruits and vegetables, and electronic products, among others, from various coastal and farm communities and export processing zones across the country. Cargo traffic in the country's top airports increased from 2010 to 2019 (Francisco and Lim, 2022). In NAIA, the traffic increased from 426 million kilograms (kgs) in 2010 to 445 million kgs in 2019, and the recovery in 2023 reached 78% of the 2019 pre-pandemic level.

#### AIRLINES

Airlines are an integral component of the air transport infrastructure. They connect and move people and cargo from one location to another. CAB reported that the Philippine domestic air carriers flew 28 million scheduled domestic passengers in 2023, which was 98.1% of the passenger volume in 2019. Philippine and foreign air carriers reported a combined total of 24.8 million scheduled international passengers in 2023, representing 81.3% recovery of the 2019 pre-pandemic traffic. In the international market, there are new entrants (e.g. Zip Air Tokyo), new routes introduced (e.g. Manila-Da Nang and Manila-Chiang Mai by Cebu Pacific, Manila-Seattle by PAL in October 2024), and resumption of direct flights by foreign air carriers after more than 20 Vears of absence (e.g. Vietnam Airlines, Air France).

The grounding and shortage of aircraft powered by the Pratt & Whithey's PW1100G geared turbofan (GTF) engines slowed down the recovery momentum of Philippine air carriers and tourism. The approved maintenance organizations (AMO) faced shortages of spare parts that eventually led to delays in aircraft delivery. To augment capacities, Cebu Pacific signed a damp lease agreement with Bulgaria Air, while PAL entered into a temporary wet lease agreement with Wamos Air.



Figure 4. International and Domestic Scheduled Passenger Traffic, Philippines, 2014-2023, in million passengers

<sup>14</sup> https://ccifrance-philippines.org/2024/09/11/air-france-to-recommence-manila-paris-direct-flights-starting-december-8/. Retrieved 11 September 2024.

<sup>15</sup> In 2023, Pratt & amp; Whitney had to recall 1,200 of the 3,000 GTF engines in operation for inspections that require the engines be taken off wings and partly disassembled.https://flightplan.forecastinternational.com/2023/07/27/pratt-whitney-prepares-to-recall-1200-gtf-engines-for-inspections/

<sup>16</sup> A damp lease agreement is a lease arrangement whereby a lessor provides an aircraft with partial crew to the lessee. Signed on December 5, 2023, the damp lease agreement allowed Bulgaria Air to provide the aircraft and the necessary crew, maintenance services, and insurance. https://www.jgsummit.com.ph/

<sup>17</sup> Wet lease refers to the lease of an aircraft where the aircraft is operated under the AOC of the lessor. It is normally a lease of an aircraft with crew, operated under the commercial control of the lessee and using the lessee's airline designator code and traffic rights. (Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (ICAO Doc8335, paragraph 1.4). https://www.icao.int/APAC/Meetings/2012\_FAOSD\_Training/Doc%208335%20-%20Manual%20for%20Ops%20Inspection%20Cert%20Continued%20Surv%20Ed%205%20(En)%5B1%5D.pdf

However, the supply chain issues did not dampen the optimism of the global airline industry about the medium- to long-term growth prospects. The size of the global fleet is projected to increase by 28% over the next 10 years, expanding from today's 28,400 aircraft to 36,400 by 2034 (Wyman, 2024). On July 5, 2024, AviTrader reported that Cebu Pacific signed a binding memorandum of understanding (MOU) with Airbus for the purchase of up to 152 A321neo for US\$24 billion (PHP 1.4 trillion) based on list prices, marking the largest aircraft order in Philippine aviation history. PAL announced that it was eveing an order backlog of about 100 aircraft that will be added to its thirteen A321-200N and nine A350-1000s on order (expected to arrive in the second half of 2025).<sup>18</sup>

Given the aggressive plans of the airlines and the strong recovery from the pandemic, is the infrastructure available and ready to ensure the safety and security of everyone on the ground and in the skies?

#### AIR TRAFFIC MANAGEMENT

Air traffic management systems (ATMS) ensure order and smooth functioning of our airports by managing and optimizing the flow of air traffic in the skies (e.g. safe separation between aircraft) and on the ground (e.g. enabling seamless communication and coordination among all involved parties). They keep everyone safe, including the communities within the environs of the airport facilities and those along the flight path of the aircraft. As of December 2023, the Philippine air transportation system is composed of a network of certified service providers, licensed skilled talents, and technology systems that need to be coordinated to guarantee the safety, security, and seamless flow of people and goods in the air and on the ground. This network expands both domestically and internationally. For example, the 122 Approved Maintenance Organizations (AMO) shown in Figure 5 are located outside of the Philippines. They provide facilities, resources, equipment, and expertise that can be used by individuals, organizations, or air operators to complete aircraft maintenance requirements of the Philippine Civil Aviation Regulations.

On January 16, 2018, the government inaugurated the Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) Systems Development, a project funded through the Official Development Assistance (ODA) of the Japan International Cooperation Agency (JICA)<sup>79</sup> The CNS/ATM is a computer-based flight dataprocessing system that allows aircraft operators to meet their scheduled departures and arrivals, monitor and evaluate 80% of the Manila Flight Information Region as assigned by ICAO, and enable aircraft to transmit accurate locations for takeoffs, landings, and air traffic control.20

The vulnerabilities of our ATMs were exposed when a power outage happened at NAIA during New Year's Day of 2023. The breakdown disrupted nearly 300 flights to and from NAIA. Following the breakdown, CAAP embarked on phase two of a highly anticipated and long overdue upgrade of its CNS/ATM system. This involved the replacement of the uninterruptible power supply (UPS) and performing maintenance on the automatic voltage regulator-two components behind a larger system failure that led to Manila's January 1 power outage.<sup>21</sup> On May 20, 2024, another system glitch (software) affected over 9,200 passengers and delayed and consequently canceled several flights at NAIA.

While the installation of the software for NAIA's CNS-ATM was inaugurated in 2018, updating the program software is still being done gradually. The target is to complete the software update and maintenance support services for TopSky HE ATMS by the end of 2024 (CAAP, 2023).

Table 5. Philippine Air Transport in Numbers				
Approved Maintenance Organizations		103 Active Local 122 Active Foreign <sup>a</sup>		
Approved Training Organizat	ions	65 Maintenance Schools 44 Pilot Schools		
Air Operator Certificate Holders		42 Local 62 Foreign <sup>b</sup>		
Active Aircrew License Holde	rs: 33,18	5 (as of December 2023)		
Pilots	11,007	Flight Instructors	765	
Flight Dispatchers	261	Aeronautical Station Operators	94	
Air Traffic Controllers	776	Ground Instructors	469	
Flight Engineers	4	Air traffic Safety Electronic Personnel	432	
Mechanics (AMT and AMS)	18,763	Remotely Piloted Aircraft System	614	

Source: CAAP

Notes:

a Located outside of the Philippines b Holder of an air operator certificate from the State of the operator other than the Philippines

<sup>18</sup> https://www.ch-aviation.com/news/

<sup>19</sup> https://www.pna.gov.ph/articles/1021847

<sup>20</sup> https://rtvm.gov.ph/inauguration of CNS ATM

<sup>21</sup> Senate Committee Report No.39. https://legacy.senate.gov.ph/lisdata/4103237661!.pdf 22 https://www.pna.gov.ph/articles/1225237.

#### **ENABLERS**

The Philippines has a liberal air transport industry. enabled by implementation of policies such as EO No. 219 s. 1995 (Establishing the Domestic and International Civil Aviation Liberalization Policy), EO No. 29 s. 2011 (Authorizing the Civil Aeronautics Board and the Philippine Air Panels to Pursue more Agaressively the International Civil Aviation Liberalization Policy) and participation in liberal regional arrangements (e.g. ASEAN Open Skies, the ASEAN-China Air Transport Agreement, and the ASEAN-EU Comprehensive Air Transport Aareement).

In the past three years, the government approved three landmark institutional changes that further cleared the pathways to transformation in the Philippine air transport sector:

1. The Amended Public Service Act (Republic Act No. 11659) and its Implementing Rules and Regulations. The RA was signed into law on March 21, 2022 and it amended the Commonwealth Act No. 146, otherwise known as the Public Service Act (PSA) of 1936. Upon the effectivity of the Implementing Rules and Regulations (IRRs) on April 4, 2023, the amendments enabled the liberalization of key public services by allowing full foreign ownership of businesses in select industries such as airports, railways, expressways, and telecommunications.

To leverage the RA 11659 as an incentive to generate more investments in the commercial aviation industry, the Philippines has to revise the designation clause for Philippine carriers from substantial ownership to principal place of business under the standard bilateral air service agreement (ASA). When accepted by the bilateral partner of the Philippines, then the ASA will allow the Philippines to designate airlines that are owned or controlled by nationals of other countries, as long as these airlines are incorporated in and maintain their principal place of business in the territory of the Philippines. Other proposed amendments in the standard agreement include (i) Aviation Safety and Security clauses to comply with international standards and practices (e.g. incorporate ramp inspections into the Aviation Safety clause) and (ii) additional and new non-traffic rights (e.g. domestic code-sharing, inter-modal code sharing, etc.).23

2. RA 11966: Public-Private Partnership Code of the Philippines. RA 11966, or the PPP Code of the Philippines, took effect on December 23, 2023 to allow mobilization of private sector resources as an engine for capital and a catalyst for growth. The PPP Code provided a unified legal framework for PPPs and clarity on airport policy - including faster approval timelines for solicited and unsolicited proposals and predictable tariff regimes. In the case of airport-related fees like passenger service charges, adjustments can be made only after key performance indicators are met after a year of operations by the private proponent. Since December 2023, airport PPPs in the pipeline are making good progress in terms of procurement and negotiations. DOTr announced that 10 regional airports will be included in the airport PPPs. Table 6 provides an update on the status of the airport PPPs.

Table 6. Status of Airport Public-Private Partnership Projects

Status	Airports
Advanced stages in the pipeline (5)	<ol> <li>Laguindingan International Airport</li> <li>Bohol-Panglao International Airport</li> <li>Iloilo International Airport</li> <li>Puerto Princesa International Airport</li> <li>Kalibo International Airport</li> </ol>
Under development/ evaluation (4)	<ol> <li>Laoag International Airport</li> <li>Sayak Siargao Airport</li> <li>Francisco B. Reyes Airport and the new Busuanga Airport (Coron, Palawan)</li> <li>New Surigao Airport Project</li> </ol>
With live contracts (7)	<ol> <li>Clark International Airport Expansion Project – Operation and Maintenance (O&amp;M)</li> <li>Mactan-Cebu International Airport Project (MCIA)</li> <li>Cagayan North International Airport Project (Lal-Io Airport Project)</li> <li>Caticlan Airport Development Project (CADP)</li> <li>New Manila International Airport (Bulacan International Airport)</li> <li>Sangley Point International Airport (SPIA) Project</li> <li>Ninoy Aquino International Airport Public-Private Partnership (NAIA PPP) Project</li> </ol>
Concluded (1)	<ol> <li>Clark International Airport Expansion Project – Engineering, Procurement and Construction (EPC)</li> </ol>

Source: PPP Center

3. RA 12009 or the New Government Procurement Act. To promote inclusivity and public participation in the preparation of the IRR, the Government Procurement Policy Board reported that it will use a new microsite to enable stakeholder consultation for the five IRR Committees, where non-Government Procurement Policy Board agencies, private sector groups, civil society organization groups, and the public can participate in the online consultation.

<sup>23</sup> A Roadmap for Legislative and Administrative Reforms in the Philippine Aviation Sector. Presentation of Undersecretary Roberto O. Lim, DOTr, American Chamber of Commerce Infrastructure Committee. 08 February 2023.

Proposed reforms in the air transport sector in previous Congresses aimed to delink the multiple functions of CAAP as regulator, commercial operator of airports, and investigator. They were covered by proposed legislative measures namely:

- Amendment of RA 9497 to strengthen CAAP as technical regulator and its safety oversight;
- Creation of a separate entity, referred to as the Philippine Airports Authority or Philippine Airports Corporation, in separate bills to handle the developmental functions, and;
- Creation of an independent national transportation safety board.

To date, these proposed reforms are not part of the legislative priorities of the administration. The Philippine Transportation Safety Board reached the most advanced stage among these reforms.

Approved by the Philippine Congress in May 2022, the PTSB was vetoed by the Office of the President because of concerns that its proposed creation would create redundant functions and result in confusion as to the authority among different agencies under DOTr (i.e. Land Transportation Franchising and Regulatory Board (LTFRB), Land Transportation Office (LTO), Philippine Coast Guard (PCG), Aircraft Accident Investigation and Inquiry Board (AAIIB), and Maritime Industry Authority (MARINA)), the Philippine National Police (PNP), and National Bureau of Investigation (NBI).<sup>24</sup> In the interim, the Board of CAAP approved the transfer of the Aircraft Accident Investigation and Inquiry Board to the DOTr to de-link the function of investigation from CAAP. These proposed reforms are discussed further in the advocacy recommendations.

The recent developments point to busier skies ahead. As the government accelerates infrastructure investments and modernization in air transportation, improvements in the overall experience are needed.

#### Box 1. Support for critical airport governance reforms

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Foreign chambers seek reforms at PHL airports May 27, 2024 | 9:39 pm



PHILIPPINE STAR/MIGUEL DE GUZMAN

In May 2024, the American, Australian-New Zealand, Canadian, European, Japanese, and Korean chambers and the Philippine Association of Multinational and Regional Headquarters, Inc. supported calls for the approval of crucial legislative measures aimed at overhauling the governance framework of the country's airports. Specifically, the JFC emphasized the importance of (1) the Civil Aviation Authority Act of the Philippines (CAAP) Law amendments to strengthen CAAP's role in safety oversight by enhancing human resource development, fortifying the board, and aligning with global safety standards, (2) the creation of the Philippine Airports Authority to separate the conflicting functions of CAAP as an airport regulator and operator, and (3) the creation of the Philippine Transportation Safety Board to strengthen the government's ability to investigate accidents and improve safety.

"These reforms are essential to enhancing the safety, efficiency, and overall quality of both domestic and international airports in the Philippines."

#### V. EASE of Passenger and Air Cargo Mobility

Over the years, various reports of the World Economic Forum (WEF) have highlighted the low rankings of the Philippines in the quality of air transport infrastructure. In the latest 2024 WEF Travel and Tourism Development Index (TTDI) report, the Philippines ranked 56th (from 50th in 2019) out of 119 economies in the air transport infrastructure pillar and 6th among Southeast Asian economies included in the report.

Stakeholders recognize the need to accelerate infrastructure development to improve the rankings and to achieve Efficient, Accessible/Affordable, Safe/Secure/Seamless/Sustainable for Everyone or EASE of travel as part of the quick wins. EASE of travel (EoT) when applied to passenger movement refers to how easily people can travel, given their motivations, skills, options, and travel quality. EoT may differ by mode and influence people's travel behavior, participation in out-of-home activities, and experience of travel (De Vos, 2024).



In photo: Self check-in facilities are available in Clark International Airport

In this section, we map out the journey of travelers and goods and identify the areas where improvements needed are to increase the competitiveness of air transportation, tourism, and trade.

Economies	TTDI Score	TTDI Rank	Air Transport Infrastructure Score	Air Transport Infrastructure Rank	Air transport Services Efficiency Score	Airport Connectivity Score
Cambodia	3.57	86	2.76	86	4.18	2.98
Indonesia	4.46	22	4.34	34	5.48	6.62
Lao PDR	3.48	91	2.36	105	4.46	2.12
Malaysia	4.28	35	4.18	39	5.27	4.97
Philippines	3.84	69	3.62	56	4.18	5.35
Singapore	4.76	13	5.94	4	6.62	5.02
Thailand	4.12	47	4.89	22	5.5	5.51
Vietnam	3.96	59	4.04	43	4.68	5.93

Table 7. Travel and Tourism Development Index (TTDI), Southeast Asia, 2024

Source: World Economic Forum (2024) / https://www.weforum.org/TTDI 2024

\*Score is from 1-7, where 7 is the best, Rank is out of 119 countries.

Figure 5 identifies 16 steps along the journey of passengers, in particular tourists, from their pre-trip planning to after their stay (when they will continue to post and share about their experience on social media and other platforms). Nine out of the 16 steps happen in the airport, where at least 20 government agencies (in the case of NAIA) are involved in providing overall passenger experience and cargo movement.

Key issues along these journey maps are identified in FIgure 5 and drawn from a synthesis of roundtable discussions organized by the American Chamber of Commerce of the Philippines with the representatives from Philippine business groups, foreign chambers, industry associations, government agencies, and other stakeholders, as well as key informant interviews.

#### SAFETY AND SECURITY

Stakeholders raised six areas of safety and security concerns given the growth of the industry and the expansion programs of airlines. According to ICAO, safety management aims to proactively mitigate safety risks before they result in accidents or incidents. **Airspace**. Some risks or hazards include: (a) increasing encounter of bird strikes; (b) drones flying in departure and take off areas;  $\binom{25}{C}$  congestion at NAIA that impacts safety; (d) lack of modern air traffic control systems and reliance on outdated technologies; (e) concerns about the availability of an immediate back-up plan if the air traffic control and management service facilities are damaged or destroyed by earthquakes or other disasters; and (f) unruly passengers who pose safety risks.

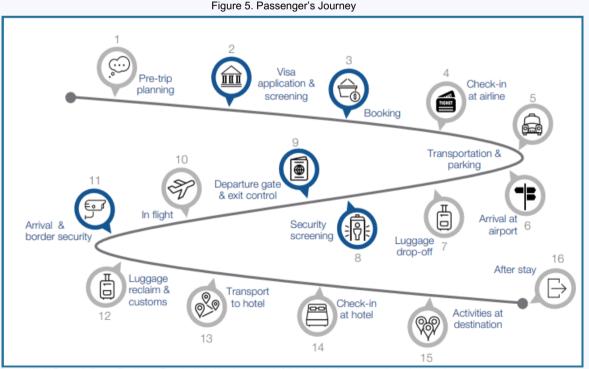
During the pre-pandemic period of 2017 to 2019, CAAP recorded 541 wildlife strikes. Bird strikes alone accounted for about 68% of these collisions (the rest include wildlife strikes on runway - dogs, cats, and cows). These strikes pose significant threats to the safety of aircraft and people.

Furthermore, in June 2024, the MIAA received reports of unauthorized drone activities within the 10-kilometer aerodrome radius of NAIA. In 2023, there were ten recorded sightings of unlicensed drone operations, with four reported in the first quarter of 2024.<sup>26</sup>

During a roundtable discussion hosted by the American Chamber of Commerce of the Philippines, the risks posed by unruly passengers during flights, which can lead to emergency landings, were highlighted.

IATA reported one unruly incident for every 568 flights in 2022, up from one per 835 flights in 2021 in the global aviation industry. The most<sup>27</sup> common categorizations of incidents in 2022 were non-compliance, verbal abuse, and intoxication. ICAO issued an urgent call to its Member States to fast-track the ratification of the 2014 Protocol to Amend the Convention on Offences and Certain Other Acts Committed on Board Aircraft (Montréal Protocol 2014 or MP14).

The ratification of the Montreal Protocol 2014 will allow those with regulatory or police powers to prosecute any passenger who commits unruly behavior or imposes safety risks on other passengers and crew. Currently, the scope of functions is currently limited under the Tokyo Convention of 1962.<sup>28</sup>



Source: World Economic Forum, The Known Traveller Unlocking the potential of digital identity for secure and seamless travel. https://www.weforum.org/publications/the-known-traveller-unlocking-the-potential-of-digital-identity-for-secure-and-seamless-travel/ (retrieved 10 June 2024).

<sup>25</sup> A wildlife strike is a collision between an animal and an aircraft which is in flight or on a take-off or landing roll. The term that describes such events was initially bird strike since this was the most common scenario. However, the increased number of flights and airfields used resulted, among other things, in the increase of collisions between aircraft and animals other than birds. https://www.icao.int/safety/GASP/GASP%20Library/National%20aviation%20safety%20plans/Philippines%20NASP%202022-2025.pdf

<sup>26</sup> https://www.miaa.gov.ph/awareness and compliance with drone regulations. Retrieved 02 July 2024.

https://www.iata.org/en/pressroom/Unruly Passengers/. Retrieved 04 July 2024.
 ECCP. 2024 Advocacy Papers. <u>https://www.eccp.com/advocacy/papers/2024</u>. Retrieved 20 June 2024

**Aerodrome.** Safety and security risks can be high when aerodrome infrastructure such as runway end safety areas do not comply with international standards. Expansion of these areas could be prohibited by land ownership conflicts, environmental concerns, and reclamation issues. Obstruction lights on trains, high rise buildings and construction areas, and wild life collisions (dogs, cats, and cows) on the runway are sources of risks and threats to safety.

*Airline safety.* The shortage of aircraft parts, coupled with operational pressure to deliver aeronautical products on time, may lead maintenance organizations to purchase from alternative suppliers. This can increase the risk of Suspected Unapproved Parts infiltrating the air transport supply chains.

*Airport security.* Highly publicized theft incidents involving security officers at NAIA have negatively impacted passenger perceptions of airport security quality. In addition, the readiness of security personnel to mitigate risks related to physical security attacks and cyber-attacks is another concern.

**Cybersecurity.** Cyber-attacks cause disruptions to the air transport infrastructure ecosystem. Apart from delays and financial losses, they also create flight safety risks. A Crowdstrike update in July 2024 that caused massive IT outage was not due to a cyberattack, but it gave opportunity for threat actors to take advantage of the incident based on reports of malicious activities.

Safety and Security of Personal Data. Keeping personal data safe and secure is a shared responsibility of governments and industry, including airlines. However, governments have different privacy and data policies and multilateral solutions need to be explored.

#### CONVENIENCE

Airport congestion lowers the level of convenience, comfort, safety, and security for passengers. Milestones have been achieved in the operations of our Philippine airports in recent years. These include:

- 1. Institutionalization of the electronic travel (etravel) system as the standard process for all international passengers and crew members to facilitate border control procedures with immigration and customs (Administrative Order No. 24 s. 2024);
- 2. Investment in e-gates to facilitate passenger screening and improvements in immigration processing;
- 3. Online travel tax payments for outbound Philippine passengers implemented by the Tourism Infrastructure and Enterprise Zone Authority (TIEZA) to help reduce congestion at the airport;
- 4. Self-service kiosks and self-bag drop counters of airlines in NAIA, Cebu, and Clark initiated by airlines and private operators (in the case of Clark and Cebu) to minimize contact between passengers and airport staff;
- 5. Removal of initial security screening at NAIA terminals to reduce the number of touchpoints/chokepoints; and
- 6. Investment in state-of-the-art technology in Cebu and Clark airports to improve security and screening and passenger experience and reduce carbon footprint and consumption of energy and water.



29 https://www.techtarget.com/Crowdstrike. Retrieved on 02 July 2024.

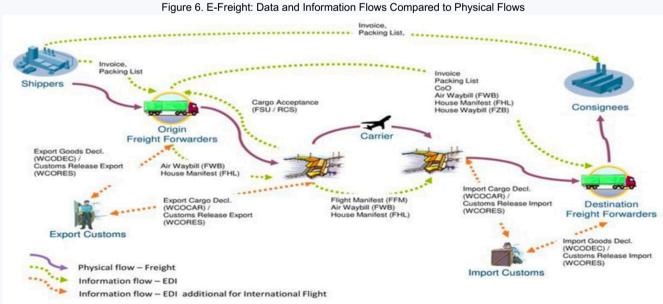
Meanwhile, additional areas that require attention from airport operators include:

- [In NAIA Terminal 3] Ensuring availability of sufficient: (i) immigration counters and officers (to match demand during peak times of the day), (ii) space between immigration counters and security screening facilities, (iii) parking spaces, proper designation in parking spaces, and improvement of vehicle traffic movements;
- 2. Providing faster internet speed to facilitate completion of the e-travel form;
- Addressing concerns of OFWs in filling out the etravel form;
- 4. Providing adequate facilities in the departure lounges and transit areas;
- 5. Improving travel tax payment processes at the airports; and
- 6. Developing efficient inter-connectivity between the NAIA terminals.

On air cargo, Philippines shipments must be covered by the paper air waybill (cargo version of your passenger paper tickets), which is inefficient and expensive. The airway bill functions as proof of receipt of goods for shipment, evidence of contract of carriage, certificate/proof of insurance, basis for air cargo rate/freight calculation, customs declaration, and guide to the carrier staff.<sup>30</sup> There is already an electronic version of the airway bill, used by other countries, that can serve as a model. The Philippine customs has not yet recognized the use of system also needs to advance its information on cargo shipment, which is the same as the advanced passenger information system.<sup>37</sup> The flow of air cargo shipments is shown in Figure 6, which identifies various steps from the shippers to the consignee of the goods.

#### PEOPLE

The EASE of travel and cargo movements depends on the availability and quality of the services by the aviation talents who make the air transport system work 24/7 safely and securely. As the global fleet of commercial aircraft is projected to balloon by the year 2034, economies such as the US are experiencing a shortage in aircraft maintenance workers (Wyman, 2024). In the Philippines, DOTr has reiterated a shortage of aviation personnel in the country and how the privatization of NAIA can arrest the decline in the number of air controllers through investment in the training of new talents to run the airport's day-to-day operations. CAAP is searching for close to 300 more personnel to man air traffic control towers of the country's airport network to meet the growth in demand and expansion programs of the airlines.32



Source: International Airport Transport Association (IATA) E-freight and e-AWB

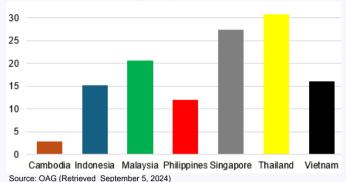
as a part of E-commerce. https://www.icao.int/Meetings/Regional-Symposia/AC-SP13/Documents/Presentations/S5 2.pdf (retrieved 20 June 2024)

- 30 https://asean.org/Air-Freight-Air-Waybill.pdf 31 https://portcalls.com/immediate-adoption-eawb-ph-urged/
- https://portcalls.com/immediate-adoption-eawb-ph-urged/
   https://www.philstar.com/headlines/2024/Air Traffic Controllers

#### **COUNTRY-LEVEL CONNECTIVITY**

The availability of frequent and flexible connections in a destination influences tourism, trade, and investments. The physical distance, capacity, and competition in a route also influence the cost of air tickets. Figure 7 shows capacity in terms of incoming seats for select ASEAN countries since the start of the year. There is significant room to expand connectivity of the Philippines overall, and to enhance connections between airports of the archipelago.





#### **VI. Advocacy Recommendations**

The recommendations below reiterate the need to provide linkages where there should be convergence and to decouple where there should be independence. More specifically, there is a need to (1) provide greater coherence and convergence among entities undertaking airport development and their implementation; and (2) separate regulatory and developmental (i.e. operations and maintenance) functions, which are currently in singular entities. The first imperative affects adequacy of infrastructure; the second is paramount for safety.

#### **BOX 2. HEADLINE RECOMMENDATIONS**

- 1. Upgrade and modernize gateways to increase the value proposition of destinations and to improve EASE of travel and movement of goods.
- 2. Prioritize investments in national aviation safety management systems and security.
- 3. Strengthen and modernize the air transport institutions.
- 4. Combat illegal charters and grey or illegal maintenance.
- 5. Facilitate the Philippine aircraft financing by ratifying the Cape Town Agreement (CTA).
- Institute a system of incentives to increase the competitiveness of the aviation industry and sustainability of air service development.
- 7. Invest in human capital development and sustainability.
- 8. Incorporate sustainability in the long-term development strategy of Philippine aviation.

#### Upgrade and modernize gateways to increase the value proposition of destinations and to improve EASE of travel and movement of goods.

There is renewed optimism and excitement on the modernization of airports such as Laguindingan, Bohol, and Puerto Princesa after at least 10 years of waiting. These airport projects will serve as catalysts to generating higher value propositions for tourism, trade, and investments for destinations linked to these gateways. They are in the advanced stages of the PPP timeline and stakeholders look forward to the transformation of these airports to safer, more secure, customer-centric, and climate resilient infrastructure. However, there is a need for sustained financing support for the airports not covered by the PPP program. The facilities and services in the provincial airports should be continuously upgraded and made smarter to provide EASE of travel and ensure safety and security in the skies and on the ground. With technical assistance from the European Aviation Safety Agency, CAAP is set to develop a Civil Aviation Masterplan aimed at improving the country's aviation safety, efficiency, and sustainability.<sup>33</sup>The plan will cover infrastructure, operations, regulatory framework, national and regional policy, and international standards. It is recommended that the national transportation masterplan and specific

<sup>33</sup> https://caap.gov.ph/caap-set-to-develop-civil-aviation-masterplan-for-the-advancement-of-ph-aviation-sector/

aviation masterplan will transform the Philippine airport network - particularly the airports outside of NAIA, Clark, and Cebu - into productive assets for the country. The plan should be able to enhance surface accessibility and inter-modal transportation, improve seamless mobility of people, and encourage digitalization efforts (e.g. adoption of electronic version of airway bill for cargo).

## **2** Prioritize investments in national aviation safety management systems and security.

The National Aviation Safety Plan (NASP) 2022-2025 identified challenges encountered by CAAP in performing its safety oversight function. These challenges include insufficient number of qualified inspectors to perform oversight functions, insufficient budget to conduct oversight functions, insufficient trainings for oversight personnel, lack of tools (hardware and software) necessary for the implementation of effective State Safety Oversight and State Safety Program (SSP), the Aircraft Accident Investigation and Inquiry Board's lack of independent status as an accident and investigation authority, and ineffective enforcement of policy implementation.

CAAP is pursuing partnerships with international organizations to address these issues. To illustrate, in addition to the EASA technical assistance, CAAP

#### Box 3. Recommendations from Senate Committee Report on the January 1, 2023 Philippine airspace closure

The Senate Committee Report No. 39 on the January 1, 2023 CNS-ATM breakdown reported the following recommendations of ICAO to address the low rating of CAAP in the area of ANS:<sup>34</sup>

- Separate the function of CAAP as a regulator and operator in aerodromes where CAAP is supportive. CAAP asserted that the country's low rating in ANS was mainly due to the agency being both a regulator and operator of airports. By focusing on its regulatory function, CAAP could be more efficient and ICAO compliant;
- Ensure that all aerodromes used for international operations have certification and oversight; and
- Address the insufficiency of aerodrome inspectors.

is collaborating with the US Federal Aviation Administration – Air Traffic Organization, which has manifested its assistance and support in drafting and finalizing the National Air Navigation Plan, conducting a study on parallel runways, enhancing the country's ATM Center infrastructure and Air Traffic Flow Management, exploring best practices and technological advancements for the System Wide Information Management, and procedure design support.<sup>36</sup>

## **3** Strengthen and modernize the air transport institutions.

ICAO highlighted that liberalization, market growth, and complex commercial arrangements among aircraft operators and airlines put pressure on the government in terms of its capacity in safety/security regulation for foreign and domestic aircraft operators. Agencies need resources – human and financial – and the legal, regulatory, and organizational infrastructure to perform the required safety/security regulatory functions (ICAO, 2005).

In order to strengthen the Philippine government's capacity in safety and security, it is recommended: (i) to strengthen CAAP as a non-economic regulatory oversight agency and make it conform with international protocols, (ii) to reinstate the fiscal autonomy of CAAP, and (iii) to de-link the and developmental, proprietary, investigation functions so that CAAP can focus on its regulatory role. Both DOTr and CAAP support these proposed reforms. The National Economic Development Authority (NEDA) also noted that the need to separate conflicting functions of CAAP complies with Section 38 of the National Transport Policy.

To achieve these objectives, the following are proposed as priority legislative measures:

Amendments of RA 9497. CAAP needs funds to maintain and upgrade air transportation systems such as, but not limited to, the CNS/ATM, and to be able to recruit and retain highly qualified and skilled aviation workers. RA 9497 granted fiscal autonomy to CAAP and allowed it to maximize the use of its revenues. However, the GOCC Governance Act of 2011 (RA 10149) made CAAP, like other GOCCs

<sup>34</sup> Senate Committee Report No. 39 cited ICAO's low rating of 45.28% on ANS (compared to the global average of 65%) while the global average is 65%) and that the categories where the Philippines scored low are still up for validation in 2024 and are not yet considered in the audit computation of the Philippine's overall Effective Implementation score of 69% which is above the global average of 67.6%.

<sup>35</sup> https://caap.gov.ph/caap-set-to-develop-civil-aviation-masterplan-for-the-advancement-of-ph-aviation-sector/

<sup>36</sup> A Roadmap for Legislative and Administrative Reforms in the Philippine Aviation Sector. Presentation of Undersecretary Roberto O. Lim, DOTr, American Chamber of Commerce Infrastructure Committee. 08 February 2023.

subject to RA 7656 (the Dividends Law) that mandated GOCCs to declare and remit dividends to the National Government. It also removed the exemption from salary standardization regulations applicable to GOCCs, resulting in standardized, and less competitive, salaries for technical staff. This made it harder to attract and retain skilled aviation workers.

Part of the legislative proposal to amend RA 9497 is to reinstate CAAP's fiscal autonomy and exemption from GOCC salary standardization requirements. Interim measures include the permission for CAAP to re-classify highly technical positions into higher salary grades and in accordance with law and exempt CAAP from the requirement to remit dividends to the National Government. To protect against future implied repeals of RA 9497, the proposed legislation should incorporate a clause requiring that all future repeals or amendments must be explicit, thereby prohibiting implied repeals.

The proposed amendment also intends to revise the requirement that only the CAAP Director General is authorized to file complaints against unruly passengers who violate the criminal provisions of RA 9497, thus expanding the authority to other Philippine officials. This conforms with the ratification of the Montreal Protocol 2014 that will allow those with regulatory or police powers to prosecute any passenger who commits unruly behavior or imposes safety risks on other passengers and crew. The Philippines will gain jurisdiction over offenses committed by unruly passengers onboard foreign aircraft that land in the Philippines.

As of August 2024, SB 1003 (Senator Angara) is the pending bill to amend RA 9497.

**De-link the developmental and proprietary functions of CAAP through the creation of a Philippine Airports Development Corporation or Philippine Airports Authority.** Section 78 of the RA 9497 mandates CAAP to be responsible for the planning, development, construction, operations, maintenance, or expansion of airports. As a technical regulator, CAAP also regulates facilities that it develops and operates. This creates inefficiencies and conflicts of interest. Stakeholders attribute issues such as the lack of convenience and comfort at airports, breakdown of airport equipment and facilities, lack of water and amenities in restrooms, and other challenges to the conflicting functions within CAAP.

The proposed reform is to transfer these functions to a new entity (organizational de-linking) outside of CAAP. This entity will be responsible for the development and commercial functions of all CAAP airports. The functional de-linking approach, by separating the group handling commercial operations within the organizational structure, is deemed as an interim measure. Evidence reveals that organizational de-linking provides greater flexibility to the regulator to focus on its core function. Pending bills in the 19th Congress on delinking the CAAP functions include HB 02234 (Representative Yap, et. al.) and SB 1073 (Senator Poe).



In photo: Inside Mactan-Cebu International Airport, which is operated by the Mactan-Cebu International Airport Authority

There is an initiative to separate the proprietary function related to the operations and maintenance of the CNS/ATM, as practiced in other jurisdictions, to avoid conflicts of interest. A private proponent -Comclark Network and Technology Corporation submitted an unsolicited proposal for the construction, modernization, and operation of air navigation services facilities including the CNS/ATM facilities under a design, build, finance, and operate (DBFO) contractual arrangement. The is conducting a detailed evaluation of the proposal with an estimated project cost of PHP 29.82 billion, after the PPP Center endorsed the proposal to CAAP after it determined the proposal to be complete pursuant to Section 10 of the PPP Code.<sup>38</sup>

Ibid.
 https://ppp.gov.ph/ppp\_projects/design-build-finance-operate-the-air-navigation-services-air-traffic-service-and-air-navigation-service-of-the-philippines/

Independent Philippine Transportation Safety **Board** (PTSB). The current approach to and transportation passenger safety and investigation is fragmented and lacks independence. Transport agencies perform multiple and conflicting functions as regulators, operators, and investigators. This gap in the bureaucracy provides a compelling reason to effect institutional reforms to enhance the standards of transportation safety measures, prevent transportation accidents in the future, and mitigate danger to human lives and property.

The main objectives of the proposed PTSB are to: (a) improve transportation safety measures that will help prevent transportation accidents and mitigate danger to human lives and property; and (b) ensure the implementation of transportation safety standards.

The proposed body shall be a non-regulatory and autonomous agency and shall be the primary agency responsible for the conduct of impartial and forensic evidence-based investigation on the causes of transportation-related accidents and incidents. This proposed reform also seeks to address ICAO audit findings highlighted in the earlier discussion. Stakeholders are advocating to collaborate with Congress to revisit and address the reasons behind the veto of the PTSB. Pending bills on this matter filed in the 19th Congress include SB 1121 (Sen. Grace Poe) and HB 01801 (Cong. Villafuerte, et. al.).

Amend the Civil Aeronautics Act of 1952. This recommendation aims to modernize CAB as an economic regulator with a strong mandateThis recommendation aims to modernize CAB as an independent economic regulator with strong mandate to promote consumer interests in a globalized and highly liberalized aviation market. In addition, as the ownership of airports changes from public to private hands, economic regulation may become more necessary to ensure airport service pricing promotes welfare of airport users.

The proposal is to integrate airport economic regulatory functions in the CAB mandate. DOTr proposed that in the interim, they will create an intraagency office under the Aviation and Airports Sector which will perform the economic regulator functions over airports.

### Box 4. Full Speed Ahead in Air Transport and Tourism Convergence

Infrastructure developments make stronger catalytic impacts when there is convergence with the goals and needs of the users. During his first State of the Nation Address, President Marcos Jr. highlighted the role of improvements in the railway system and modernization of airports and seaports in maximizing the strategic location of the Philippines in the Pacific.

#### Enhancing the Catalytic Effects of Air Transport Through Tourism

Anchored on the order of the President to go on "full speed ahead," the DOTr under the leadership of Secretary Jaime Bautista made it a commitment for air transport to provide its customers CASA (convenient, accessible, safe and secure, and affordable) travel. In the past two years, there is stronger alignment of the air transportation and tourism programs. This is evidenced by the improvements in process flow and integration of the Filipino cultural and heritage elements in the NAIA terminals. DOT leveraged resources with the DOTr and other government agencies involved in the EASE of travel journey. It has carried out its developmental role of increasing access to the tourism destinations by investing in air route development activities. DOTr and DOT have formed a technical working group for the development and promotion of gateways such as Clark.

While overall infrastructure is not yet at the level needed to strongly position the Philippines as a tourism powerhouse in Asia, the focused government efforts (evidenced by the fast implementation of the big-ticket NAIA PPP) are pushing the air transportation industry in the right direction. In our discussion with DOT Secretary Christina Garcia Frasco, the following opportunities for enhancing these catalytic effects of air transport through stronger convergence with tourism emerged:

**Modernization of Existing Airports through Public-Private Partnerships.** Upgrading facilities and incorporating technology will enhance passenger experience and operational efficiency, and make airports as tourist destinations (e.g. Singapore, Bangkok, Qatar). Airports like Cebu are enhancing their strategic position in the region.

**Development of More Regional Airports.** Expanding airport infrastructure in key regions would improve connectivity and decentralize tourism and create more opportunities for tourists to explore less-developed areas of the country, which in turn can further boost regional economies.

Introduction of Digitalization and Sustainability. Implementing digital solutions, such as seamless, contactless transactions for passengers and environmentally sustainable practices in airport operations would streamline processes, reduce passenger time spent at airports, and contribute to a more efficient and enjoyable tourism experience.

**Ensuring Intermodal Connectivity.** Strengthening intermodal connectivity—such as reliable and consistent transport options from airports to nearby cities and regions—is vital. TThis can be seen in developments like the Clark Airport-New Clark City Road, which enhance connectivity. Addressing issues such as long queues, inefficiency, and terminal transfers through NAIA's potential privatization is also key to improving both domestic and international connectivity.

Airport operators need to integrate the tourism experience in the planning and design stages of airports to ensure visitor satisfaction. After years of being labeled as a weakness of Philippine tourism, the air transportation industry is shifting gears for its long-awaited take-off.

#### Combat illegal charters and grey or illegal maintenance.

General aviation poses safety and security risks in the form of illegal charter operations. General aviation refers to aircraft operations that are not for commercial air transportation (i.e. private) unless exemptions apply.

However, when a passenger uses the aircraft by paying money or providing benefits, and the aircraft operators do not have an Air Operator Certificate (AOC), then the general aviation operation is considered an illegal charter. In the event of an accident or incident, passengers cannot make insurance claims from an illegal activity. The illegal operator will be exposed to significant damages resulting from regulatory penalties, repossession of aircraft by the lessor, and damages for death, personal injury or ground damage. The legitimate operators are also penalized by the reputational damage caused by the illegal operations.

How can the industry combat illegal charters? In 2021, CAB formally endorsed the Illegal Charter Reporting System (ICRS) of the Asian Business Aviation Association (AsBAA). As reflected in the European Chamber of Commerce of the Philippines (ECCP) aviation advocacy additional paper. measures include:

- · For CAAP and CAB to streamline and make the financial requirements reasonable for operators to secure an AOC. The CAAP reported that there were 42 local AOC holders (Figure 5) - 28 small/air taxi operators and 14 large/airline operators.40
- · For both agencies to devise a more effective policy to identify illegal operators, to ensure compliance by the legitimate operators, and to conduct stricter ramp inspections at various airports of the country. The objective is to prevent illegal charter operations and to penalize violators accordingly.
- · Investing in public engagement to educate stakeholders end-users about and the regulations that apply to charter operations.

- · Upholding the highest safety standards and codes of best practices along the value chain including the services the approved of maintenance organizations. where illegal maintenance can inflict significant damage on lives and properties.
- Providing proper training to gualified and trained personnel (QTP) inspectors and technicians, and building an ecosystem of a competent and highly equipped aviation workforce produced by educational and training institutions that comply with high standards and curriculum.

#### Facilitate the Philippine aircraft financing 5 by ratifying the Cape Town Agreement.

To operate modern and safe aircraft, airlines need to obtain high-value aviation assets (namely airframes, aircraft engines, and helicopters) which do not have fixed locations. Given the amount of credit or assetbased financing involved, financiers or lessors seek successful enforcement of their proprietary interests in the specific aircraft, especially during airline defaults or insolvencies. Lessees or borrowers also seek protection as part of the transactions. Airlines encounter difficulties in securing rights to these assets because legal systems have different approaches to securities, title retention agreements, and lease agreements. The result is uncertainty on the part of the lending institutions to extend the financing for the investments, which in turn leads to higher costs of borrowin<sup>4</sup>.

To address these issues, it is recommended that countries ratify the 2001 Cape Town Convention on International Interests in Mobile Equipment and the associated Protocol on Matters Specific to Aircraft Equipment. Treated as one single instrument, the Convention and Protocol serve as a legal safety net for the lessors and lessees. It aims to resolve the problem of obtaining rights to high-value aviation assets and to protect the international interests of the sellers, purchasers, and creditors through the creation of an International Registry, and to reduce the risks of lending for aircraft financiers and for other parties involved in aircraft purchasing and leasing. From the time the Convention entered into force on March 1, 2006, a total of 80 Contracting States including Indonesia, Malaysia, Myanmar, and Singapore have become parties to the Agreement.

https://www.hfw.com/app/uploads/2024/04/002600-HFW-AsBAA-Survey-Illegal-Charter-Jan-2021.p
 https://caap.gov.ph/wp-content/uploads/2023/09/List-of-Active-Air-Operator-Certificate-AOC-Holders-as-of-16-March-2023.pdf?csrt=42820843475236100

<sup>41</sup> https://www.icao.int/sustainability/Pages/Capetown-Convention.aspx

## Institute a system of incentives to increase the competitiveness of the aviation industry and sustainability of air service development.

On September 10, 2024, the Senate adopted and ratified the Congressional bicameral conference committee report on the Corporate Recovery and Tax Incentives for Enterprises to Maximize Opportunities for Reinvigorating the Economy (CREATE MORE) bill, which stakeholders expect will facilitate the increase in foreign direct investments to the country and is expected to make the Philippines a more attractive investment destination, improve the economy, and ultimately stimulate demand for aviation and aviation talents. Other areas of concern raised by stakeholders include the excise taxes on aviation turbo jet fuel that contribute to higher costs of doing business and surcharges on airfares.

The expansion program of airlines depends on the airport infrastructure at the origin and destination, level of demand, viability and sustainability of the service, and their respective business models, among other factors. Airlines invest in building the demand and need support from national and local stakeholders to generate the critical scale of passenger traffic and sustain the routes.

Airport authorities and private airport operators have greater flexibility to design incentives schemes. However, for most of the airports of the country that are being promoted to the airlines for direct flights, there is a lack of incentives that rival the offerings of other airports in the region.

It is recommended that airport operators provide competitive incentive schemes (e.g. passengerbased fees depending on load factors, value-growth incentive when an airline has based an aircraft in the airport, and new entrant incentives) that other airport authorities in the region offer to international airlines. Tourism stakeholders will be able to complement these schemes with destination marketing incentives or marketing support programs.

## 7 Invest in human capital development and sustainability.

To achieve safe, secure, and sustainable Philippine aviation, the government and industry need to address the brain drain of aviation talents reported by DOTr and CAAP. Foreign airport authorities offer very competitive packages to Filipino aviation workers and professionals. The air traffic controllers, for example, who earn PHP 40,000 per month in the Philippines can earn six to eight times more in the Middle East. The package also includes free housing benefits for their families.<sup>42</sup>

To address the issues, one recommendation raised by stakeholders is for the government to conduct an in-depth analysis of the current pay structures and benefits of aviation professionals in the Philippines compared to those in other countries. This will then be used to facilitate an adjustment in the salary grades of air traffic personnel.

A parallel track is the priority of the DOTr to strengthen the Civil Aviation Training Center and to promote increased participation of the private sector in skills training and development in the aviation industry. While CAAP continues to advocate for fiscal autonomy, the proceeds from airport PPPs are proposed to be utilized for the improvement of the rest of the airport network and the talent pool of the industry.



In photo: Ground crew at the tarmac of Mactan-Cebu International Airport

42 https://www.rappler.com/business/caap-philippines-losing-air-traffic-controllers-countries-pay-higher-salary/

#### Incorporate sustainability in the long-term **R** development strategy of Philippine aviation.

By 2050, commercial aircraft emissions could triple given the projected growth of passenger air travel and freight.43 However, global airline stakeholders including IATA member airlines and ICAO have come together to chart the flight path towards the net-zero carbon emissions for air transport by 2050. On 22 July 2022, at ICAO High-Level Meeting on Long-Term Aspirational Goals (LTAG), ICAO Member States took a step forward in adopting LTAG for international aviation emissions and to define a common approach by states to decarbonise aviation. The latest developments in aircraft technology, use of sustainable aviation fuels, efficiency in operations, and mechanisms to offset or eliminate carbon emissions show that the sustainable flight path is highly possible.

In April 2016, the Philippines signed the Paris Climate Agreement, which outlines a sustainable

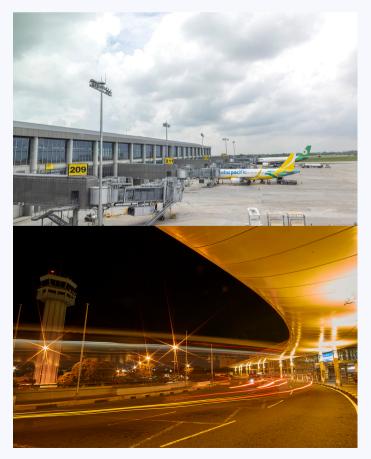
VII. Conclusion

The Philippine aviation industry has entered a new and exciting period of modernization of its infrastructure. Airports are expanding and airlines are investing to restore their pre-pandemic levels and to shift to a high growth trajectory. There is greater convergence between air transportation and industries such as tourism that enhance the catalytic impacts of air transportation.

Recent policy reforms have increased options for financing the growth of airports and airlines, and upgrading of air traffic management systems. As the industry seeks to capitalize on growth opportunities, users of air transportation aspire to see the development of a highly customer-centric network of airports that ensures EASE of travel and movement of goods.

Most importantly, this network will be able to guarantee the safety and security of everyone on the ground and in the skies. Institutional reforms are urgently needed to fill in the gaps in the Philippine air transport ecosystem and to build the momentum for a sustainable take-off.

framework to significantly reduce global greenhouse das emissions.<sup>44</sup> There are some ways aviation can contribute to the country's commitments based on the ECCP advocacy paper. These include: (i) development of a comprehensive support program for adopting sustainable aviation fuel (SAF), (ii) devising policy support for aircraft manufacturers to accelerate research in the national climate action plan. (iii) facilitating investments in the aviation sector, (iv) developing a cost-competitive production value chain of SAF with proper incentives given that SAF is still in its infancy stage, (v) supporting the plan of the Department of Energy to push the adoption of SAF in the Philippines by 2027, (vi) promoting certification standards that ensure SAF eligibility under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) that can facilitate compliance with international emission reduction targets and incentivize investments, and (vii) positioning the Philippines in ICAO as its global platform for sustainability.



<sup>43</sup> https://www.eesi.org/papers/view/fact-sheet-the-growth-in-greenhouse-gas-emissions-from-commercial-aviation 44 https://www.un.int/philippines/activities/philippines-174-countries-sign-paris-climate-agreement

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#### LIST OF PARTICIPANTS AT ROUNDTABLE DISCUSSIONS ON PHILIPPINE AIR TRANSPORT INFRASTRUCTURE (AUGUST 2023 AND JUNE 2024 AT THE AMCHAM ROBERT SEARS HALL)

1. Adame, Rady 2. Angeles, Lourdes "Utchie" 3. Arbotante, Ray	Division Manager, Tourism Infrastructure and Enterprise Zone Authority Aviation Committee Co-Chair, European Chamber of Commerce in the Philippines Officer-in-Charge, Aerodome Air Navigation Safety Oversight Office, Civil Aviation Authority of the Philippines
4. Bagas, Kaye 5. Baldonado, Anna Beatrice	Program Officer, UPPAF-RESPOND Program Officer, Philippines Representative Office, Center for International Private Enterprise
6. Barcellano, Katherine 7. Bautista, Bettina 8. Biscocho, (Atty.) Abbie 9. Casanova, Arnel 10. Cheol, Lee 11. Choi, Hyok 12. Clemente, Aileen	Corporate Planning Analyst, Civil Aviation Authority of the Philippines Policy and Project Officer, Makati Business Club Special Project Research Officer, Civil Aviation Authority of the Philippines Infrastructure and Logistics Committee Chair, AmCham Philippines Regional General Manager, Korean Air Vice President, Korean Chamber of Commerce Philippines President, Rajah Travel Corporation
13. Costales, Jose Miguel 14. Crucena, Raul 15. Cruz, Junard	Director, Quantity Solutions Civil Aviation Authority of the Philippines Consultant for the Office of the Undersecretary for Aviation and Airports, Department of Transportation
<ol> <li>15. Cruz, Junard</li> <li>16. Curay, Pierre Carlo</li> <li>17. David, Samuel</li> <li>18. Devulgado, Alicia</li> <li>19. Drysdale, Dorothy</li> <li>20. Escarilla, (Atty.) Louise Mikhaela</li> <li>21. Evardone, (Atty.) Armie</li> <li>22. Fulmaran, Sofia</li> <li>23. Garcia, Randall</li> <li>24. Griar, (Atty.) Stephanie</li> <li>25. Hinchliffe, Ebb</li> <li>26. II Jeon, Kook</li> <li>27. Jamadre, (Engr.) Rynor</li> <li>28. Jose, Joseph</li> <li>29. Laroya, Aaron Christian</li> <li>30. Manalo, Jeffrey</li> <li>32. Mellizas, Marian</li> <li>33. Mendiola, James</li> <li>34. Mina, Ronald</li> <li>35. Moro, (Atty.) Maria Elben</li> <li>36. Motchmann, Max</li> <li>37. Ng, (Capt.) Stanley</li> <li>38. Parco, Jun</li> </ol>	Consultant for the Ondersecretary for Aviation and Airports, Department of Transportation Co-Chair, Transport Logistics Committee, Philippine Chamber of Commerce and Industry Country Manager, International Air Transport Association President, Oversees Placement Association of the Philippines Tourism and Hospitality Committee Chairperson, AmCham Philippines Legal Officer, Associated Marine Officers' and Seamen's Union of the Philippines Senior Legislative Consultant, Arangkada Philippines Officer-in-Charge, Strategic Planning Division, Civil Aviation Authority of the Philippines Project Director (2023), Arangkada Philippines Special Project Research Officer, Civil Aviation Authority of the Philippines Executive Director, AmCham Philippines Director, Korean Chamber of Commerce Philippines Infrastructure and Logistics Committee Chairperson, AmCham Philippines Officer-in-Charge, Migrant Workers Protection Bureau, Department of Migrant Workers SITA Aviation Committee Co-Chairperson, European Chamber of Commerce in the Philippines Deputy Executive Director, Public-Private Partnership (PPP) Center National Economic and Development Authority (NEDA) Oversees Workers Welfare Administration (OWWA) Director, Overseas Workers Welfare Administration (OWWA) Deputy Executive Director, Civil Aeronautics Board (CAB) Aviation Committee Member, European Chamber of Commerce in the Philippines (ECCP) Trustee of the Tourism Congress of the Philippines (TCP) Director, Overseas Workers Welfare Administration (OWWA)
39. Repancol, David 40. Rivera, Rafael 41. Rodolfo, Ma. Cherry Lyn 42. Santos, Miles 43. Stuntz, Katie 44. Yap, Eduardo "Eddie"	Acting Chief, ARCID, Civil Aviation Authority of the Philippines (CAAP) Deputy Leader, UPPAF-RESPOND Lead Convener, Safe Travel Alliance Manager - Corporate Sales, Bayview Park Hotel Project Director (2024), Arangkada Philippines Foundation for Economic Freedom / Infrastructure Committee Chair, Management Association of the Philippines



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