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Viet Nam Airport Sector: Development and Investment Opportunities



Executive Summary

This document is prepared by PwC Vietnam Aviation team with the aim of providing information on the airport sector development and investment in Viet Nam. Its content is based on reviews of the sectoral regulatory framework in Viet Nam, market development and perspectives, PwC research and analysis.

Key insights



Potential of Viet Nam aviation market

Viet Nam boasts a rapidly growing passenger and cargo aviation market, steady post-COVID recovery and strong growth prospects moving forward.

[>> See page 4 for details](#)



Viet Nam Airport Masterplan

In the Viet Nam Masterplan on National airport development for 2021-2030, with a vision to 2050 (Viet Nam Airport Masterplan), **8 new airports** and 22 airport expansion projects are planned to **increase airport accessibility within 100km to over 95% of the population** by 2030.

[>> See page 5-7 for details](#)



Required investment

Viet Nam is looking to spend **USD 17.80 billion** on the development of the nationwide aviation system from 2021 up to 2030, and **USD 25.48 billion** up to 2050.

[>> See page 8 for details](#)



Private participation

To facilitate the targeted airport infrastructure improvement, numerous policies have been enacted to **encourage private investment and foreign investment participation**.

Private sector participation through Public-Private Partnership (PPP) modality is enabled by the PPP Law and included in the Viet Nam Airport Masterplan.

[>> See page 9-10 for details](#)



Airport PPP projects

New policy development allows for **a number of airports to be opened for PPP**, except for major airport projects.

All airport PPP projects fall under the Prime Minister's authority or above to decide investment policies, and hence are subject to relevant procedures.

[>> See page 11-12 for detailed list of potential airport PPP projects](#)

Opportunities moving forward

Open market for private sector:

With favourable legal policy paving the way for private participation, there are increasing investment opportunities open for both local and foreign investors to develop Viet Nam airport sector.

Market pioneer opportunity:

No airport PPP project has been completed since the new PPP law came to effect on 01 January 2021, which opens an opportunity for a market pioneer to develop a suitable project for implementation.

Knowledge sharing from international resources:

Learning best practices and leveraging international experience and technology is critical to support management of investment and efficient PPP development and implementation.

Stakeholder participation:

Authorities, multilateral and bilateral development partners, foreign and local investors, project developers, and all other stakeholders should expedite dialogues, regulatory processes, and negotiations to realise the potential of private participation in the airport sector.

Opportunities for airport suppliers:

Technology adoption at Viet Nam airports is generally on a similar level to other airports in Southeast Asia but still limited in quantity and variety. This, together with the number of airport development and expansion projects, leads to potential opportunities for smart technology providers in the aviation sector.

Viet Nam boasts a rapidly growing passenger and cargo aviation market with steady post-COVID recovery, amid global headwinds

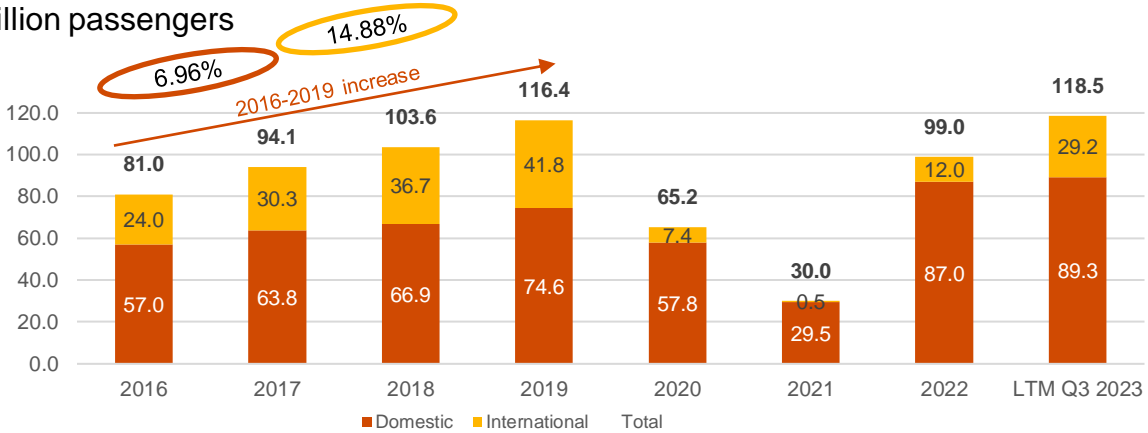


Air Passenger Traffic

- From 2016 to 2019, domestic and international passenger traffic of airports operated by Airport Corporation of Vietnam (ACV) has increased rapidly
- Strong post-COVID recovery in 2022 is driven by overall economic growth, tourism, and rapid urbanisation in the country
- In 2023, domestic air traffic continued to grow beyond its 2019 level, with SGN-HAN route ranked as top 4 globally as reported by OAG. International air traffic, despite continuing to increase, has not yet recovered to its pre-COVID performance.

Passenger traffic of airports operated by Airport Corporation of Vietnam

Million passengers



LTM Q3 2023: Last 12 months from October 2022 – September 2023

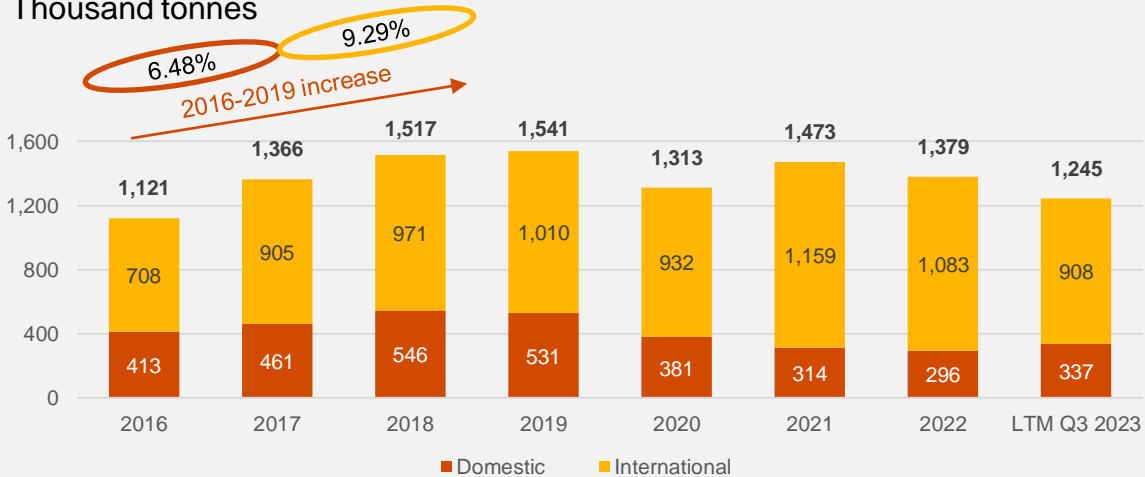


Air Cargo Traffic

- From 2016 to 2019, domestic and international cargo handled in Viet Nam has increased steadily
- The international cargo sector grew in 2021, almost fully recovered from its 2019 level, due to the country's expanding manufacturing sector, e-commerce sector, hinting for long-term growth potential
- However, the sector experienced a reduction in 2022-2023, which aligns with recent global headwinds in economic activity and international trade.

Cargo traffic of airports operated by Airport Corporation of Vietnam

Thousand tonnes



LTM Q3 2023: Last 12 months from October 2022 – September 2023

Note: 21 out of 22 airports in Viet Nam (except for Van Don Airport) are currently operated by Airport Corporation of Vietnam (ACV).

Source: Airport Corporation of Vietnam (ACV) Annual reports, Civil Aviation Authority of Vietnam, EMIS Insights - Viet Nam Infrastructure Sector Report 2021/2022, Vietnam Briefing, "Vietnam Whitepaper" (Embraer), PwC Analysis

Viet Nam Master plan on National Airport Development for 2021-2030, with a vision to 2050 set ambitious targets for the sector, which requires significant investment

2030 Targets

Transportation Traffic by 2030



275.9 million

Air transport passengers
Equivalent to 1.5-2% of total transportation traffic



4.1 million

Air transport cargo tonnage
Equivalent to 0.05-0.1% market share

Infrastructure Target

Prioritised airports

Noi Bai International Airport,
Tan Son Nhat International Airport,
Long Thanh International Airport,
Da Nang International Airport,
Cam Ranh International Airport,
Phu Quoc International Airport



Gradual upgrade and effective exploitation of existing airports, infrastructure and flight management equipment



Increased airport accessibility **within 100km** to over **95%** of the population

Vision to 2050



02 major international transshipment hubs for the region in Hanoi and Ho Chi Minh City



Increased airport accessibility within **100km** to over **97%** of the population

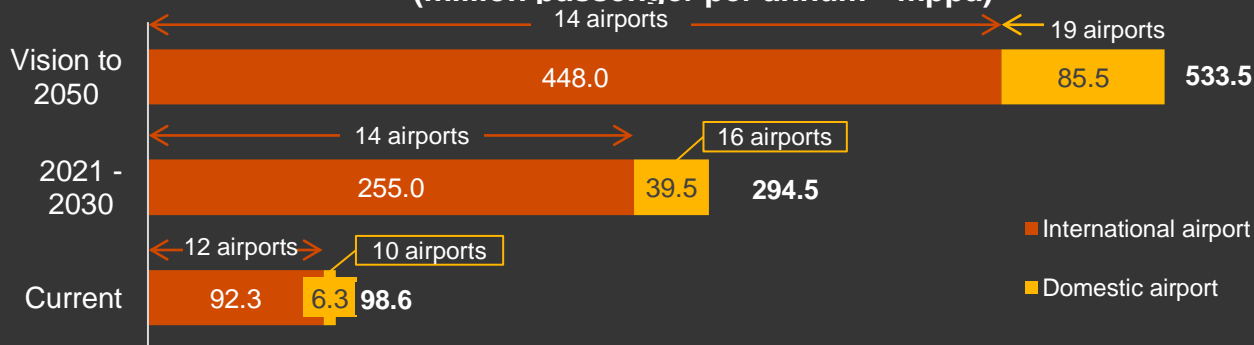


Expand and upgrade airports in regional economic centres, ensuring socio-economic development needs



Synchronous and modern aviation infrastructure system at international level

Targeted total designed airport capacity (million passenger per annum - mppa)



Source: Decision. No 648/QĐ-TTĐ dated 07 June 2023 on Viet Nam Master plan on National airport development for 2021-2030, with a vision to 2050, News and article, PwC Research

The Masterplan also highlights synchronous infrastructure planning with inclusion of logistic centres and MRO operations are critical for the airport sector development

01 Flight Operation System

Invest in and **modernise** the infrastructure system and equipment to ensure

- **Safety standards** in flight operations at all airports aligned with national security and airspace sovereignty mission
- Compliance with **ICAO standards**.

02 Air Transport Logistics Centres

- Establish **logistics centres** at airports with **cargo transport greater than 250,000 tonnes/year**
- Set up an international transshipment logistics centre at **Chu Lai airport**
- Meet **warehousing and connectivity requirements** (at Noi Bai, Tan Son Nhat, Van Don, Cat Bi, Da Nang, Chu Lai, Long Thanh, Can Tho and other qualified airports).

03 Flight Training Centres

- Set up suitably scaled **flight training centres** for **domestic and regional training** at airports with high landing and take-off density
- **Prioritised** airports include **Chu Lai, Rach Gia and Ca Mau airports**.

04 Aircraft Maintenance, Repair & Overhaul (MRO) Centres

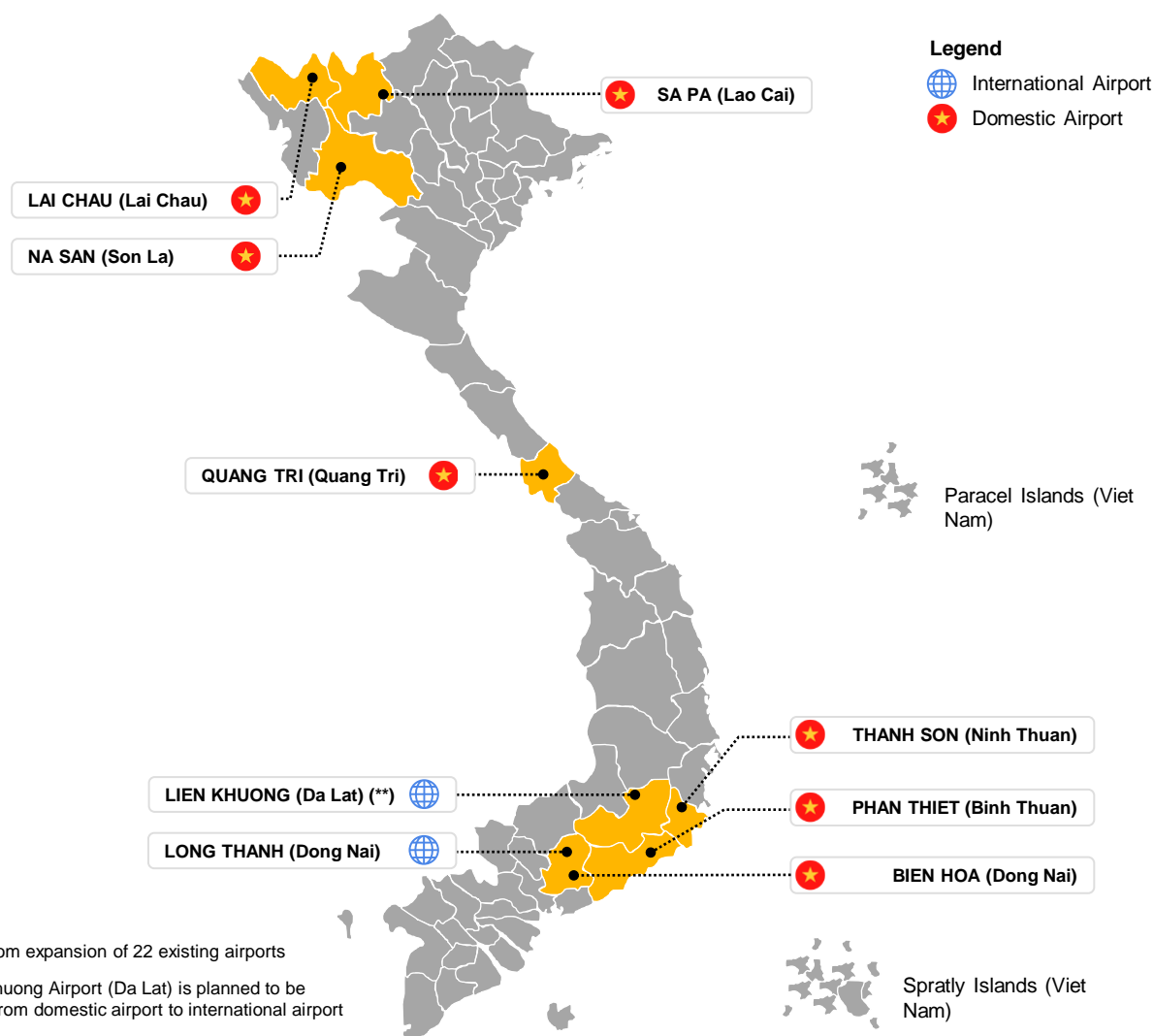
- Establish **MRO centres** as necessary
- Prioritise (i) **MRO centres construction at major airports**, including: Noi Bai, Da Nang, Tan Son Nhat, Chu Lai, Cam Ranh, Can Tho, Long Thanh
- Prioritise (ii) **Major MRO centre at Chu Lai airport**.

Source:
Decision. No 648/QĐ-TTĐ dated 07 June 2023 on Viet Nam Master plan on National airport development for 2021-2030, with a vision to 2050, News and article, PwC Research

8 new airports and 22 airport expansion projects are planned to increase airport accessibility within 100km to over 95% of the population by 2030

Planned Additional Airports in Viet Nam until 2030 (*)

1 International + 7 domestic + 1 upgrade from domestic to international



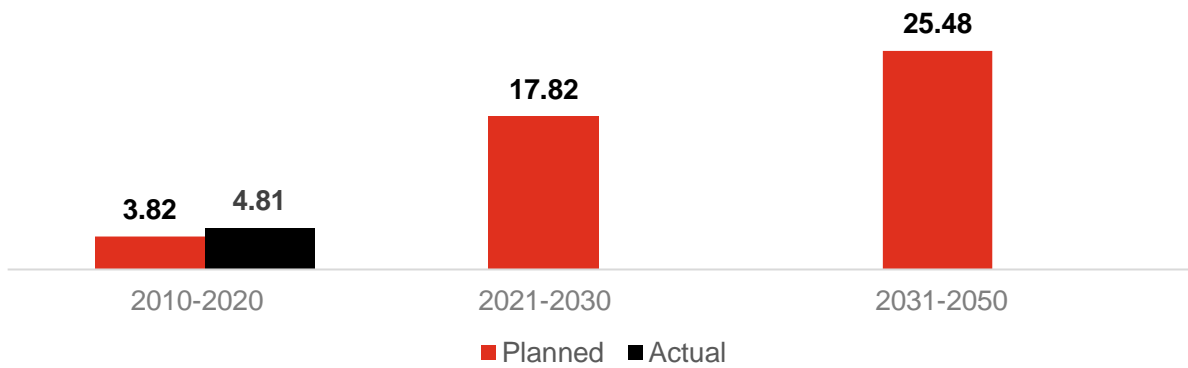
Planned Additional Airports until 2050 (apart from 30 airport expansion projects)

- (1) New Hai Phong International Airport
- (2) Cat Bi Airport (Hai Phong) changed from international to domestic airport
- (3) New Second airport of the Hanoi Capital region
- (4) New Cao Bang Airport

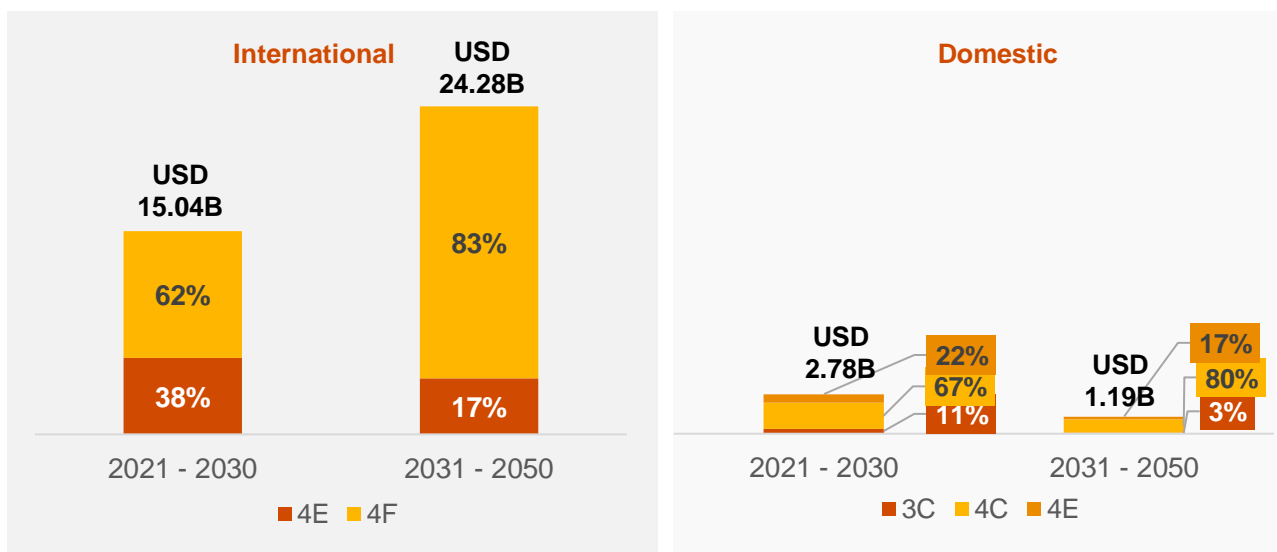
Source: Decision. No 648/QD-TTG dated 07 June 2023 on Viet Nam Master plan on National airport development for 2021-2030, with a vision to 2050, News and article, PwC Research

To meet the ambitious targets of the Master plan, significant investment is required for airport infrastructure in Viet Nam

Total capital requirement for national airport system (USD billion)



Total capital requirements of international airport system by ICAO Annex 14 aerodrome type (USD billion)



| Aerodrome type | Aeroplane reference field length | Wingspan | Typical aeroplane served |
|----------------|----------------------------------|------------|---|
| 3C | 1200m to 1800m | 24m to 36m | Embraer regional jets, ATR, and equivalent |
| 4C | 1800m and above | 24m to 36m | Airbus 320, 321, Boeing 737, and equivalent |
| 4E | 1800m and above | 52m to 65m | Airbus 350, Boeing 787, and equivalent |
| 4F | 1800m and above | 65m to 80m | Airbus 380, and equivalent |

Note: Exchange rate VND/USD used: 23,600 (Fitch 2023 Annual average figure).

Source: Decision No. 648/QĐ-TTĐ dated 07 June 2023 on Viet Nam Master plan on National airport development for 2021-2030, with a vision to 2050, ICAO Annex 14, Published news and airports, PwC Research

To facilitate the targeted airport infrastructure improvement, Vietnamese Government has introduced policies to encourages private investment and foreign investment participation

Public-Private Partnerships (PPP) Modality

PPP Modality for Van Don International Airport 2015

The first private airport in the country (pilot project) to date. A domestic private investor undertook the development of the airport from 2015, and its operation from 2018.

PPP Law no.64/2020/QH14
dated 18 June 2020
effective from 1 January 2021

Airport is one of the sectors in which PPP modality is allowed.

All airport PPP projects with required public capital of **VND 10,000 billion (~USD 424 million) and above** fall under the National Assembly's authority to decide investment policies, and hence are subject to relevant procedures. All other PPP airport projects fall under the Prime Minister's authority to decide investment policies.

In JV cases: The leading investor in the consortium must have a **minimum 30% equity contribution**, each member in the consortium must have a **minimum 15% equity contribution**

Submission of Ministry of Transportation (MOT) to PM in 2023

on Proposed orientation to mobilise social capital for investment in aviation infrastructure

Suggesting to classify 21 existing airports into 5 groups. Major airports, including Noi Bai, Da Nang, Cam Ranh, Phu Quoc, Long Thanh, and Tan Son Nhat, are classified as Group 1. These are important international airports of the country, with a planned capacity of more than 25 million passengers per year by 2030, which are not subject to private capital participation.

Other airports are subject either partially or totally to private capital participation, including PPP investment. **This proposal is subject to Prime Minister approval.**

Decision. No 648/QD-TTG on Viet Nam Master plan on National airport development for 2021-2030, with a vision to 2050

dated 07 June 2023

PPP would be prioritised for greenfield airports.

For existing airports, PPP is one of the investment forms to be leveraged for upgrading and expansion.

For airports of national importance, airports with military operations and airports in border and island areas, public resources would be prioritised.

Note: Exchange rate VND/USD used: 23,600 (Fitch 2023 Annual average figure).

To facilitate the targeted airport infrastructure improvement, Vietnamese Government has introduced policies to encourages private investment and foreign investment participation

Foreign Investments

Due to the rapid growth in the Vietnamese aviation market, the airport infrastructure in the country is overloaded. This has led to a **vital and urgent need for investments in the Vietnamese airport market** including foreign investments.

Since Viet Nam became a part of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), **foreign investment in the aviation sector is allowed via capital contributions or stake acquisitions capped at 30% for airports and airport operation services.** Minimum capital requirement for the foreign investor to establish and maintain an airport operation business is **VND 100 billion (USD 4.24 million) for domestic airports and VND 200 billion (USD 8.48 million) for international.**

Favourable regulation and enforcement is needed to facilitate the attraction of foreign investment in the Vietnamese aviation sector:

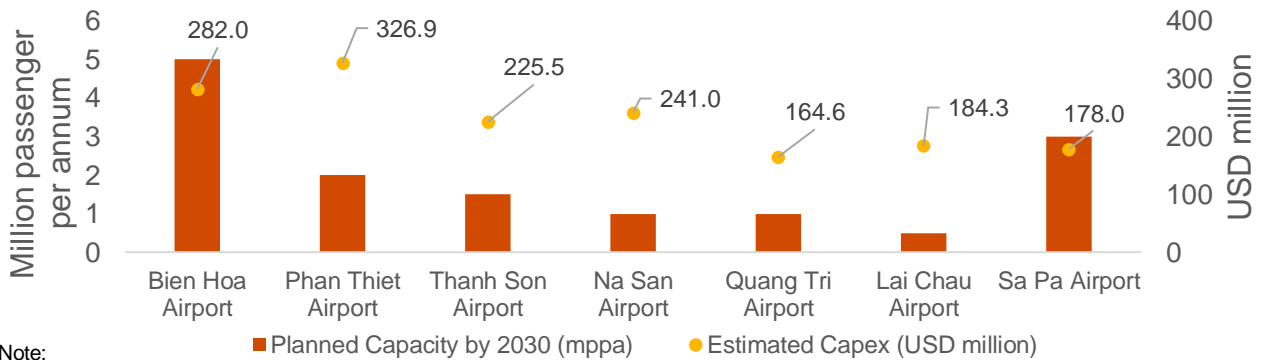
- Enhanced clarity in PPP project implementation guidance for aviation sector
- Further relaxed policies regarding the maximum allowed foreign ownership as well as the minimum capital requirement.



New policy development suggests a number of airports to be opened for private participation, particularly PPP modality

7 New Airport Projects by 2030 – estimated passenger traffic and CAPEX

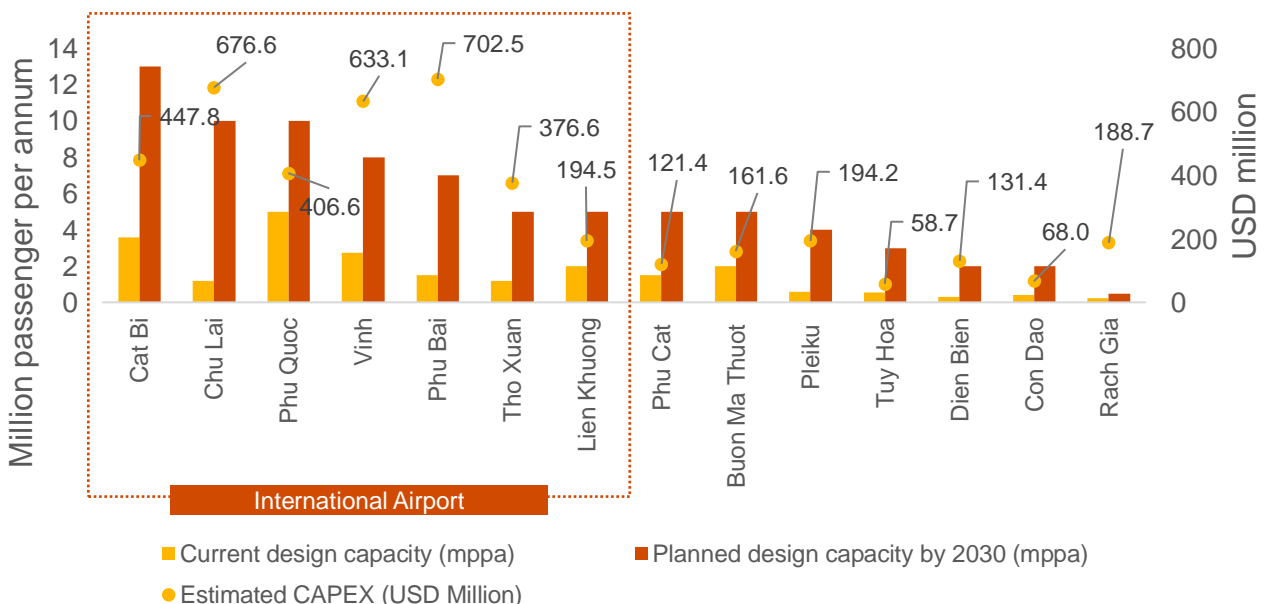
PPP would be prioritised for greenfield airports, except for airports of national importance, airports with military operations and airports in border and island areas.



- Note:
- Construction of Quang Tri Airport, Sa Pa Airport and Phan Thiet Airport projects following PPP modality are on-going. Investment policy for Phan Thiet Airport is being adjusted due to planning adjustment from level 4C airport to level 4E
 - Bien Hoa and Thanh Son Military Airports are allowed for conversion from single usage (military only) to dual usage (commercial and military) according to the Viet Nam Airport Masterplan

14 Airport Expansion Projects by 2030 – estimated passenger traffic and CAPEX

Investment mechanisms through PPP/concession modality and other forms of investment will be researched and developed. This excludes airports of national importance, airports with military operations and airports in border and island areas.



- Note:
- Exchange rate VND/USD used: 23,600 (Fitch 2023 Annual average figure).
 - Airports in Group 1 according to Submission of MOT to PM on Proposed orientation to mobilise social capital for investment in aviation infrastructure have been excluded in the above lists, as public capital is suggested to be prioritised for them.

Source: Decision. No 648/QD-TTG dated 07 June 2023 on Viet Nam Master plan on National airport development for 2021-2030, with a vision to 2050, News and article, PwC Research

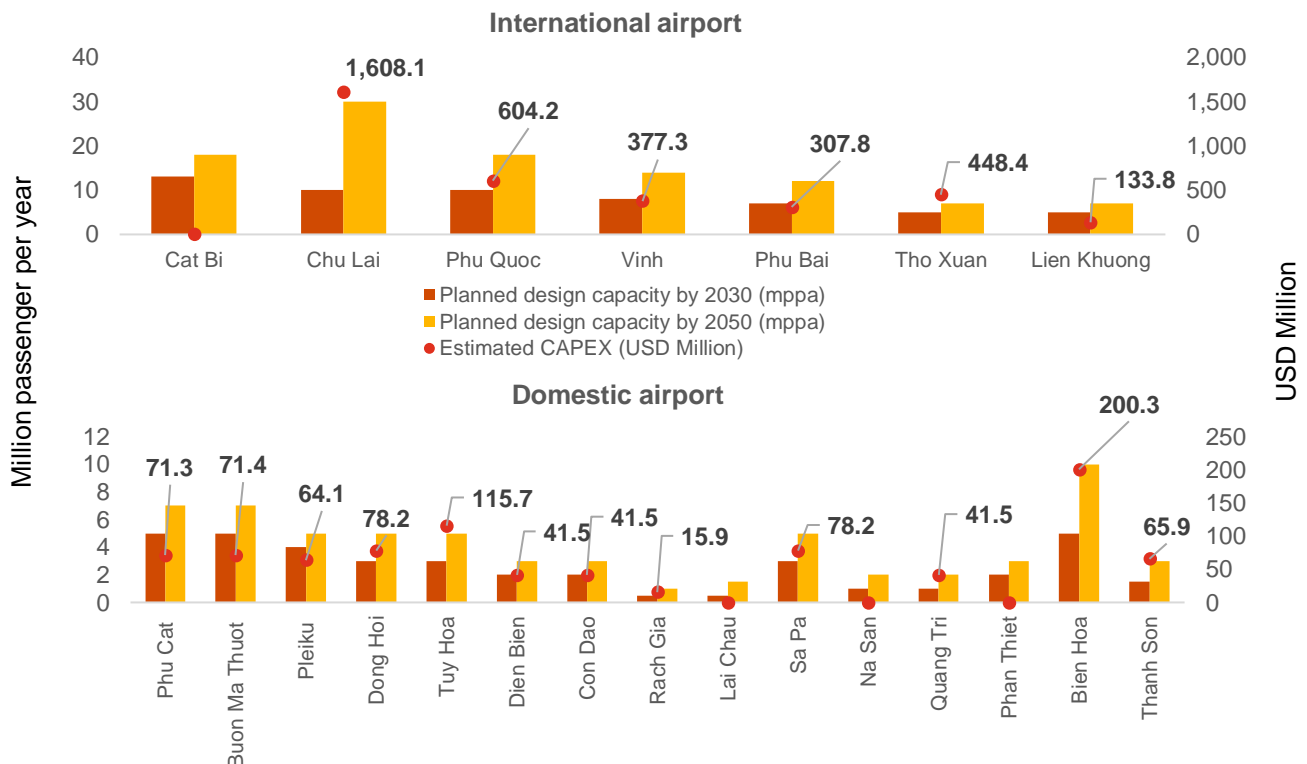
New policy development suggests a number of airports to be opened for private participation, particularly PPP modality

3 New Airport Projects by 2050 – estimated passenger traffic and CAPEX

| | Planned Capacity by 2050 (mppa) | Estimated Capex (USD million) |
|--|---------------------------------|-------------------------------|
| Hai Phong International Airport | 12 | N/A |
| Cao Bang Airport | 2 | 241.02 |
| Second airport of Hanoi Capital Region | N/A | N/A |

Note: Designed capacity and Estimated Capex for second airport of Hanoi Capital Region, Estimated Capex for Hai Phong International Airport are not specified in Decision. No 648/QD-TTG dated 07 June 2023 on Vietnam Master plan on National airport development for 2021-2030, with a vision to 2050.

22 Airport Expansion Projects by 2050 – estimated passenger traffic and CAPEX



- Note:
- Exchange rate VND/USD used: 23,600 (Fitch 2023 Annual average figure).
 - Estimate CAPEX for Cat Bi, Lai Chau, Na San, Phan Thiet Airports are not specified in Decision. No 648/QD-TTG dated 07 June 2023 on Viet Nam Master plan on National airport development for 2021-2030, with a vision to 2050.
 - Airports in Group 1 according to Submission of MOT to PM on Proposed orientation to mobilise social capital for investment in aviation infrastructure have been excluded in the above lists, as public capital is suggested to be prioritised for them.

Source: Decision. No 648/QD-TTG dated 07 June 2023 on Viet Nam Master plan on National airport development for 2021-2030, with a vision to 2050, News and article, PwC Research

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