

Enclosure

**Legislative Council
Panel on Economic Development and Panel on Environmental Affairs**

**Views from the Hong Kong Institution of Engineers
on The Third Runway Project in the Hong Kong International Airport
and the relevant Environmental Impact Assessment Report**

Introduction

Airport Authority Hong Kong (AAHK) proposed the Third Runway Project in the Hong Kong International Airport (HKIA) in 2011. The need is keenly contested in some sectors. It is not going to be an easy decision for Hong Kong. The Hong Kong Institution of Engineers (HKIE) has been following the development of the subject, and tracking views and arguments for and against the Third Runway. We see it suitable to submit our view to the Panel for its consideration.

Need for the Third Runway

2. The HKIE tenders its support for the Third Runway Project for its potential benefit to the economic health of the Hong Kong Special Administrative Region (HKSAR).

3. With very limited primary production and limited secondary production, Hong Kong imports all the energy and most of its food, raw materials and industrial products to support its community and work. It relies on providing national and international services to generate the wealth to pay for these imports and fund leisure and enjoyment by its people. Being an international flight hub is an important wealth-generating service in this respect. The others include finance, port, trade and commerce, and tourism.

4. The position of an international flight hub also contributes to other wealth-generating national and international services. The high and prompt air cargo delivery capacity fosters logistics services that draw part of its cargos by sea through the port facilities. Fast accessibility to all parts of the world predisposes Hong Kong for setting up offices and to cut deals by national and international enterprises and firms, with benefits to its trade and commerce services. Passengers on transit to other destinations may stop over, contributing to tourism.

5. Hong Kong has to invest to maintain its competitiveness in the wealth-generating services, including its airport. Any set back will unavoidably lower the living standards of the community. It is usually the less well-off classes that will suffer more from such.

6. The business case for the airport has up to the moment been mostly in terms of contributions to Gross Domestic Product (GDP). It does not distinguish wealth-generating economic activities from others, and hence fails to draw attention to the important role the airport plays in paying for the subsistence and welfare of the people of Hong Kong. AAHK may like to look into this line of reasons and quantify it for a more relevant business case to focus discussion.

7. The HKIE is aware of the views that short-term improvements, in form of enhancing facilities and beefing up human resources to optimise their use, are important. This is likely to be true but by itself may not be sufficient to ensure the lead of HKIA in its position as an international flight hub. AAHK should seriously look at the suggestions and make the best of them.

8. The HKIE is aware of the views that the benefit of a Third Runway is limited by a crowded air space. There is merit for AAHK to open its assumptions and release its calculations on the subject, for the benefit of an informed discussion. However, constraints always exist in one form or the other. It is for Hong Kong to look for ways of easing them and their effect.

9. The HKIE is aware of the views that the capacity of the existing runways can be improved by discouraging narrow-bodied aircraft and routes to less important destinations. This should be possible but there is a limit to which such constraints could be imposed without hurting HKIA's lead. Again, it would be to the advantage of AAHK if it could put this in relatively concrete terms.

10. The HKIE is aware of the views that Hong Kong should not attract economic activities that its environment cannot support. This is true and hence the Environmental Impact Assessment (EIA) is believed to be a key subject for this meeting of the Panel.

11. The HKIE is aware of the very tight programme AAHK has drawn up for the construction of the Third Runway and associated facilities. While it admires its determination for Hong Kong to reap the benefit of a Third Runway as early as possible once the project is authorised, the HKIE would note that such a programme could only be achieved when all conditions are favourable. AAHK should plan for early actions to create favourable conditions where it can, and to draw up contingency plans for those that it has no control.

Environmental Impact Assessment

12. The HKIE has reviewed the EIA Report on the Expansion of HKIA into a Three-Runway System. The HKIE finds the assessment to have followed currently accepted standard of good practice, is fact-based where appropriate, with holistic analysis on the effects of the project in specific aspects of the environment, and have recommended mitigation measures. It should provide a sound platform for informed discussion and judgement by the Advisory Council on the Environment (ACE), green groups, other stakeholders, and the public in general.

13. The HKIE is aware of the particular emphasis of green groups in protecting the Chinese White Dolphins. In this regard, the continual field studies on them since 1995 provide a wealth of data on the habitat and habits of the dolphins. There is a declining trend of their abundance around Lantau Island. The more recent decline around the Brothers Islands and the east of the airport platform may have been related to the marine works there. The decline at the north of Lantau may be related to the operation of the Sky Pier. There is also evidence of dolphins that avoided areas of the marine works having extended their range to the previously less favoured waters at the west of Lantau. On the bright side, one may contend that Chinese White Dolphins are mobile to some extent in avoiding unpleasant waters. The food and sanctuary promised by the planned marine parks could attract them back. Knowledge of their ranging habit and impact of the Sky Pier would permit better planning of the marine parks and operation of the Sky Pier for the good of the dolphins. On the pessimistic side, how far this would work out carries uncertainties.

14. The HKIE is also aware of the concern that the promise for marine parks may not materialise, and the green groups' preference for setting them up before works start. The Institution sympathises with the concern but also understands that the conservation areas with the associated constraints on marine activities, if set up by the time of the construction, could render the works very expensive and slow if not impractical. AAHK should liaise with the green groups to build up sufficient mutual trust and common ground.

Preparedness for Project Implementation

15. Hong Kong's construction industry has a long record of meeting the challenge of compressed programme and very tight completion targets, but there are signs that this might have been pushed a bit too far. A compressed programme also adds to the cost and risk of contractual complications and delays.

16. Works for the Third Runway will be many folds more taxing than the construction of the present airport in the 1990's. It will have to be done alongside a live airport operating close to its capacity. The public is generally less sympathetic and environmental and safety requirements are now more stringent. AAHK should review its programme to identify actions that could be taken to reduce uncertainties and plan for contingencies. The HKIE would raise two examples to illustrate.

17. Land formation for the Third Runway would require 0.1 billion cubic metre of fill. Supplies from outside Hong Kong will be needed. Marine sand from the Mainland will be one likely source. Demand for such fill within Mainland China is high and the Mainland government has stepped up controls and regulations of winning and export of sand fills. The HKIE urges the Administration and AAHK to do its best to liaise with the relevant authorities and supplying parties, to secure supplies early.

18. Seabed utilities have to be diverted for the land formation. The diversion could be done alongside the formation works, but this will reduce the flexibility of

works sequence and programme. The cost of such diversion would be a small fraction of the total cost of the land formation works. AAHK should look into the merit of advancing such works at the risk of their being abortive if the project fails to be authorised by Legislative Council.

Public Engagement

19. The HKIE is aware of the heavy effort by AAHK in communicating with stakeholders. It should keep up the momentum, monitor its effectiveness, and step up effort where needed. One that commonly helps is opening information to stakeholders, for informed discussion, and to permit third parties to judge on the strength of arguments on key issues.

Concluding Remarks

20. With the information available at present, the HKIE supports the Third Runway. We see the EIA Report as having provided a sound platform for ACE and stakeholders to deliberate and judge on the environmental acceptability of the runway. We note the need for AAHK to advance actions where possible to create conditions favourable to project implementation. We are pleased with AAHK's effort in engaging stakeholders and suggesting areas that could merit further actions.