



ANGKASA PURA II
INDONESIA'S AIRPORT COMPANY

ANGKASA PURA II: AIRPORT FUTURE CONCEPT

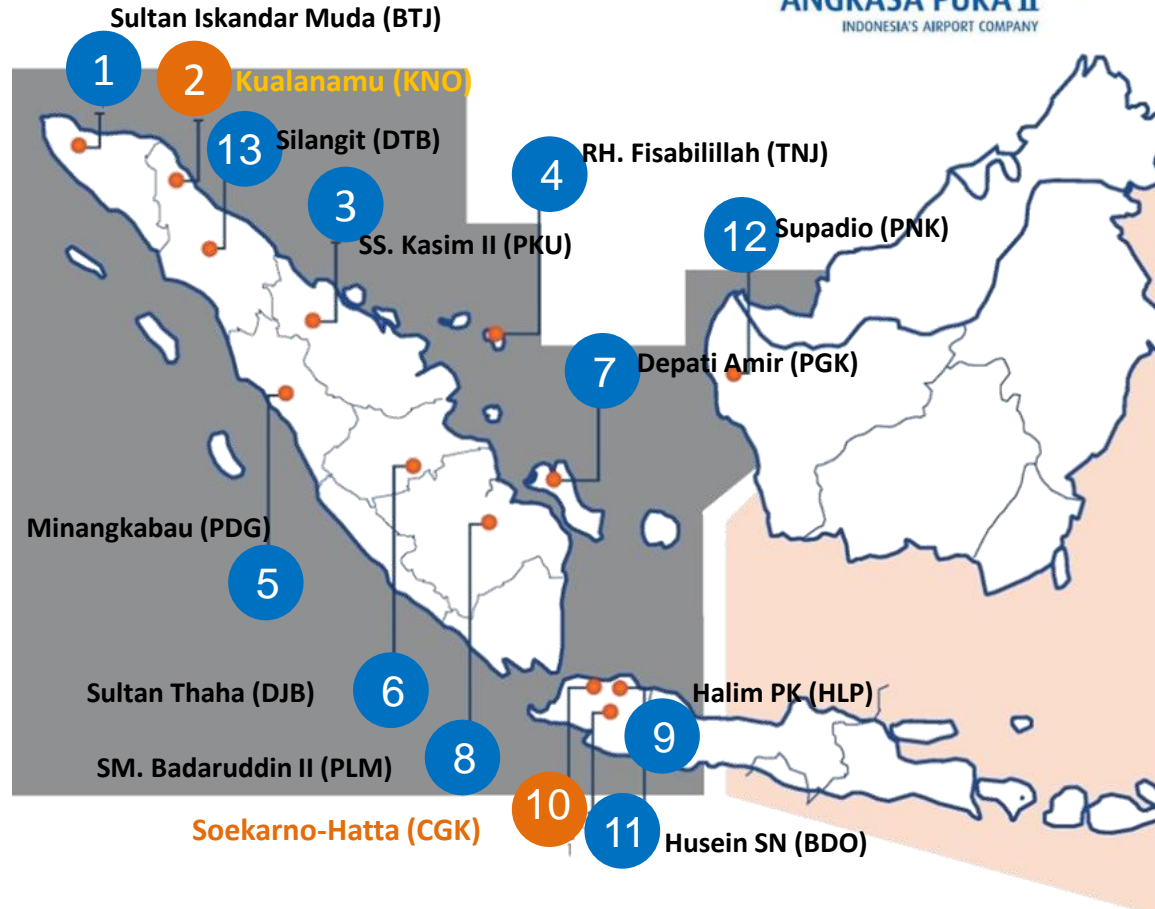


BY: DJOKO MURJATMODJO (*DIRECTOR OF OPERATIONS & ENGINEERING*)



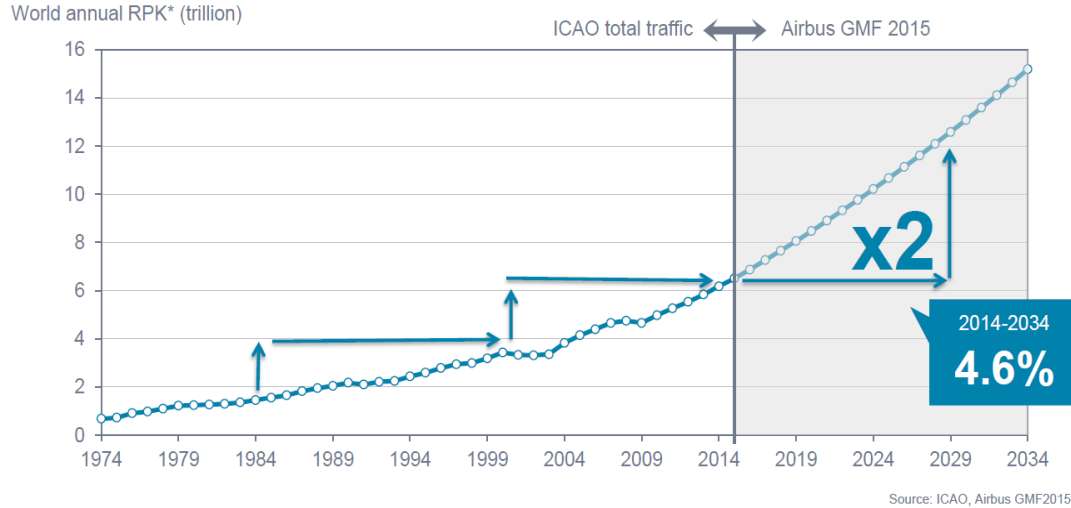
APEN BANDUNG SYMPOSIUM 2015
NOVEMBER 12th, 2015

COMPANY PROFILE

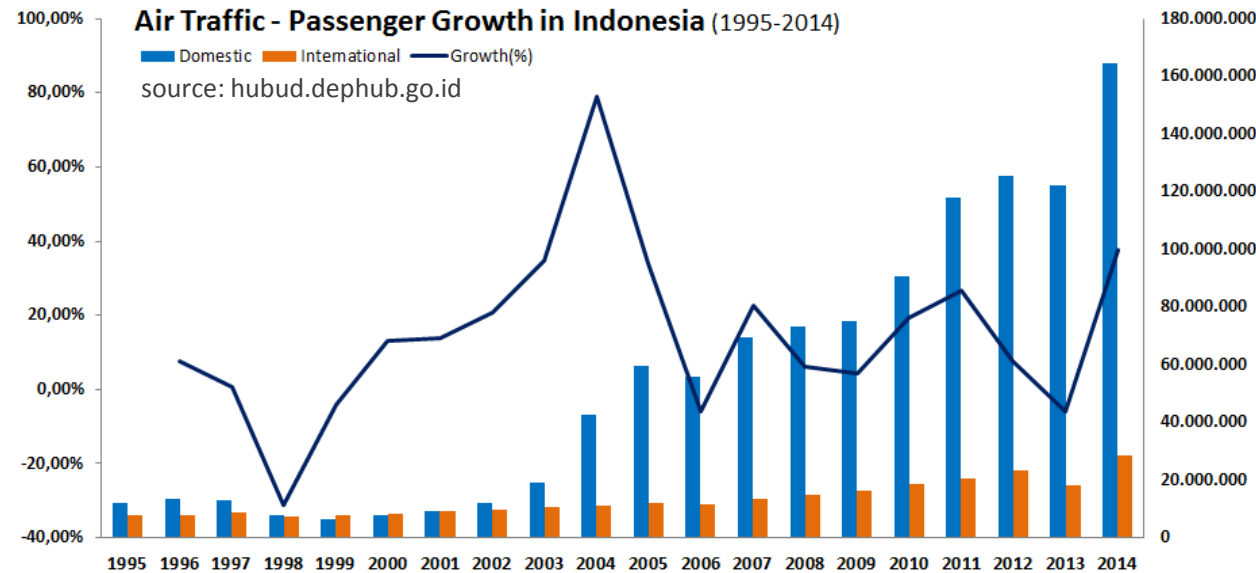


PT Angkasa Pura II (Persero) is one of the State-owned enterprises in the Department of Transportation engaged in the airport services and airport related services in Western part of Indonesia. Currently, Angkasa Pura II operates 13 airports in which one of its airport, Soekarno Hatta International Airport as the Main Hub Airport in Indonesia.

AIRPORT CHALLENGES

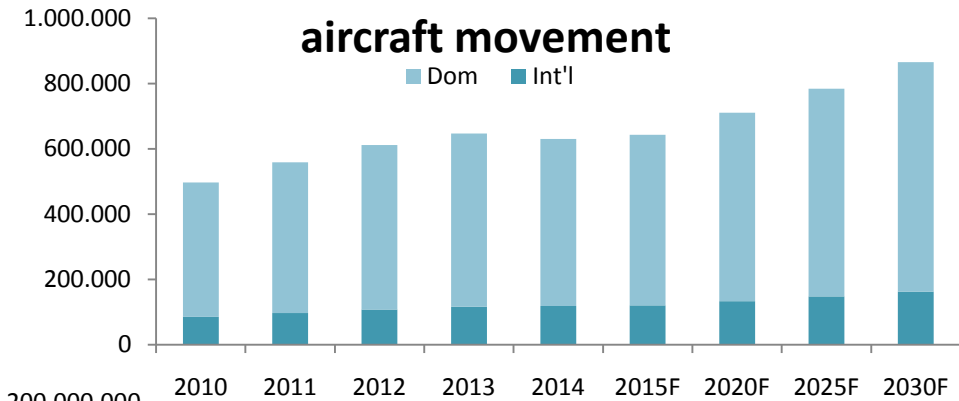


ICAO and AIRBUS statistics data of world air traffic growth described that every 15 years the growth has doubled. The world annual traffic growth is projected approximately to 4.6% for next 20 years and by 2014 to 2034

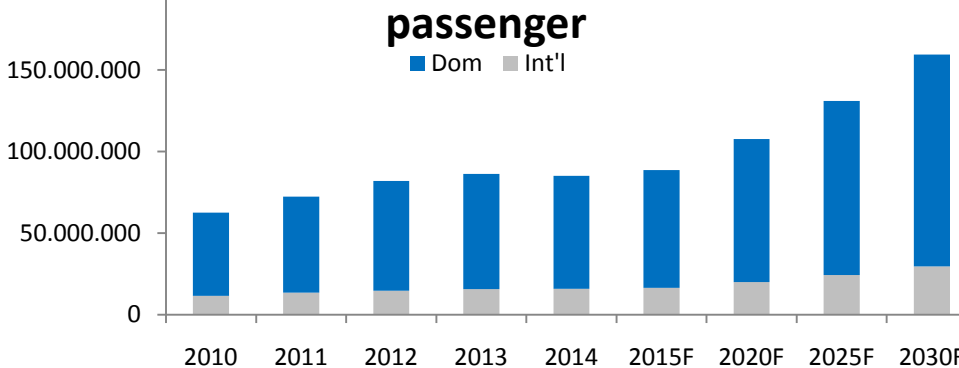


Total passenger traffic at Indonesian airports is forecast to increase from 20 million passengers per annum (mppa) in 1995 to 193 mppa in 2014, an AAGR of 14.8%. The ratio between Domestic and International passengers to the total passenger in 2014 is approximately 85% (Domestic) and 15% (International).

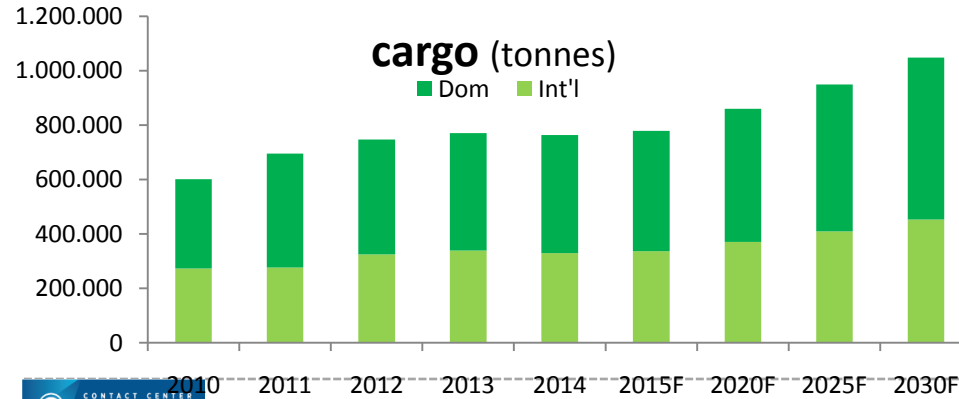
AP II's STATISTICS 2010-2030(F)



Total Aircraft movement of AP II airports is forecast to increase approx. **866 thousand movements** in 2030



Total Passenger of AP II airports is forecast to increase approx. **159,5 million passengers** in 2030



Total Cargo of AP II airports is forecast to increase approx. **1048,6 million tonnes** in 2030

SYSTEM DEVELOPMENT OF AIRPORT



Airport as a facilities for take off - landing aircraft and activities in between (embarks and disembarks)

1980 and before



Airport as business unit (cost recovery)

1990's



Airport as business center

2000's



Airport as business center with customer satisfaction as the main goal

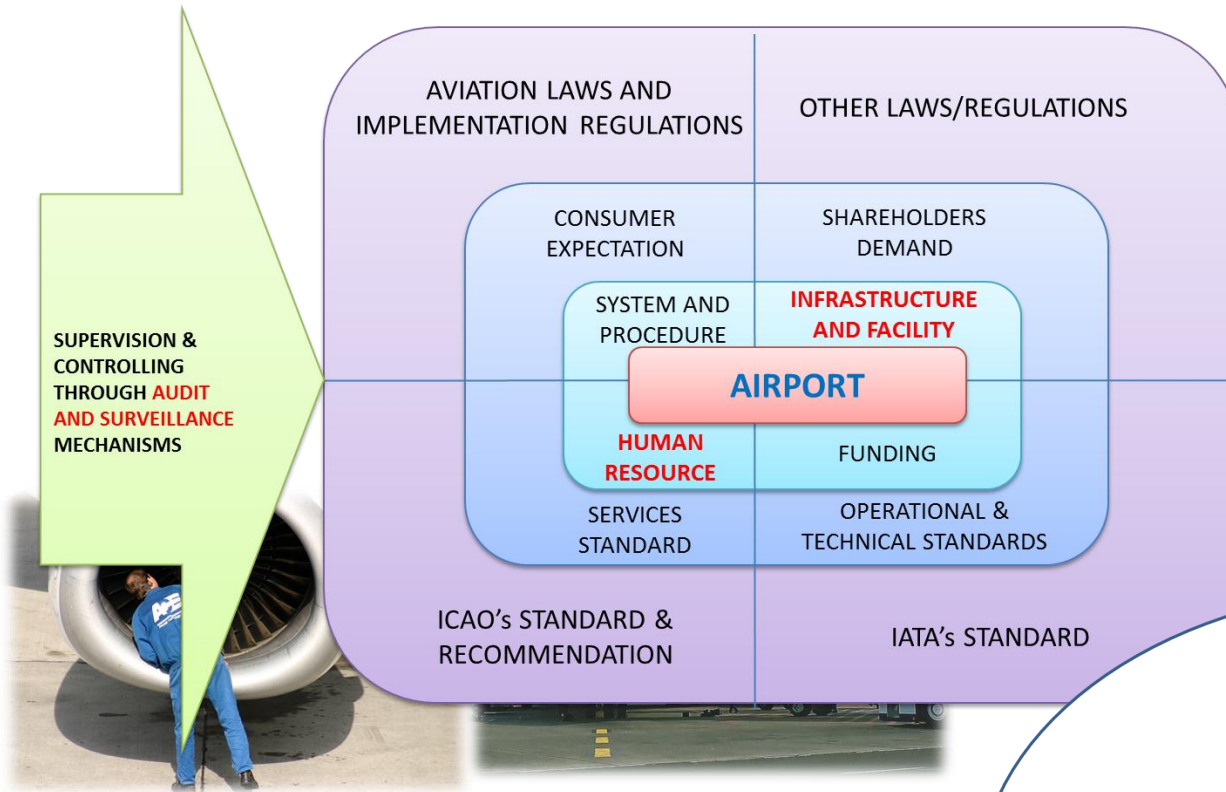
2010



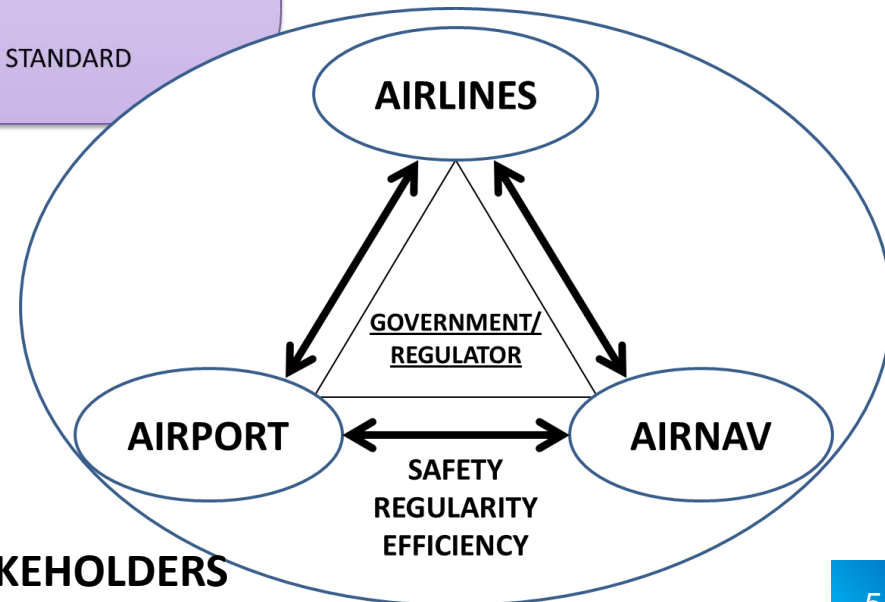
Airport as the economic engine growth by developing business community surrounding the airport/aerotropolis

Current condition and future

AIRPORT ANATOMY & AIRPORT STAKEHOLDERS



AIRPORT ANATOMY



AIRPORT STAKEHOLDERS

AIR TRANSPORT BENEFITS

Air transport is a major global employer

The air transport industry generates a total of **32 million jobs globally**:

5.5 million direct jobs

- The airline and airport industry directly employ 4.7 million people globally.
- The civil aerospace sector (manufacture of aircraft systems, frames and engines, etc.) employs 780,000 people.

6.3 million indirect jobs through purchases of goods and services from companies in its supply chain.

2.9 million induced jobs through spending by industry employees.

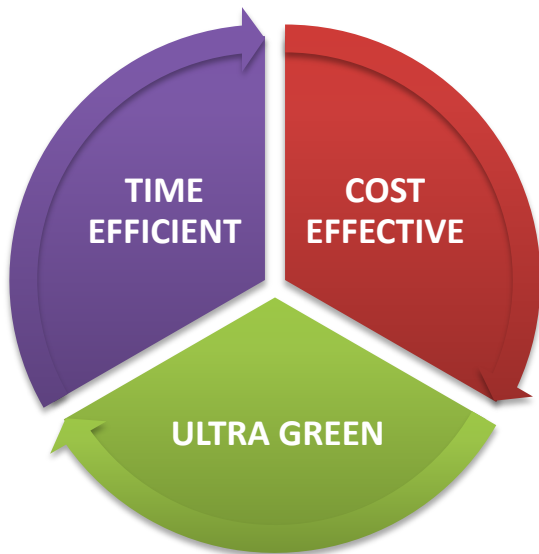
17.1 million jobs through air transport's catalytic impact on tourism.

AIRPORT AS MAJOR ECONOMIC GROWTH ENGINE

- **Economic growth engines** & a reflection of respective communities
- Passenger traffic reflects **level of economic development, demographics, business activity, and tourism**
- Cargo volume is **an indication of economy strength**
- Land development on and/or near airport sites **generates additional economic activity**

Source: The Economic & Social Benefits of Air Transport, ATAG,2008

FUTURE AIRPORT CONCEPTS



Time-Efficient

→ to maximise the efficiency and effectiveness of air transport operations

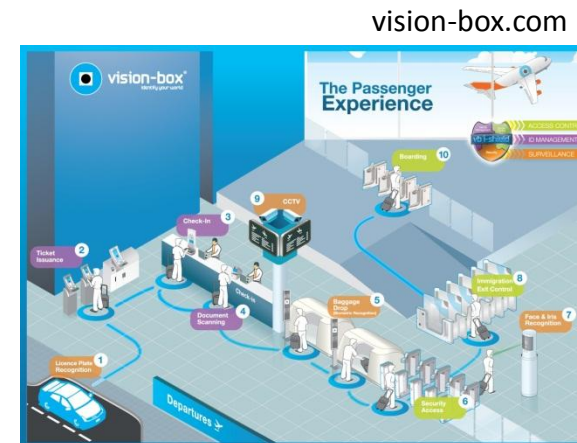
Cost-Effective

→ to reduce the operating cost and optimal revenues.

Ultra-Green

→ to create a sustainable airport regarding energy needs, climate-neutral operations, and noise exposure limitations

sources: cordis.europa.eu



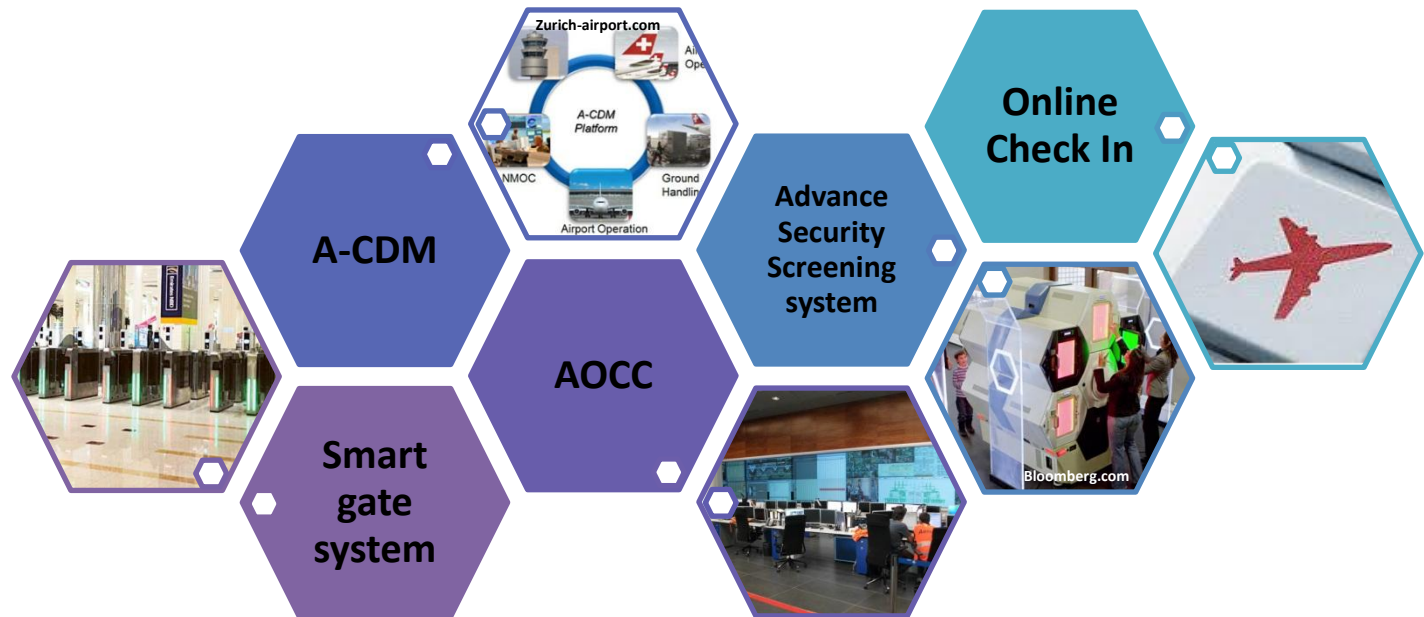
The CAP Strategic Research, a company conducts market research and marketing consultancy for the Aviation industry, concluded that Airports will change radically over 15 years (2025-2030) in order to improve passengers and airlines satisfaction. The study also predicted that the following predictions will be realized in the future.



- No check-in desks at airports
- No emigration procedure
- No shops at airports, just showrooms
- No security checks for "Trusted Travellers"
- No check-in luggage at airports
- New in place boarding procedures
- No immigration on arrival
- Airports operate 24 hours a day

Source: capstrategicresearch.com

IT IMPLEMENTATION AT THE AIRPORT

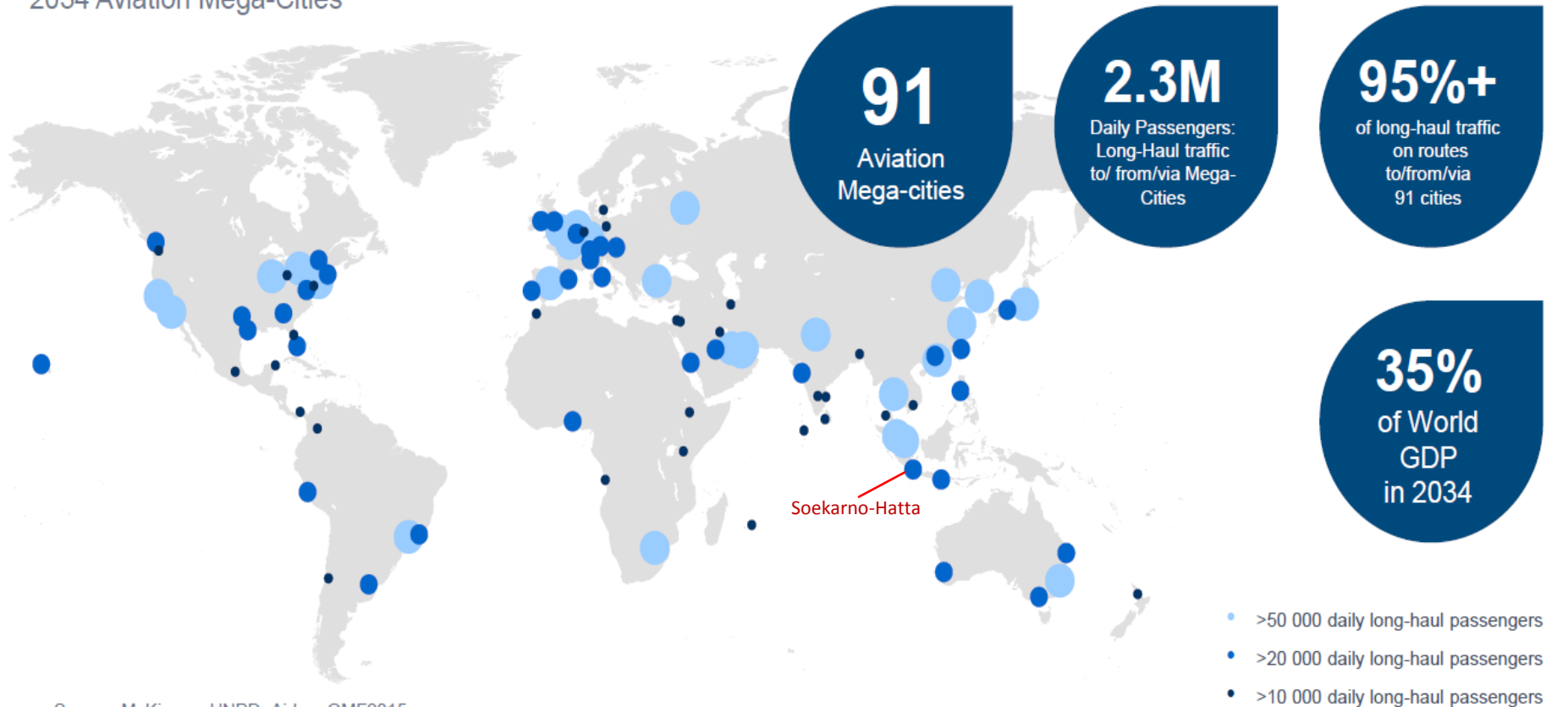


In the context of an environment which is likely to be more mobile, social and intelligent, the IT implementation could help airport operators serve future travellers and take advantage of expected future developments in travel technology.

In addition, the implementation of IT could help the operator anticipates due to rapidly growing ASEAN economies which affect boom demand for 3T service sectors (Transportation, Telecommunication, and Tourism)

91 MEGA CITIES BY 2034

2034 Aviation Mega-Cities



Source: McKinsey, UNPD, Airbus GMF2015

© AIRBUS all rights reserved. Confidential and proprietary document.



SOEKARNO-HATTA AS ONE OF THE WORLD BUSSIEST AIRPORT

SOEKARNO-HATTA AIRPORT WORLD BUSSIEST RANK (PASSENGER TRAFFIC IN 2012-2014)

YEAR	RANK	PAX TRAFFIC	% GROWTH
2011	12	51.5 million	+ 16.2%
2012	9	57.7 million	+ 14.4%
2013	10	59.7 million	+ 3.4%
2014	12	57.0 million	- 4.8%



No. 5th busiest airport in the Asia Pacific (in 2014):

- #1 Beijing Capital Int'l Airport
- #2 Haneda Int'l Airport
- #3 Dubai Int'l Airport
- #4 Hongkong Int'l Airport
- #5 Soekarno Hatta Int'l Airport

Soekarno Hatta International Airport
#1 busiest airport in Asean

AP II FUTURE AIRPORT PROGRAM



EFFECTIVE & EFFICIENT AIRPORT OPERATIONS

- E-kiosk, Mobile applications, baggage handling system, advanced technology implementation, old facilities refurbishment



ENVIRONMENTAL SUSTAINABILITY

- Eco Airport masterplan, Green Terminal Building construction and assessment, Water & waste treatment, Emission reduction by Renewable energy implementation, Energy management



INFRASTRUCTURE DEVELOPMENT

- New Airport construction, Terminal capacity development, Airside capacity improvement, new Runway construction/expansion



SAFETY AND SECURITY IMPROVMENT

- Risk Management (hazard identification, reporting & investigations), Promotion (training, campaign, communication), Assurance (performance monitoring, Audit/Assessment)

AP II's AIRPORT PROJECT DEVELOPMENTS

Operates Juli 2013



KUALANAMU (MEDAN)
Year of dev't : **2007-2014**



SOEKARNO-HATTA (JAKARTA)
Year of dev't : **2012-2021**

Operates Juli 2012

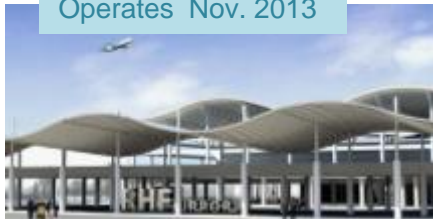


SSK II (PEKANBARU)
Year of dev't : **2009-2014**

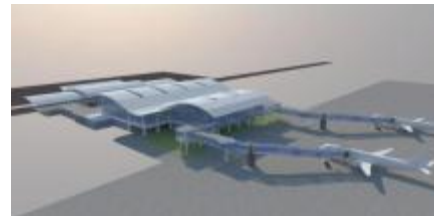


SMB II (PALEMBANG)
Year of dev't : **2012-2017**

Operates Nov. 2013



RH FISABILILLAH (TJ.PINANG)
Year of dev't : **2009-2014**



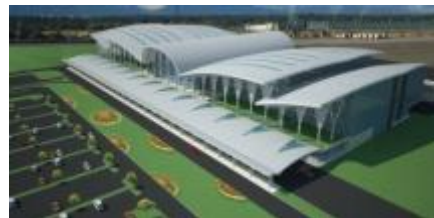
SULTAN THAHA (JAMBI)
Year of dev't : **2011-2016**



DEPATI AMIR (PG.PINANG)
Year of dev't : **2011-2016**



HUSEIN ST (BANDUNG)
Year of dev't : **2014-2016**



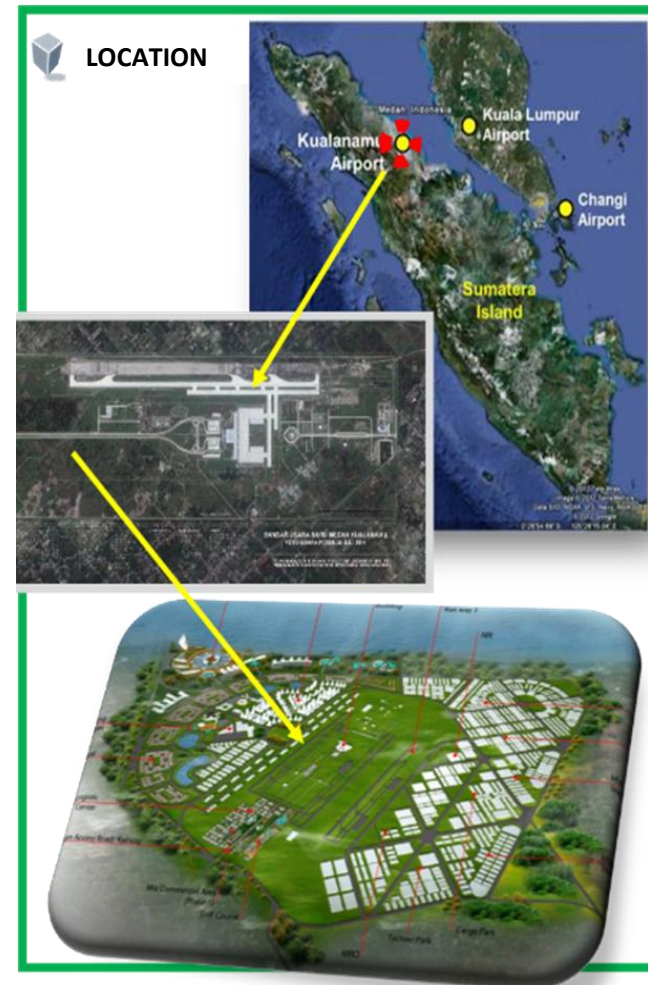
SUPADIO (PONTIANAK)
Year of dev't : **2011-2016**



SILANGIT (MEDAN)
Year of dev't : **2013-2016**

THE CONCEPT OF AEROTROPOLIS KUALANAMU DEVELOPMENT

- ❑ **Aerotropolis** is the Regional **Economic Development** with **Airport as key Driver** with comprehensive well connected stakeholders and business through airport planning, urban planning, and business planning;
- ❑ Aerotropolis Kualanamu aim to **increase competitiveness of Western part of Indonesia** through decrease logistics cost and well connected business and economic activities with concern on *Speed (guaranteed time travelling)*, *Connectivity (infrastructure)* and *Agility (ability to respon)*;
- ❑ **The Super Corridor** of Aerotropolis Kualanamu along with existing Belawan Sea Port, upcoming Kuala Tanjung Sea Port and industrial hinterland area give a competitive advantaged for future development;
- ❑ In general, the Aerotropolis development radius within 30 km from airport.



Old Fashioned

- ❑ Facilitator : Aircraft, Passanger & Cargo.
- ❑ Support the City and the hinterland passively.
- ❑ The Airport is “an island”.



City Airport

Airport is the passive facilitator



New Paradigm

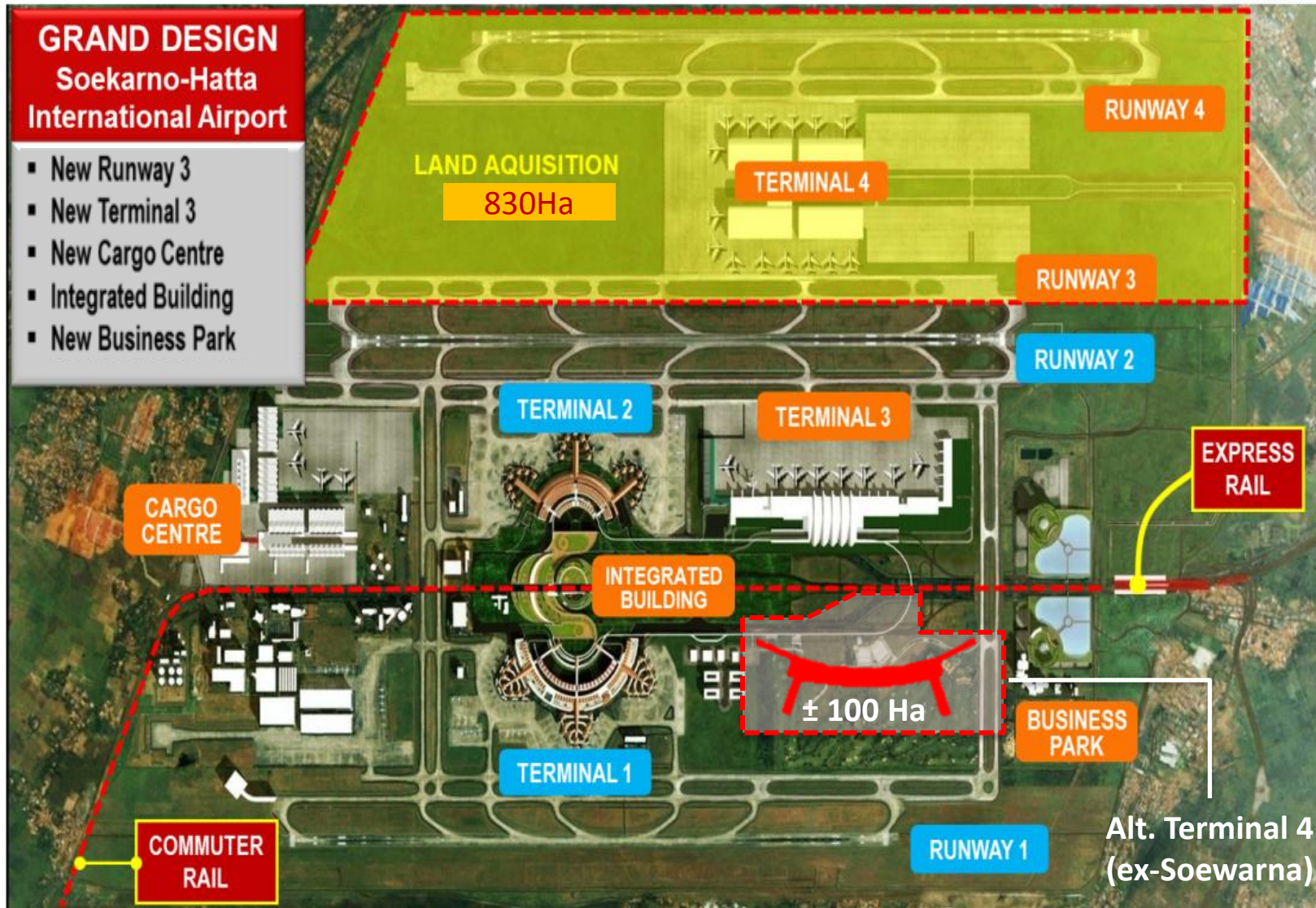
- ❑ Node of Economy (Trade, Business Commercial, & Industry) Generator.
- ❑ Airport City : Merge with the city.



Airport is the active driver for the the city and the regional economic development.

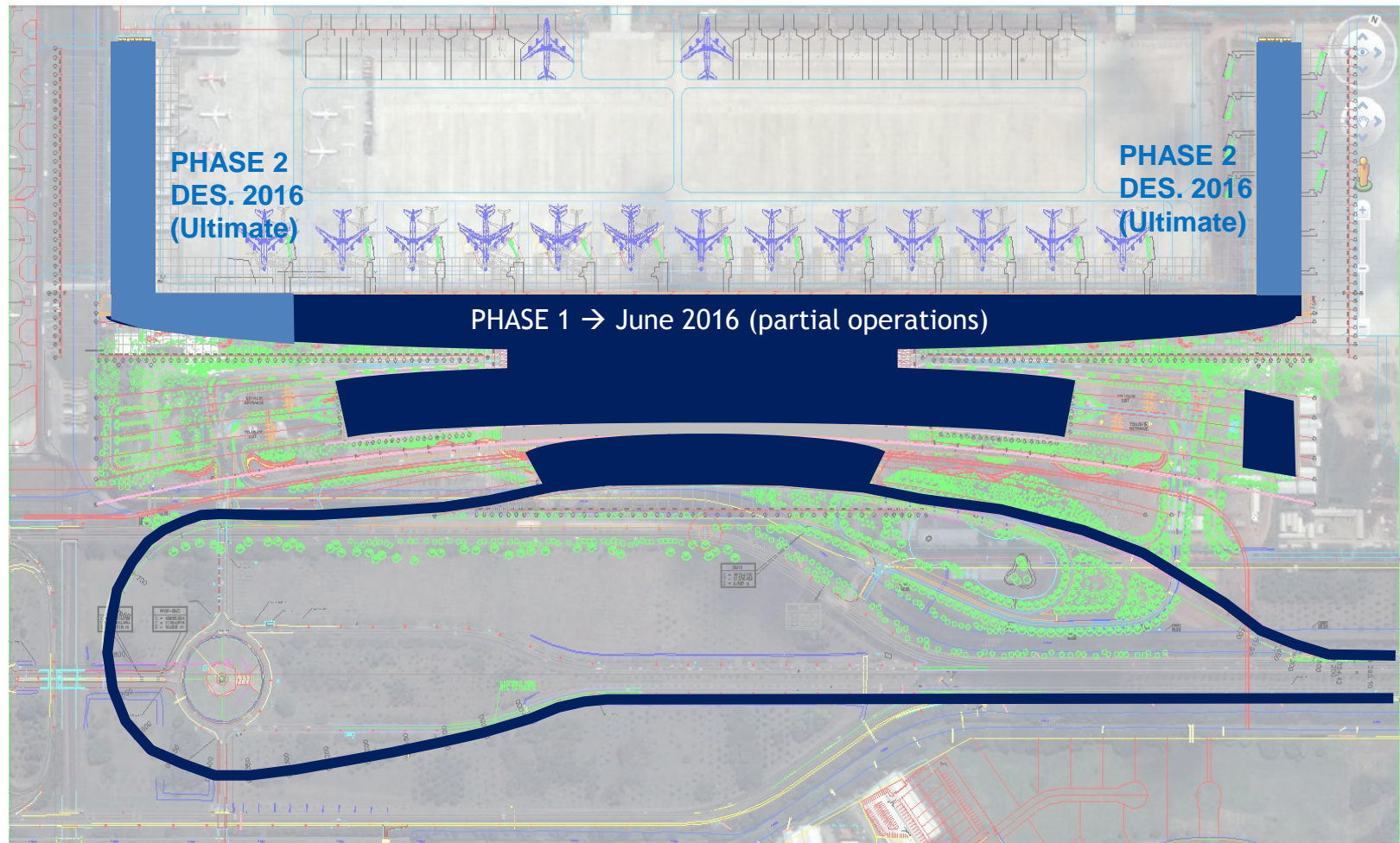
Source: Anagadinata, Center for Logistics and Supply Chain Studies, 118, 2014

GRAND DESIGN OF SOEKARNO-HATTA AIRPORT



PMN/ Equity Injection : Rp. 4 T (2015: 2 T, 2016: 2T) : For Land Acquisition ± 200 Ha

SOEKARNO-HATTA AIRPORT T3-ULTIMATE DEVELOPMENT



The capacity of Terminal 3 Ultimate will be developed up to 25 MPA in the end of 2016. Total capacity development of Grand Design Soekarno-Hatta of 62 MPA in 2017 (including T1 and T2 revitalizations). The new Terminal 4 construction is one of the program to handle future traffic demand in 2020.

RUNWAY 3 CONSTRUCTION

Operates : Y2018
Dimension : 3000 x 60m
Construction : Rigid
Location : North

In 2018, Soekarno-Hatta aircraft movement traffic is projected to increase approx. 420 mov't per annum.
The new 3rd Runway construction is aim to improved airside capacity of Soekarno-Hatta Airport from 86 to > 100 movements/hour





ANGKASA PURA II
INDONESIA'S AIRPORT COMPANY



THANK YOU