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Planned Expansion of Hong Kong International Airport into a Three-Runway System Update on Environmental Impact Assessment Study and Stakeholder Engagement

PURPOSE

This paper informs the Council of the development of the proposed Three-Runway System Project and provides an update on the Environmental Impact Assessment (EIA) study and associated stakeholder engagement.

BACKGROUND

- 2. Airport Authority Hong Kong (AAHK) examines the long-term needs of Hong Kong International Airport (HKIA) over a 20-year planning horizon through the preparation of a HKIA Master Plan which is reviewed and updated every five years. The latest HKIA Master Plan 2030 released in June 2011 presented two options as the future strategic development direction: Option 1 is to maintain the airport's two-runway system, and Option 2 is to expand into a three-runway system.
- 3. In the process of preparing for the three-runway system option under Master Plan 2030, studies were undertaken to identify the preferred airport expansion scheme and to prepare preliminary design and environmental assessments to compare the identified airport expansion options. A total of 15 runway alignment options had been considered, of which 3 were shortlisted for further evaluation. These 3 shortlisted

alignment options were then used to develop into 18 airport layout options for evaluation against major criteria including airfield efficiency, passenger convenience, cargo operations efficiency, surface access quality and degree of environmental impact. The latter covered the aspects of air quality, water quality and hydrodynamics, waste, marine ecology and Chinese White Dolphins, fisheries, noise, landscape and visual impacts. Based on the results of this extensive evaluation exercise, the preferred layout for the three-runway system was identified with a view to striking a balance among the various environmental considerations, operational needs and engineering constraints. The preferred layout is under further development and improvement during the EIA process.

- 4. To seek the views of the public on the development options of the airport, AAHK conducted a public consultation of the HKIA Master Plan 2030 between 3 June 2011 and 2 September 2011. During the public consultation, approximately 200 seminars, meetings, briefings and forums were conducted, and over 29,000 completed feedback questionnaires were received. The Social Sciences Research Centre of the University of Hong Kong who compiled the public opinions as an independent consultant reported that 73% of the questionnaire respondents preferred Option 2, i.e., a three-runway system.
- 5. On the basis of the considerations in planning for the long-term development of HKIA as set out in the Master Plan 2030 and the public support obtained, AAHK made a recommendation to the Government in end December 2011 on the adoption of Option 2. Having considered AAHK's recommendation, on 20 March 2012, the Government approved in-principle the adoption of the three-runway system option as the future development direction for HKIA for planning purposes, and approved AAHK to proceed with the statutory EIA process.
- 6. AAHK submitted Project Profile for application of EIA Study Brief for the proposed Three-Runway System Project on 28 May 2012. During the statutory public inspection period, Environmental Protection Department (EPD) requested for further information in accordance with Section 5(4) of the EIAO on 8 June 2012. AAHK subsequently submitted further information to EPD on 29 June 2012. The EIA Study Brief (ESB-250/2012) for the Project was formally issued on 10 August 2012.

PROJECT DESCRIPTION

- 7. The Project covers mainly an area of reclamation of approximately 650 ha to the north of the existing Airport Island. The extent and configuration of this reclamation area has been refined from extensive alignment and layout option studies undertaken as part of the HKIA Master Plan 2030. Part of the reclamation will cover an area of capped contaminated mud pits, with active contaminated mud pits located to the east of the reclamation area.
- 8. As detailed in the Project Profile, the Project involves the following key elements:
 - i. Land formation of about 650 ha to the north of the existing Airport island including a portion over the capped contaminated mud pits;
 - ii. Construction of a third runway, related taxiway systems and navigation aids, and airfield facilities;
 - iii. Construction of the third runway aprons and passenger concourses;
 - iv. Expansion of part of the midfield freighter apron on the existing Airport island;
 - v. Expansion of the existing passenger Terminal 2 (T2) on the existing Airport island;
 - vi. Extension of the automated people mover (APM) from the existing Airport island to the passenger concourses of the third runway;
 - vii. Extension of the baggage handling system from the existing Airport island to the aprons of the third runway;
 - viii. Improvement of the road network in the passenger and cargo areas and new landside transportation facilities including new car parks on the existing Airport island;
 - ix. A greywater recycling system at the proposed Airport expansion area (with a capacity of not more than 15,000m³ per day);
 - x. Necessary modifications to existing marine facilities including the underwater aviation fuel pipelines and 11kV submarine cable between the existing Airport island and the off-airport fuel receiving facilities, sea rescue facilities and aids to navigation; and

- xi. Any other modification, reconfiguration, and/or improvement of the existing facilities on the existing Airport island as a result of the third runway.
- 9. With reference to Part I of Schedule 2 to the EIA Ordinance, the designated projects that are covered as part of the proposed HKIA expansion include, but are not limited to:
 - i. For the reclamation: C.1. Reclamation works more than 5 ha in size;
 - ii. For the proposed third runway and its associated facilities: B.1. An airport (including its runway and the development and activities related to aircraft maintenance, repair, fuelling and fuel storage, engine testing or air cargo handling);
 - iii. For extension of the Automated People Mover (APM) to the expanded Airport region: A.2. A railway and its associated stations;
 - iv. For extension of the existing APM as well as the airside vehicular tunnels to the expanded Airport system: A.7. A road or railway tunnel more than 800m in length between portals;
 - v. For reuse of the treated greywater: F.4. An activity for the reuse of treated sewage effluent from a treatment plant; and
 - vi. For diversion of the submarine fuel pipeline: H.2 A submarine gas pipeline or submarine oil pipeline.

EIA PROGRAMME

- 10. Given the diversity of the proposed Three-Runway System Project, the spectrum of issues covered under the EIA study is wide, including air quality, water quality, noise, marine ecology, fisheries, waste management, landscape and visual impact, and cultural heritage etc.. To strengthen the work of the study particularly for the parts which are more unique to the airport environment, AAHK has additionally procured specialist sub-consultants on air quality, aircraft noise and Chinese White Dolphins to support the EIA Lead Consultant.
- 11. Preparation of the EIA in accordance with the EIA Study Brief is underway, and AAHK aims to complete the EIA process in about 2 years. The timeline is tight

considering the extensiveness of the EIA study. By way of example, to derive assessment assumptions like future air traffic forecast for detailed air quality and noise impact assessments, AAHK needs to obtain data input from major airlines and service providers at HKIA which takes time to process. Another example is that some ecological field surveys, like the bird survey, will take up to 12 months. AAHK is pressing ahead with the early stage of the EIA study and will prepare and submit the proposed approach and methodologies for key areas of technical assessments to EPD to seek their prior agreement.

STAKEHOLDER ENGAGEMENT

- 12. AAHK is committed to undertaking the EIA process by proactively engaging with a wide range of stakeholders and acting in a highly prudent, professional and transparent manner. To enable stakeholders to actively participate in the development of the Project and the EIA, a number of stakeholder engagement initiatives have been organized, including the establishment of the following four EIA Technical Briefing Groups (TBGs):
 - i. Technical Briefing Group on Air Quality;
 - ii. Technical Briefing Group on Noise;
 - iii. Technical Briefing Group on Marine Ecology and Fisheries; and
 - iv. Technical Briefing Group on Chinese White Dolphins.
- 13. The TBGs consist of academics, members from relevant professional institutions and trade associations. AAHK has invited the green groups to join the TBGs. Although they have not accepted the invitation yet, AAHK will be delighted for them to join any time in the future. Through the TBG channel, AAHK aims to effectively exchange views with the relevant experts and concerned groups on various key environmental subjects, while keeping them abreast of the latest progress of the EIA study. The first round of TBG meetings is scheduled in late September and October 2012 to solicit TBG members' views on the proposed assessment methodologies and to discuss possible mitigation measures and constraints. Feedback, advices and suggestions from the TBG will be fully considered by AAHK during the course of the EIA study.

14. In addition, five Community Liaison Groups (CLGs) have been set up to proactively engage neighbouring communities in the vicinity of the airport. They include:

i. Islands;

ii. Tuen Mun;

iii. Tsuen Wan;

iv. Kwai Tsing; and

v. Sha Tin

The establishment of the CGLs aims to keep the neighbouring communities informed of the medium to long-term development projects and plans of HKIA and to seek their views on matters that are of interest to the communities. Members of the CLGs are District Councillors, Chairman and Vice Chairman of Area Committees and other community leaders. The first round of CLG meetings has started in early October 2012.

AAHK also engages a wide range of other stakeholders such as business partners, industry bodies, professional groups, business chambers, lawmakers, workers' unions, residents, NGOs, secondary schools and universities through such initiatives as airport visits, talks, seminars, exhibition and more. A dedicated website www.threerunwaysystem.com has also been set up and a newsletter will be produced to keep the public abreast of the development of the planned three-runway system.

Airport Authority Hong Kong October 2012