

**For discussion on
24 November 2014**

**LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENTAL AFFAIRS**

**Environmental Impact Assessment (EIA)
for the Three-Runway System Project**

PURPOSE

This paper provides information on the approval of the EIA report of the Three-Runway System (3RS) project and granting of the Environmental Permit (EP).

**KEY MILESTONES OF THE 3RS EIA REPORT UNDER THE
ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (EIAO)**

2. The Airport Authority Hong Kong (AAHK) submitted a Project Profile to the Environmental Protection Department (EPD) on 28 May 2012 applying for an EIA Study Brief for the 3RS project. Following a public inspection process EPD issued an EIA Study Brief to AAHK on 10 August 2012.

3 AAHK proceeded with the EIA study in accordance with the Study Brief and submitted on 17 April 2014 an EIA report of the 3RS project to EPD for approval together with an application for an EP. EPD examined the EIA report in conjunction with the relevant Government departments and authorities, and advised AAHK on 12 June 2014 that the EIA report was suitable for public inspection.

4. The EIA report was made available for public inspection by AAHK during the period from 20 June to 19 July 2014. As required by EPD, AAHK submitted the EIA report to the Advisory Council on the Environment (ACE) on 23 July 2014. The EIA Subcommittee (EIASC) of ACE held five meetings from mid-August to September 2014, during which the presentation and question-and-answer sessions were open to the public, to deliberate the EIA report. An ACE full council meeting was held on 15 September 2014 to discuss the recommendations of EIASC and the

EIA report. ACE provided written comments to EPD on 19 September 2014. While ACE recommended approval of the EIA report, it also set out a total of eighteen proposed measures to be imposed as conditions in the EP and four recommendations, to enhance protection of ecology particularly in relation to the Chinese White Dolphins; fisheries; water quality; landscape and visual aspects; waste management; and environmental monitoring and audit requirements, for implementation of the 3RS project. The full list of these proposed measures and recommendations is at **Annex I**.

5. After receiving the comments including the proposed measures and recommendations from ACE and having considered the comments received during public inspection, EPD wrote to AAHK on 30 September 2014 seeking for the information provided to ACE by AAHK, in accordance with Section 8(1) of the EIAO. AAHK provided the further information to EPD on 10 October 2014. After taking advice from all relevant Government departments and authorities, EPD approved the EIA report on 7 November 2014. An EP with conditions was granted by EPD to AAHK on the same day. All the eighteen proposed measures recommended by ACE have been taken on board. The relevant documents involved in the EIA process concerning the 3RS EIA case, including the EP and its conditions, can be accessed through the EIA website, web links of which are set out at **Annex II**.

STATUTORY PROCEDURES AND CRITERIA

6. The EIA process is a statutory process. Consideration of applications under the EIAO is strictly in accordance with the requirements stipulated under the Ordinance and the Technical Memorandum on EIA Process (TM). On approval of EIA reports, Section 8 (1) and 8(3) of the EIAO stipulates that –

“(1) The Director may, within 14 days of the expiry of the public inspection period or the receipt of comments from the Advisory Council on the Environment, whichever is later, ask an applicant in writing to give him the information he requires to decide whether to approve an environmental impact assessment report.

(3) The Director shall, within 30 days of-

- (a) the expiry of the public inspection period;
- (b) the receipt of comments from the Advisory Council on the Environment; or

(c) the receipt of information under subsection (1),

whichever is the later, approve, approve with conditions or reject an environmental impact assessment report for the designated project.”

7. On granting of EPs, Section 10 (3) of the EIAO stipulates that –

“The Director shall advise the applicant and the Advisory Council on the Environment, where it has been consulted under section 6(7), of the grant or refusal of the environmental permit within 30 days of the later of-

- (a) the receipt of the application;
- (b) the expiry of the public inspection period of the environmental impact assessment report under section 7;
- (c) the receipt of comments from the Advisory Council on the Environment on the environmental impact assessment report; or
- (d) the receipt of information under section 8(1).”

8. The technical aspects of the EIA process involve science and engineering matters of various disciplines including but not limiting to those areas under the expertise and responsibilities of EPD. While EPD is responsible for environmental impacts on noise, air pollution and water quality, Section 9.1 of the TM stipulates that the Director shall take the advice from the following authorities on the matters prescribed below:-

| | | |
|---|----|---|
| Director of Agriculture, Fisheries and Conservation | on | Nature conservation, ecological assessment, agriculture, animal and plant health, fisheries |
| Director of Planning | on | Visual and landscaping aspects |
| Director of Marine | on | Marine matters |
| Director of Electrical & Mechanical Services | on | Hazards associated with fuel gas dangerous goods, electromagnetic field |
| Director of Health | on | Human health matters |
| Director of Food and Environmental Hygiene | on | Collection of domestic waste and public cleansing |
| Director of Fire Services | on | Transport, handling and storage of dangerous goods |
| Director of Leisure and | on | Antiquities and monuments |

Cultural Services

Director of Drainage Services on Drainage matters

Director of Civil Aviation on Civil aviation matters

Director of Water Supplies on Developments or works within water gathering grounds or in the vicinity of waterworks installations

Commissioner for Transport on Traffic and transport matters

9. Section 4.5.1 of the TM provides that–

“After the public inspection of the report and, if required, the consultation with the Advisory Council on the Environment, the EIA report shall be approved with or without conditions if

- (a) the requirements in the EIA study brief have been met;
- (b) the quality of the report meets the requirements as set out in Section 4.4 and the results and conclusions are technically sound and reliable;
- (c) it addresses relevant environmental issues raised by the public and the Advisory Council on the Environment during the public inspection period; and
- (d) all relevant environmental principles and criteria laid down in this technical memorandum can be met and the residual environmental impacts are within the relevant criteria, unless with sound environmental justifications and without long term serious environmental implications.”

10. On the issue of EP, Section 7.1 of the TM stipulates that –

“The Director will grant an environmental permit to the applicant if an EIA report covering the project has been approved with or without conditions under this Ordinance.”

11. For purpose of deciding whether the 3RS EIA report should be approved, EPD has considered the EIA report, the comments including the proposed measures of ACE, comments received during the public inspection period, and further information provided by AAHK strictly, in accordance with the procedures and

requirements set out under the TM. After examining the subject matters concerned, all the relevant authorities had advised that the respective subject matters of the EIA report met the statutory requirements of the Study Brief as well as the TM. With the advice received and in accordance with Section 7.2 of the TM, EPD has imposed conditions in the EP. All the eighteen proposed measures recommended by ACE had been taken on board.

12. EPD approved the EIA report on 7 November 2014 in accordance with Section 8(3) of the EIAO. An EP was granted to the AAHK on the same day with conditions in accordance with Section 10(3) of the EIAO.

**Environmental Protection Department
November 2014**

**Environmental Impact Assessment (EIA)
for the Three-Runway System Project**

**Proposed measures and recommendations by
the Advisory Council on the Environment**

(A) Proposed measures to be imposed as conditions in the EP

Marine Ecology

- (a) The project proponent should advance the preparatory work for the designation of the marine park as recommended in the EIA report, including a study on the details of the designation, consultation with stakeholders and incorporation of enhancement measures such as deploying artificial reefs, releasing fish fry, etc., on the understanding that the designation of the marine park should be completed before the operation of the project.
- (b) The project proponent should, in consultation with the Agriculture, Fisheries and Conservation Department (AFCD), submit the marine park proposal including the proposed size and management plan of the marine park as recommended in the EIA report to the Advisory Council on the Environment (ACE) for comment before the commencement of reclamation works.
- (c) The project proponent should establish an independent Marine Ecology Enhancement Fund (The Fund) which should be substantial enough to meet its conservation objectives in a long-term and sustainable manner. A detailed Marine Ecology Conservation Plan (The Plan) should be formulated for the conservation of marine life particularly the Chinese White Dolphins (CWD) within the Hong Kong and the Pearl River Estuary (PRE) waters. The Plan should cover the relevant marine parks and other important marine habitats in Hong Kong to enhance their carrying capacity, “dolphin friendly” activities, the recovery of fisheries resources, and scientific research for the overall benefits of marine mammals, particularly CWD, in the PRE during the construction and the

operation of the project. A management committee should also be set up for The Fund with members from different stakeholders including relevant academics, green groups and dolphin experts for effective implementation of The Plan. The project proponent should submit The Plan and the setup of The Fund to ACE for comment before making the submission to the Director of Environmental Protection (DEP) for approval before implementation.

- (d) The project proponent should devise a Marine Traffic Routes and Management Plan (The Plan) for high speed ferries (HSF) of the SkyPier. The Plan should include the imposition of a speed limit within Hong Kong waters which are hotspots of the CWD during the construction phase so as to minimize chances of collision and disturbance to the CWD, and to cap the number of SkyPier HSF at the current level of operation (i.e. an annual daily average of 99) prior to designation of the proposed marine park. The Plan should also explore the feasibility of imposing a daily cap on the number of HSF leaving the SkyPier and imposing further speed restrictions at different spots along the marine routes after detailed study. The Plan for HSF should be submitted to ACE for comment prior to submitting to DEP for approval before commencement of the construction works.
- (e) The project proponent should develop a Coral Translocation Plan which should include information of coral colonies to be translocated, the recipient area, translocation methodology and monitoring of transplanted coral colonies.
- (f) The project proponent should not use underwater percussive piling for the project.

Fisheries

- (g) The project proponent should establish an independent Fisheries Enhancement Fund (The Fund) and submit a detailed Fisheries Management Plan (The Plan) in collaboration with fishermen for supporting the fishing industry and enhancing fisheries resources in the western Hong Kong waters especially the Lantau waters. A management committee should also be set up for The Fund with members from fishermen and relevant stakeholders for effective implementation of the fisheries management plan. The project proponent should submit

The Plan to ACE for comment before making the submission to DEP for approval before implementation.

Terrestrial Ecology

- (h) The project proponent should develop an Egretty Survey Plan which should include pre-construction survey(s) during the breeding season to update the latest boundary of the egretty with a view to confirming the daylighting location. The daylighting point should be kept to the minimum in size and be situated as far away from the latest egretty boundary as practicable.

Water Quality

- (i) The project proponent should devise a Silt Curtain Deployment Plan which should include the construction programme and details on the design, operation and maintenance of silt curtains to be deployed during construction.
- (j) The project proponent should draw up detailed technical guidelines to avoid adverse water quality impacts for compliance of contractors over the operation of barges and construction vessels to be deployed in the project area.

Landscape and Visual

- (k) The project proponent should formulate a Landscape and Visual Plan for submission to DEP to specify quality criteria on the overall landscape and visual environment of the project with broad-brush targets to be achieved for greening and planting as benchmarked against international standards and best practices.

Waste Management

- (l) The project proponent should adopt a waste minimization strategy and develop a detailed Waste Management Plan (The Plan) setting out measures to minimize waste generation through avoidance, minimization, recovery, recycling and reuse of different categories of waste, for construction and operation phases of the project.

As part of The Plan, the project proponent should maximize the use of construction and demolition (C&D) materials for the land formation work during the construction phase of the project. The project proponent

should critically review the scheduling of surcharge operations to avoid, or otherwise, minimize generation of residual C&D materials requiring disposal during and at the end of the land formation work.

As part of The Plan, the project proponent should incorporate the infrastructural design of the project, suitable facilities to effect separation, storage, recovery, recycling and reuse of different categories of waste generated during operation phase of the project.

Environmental Monitoring and Audit

- (m) The project proponent should develop clear and enforceable action and limit levels and the associated event action plans with clear rationale for CWD, air, noise, water quality and waste monitoring for approval by DEP prior to the commencement of construction works. These plans should include provisions for stopping the relevant parts of works if the respective limit levels are exceeded.
- (n) The project proponent should, as a part of the Environmental Monitoring and Audit (EM&A) programme, devise a Marine Mammal Watching Plan (The Plan) for approval by DEP prior to the commencement of marine works. The Plan should include regular inspection of silt curtains, visual inspection of the waters around silt curtains and the works areas, and a response plan to cope with any unpredicted incidents such as any marine mammal including but not limited to CWD found within the waters surrounded by silt curtains or the works areas.
- (o) The project proponent should draw up a Spill Response Plan (The Plan) with details on the actions to be taken in the event of accidental spillage of oil, unexpected release of large amount of suspended solids or other hazardous chemicals during construction and operation of the project. The Plan should include vessels operating for the project, with specific provisions for protecting the water quality and marine ecology as well as for the neighbouring residents.
- (p) For the purpose of confirming that the actual aircraft noise performance meets the Noise Exposure Forecast (NEF) Contour 25 predicted in the EIA report, the project proponent should update the NEF Contour 25 for submission to DEP with actual operational data after a full year of operation of the project. Thereafter the project proponent should review

the operational data annually and update the NEF if there are major deviations from the assumptions adopted in the EIA report.

- (q) The project proponent should, before the operation of the Project, confirm with the Civil Aviation Department (CAD) on the implementation of restrictions on specific aircraft types to follow the guidelines laid down by the International Civil Aviation Organization to tackle aircraft noise problems at source. The project proponent should also develop an Aircraft Noise Monitoring Plan (The Plan) to monitor aircraft noise at representative locations in Tung Chung, Ma Wan, Tsing Yi, Tsuen Wan, Ting Kau, Siu Lam and Tuen Mun. The Plan should make use of the available aircraft noise and flight track monitoring data including measured noise levels in terms of dB(A) and their distribution, flight tracks, aircraft fleet mix data and other relevant information at these locations. The Plan should include an action plan, as approved by CAD, to review the noise data to assess the effectiveness of the mitigation measures and to take appropriate actions with reference to the prevailing internationally recognized standards in aircraft noise mitigation.
- (r) The project proponent should set up community and professional liaison groups respectively comprising members of the affected communities and relevant professionals/experts to facilitate communication, enquiry and complaint handling on environmental issues related to the project. A detailed Complaint Management Plan including a dedicated complaint hotline and an email channel should be established for timely response to complaints.

(B) Recommendations

- (a) The project proponent should further discuss with the relevant authorities in Hong Kong and the Mainland to adopt a reduced speed limit for HSF operated by the SkyPier and other operators when navigating in important CWD habitats in Hong Kong and PRE waters which is one of the core areas for CWD; and should make efforts to avoid entering the core area of PRE CWD National Nature Reserve.
- (b) The project proponent should target for the BEAM Plus Platinum certification taking into account its pledge to develop the Hong Kong

International Airport as the world's greenest airport.

- (c) The project proponent should consider further waste minimization and recycling strategy and develop a Food Waste Management Plan for food & beverage outlets managed by his tenants in the Airport facilities.
- (d) The project proponent should draw up a Relics and Antiques Rescue Plan to resurrect items of conservation value/significance in the event of archaeological discovery during construction of the project.

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The relevant information and documents concerning the 3RS EIA case are available from the following web links –

- (a) Project Profile on the 3RS project by AAHK
<http://www.epd.gov.hk/eia/register/profile/latest/esb250/esb250.pdf>
- (b) EIA Study Brief for the 3RS project
<http://www.epd.gov.hk/eia/register/study/latest/esb-250.pdf>
- (c) EIA Report on the 3RS project
http://www.epd.gov.hk/eia/register/report/eiareport/eia_2232014/html/index.htm
- (d) Approval Letter of the EIA Report on the 3RS project
<http://www.epd.gov.hk/eia/register/report/conditions/aeiar2232014.pdf>
- (e) Environmental Permit for the 3RS project
<http://www.epd.gov.hk/eia/register/permit/latest/ep4892014.htm>