

**Expansion of Hong Kong International Airport into a
Three-Runway System**
Twelfth Meeting of Professional Liaison Group
Notes of Meeting

The twelfth meeting of the Professional Liaison Group (PLG) was held on 17th November 2023. Airport Authority Hong Kong (AAHK) presented an update on the Expansion of Hong Kong International Airport into a Three-Runway System (3RS) Project, including an overview of the 3RS works progress, a summary of environmental monitoring and audit (EM&A) results, updates on the implementation of the Marine Ecology and Fisheries Enhancement Strategy (MEFES), carbon management and climate adaptation and resilience. Members also attended a trial ride of the Autonomous E-Staff Shuttle Bus and were briefed on the application of autonomous vehicle technologies at airport and the decarbonising E-GSE (Electric Ground Services Equipment) pooling scheme at the apron area.

Members present:

Ir Dr Cary CHAN, JP	Hong Kong Green Building Council
Prof Jackson HO	Hong Kong Airline Service Providers Association
Dr Brian KOT	Jockey Club College of Veterinary Medicine and Life Sciences, City University of Hong Kong
Mr Ken LAU	Airports Council International (ACI) Asia-Pacific
Ir LEE Ping Kuen	The Hong Kong Institution of Engineers
Dr LUI Sun Wing	The Hong Kong Association for the Advancement of Science and Technology
Mr Simon NG	Business Environment Council
Ir Kenny WONG Siu Wai	The Hong Kong Institution of Engineers
Prof Ir Steve WONG	Environment & Sustainability Committee, The Hong Kong General Chamber of Commerce
Dr Cynthia YAU	Marine and Fisheries Ecologist

Members absent with apologies:

Ir Albert CHENG	Construction Industry Council
Mr Norman CHENG	Hong Kong Waste Management Association
Ir Gordon CHO	Dashun Policy Research Centre
Prof CHU Ka Hou	School of Life Sciences, The Chinese University of Hong Kong
Ms Yvonne HO	International Air Transport Association
Prof Alexis LAU	Division of Environment and Sustainability, The Hong Kong University of Science and Technology
Mr Thomas LUI	The American Chamber of Commerce in Hong Kong
Ms Josephine WONG	Ocean Park Conservation Foundation Hong Kong
Mr Philip WONG Wing Hong	Ocean Park Corporation

In attendance:

Mr Tommy LEUNG	Airport Authority Hong Kong (AAHK)
Mr Peter LEE	Airport Authority Hong Kong (AAHK)
Mr Eden NGAN	Airport Authority Hong Kong (AAHK)
Mr Eric CHING	Mott MacDonald (MM)
Ms Julia CHAN	Mott MacDonald (MM)
Dr Jasmine NG	Environmental Resources Management (ERM)

1.0 Welcome and Introduction

1.1 AAHK welcomed members and thanked them for attending the meeting-cum-visit. Environmental consultants assisting in the implementation of 3RS Project were introduced. Emphasis was made on the PLG meeting being a two-way communication platform with members encouraged to raise questions and make comments at any time during the presentation.

2.0 Presentation by AAHK and their consultants

2.1 AAHK shared with members updates on the 3RS Project, carbon management, and climate adaptation and resilience.

2.2 MM presented implementation status of the Project's EM&A programme, including monitoring results of Chinese White Dolphins (CWDs).

2.3 ERM presented latest progress of the MEFES, including marine ecology and fisheries enhancement measures in Lantau waters, the proposed North Lantau Marine Park (NLMP), and the Marine Ecology Enhancement Fund (MEEF) and Fisheries Enhancement Fund (FEF).

3.0 Questions and comments from members

3.1 Members raised questions after the presentation and the discussion items were summarised as follows.

3.2 An enquiry was made if the connection from Hong Kong Boundary Crossing Facilities (HKBCF) to the airport is in the restricted area. The AA team responded the Park & Fly arrangement allows homeland passengers to park their cars at the HKBCF and enjoy seamless connection to their departure gates, whereas the Park & Visit arrangement allows homeland visitors to park then enter Hong Kong.

3.3 A question was raised regarding drainage systems at the airport. The AAHK team responded that the modelling of the airport-wide drainage system has considered the latest IPCC climate projections and downscaled data from Hong Kong Observatory for extreme scenarios. The results revealed that the airport is well-protected from flooding until at least mid-century and operational at the end of the century with adaptation measures in place.

- 3.4 A question was raised regarding the GSE Pooling Scheme implemented at HKIA. The AAHK team responded that the Pooling Scheme enables ramp handling operators serving airlines to rent critical GSE, of which 95% are electric-powered GSE, from AAHK and as a result they would not have to purchase duplicate equipment, and over 90% of related diesel emissions were reduced, demonstrating a good decarbonisation and emissions reduction measure implemented at the apron area.
- 3.5 A question was raised if aircraft noise would have impact on the released fish fingerlings and marine ecology. The AAHK team responded the fish fingerlings were released at the artificial reefs (ARs) area near the seabed with a water depth of 4 to 5 metres, in which as assessed in the Environmental Impact Assessment, impact of aircraft noise on marine fish would be minimal.
- 3.6 An enquiry was raised regarding the type of ARs deployed. The AAHK team responded in consideration of the relatively shallow water depth allowance at the deployment area, the two types of ARs deployed were both low profile reef. Fifty ARs were hollow in shape with holes of varying sizes and another fifty numbers were filled with oyster reef/ oyster bags. One year of post-deployment monitoring was conducted to evaluate the effectiveness of the ARs.
- 3.7 A question was raised regarding acoustic monitoring for the phase 2 fish fry release pilot. The AAHK team responded that similar to the phase 1 pilot, acoustic tags were inserted into the fish fingerlings. In terms of post-deployment monitoring, this time hydrophones were placed along the ARs on the seabed level to detect signals from the tagged fishes within the acoustic array. And batteries in the tags are good for about half a year.
- 3.8 Regarding outcomes and results of MEEF- and FEF-funded projects, an enquiry was raised if there would be sharing and outreach opportunities. The AAHK team responded that further to earlier sharing sessions with the industry and professional bodies, AAHK will also look into other outreach opportunities.
- 3.9 A question was raised regarding Environmental, Social, and Governance (ESG) and AAHK's involvement in peace and partnership. The AAHK team indicated the EXTRA MILE project, rolled out in early 2018, is a collective platform for AAHK and business partners to attract and retain talent for the airport community by investing in, and unleashing the potential of three target groups – working youth, non-Chinese speakers and airport staff with children – through work placement and after-school care programmes, namely “Working Holiday@Lantau”, “The Pioneer” and “EduCare”. The AAHK also provides airport visits for schools and colleges; and engages with professionals and community leaders through the Professional Liaison Group and Community Liaison Groups.
- 3.10 A comment was raised on wowing visitors' first impression of the airport. The AAHK team responded that complementing to the pleasant in-terminal

ambience, continuous improvement to passengers' experiences is vital, e.g. upholding and delivering performance pledges like the 20- and 40-minute arrival of first and last bag at baggage reclaim belts. Furthermore, the AAHK's revamp of toilets was recognised and recently awarded Best Lavatory at Public Transit Facilities by the Hong Kong Toilet Association.

4.0 Conclusion

4.1 AAHK thanked PLG members for their attendance, insights and suggestions,

Airport Authority Hong Kong
December 2023