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**Panel on Economic Development**  
**Meeting on 10 December 2019**

**Updated background brief on the resources proposals relating to  
the government facilities and equipment to support  
the three-runway system at the Hong Kong International Airport**

**Purpose**

This paper provides a brief account of the discussion on the resources proposals relating to the government facilities and equipment to support the three-runway system ("3RS") at the Hong Kong International Airport ("HKIA") by Members of the Legislative Council ("LegCo").

**Background**

2. The 3RS project comprises reclamation of some 650 hectares of land north of the existing Airport Island, the construction of a new third runway with associated taxiways, aprons and aircraft stands, a new passenger building, expansion of the existing Terminal 2 into a full service processing terminal, a new automated people mover system, a new baggage handling system, related airside and landside works with associated ancillary and supporting facilities. The scale of works is comparable to the construction of a new airport.

3. According to the Airport Authority Hong Kong ("AAHK"), the commissioning of the new third runway is scheduled for 2022, after which the existing North Runway will be closed for reconfiguration for about two years. The commissioning of the full 3RS is targeted in end 2024. Upon the full commissioning of 3RS, HKIA will have the capacity to handle air traffic demand at least up to 2030, by which time the annual passenger and cargo volume are expected to increase to around 100 million and 9 million

tonnes respectively. To cater for the growth in air traffic, the relevant government departments need to enhance their services at HKIA to ensure the safe and efficient operation of HKIA. The government facilities, which are part and parcel of 3RS, will need to be provided in batches to tie in with the implementation programme of 3RS.

4. AAHK will self-finance the 3RS project, which is around \$141.5 billion in money-of-the-day ("MOD") prices. The Administration advised in March 2015<sup>1</sup> that a number of government facilities, such as a new air traffic control ("ATC") tower, fire stations, weather monitoring systems, etc., would be required for the operation of 3RS, and that the Administration undertook to seek LegCo's funding approval for such works in batches to tie in with the development stages.

5. The Administration advised in June 2018<sup>2</sup> that the estimated project cost of the first batch government facilities to support 3RS at HKIA was about \$8.1 billion in MOD prices, which consisted of \$4.8 billion for the three Public Works Programme ("PWP") projects (including the provision of ATC, aviation weather services and fire services facilities) and \$3.3 billion, which was subject to further detailed assessment, for the procurement of air navigation service ("ANS") equipment and fire services vehicles under capital non-works items. Planning and preliminary design of the remaining government facilities were underway. The remaining government facilities, mainly for security control, such as customs, immigration, quarantines, port health control and law enforcement, were required within the new passenger building, expanded Terminal 2 and various locations at the airport. In addition, the Hong Kong Observatory would also require new systems for aviation weather services. The preliminary cost estimate of the remaining government facilities was about \$9 to \$9.5 billion in MOD prices, which was subject to review after the completion of the planning and preliminary design. The Administration would seek funding approval from LegCo for the remaining facilities at a later stage. The total estimated cost of government facilities was about \$17.5 billion in MOD prices.

### **Previous discussions**

6. At the meeting on 28 May 2018, the Panel on Economic Development ("the Panel") was briefed on the first batch of government facilities and equipment to support 3RS at HKIA as mentioned in paragraph 5 above. The three PWP projects were endorsed by the Public

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<sup>1</sup> Source: Legislative Council Brief, File Ref.: THB(T) CR2/582/08

<sup>2</sup> Source: LC Paper No. PWSC(2018-19)25

Works Subcommittee and approved by the Finance Committee ("FC") on 25 June 2018 and 18 July 2018 respectively. At the latter meeting, FC also approved the commitment of about \$2.958 billion for the provision of ANS equipment to support 3RS system at HKIA and replace existing aged ANS equipment. The major views and concerns expressed by members are summarized in the ensuing paragraphs.

#### Need for the Administration to provide facilities and equipment

7. Some member queried the need for the Administration to provide government facilities and equipment to support 3RS, given the undertaking made by AAHK to implement 3RS with its own finances. They were concerned whether the Administration or AAHK would be held responsible in the event of cost overrun. To achieve cost reduction, some members suggested that the costs of various facilities and equipment should be reviewed.

8. The Administration advised that the proposed government facilities had to be developed for compliance with the requirements of the International Civil Aviation Organization regarding air traffic movements and airport operation, as well as other security and operational requirements to facilitate the efficient and smooth operation of the airport. The arrangement of seeking LegCo's funding approval for the development of government facilities was in line with the practice adopted in the 1990s for the two-runway system of HKIA. The Administration anticipated that the planning and preliminary design of the remaining government facilities would be completed in around 2019. The cost estimate could then be finalized and the funding request would be submitted to LegCo.

#### Entrustment agreement between the Government and AAHK

9. Members noted that the Administration planned to entrust the design and construction of the related capital works projects to AAHK and that the Government had to pay AAHK the on-cost for managing the entrusted works, including the costs of the design, project management, insurance, and construction support and airport on-costs. Some members raised concerns about the entrustment agreement ("EA") and queried why the proposed on-cost for managing the entrusted works was 16.5% of the construction cost, which was higher than the 12.5% of the on-cost for managing the entrusted works payable to other public organizations under government building projects in general.

10. The Administration explained that in view of the exceptionally high degree of integration required amongst the airport facilities under the 3RS

project and various government facilities located at different parts of the 3RS project area, and the critical interfacing issues such as overlapping works sites, construction works sequences and programme dependence among the proposed works, it planned to entrust the design and construction of the projects to AAHK for better integration, and management of interfacing issues. It would be impractical for AAHK to design and construct the 3RS project, while the Government separately undertook the design and construction of the projects co-located within the 3RS project area. Besides, HKIA was in round-the-clock operation with heavy air traffic. To avoid disturbance to the operation of the airport and to uphold aviation safety, close coordination amongst parties responsible for airport operation, the construction of 3RS and the projects was of paramount importance. The proposed EA would enable both the 3RS works and the government facilities at the same location to be designed and constructed at the same time.

11. The Administration also explained that due to the unique nature of the construction works of the 3RS project, the on-cost for managing the entrusted works had to cover two additional special charges for the procurement of the "Owner Controlled Insurance Programme in Construction Contracts" for the project and the "Construction support and airport on-costs", which were about 1.3% and 2.7% of the construction cost of the project respectively. Details of the two charges are set out in **Appendix I**. As regards the responsibilities under EA, the Architectural Services Department was closely liaising with AAHK on the details of individual terms of EA and would scrutinize the design proposals submitted by AAHK. It was AAHK's responsibility under EA to ensure the delivery of the projects within the time as agreed between parties, otherwise AAHK had to pay liquidated damages to the Government for the delay.

#### Procurement of ANS equipment

12. Some members were concerned about the procurement procedures of the proposed ANS equipment and its compatibility with the existing Air Traffic Management System ("ATMS"). As the Civil Aviation Department ("CAD") would fully recover the cost for the provision of ANS through collecting en-route navigation charges ("ENCs") from airlines for aircraft overflying the Hong Kong Flight Information Region without taking off/landing at HKIA and collecting ATC services charge from AAHK for aircraft taking off/landing at HKIA, some members were concerned about the impact of the resources proposals on the levels of such charges.

13. The Administration advised that CAD would work out the tender documents in conjunction with the Government Logistics Department ("GLD") and the Department of Justice ("DoJ"). CAD would adhere strictly

to the tendering procedures stipulated in the Government's Stores and Procurement Regulations and the World Trade Organization Agreement on Government Procurement, and the Departmental Project Procedures Handbook of CAD, and consult GLD and DoJ as and when appropriate to ensure the fairness and impartiality of the tendering and procurement process. The Administration also advised that the ANS equipment proposed for procurement was not related to ATMS but ancillary systems such as radars, etc. As the interface between the new radar system and ATMS was governed by international standards, the systems would be mutually compatible and operable even if they were supplied by different providers.

14. The Administration advised that in setting the levels of ENCs and ATC services charge in future, CAD would include a few items in the costs to be recovered, including the depreciation cost of the total expenditure required for the operation and support of 3RS, the related additional recurrent cost and the inflation factor. As Hong Kong's ENCs were considered relatively low compared with similar charges levied by nearby countries or places, the expected increase in ENCs should not undermine the competitiveness of the aviation industry of Hong Kong. It also advised that ATC services charge only accounted for a small part of the airport charges levied on airlines by AAHK.

### **Council questions**

15. At the Council meetings of 4 February, 15 and 22 April 2015, and 7 December 2016, questions relating to the development and funding proposal of 3RS were raised by Members. Hyperlinks to the relevant written replies from the Administration are provided in **Appendix II**.

### **Latest development**

16. At the Panel meeting on 10 December 2019, the Administration will seek the Panel's support on the funding application for the government facilities and equipment to support 3RS at HKIA.

### **Relevant papers**

17. A list of relevant papers available on the LegCo Website (<http://www.legco.gov.hk>) is in **Appendix II**.

## Appendix I

### “Owner Controlled Insurance Programme in Construction Contracts” (“OCIP”)

As the construction works of the 3RS project will be carried out at an operating airport, and having considered the scale, risks and complexity of the works involving multiple works contracts, AAHK has procured the OCIP for the construction works of the entire 3RS project, including the Employees’ Compensation Insurance, Contractors All Risks Insurance and Third Party Liability (TPL) Insurance. As works are carried out at an operating airport, the TPL covers compensations for airport facilities, aircraft, airport buildings, the death of or injuries to and property damage to the third parties, etc. It would be very difficult and costly for individual contractors to procure TPL insurance on their own. With AAHK responsible for risk control, management and execution of the OCIP, all works contracts under the 3RS project can be adequately insured. Moreover, there is no need for the contractors to factor in the insurance cost and risks in the tender price. If AAHK does not provide the overall OCIP for all contractors under the 3RS project, the contractors of government facilities of the 3RS project will have to arrange insurance schemes on their own. Even if the contractors are able to procure individual insurance, the costs will also be reflected in the tender price. The actual expenditure of the Government will not decrease but may become even higher.

### “Construction support and airport on-costs”

The new reclamation area under the 3RS project is connecting with the existing North Runway which is within the airport restricted area. In view of airport security and operational needs, the transportation of construction materials and workers going into and out of the works sites of most of the 3RS works of AAHK and also the aforesaid government facilities will rely on marine transport. Therefore, AAHK will provide a range of ancillary transport facilities, including temporary piers and marine transport facilities. In addition, as the works sites of the 3RS project are remote and lack of land-based transport, AAHK will provide an array of supporting and welfare facilities for its contractors to facilitate the workers and to enhance construction efficiency, thereby attracting more local skilled workers to work for the 3RS project. AAHK will therefore provide facilities such as canteens and clinics, and temporary accommodation for workers under emergency situation such as typhoons.

The new reclamation area of the 3RS project lacks basic supporting infrastructures which are usually available at other works sites in general. Therefore, AAHK has to provide various facilities, including offices for resident site staff of the contractors, land-based transport infrastructures at the new reclamation area (e.g. temporary road network at the works site, and the associated drainage system), infrastructures for telecommunications system, security/emergency rescue facilities and a helipad for emergency rescue, material testing facilities, waste management facilities, sewage treatment facilities, concrete batching plants, and fuel storage and supply facilities to facilitate the construction works carried out by the contractors. The above supporting facilities are indispensable. Contractors of government facilities will be allowed to use these facilities. AAHK will incur additional expenditure and on-cost in the management and operation of the aforesaid supporting facilities.

*Source: LC Paper No. PWSC293/17-18(01)*

## List of relevant papers

Issued by	Meeting date/ Issue date	Paper
Panel on Economic Development	28 May 2018 (Item IV)	<a href="#">Administration's paper</a> <a href="#">Administration's follow-up paper</a> <a href="#">Background brief</a> <a href="#">Minutes</a>
	29 April 2019 (Item IV)	<a href="#">Airport Authority Hong Kong's paper</a> <a href="#">Administration's/Airport Authority Hong Kong's follow-up paper</a> <a href="#">Background brief</a> <a href="#">Minutes</a>
Public Works Subcommittee	22 June 2018 (PWSC(2018-19)25)	<a href="#">Administration's paper</a> <a href="#">Minutes</a>
	25 June 2018 (PWSC(2018-19)25)	<a href="#">Administration's follow-up paper</a> <a href="#">Minutes</a>
Finance Committee	18 July 2018 (FCR(2018-19)49 & FCR(2018-19)50)	<a href="#">Administration's paper (FCR(2018-19)49)</a> <a href="#">Administration's paper (FCR(2018-19)50)</a> <a href="#">Administration's follow-up paper</a> <a href="#">Minutes</a>
Council Meeting	4 February 2015	<a href="#">Council question on "Expansion of the Hong Kong International Airport into a three-runway system" raised by Hon Gary FAN</a>



<b>Issued by</b>	<b>Meeting date/ Issue date</b>	<b>Paper</b>
	15 April 2015	<u>Council question on "Expansion of the Hong Kong International Airport into a three-runway system" raised by Dr Hon KWOK Ka-ki</u>
	22 April 2015	<u>Council question on "Funding proposal for the project to expand the Hong Kong International Airport into a three-runway system" raised by Hon Mrs Regina IP</u>
	7 December 2016	<u>Council question on "The project to expand the Hong Kong International Airport into a three-runway system" raised by Hon CHU Hoi-dick</u>