



AIRPORTS TO THE FUTURE

“CAAT TAKE OFF CONFERENCE CHAPTER 1: BOUND FOR THE FUTURE”

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Aerodrome Standards Department (AGA)

15 November 2018

Provisional Agenda

- About us
- Aerodrome infrastructure in Thailand
- Challenges
- Actions

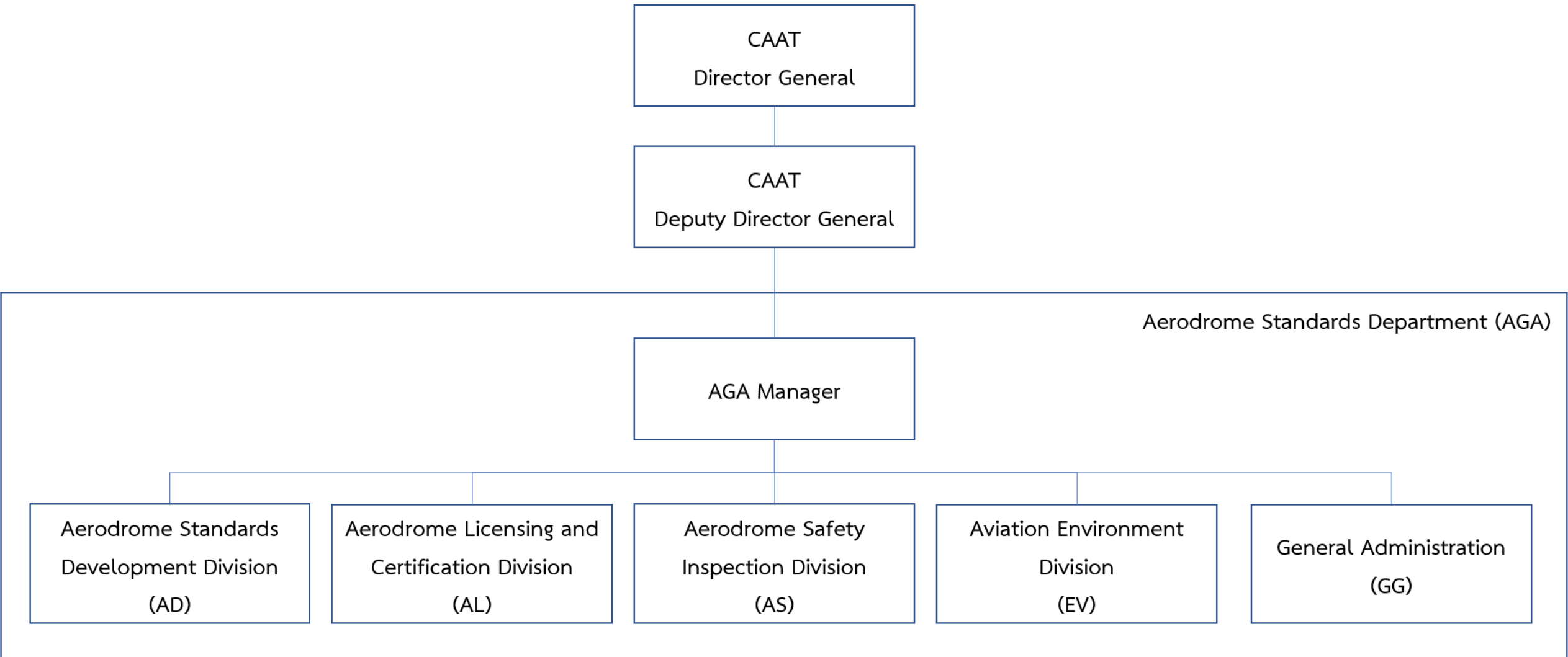
AGA Vision

Safe aerodromes for all.

AGA Mission

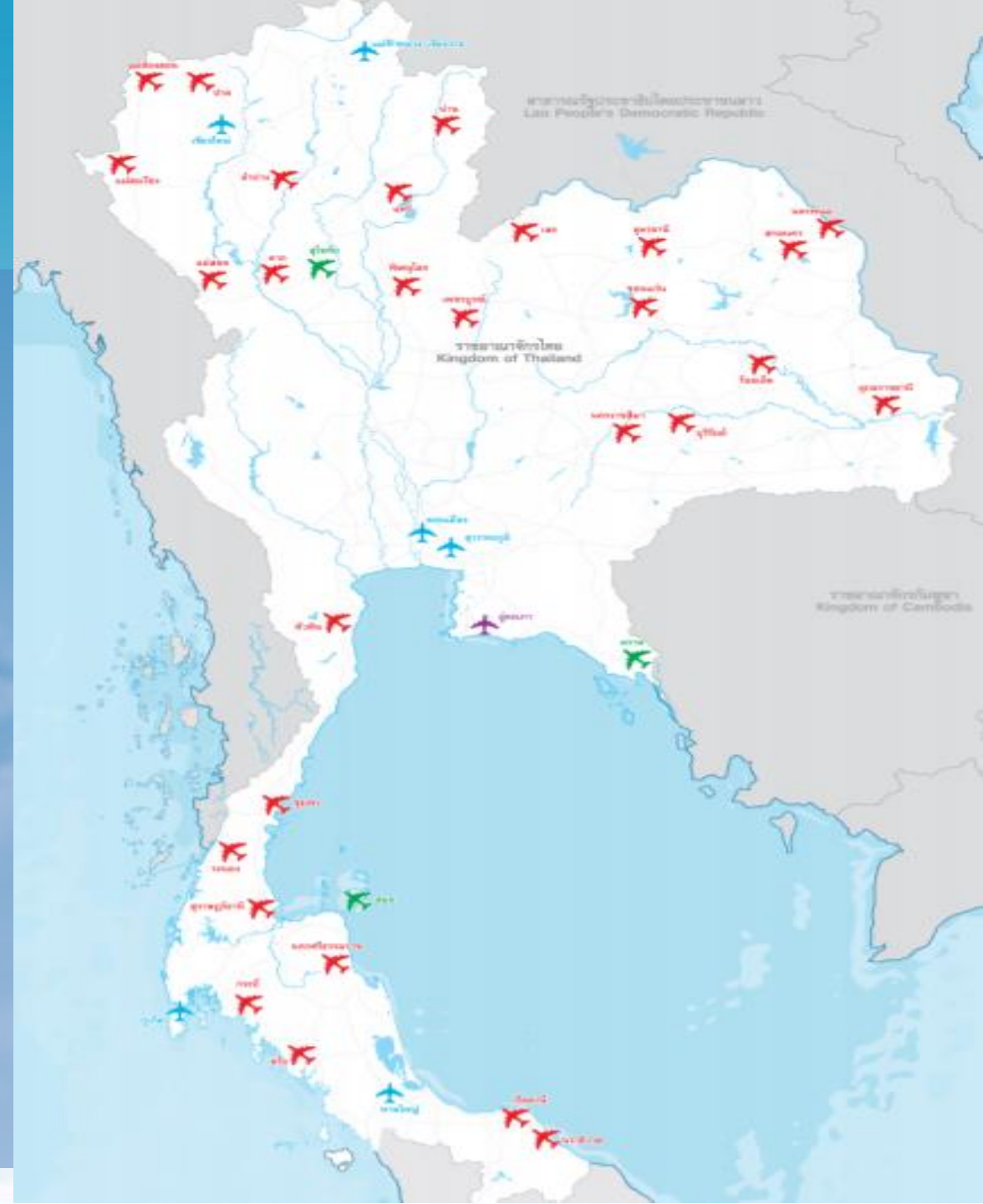
To serve the public through a fair, effective, and efficient aerodrome safety regulatory system and systematic supervision of aerodrome operators in accordance with the international standards or above.

AGA Structure

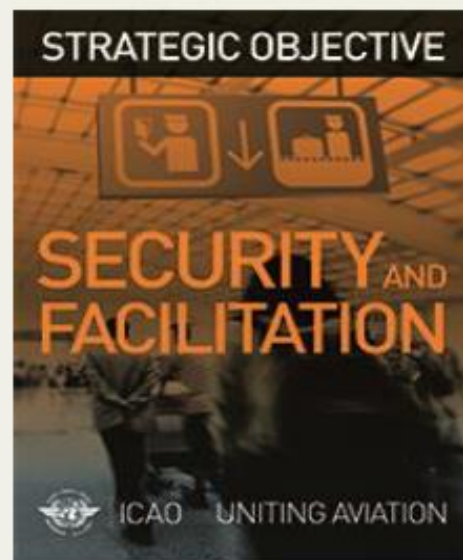
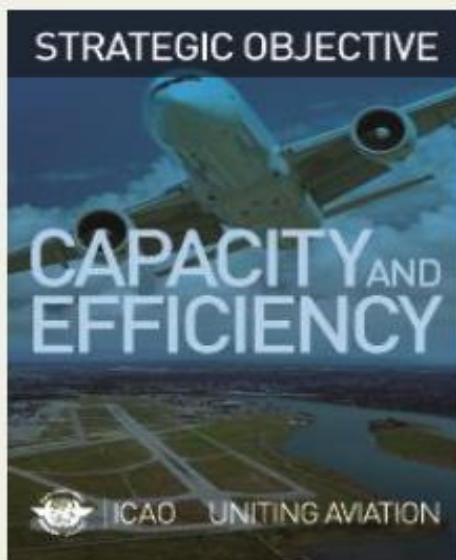


Aerodromes in Thailand

- ✈ 38 Public-used aerodromes
 - 6 aerodromes - AOT
 - 28 aerodromes - DOA
 - 3 aerodromes - Bangkok Airways
 - 1 aerodromes - Royal Thai Navy
- ✈ 150 Private-owned aerodromes
 - 33 aerodromes
 - 117 heliports



ICAO STRATEGIC OBJECTIVES



Our Challenges

- Safety
- Capacity and Efficiency
- Environment

Challenge No.1 - Safety

Global Average
= 59.87%



Safety Issues

Aerodrome
Certification

Aerodrome
Data

Physical
Characteristic

Aerodrome
safeguarding

Visual aids

Electrical
System

Operation
Service &
Equipment

Maintenance

Aerodrome
SMS and
Special
safety
attention

Aerodrome
documentation

Aerodrome Regulatory System

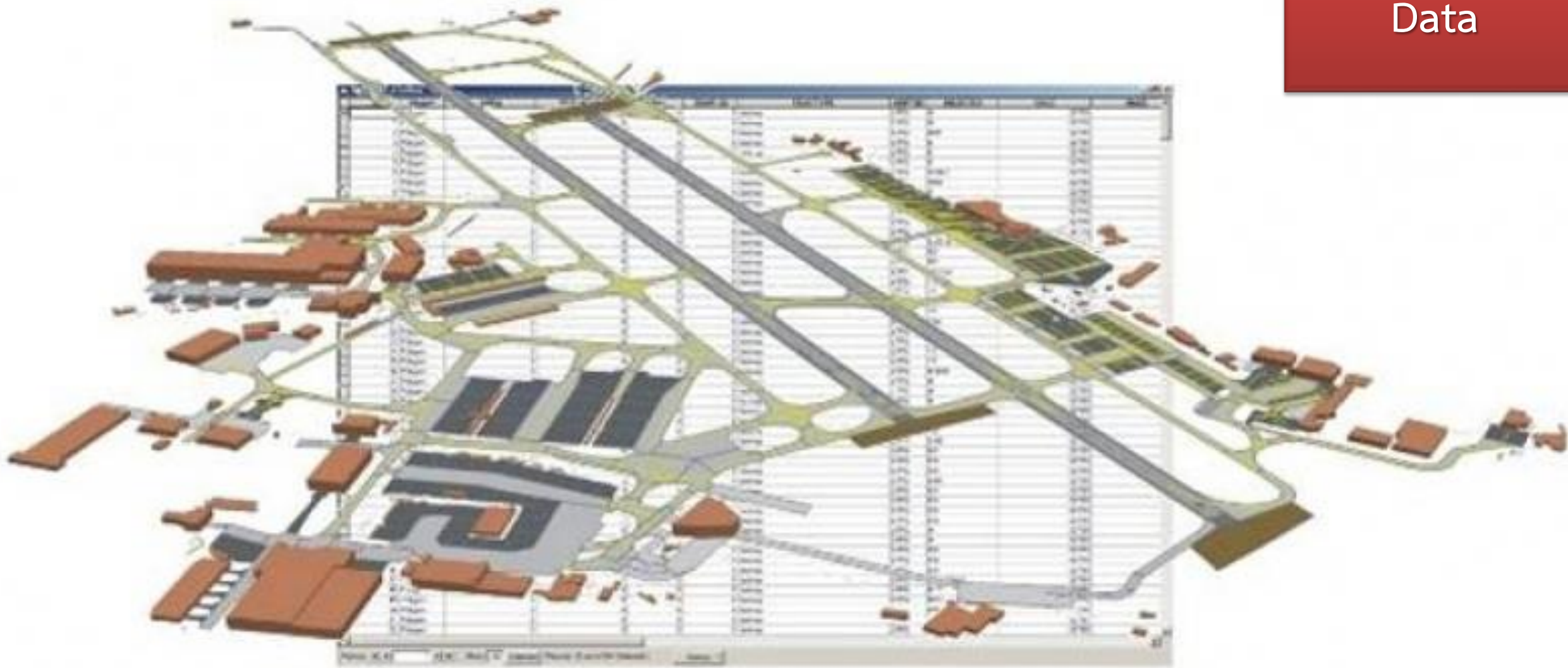
- Aerodrome standards regulation (Annex 14, Vol 1)
- Heliport standards regulation (Annex 14, Vol 2)

Fundamental





Aerodrome Data

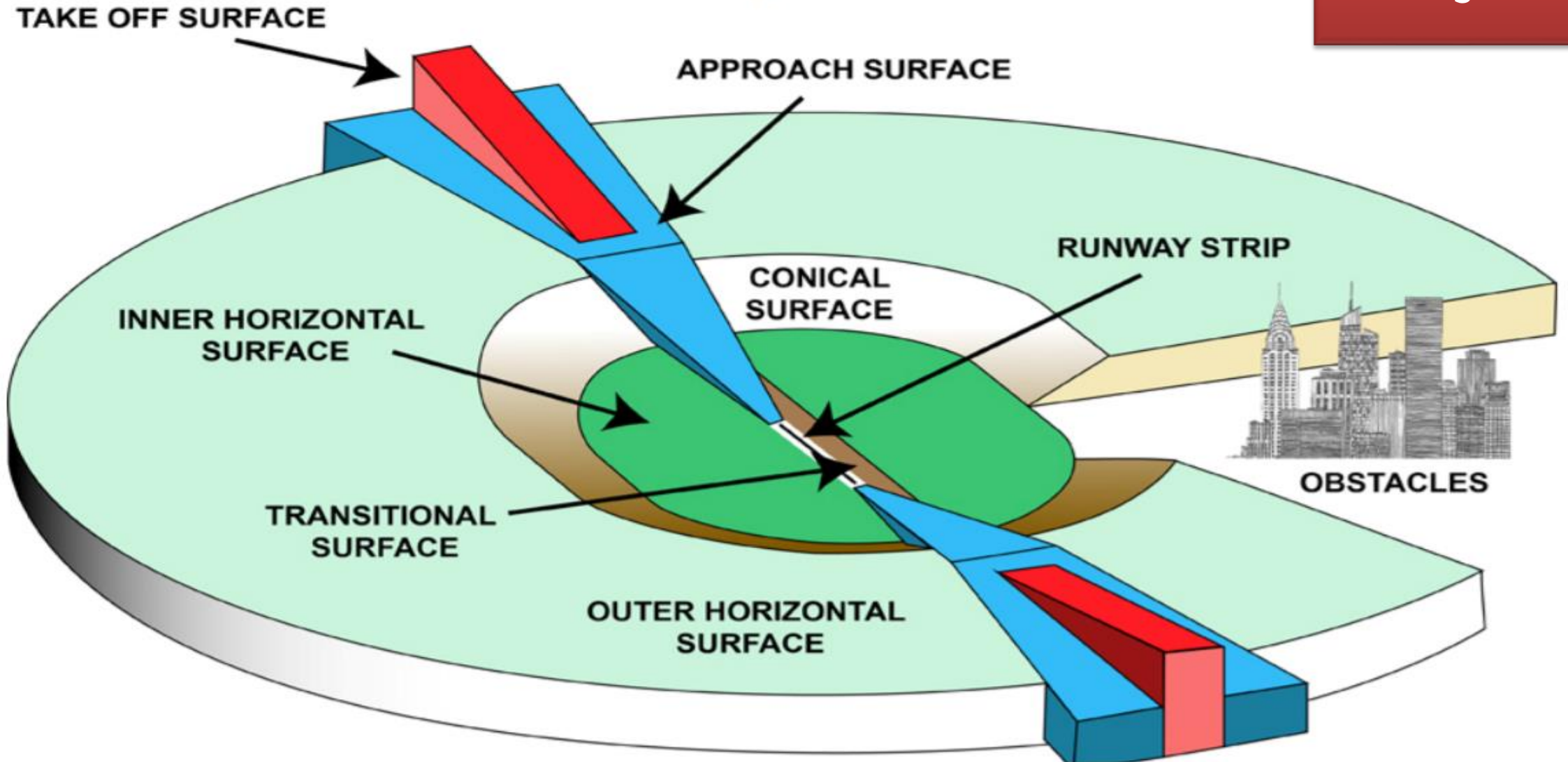


Work Safety



**OBSTACLE LIMITATION SURFACES LAYOUT
EGYPTIAN CIVIL AVIATION REGULATION
EXISTING & Designed CONFIGURATION**

Aerodrome
Safeguarding





Challenge No. 2:
Capacity and Efficiency

WATF 2017

Annual World Airport Traffic Forecasts 2017-2040



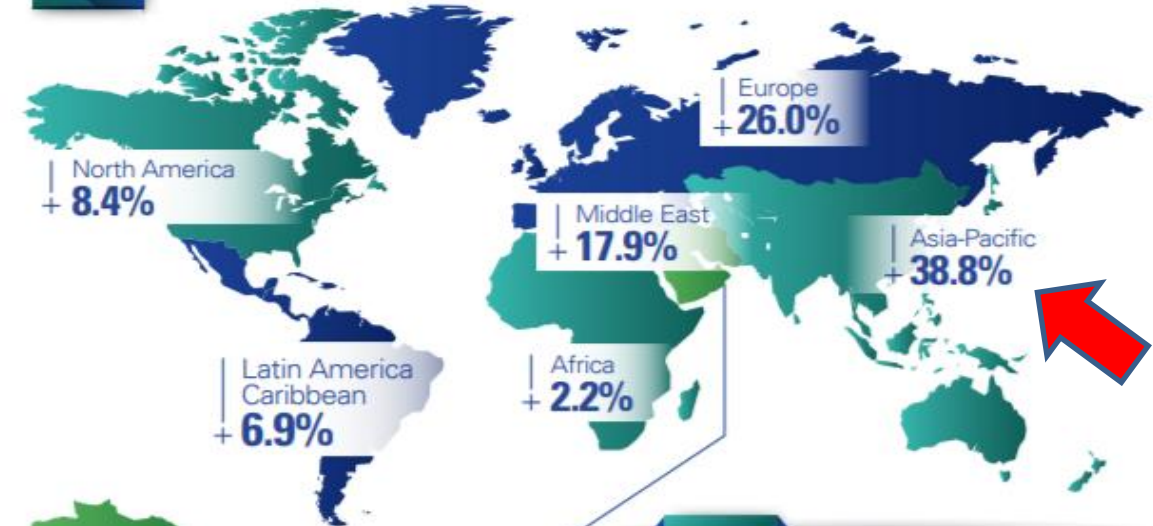
GLOBAL AVERAGE ANNUAL GROWTH RATE 2016-2040



CHANGING AVIATION MARKET SHARES OVER TIME



BY 2040 INTERNATIONAL PASSENGER TRAFFIC WILL APPROACH PARITY WITH DOMESTIC TRAFFIC



MIDDLE EAST:
The "aviation bridge"

Strong growth of airport traffic and capacity in the Middle East due to strategic location and liberalized market has allowed the region to develop into an international hub, connecting long-haul flights from east and west, north and south.

TOP 10 FASTEST GROWING COUNTRIES FOR PASSENGERS 2016-2040: (Over 50 million passengers per annum)

- Vietnam 1 **8.4%**
- India 2 **7.5%**
- Iran 3 **7.3%**
- Colombia 4 **7.1%**
- Saudi Arabia 5 **6.9%**
- United Arab Emirates 6 **6.8%**
- Indonesia 7 **6.4%**
- China 8 **5.9%**
- Malaysia 9 **5.9%**
- Philippines 10 **5.7%**



FIND OUT MORE AT www.aci.aero/watf

All are emerging and developing economies

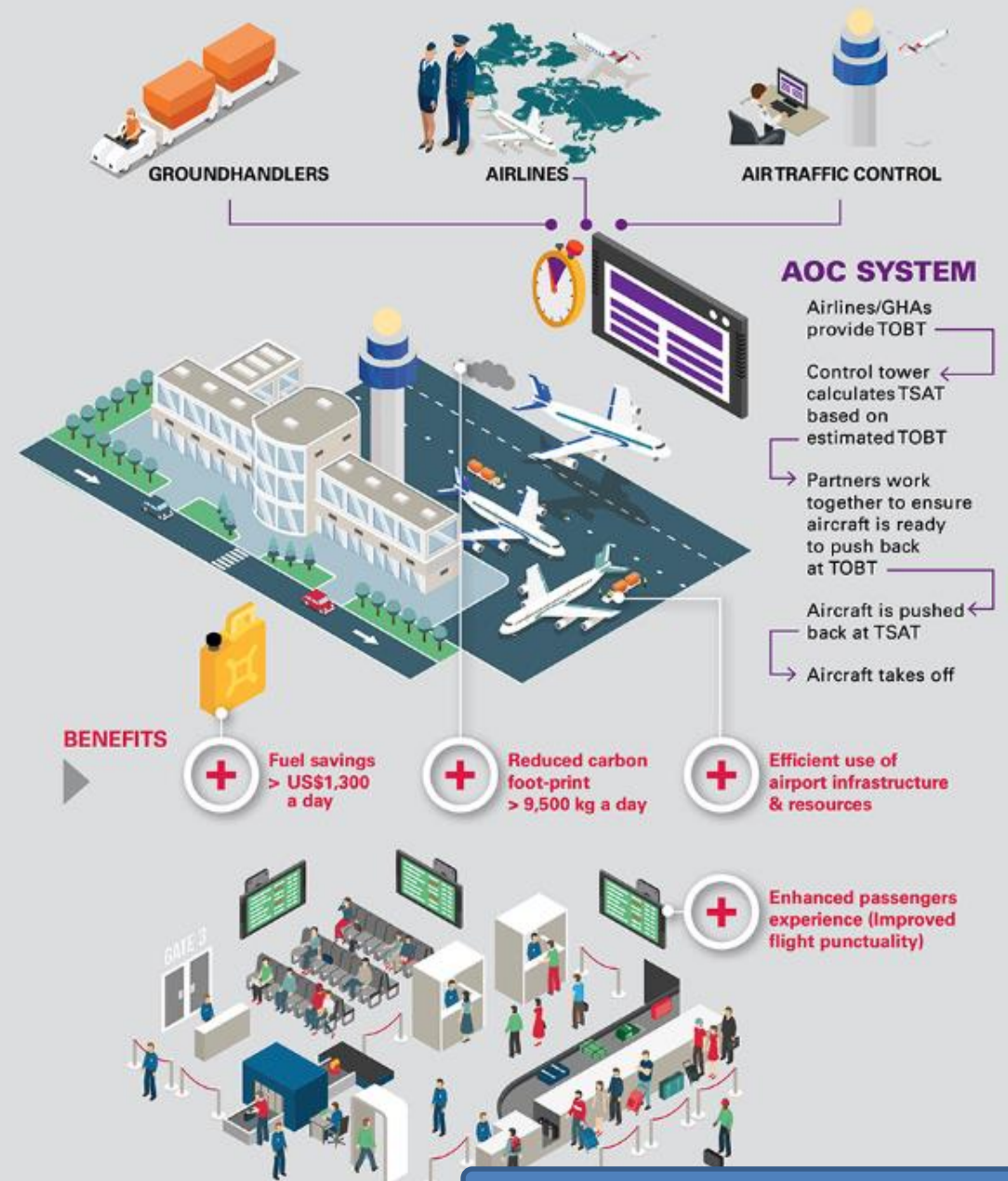
Solutions

- Bigger airports
- More efficient operational environment

Airport – Collaborative Decision Making (A-CDM)



Airport partners share airport operational information



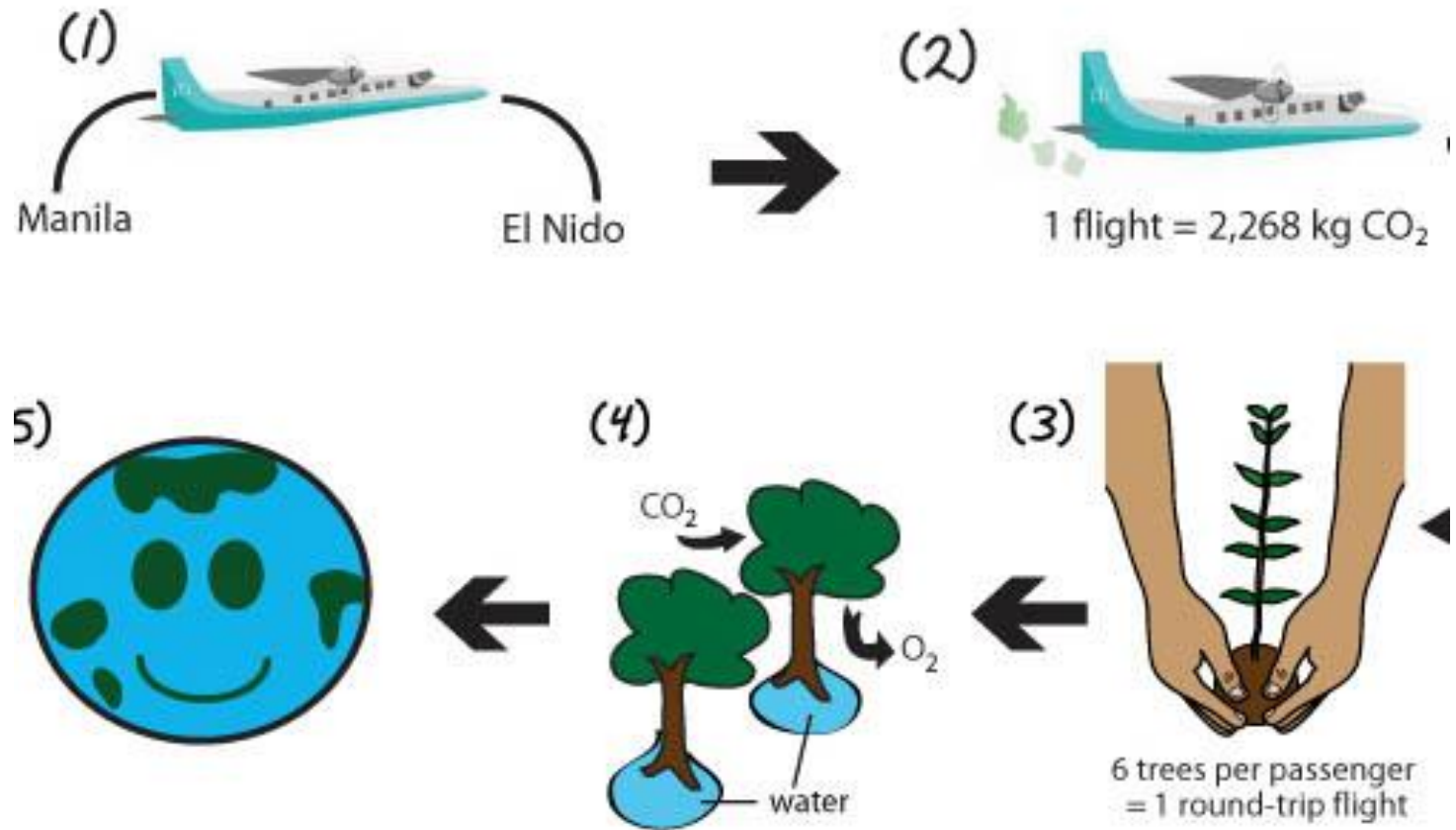
Source: Changi Airport Group

Challenge No. 3:
Environmental
Protection



CORSIA - Carbon Offset
and Reduction Scheme
for International Aviation

How Carbon Offset Works





CORSIA


Restoring balance with **Climate Friendly** carbon credits


Carbon Emitted



Carbon Emissions Prevented



1x  =



1 tonne carbon emissions prevented

You've reduced your emissions but you can't get them to zero.

By purchasing carbon credits to offset your emissions you help create new renewable energy infrastructure and energy efficiency projects.



Climate Friendly works only with the highest quality, independently verified projects to ensure your action makes a genuine impact.

- ✓ Ranked No.1 by Carbon Offset Watch
- ✓ Gold Standard & Verified Carbon Standard credits

CORSIA

CARBON OFFSETTING AND REDUCTION SCHEME FOR INTERNATIONAL AVIATION

IMPLEMENTATION PLAN



Our Action

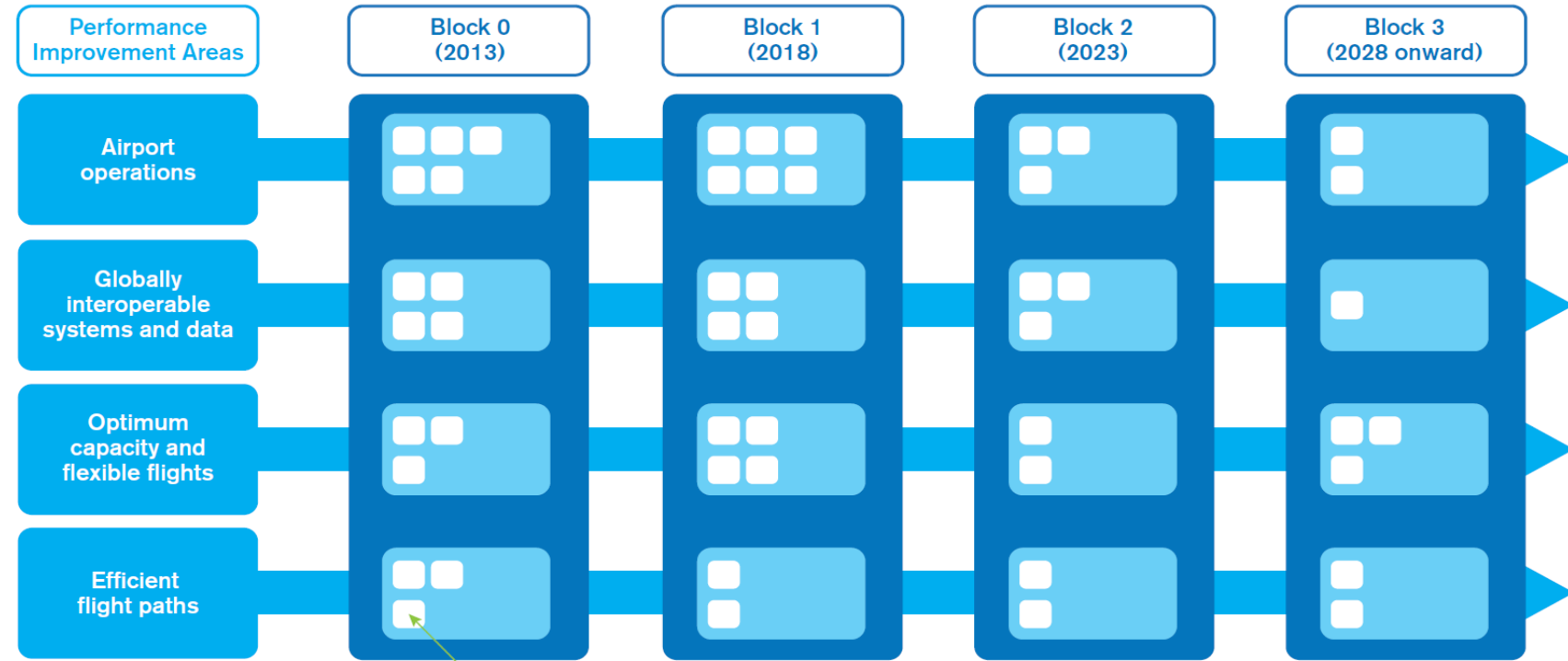


GANP Fourth Edition Aviation System Block Upgrade Methodology

2013–2028
Global Air Navigation Plan



Doc 9750-AN/963 Fourth Edition – 2013



Modules (actual number of modules per Block/Performance Area may vary)

AGA System Infrastructure





Cooperation for future aviation



STANDARD TOWARD SUSTAINABLE