

**Expansion of Hong Kong International Airport into a
Three-Runway System**

Sixth Meeting of Professional Liaison Group

Notes of Meeting

The sixth meeting of the Professional Liaison Group (PLG) was held on 27th July 2018. The Airport Authority Hong Kong (AAHK) and their consultants presented an update on the Expansion of Hong Kong International Airport into a Three-Runway System (3RS) Project, including a summary of environmental monitoring and audit (EM&A) results since the last PLG meeting, updates on coral translocation and transplantation efforts and detail on the implementation of the Marine Ecology and Fisheries Enhancement Strategy (MEFES).

Members present:

Dr Helen CHIU	American Chamber of Commerce in Hong Kong
Ir Gordon CHO	Dashun Policy Research Centre
Prof Jackson HO	Hong Kong Airline Service Providers Association
Dr Brian KOT	Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University
Mr Ken LAU	Airports Council International, Asia-Pacific Region
Ir Kenny WONG Siu Wai	The Hong Kong Institution of Engineers
Mr Philip WONG	Ocean Park Corporation
Ir Prof Steve WONG	The Environment & Sustainability Committee, The Hong Kong General Chamber of Commerce

Members absent with apologies:

Prof CHENG Li	Department of Mechanical Engineering, The Hong Kong Polytechnic University
Mr Ken CHING	Eco-Education and Resources Centre
Mr CHONG Dee Hwa	Ichthyological Society of Hong Kong
Prof CHU Ka Hou	School of Life Sciences, The Chinese University of Hong Kong
Ms Helen COCHRANE	Environment & Energy Committee, The British Chamber of Commerce in Hong Kong
Ms Suzanne GENDRON	Ocean Park Conservation Foundation Hong Kong
Ms Yvonne HO	International Air Transport Association
Prof Alexis LAU	Division of Environment, Hong Kong University of Science and Technology
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
Ms Michele WELDON	Civic Exchange
Dr Simon WONG	Ocean Park Conservation Foundation Hong Kong
Dr Cynthia YAU	Marine and Fisheries Ecologist

In attendance:

Ir Kevin POOLE	Airport Authority Hong Kong (AAHK)
Mr Peter LEE	Airport Authority Hong Kong (AAHK)
Mr Martin PUTNAM	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 Airport Authority Hong Kong (AAHK) welcomed members and thanked them for attending the meeting. AAHK provided an overview and updates on the latest 3RS Project progress. Environmental consultants assisting in various aspects of 3RS Project implementation were also introduced. Particular 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's Consultants – MM and ERM

2.1 MM presented the latest progress on the 3RS Project including:

- Implementation status of the EM&A Programme
- Chinese White Dolphins monitoring results
- Coral translocation and transplantation update

2.2 ERM presented the latest information on the MEFES including:

- Progress with the Marine Ecology Enhancement Fund (MEEF) and Fisheries Enhancement Fund (FEF)
- Potential enhancement measures and progress of pilot tests implemented during construction phase of the 3RS Project

3.0 Questions and comments from PLG members

3.1 After the presentation, members raised a number of questions and subsequent discussion items are summarised as follows.

3.2 A question was raised on whether the new aviation fuel pipelines would require maintenance during their operational life. The AAHK team responded that the new pipelines are not expected to require maintenance, however, inspections of pipeline integrity will routinely be undertaken using inspection equipment designed to travel inside each pipeline ("intelligent pigs").

3.3 A question was raised regarding the handling and disposal of bentonite associated with the drilling works prior to installation of the new aviation fuel pipelines. The AAHK team responded that the bentonite materials generated during drilling activity have been treated and stockpiled for

eventual reuse as fill material in the 3RS Project.

- 3.4 A question was raised on the sources of and transportation arrangements for marine filling materials needed for land formation. The AAHK team responded that all filling materials would be transported by barge. AAHK also noted that public fill material from local public fill banks is already being used in the 3RS Project along with materials excavated from the Tseung Kwan O – Lam Tin Tunnel project. AAHK acknowledged that as materials from fill banks can be of mixed quality, fill sorting facilities had been set up by AAHK at fill banks to ensure the fines content of marine fill achieves requirements specified in the Environmental Permit.
- 3.5 A question was raised regarding the competency of the dolphin observers monitoring the Dolphin Exclusion Zones (DEZ). The AAHK team replied that dolphin observers are required to have certain qualifications and must receive training from the Environmental Team (ET) prior to starting work; thereafter, regular checking of observers is undertaken with routine competency drills during both daytime and night-time periods. Floating objects mimicking Chinese White Dolphins (CWD) have been deployed to check whether dolphin observers spot such objects. The observers are retrained from time to time and as necessary.
- 3.6 A question was raised regarding the sighting of a dolphin carcass within the 3RS marine work site in May 2018 and what actions were taken. The AAHK team replied that the carcass was sighted by the dolphin observers who then informed the Agriculture, Fisheries and Conservation Department (AFCD) through the 1823 government hotline. AAHK added that in all cases when dolphins have been sighted within DEZs, construction works have been temporarily suspended in accordance with DEZ Plan requirements, with works only resuming after the DEZ has been clear of further dolphin observations for a continuous period of 30 minutes.
- 3.7 A question was raised regarding the identification and tracking of young CWD calves. The AAHK team replied that sightings of mothers and calves are recorded in the CWD monitoring reports, with photo identification used to identify sighted individuals whenever possible.
- 3.8 A question was raised on how potential impacts from Deep Cement Mixing (DCM) works on the marine environment had been assessed by AAHK. The AAHK team replied that intensive water quality and underwater noise monitoring had been undertaken during DCM trials, firstly using a single DCM rig and subsequently using multiple DCM rigs. Monitoring results from both trials showed that DCM works do not result in unacceptable impacts on the marine environment. The 3RS EIA water quality modeling assessments, which adopts worst-case assumptions for contaminated mud release from DCM works, projected no unacceptable water quality impacts. Ongoing water quality monitoring around DCM works reaffirms no unacceptable water quality impacts are being detected during DCM works.

- 3.9 A question was raised regarding CWD sightings within DEZs. The AAHK team replied that a total of 12 CWD sightings have been recorded within DEZs, 6 in 2017 and 6 during the period from January to June 2018. AAHK added that the longest dolphin sighting incident lasted for more than three hours; construction works were suspended for the whole time, with works only resuming when no dolphins had been observed for over 30 minutes, in accordance with DEZ Plan requirements.
- 3.10 A question was raised on whether any CWD abundance trends had been identified since the 3RS Project CWD monitoring work got underway. The AAHK team responded that the primary aim of the ongoing CWD monitoring effort is to determine any apparent decrease in dolphin encounter rates in western Hong Kong waters as 3RS works progress below a baseline level established before the works commenced. Monitoring to date has not shown any apparent decrease below target levels. In general, CWD survey data has shown that dolphin hotspot areas have remained consistent over the past two years. Broader trends of dolphin distribution are difficult to identify clearly with only two years of data.
- 3.11 A question was raised regarding the nature of complaints received in 2018. The AAHK team replied that all four of the complaints received in 2018 were related to environmental issues, for example suspected sediment or black smoke emissions from DCM barges. The Environmental Team (ET) had investigated all environmental complaints according to the Updated Environmental Monitoring and Audit Manual (EM&A Manual) and the Complaint Management Plan. Investigation results have been reported in EM&A Reports.
- 3.12 A question was raised regarding the possibility of using solar panels to provide a supplementary renewable energy supply to the airport. The AAHK responded that each 3RS design consultancy is required to consider and recommend opportunities for “green design” and the potential use of solar panels is one aspect considered under energy and resource use planning. It was noted that green design had been a feature of the Midfield Concourse (MFC) facility (opened in 2015) and from that process a range of innovative green design elements had been adopted in the MFC, including the installation of around 1,200 m² of photovoltaic panels on the MFC roof. AAHK also noted that opportunities and potential use of renewable energy initiatives is being explored with business partners on a case-by-case basis.

4.0 Conclusion

- 4.1 AAHK thanked PLG members for their attendance, expert insights and recommendations.