



51st CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGIONS

Managing Aircraft Noise in Hong Kong, China

Presented by Hong Kong, China

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DGCA/50 (Bangkok, Thailand)

Action Item 50/9

Recognizing the immense traffic growth in APAC region and the population affected by aircraft noise the Conference urged States to consider

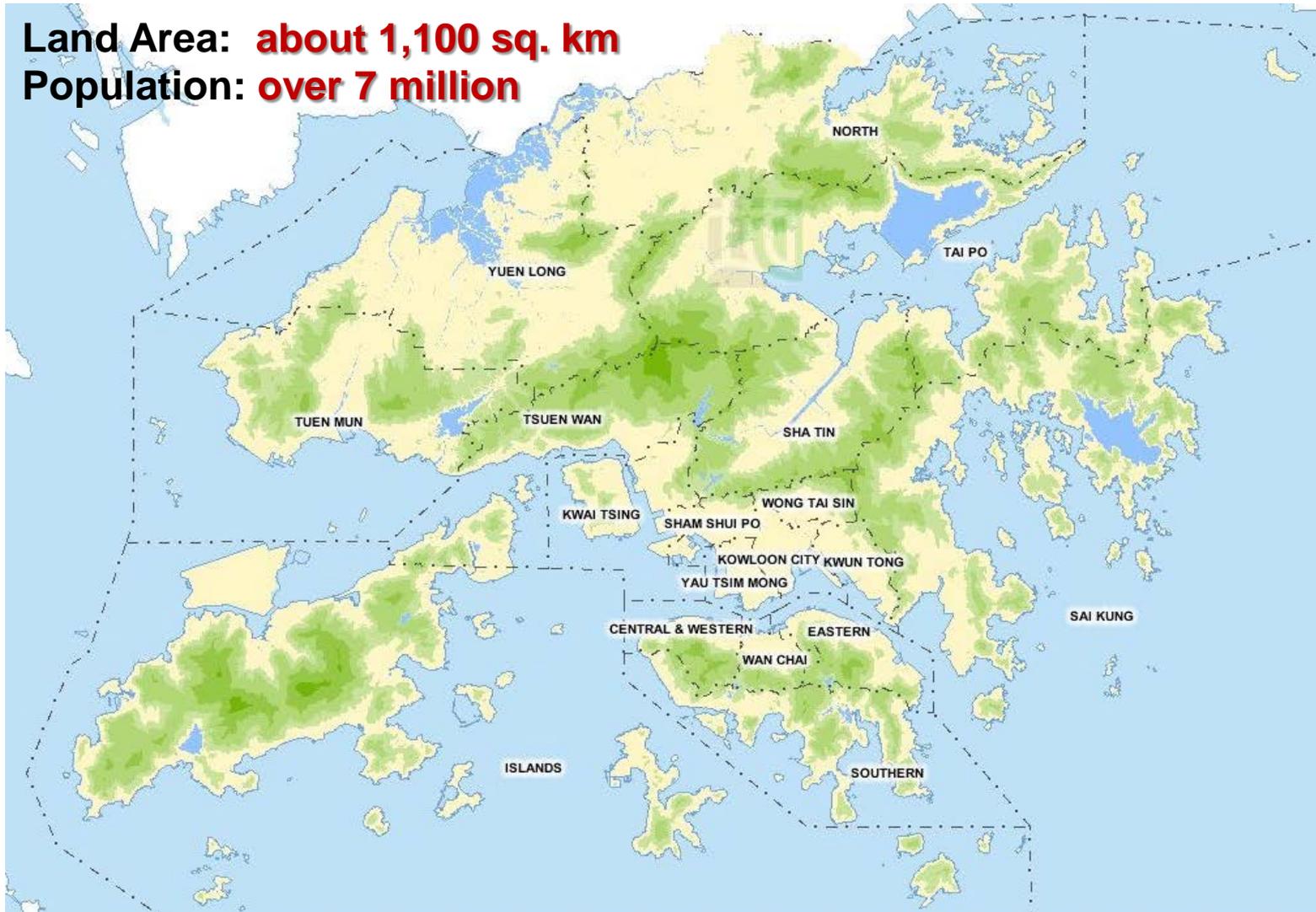
- a) inviting major airports (i.e. airports with more than 100,000 annual aircraft movements) to develop noise mapping studies, installing permanent noise monitoring systems, and where appropriate formulate action plans, by 2014 in accordance with ICAO's Balanced Approach.
- b) introduction of noise limits/guidelines and land use plans specific to airport areas by 2018 in line with ICAO's Balanced Approach and their specific conditions.

Managing Aircraft Noise in Hong Kong, China

- 1. Air Traffic in Hong Kong**
- 2. Aircraft Noise Mitigating Measures**
- 3. Aircraft Noise Monitoring**
- 4. Communication with Stakeholders**
- 5. Challenges Ahead**

1. Air Traffic in Hong Kong

Land Area: **about 1,100 sq. km**
Population: **over 7 million**



1. Air Traffic in Hong Kong

	2001	2013	% Change
ATM	196,817	372,080	89% ↑
Passenger	32 million	59 million	85% ↑
Cargo (tonnes)	2 million	4.1 million	99% ↑

2. Aircraft Noise Mitigating Measures

Hong Kong CAD has been making reference to the following documents in developing aircraft noise mitigating measures:

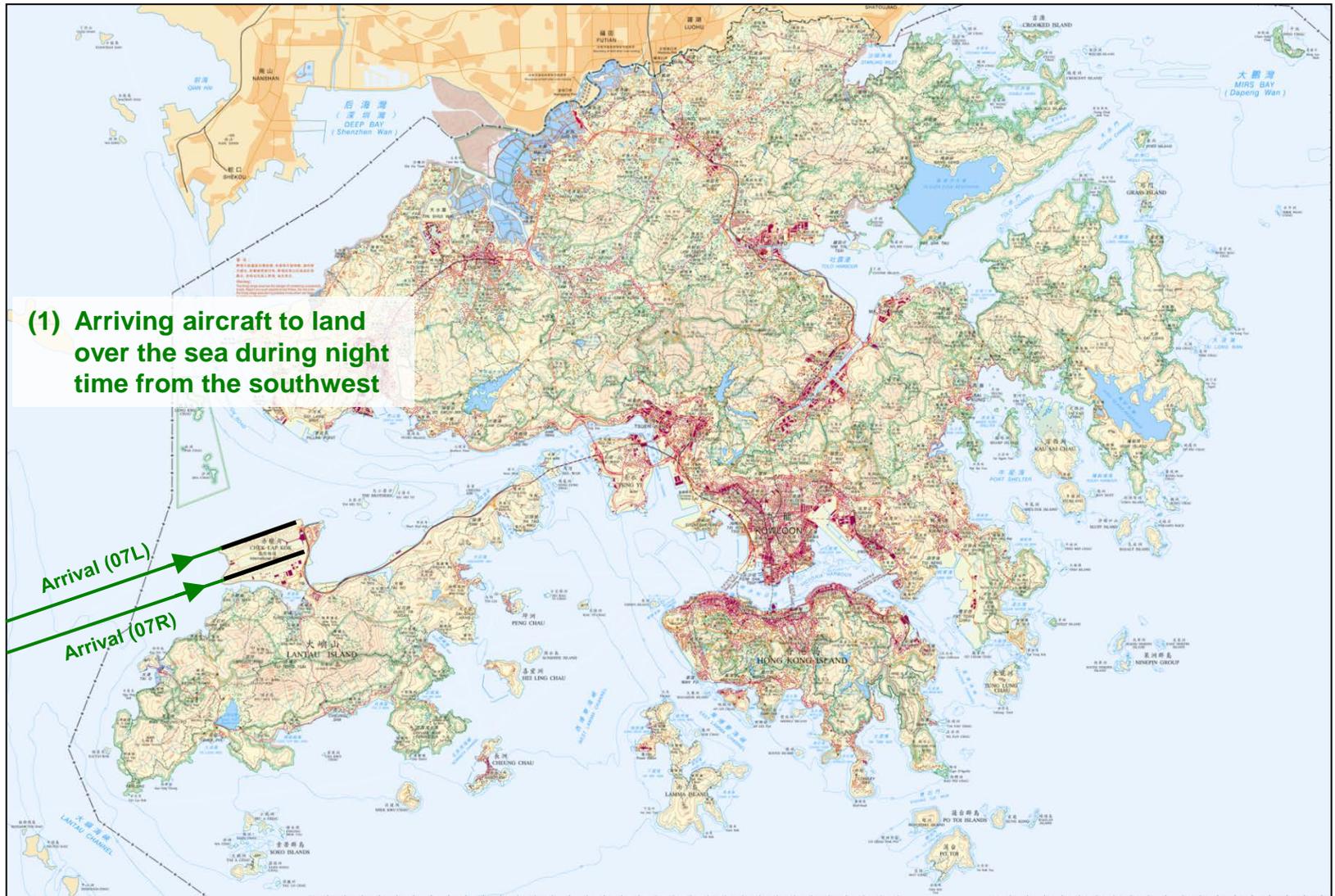
ICAO Doc 9829 – Guidance on the Balanced Approach to Aircraft Noise Management

- Reduction of noise at source
- Land-use planning and management
- Noise abatement operational procedures
- Operating restrictions

ICAO Resolution A38-17

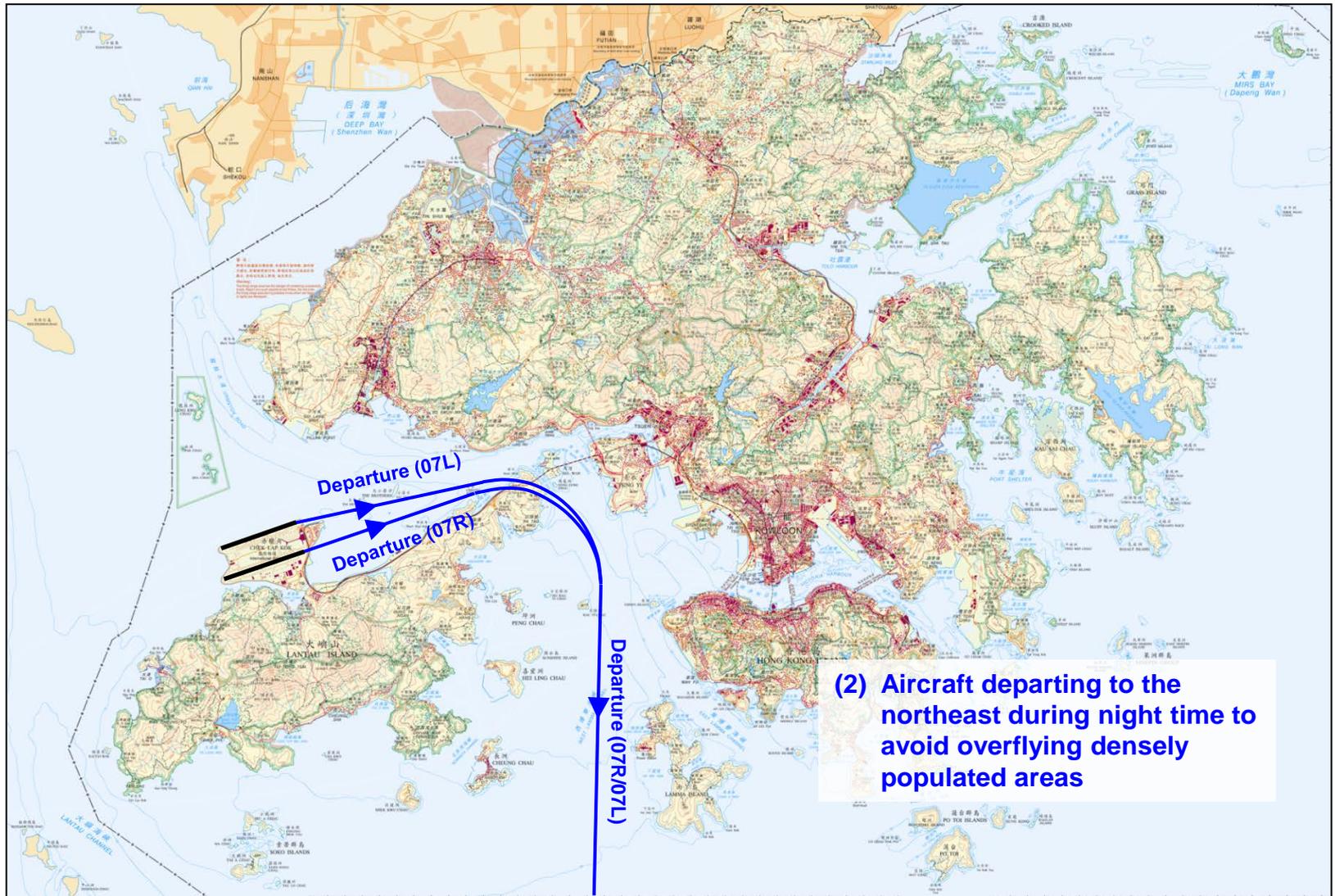
Balanced Approach

– Noise Abatement Operational Procedures



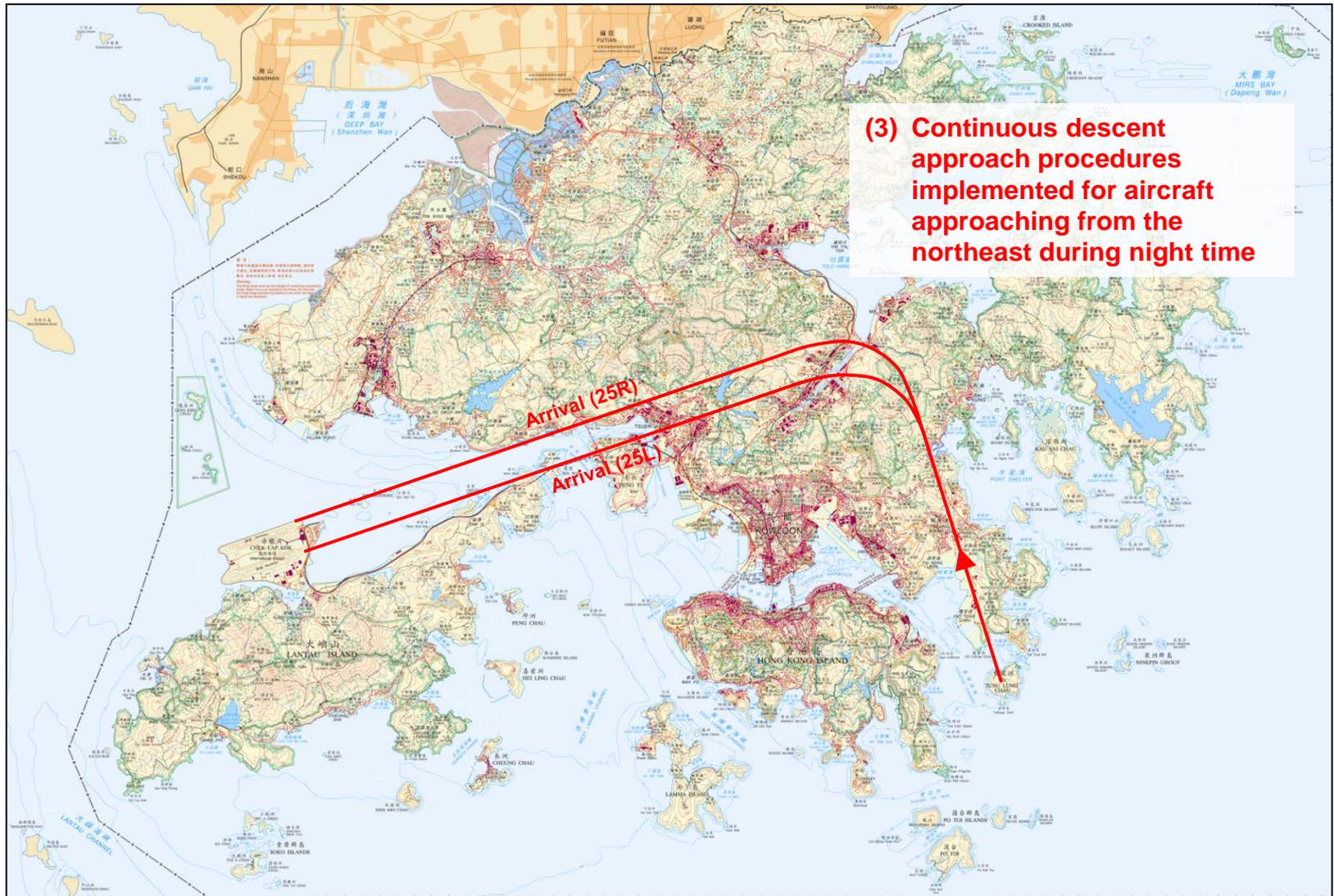
Balanced Approach

– Noise Abatement Operational Procedures



Balanced Approach

– Noise Abatement Operational Procedures



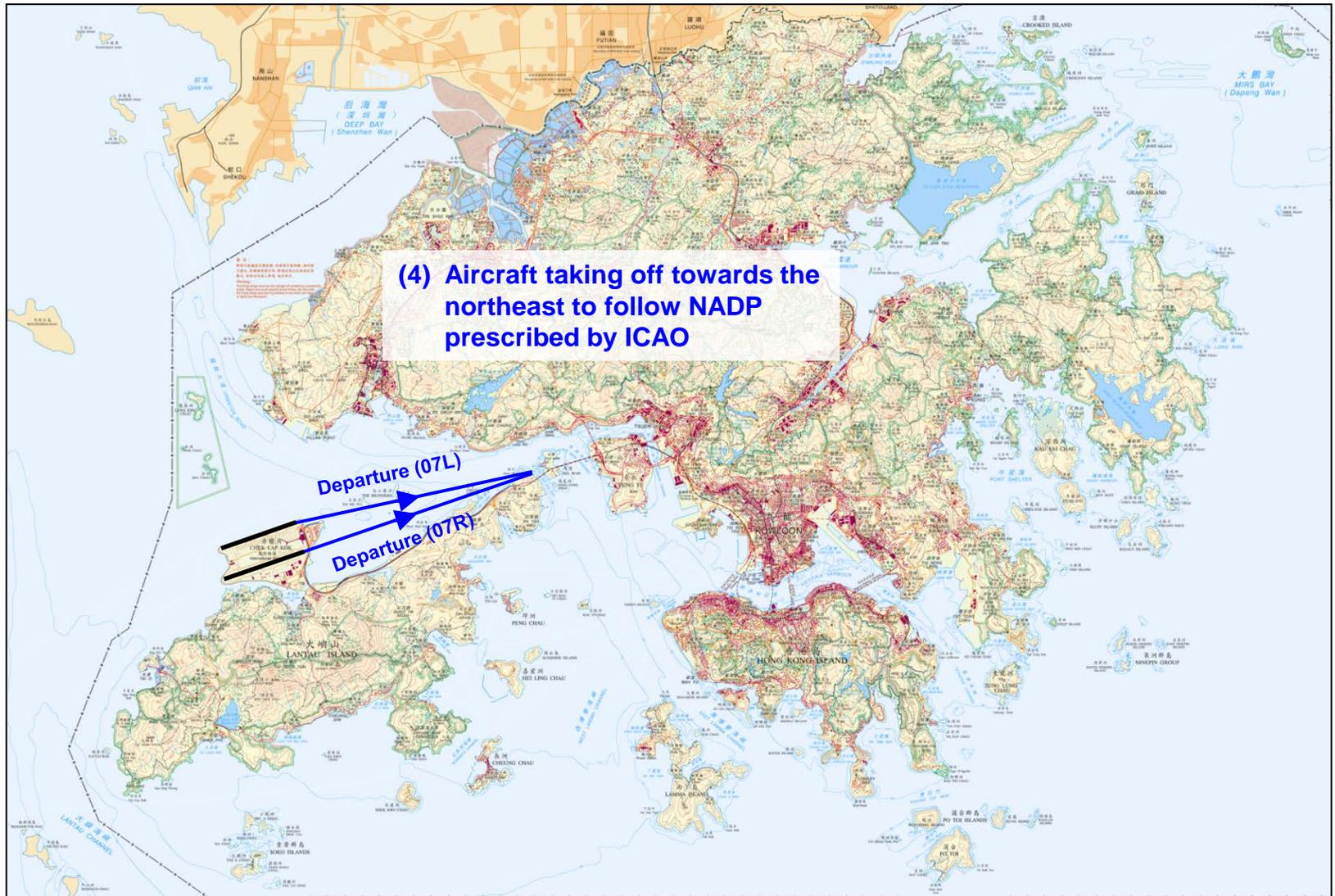
(3) Continuous descent approach procedures implemented for aircraft approaching from the northeast during night time

Arrival (25R)

Arrival (25L)

Balanced Approach

– Noise Abatement Operational Procedures



Balanced Approach

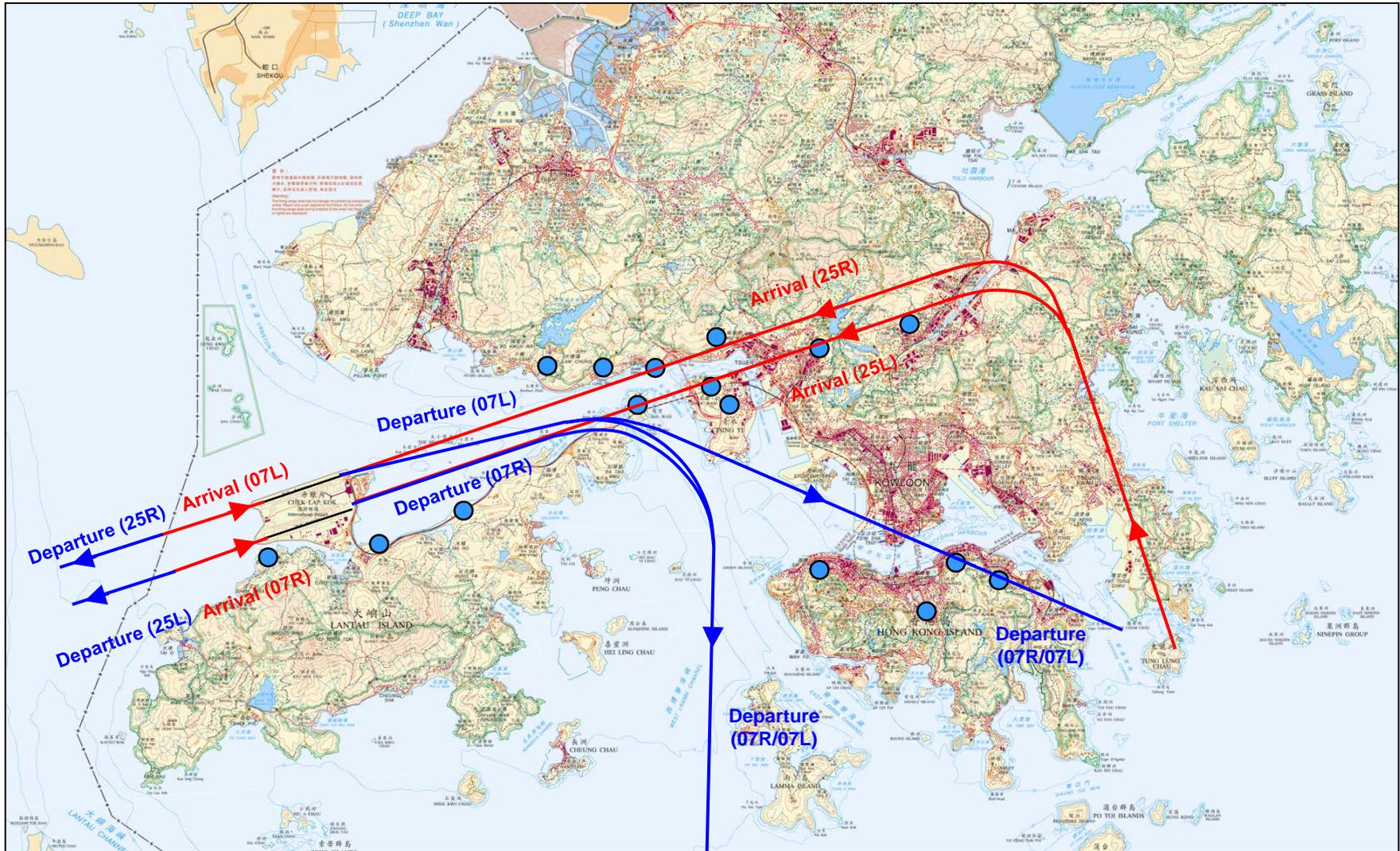
– Operating Restrictions

- Only subsonic jet aircraft complying with Chapter 3 noise standards are allowed to land and take off in Hong Kong.
- Starting from late March 2014, Hong Kong CAD no longer allows aircraft, which meet Chapter 3 noise standards by a cumulative margin of not more than 5 EPNdB, to land and take off in Hong Kong. This measure has been extended to day time from late October 2014.

3. Aircraft Noise Monitoring

- Hong Kong CAD is equipped with the Aircraft Noise and Flight Track Monitoring System which associates the noise data recorded by the 16 Noise Monitoring Terminals with the aircraft flight tracks recorded by CAD's radar system.
- The data are used for monitoring the compliance with, and checking the effectiveness of, the aircraft noise mitigating measures.
- For greater transparency, Hong Kong CAD also publishes regular updates of noise data on CAD's website.

Locations of 16 Noise Monitoring Terminals



4. Communications with Stakeholders

- Communicate with the industry stakeholders to facilitate the implementation and enhancement of aircraft noise mitigating measures.
- Communicate with the local communities to obtain their understanding on CAD's effort in mitigating aircraft noise:
 - *Various channels which includes telephone hotline, fax and email*
 - *Meetings with local district representatives and associations of housing estates' owners*

5. Challenges Ahead

- To meet the anticipated growth, the infrastructure enhancement project of constructing an additional runway for the HKIA is being taken forward.
- As new flight paths will be established with the construction of a new runway, the development of additional aircraft noise mitigating measures may be required to alleviate the impact of aircraft noise on the local communities affected by new flight paths.

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- The Conference is invited to:
 - note the contents of this paper; and
 - share experience and recommend best practices in monitoring aircraft noise and designing aircraft noise mitigating measures.

Thank You

