

**For Discussion
On 5 January 2016**

**Legislative Council Subcommittee
To Follow up Issues Relating to the
Three-Runway System at the Hong Kong International Airport**

**Three Runway System Project at the Hong Kong International Airport:
Financial Arrangement Plan of the
Three-Runway System Project**

Introduction

1. This paper sets out the financial arrangement plan Airport Authority Hong Kong (“AAHK”) proposes for the Three-runway System (“3RS”) project.

Background

2. As part of its Master Plan 2030 (“MP2030”), AAHK commissioned an external financial advisor to conduct a financial feasibility assessment study which was completed in 2011. In the light of the Executive Council’s (“ExCo’s”) in-principle approval in March 2012 for AAHK to proceed with the planning work, including the financial arrangement plan relating to the development of the 3RS, AAHK has appointed The Hongkong and Shanghai Banking Corporation Limited (“HSBC”) as its financial advisor to conduct a study on the possible financial arrangement plan for implementing the 3RS project. The study has thoroughly considered and assessed issues/scenarios such as reviewing the assumptions adopted by AAHK in formulating the revenue projections, assessing the initial debt funding requirement and possible funding options, performing risk analysis and running sensitivities to test the financial robustness and prudence of the 3RS financial arrangement plan, etc. Key differences between MP2030 financial feasibility study and 3RS financial arrangement plan are set out in **Annex A**.

3. Having critically reviewed the scope of the 3RS project and on completion of the scheme design, AAHK estimated the capital cost of the 3RS to be approximately \$141.5 billion in money-of-the-day (“MOD”) prices, i.e. after taking into account expected price inflation over the period up to expected completion of 3RS in 2023/24, assuming a 8-year

construction period commencing in 2016/17. On this basis, AAHK and its financial advisor have come up with recommendations on a financial arrangement plan which was submitted to the Government in January 2015. In March 2015, the Government affirmed the need for the 3RS project and asked AAHK to review the charging regime of the proposed Airport Construction Fee (“ACF”) so as to reduce the burden on passengers. Accordingly, AAHK revised the ACF proposal and made consequential changes to the overall financial arrangement plan.

4. At the Subcommittee’s meeting on 3 November 2015, Members were briefed on the overview of the 3RS project, covering, inter alia, the financial arrangement plan (LC Paper No. CB(4)143/15-16(01)). At the meeting on 1 December 2015, Members requested AAHK to provide the latest report of the study on the financial arrangements for the 3RS conducted by HSBC. The report has been uploaded onto AAHK’s website for public reference (http://info.threerunwaysystem.com/pdf/en/3RS_financial_arrangements_report.pdf). The main findings of the above study are summarised in this paper.

The 3RS Financial Arrangements Consultancy Study

5. In conducting the financial arrangement study, a set of key working case assumptions on AAHK’s revenue and expenditure were adopted. These assumptions are set out in **Annex B**.

6. When devising the financial arrangements, AAHK has adopted the “joint contribution” principle, i.e. users of Hong Kong International Airport (“HKIA”), including passengers, airlines and operators at HKIA should contribute to the project cost. AAHK has proposed to fund the 3RS through the following three sources :-

- (a) retaining AAHK’s operating surplus including, inter alia, reviewing and optimizing existing fees and charges;
- (b) introducing a new ACF; and
- (c) raising third party debts from the market leveraging on AAHK’s financial capability and excellent credit rating.

(a) **Retain Operating Surplus**

7. Having regard to AAHK's robust revenue performance in the past and the continued growth in revenue projected for future years in the light of steadily rising air traffic demand at HKIA, AAHK is committed to exhausting all possible means to finance the project by itself.

8. AAHK intends to optimise all its revenue sources, including the airport charges which would be brought back to the level of 15 years ago (when the charges were reduced in January 2000¹ due to the Asian Financial Crisis), with subsequent increases to be introduced in line with inflation. According to a survey conducted by the consultancy firm LeighFisher in 2015, HKIA's overall airport charges ranks 55th among the 56 international airports studied, indicating such charges are low by international standard. The information provided by the International Civil Aviation Organization ("ICAO") further indicates that airport charges account for only around 4%² of the surveyed global airlines' operating expenses. The proposed increase therefore should not result in any material impact on airlines and affect HKIA's competitiveness. AAHK is currently discussing the proposal with airlines and the increase in airport charges is targeted to be implemented in FY2016/17. AAHK will also regularly review and optimise the levels of all other revenue sources in accordance with market conditions.

9. AAHK plans to retain all distributable profits from FY2014/15 onwards until the commissioning of the 3RS (assuming a project construction period of 8 years which commences in FY2016/17).

10. AAHK estimates that about \$47 billion (or 33%) of the required capital funding for the 3RS project would be raised through optimising revenues and retaining distributable profits.

(b) **Introduction of an ACF**

11. Members were briefed on the ACF regime at the meeting on 3 November 2015 (LC Paper No. CB(4)143/15-16(01)). In short, the ACF regime differentiates charging levels for short haul/long haul passengers, first or business class/ economy class passengers, and origination and destination ("OD")/ transfer and transit ("TT") passengers, as set out in **Annex C**.

¹ The airport charges were reduced by 15% in 2000.

² ICAO Financial Situation of Airports and Air Navigation Services Providers Report 2007 (Chapter 3), ICAO Financial Situation of Airports and Air Navigation Services Providers Information Paper 2013, ICAO Data+; Include security related charges

12. AAHK estimates that about \$26 billion (or 18%) (net of tax) of the capital funding requirement of the 3RS project would be raised through the implementation of the ACF. AAHK plans to begin levying the fee once all the statutory procedures for the 3RS project under the Town Planning Ordinance (Cap. 131) and the Foreshore and Seabed (Reclamations) Ordinance (Cap. 127) are completed. It will remain in effect until all the 3RS-related borrowings have been repaid. Currently, it is AAHK's intention to maintain the charging levels of ACF throughout the collection period. Meanwhile, AAHK will work out with airlines and the travel industry the logistics arrangement for collecting ACF via air tickets.

(c) **Raising Funds from the Market**

13. Taking account of the funding sources outlined in paragraphs 7 to 12 above, there remains a funding shortfall of \$52 billion. To fill this funding gap, AAHK needs to resort to borrowing/raising funds from the market. Together with the estimated borrowing cost of \$17 billion, the total incremental borrowings will be \$69 billion which will be raised from the market by phases subject to the 3RS capex phasing. AAHK's reputation, its financial capability, its 100% ownership by the Government and its excellent credit rating (AAA) would enable AAHK to raise sufficient funds on competitive terms from the market.

14. Currently, AAHK is working on the detailed plan and strategy for raising fund from the market. AAHK has established the following general guiding principles in developing the plan and strategy:-

- (a) Raise debt from sources and on terms which will result in :-
 - (i) debt tenors consistent with AAHK's investment plans and funding needs;
 - (ii) cost-effective financing;
 - (iii) flexible terms which reflect the uncertainties that a project of 3RS' scale and complexity entails; and
 - (iv) opportunities for a broad range of stakeholders to participate in the financing of AAHK/3RS.
- (b) Retain flexibility on the timing of approach to market including:-

- (i) adapt to changing market conditions, unexpected events and the need to raise additional funding if required (e.g. by ensuring sufficient headroom under the debt capacity of the AAHK);
 - (ii) retain sufficient committed but undrawn facilities; and
 - (iii) ensure that the current multi-currency Medium Term Notes programme is in place to facilitate swift issuance of bonds.
- (c) Examine all potential sources and forms of financing, including institutional bonds, retail bonds, Islamic bond, bank loans, export credit agency backed financing and alternative funding source across a range of currencies and tenors. The financing plan will also be formulated to take into account the possibility of allowing public participation and sharing the financial success of the 3RS.
- (d) Actively manage relationship with relevant rating agencies, investors and banks to ensure that the strength of AAHK's operation is well understood in order to obtain funding from the market on competitive terms.

15. AAHK has assessed its borrowing capability taking into account potential impact to AAHK's credit rating and ensuring compliance with the Airport Authority Ordinance ("AAO"). It has come to the view that it would be viable to increase borrowing incrementally to \$69 billion, which would bring its maximum debt level to \$77 billion in FY2023/24 or around 4.5 times EBITDA in FY2022/23. AAHK has access to a wide range of funding options, including bank and bond markets. These markets have sufficient liquidity to fund the \$69 billion incremental debt required by AAHK. The following financial instruments will be considered:-

(a) Long tenor bonds

AAHK has a strong track record of tapping the HKD and USD bond markets and local and international investors will likely have a keen interest in AAHK's bonds. Therefore, institutional bonds will be an attractive financing option for the AAHK's core debt. Such funding is of minimal risk because of its long tenor (reducing refinancing risk) and fixed interest rates. Long

tenor bonds are most appropriate for long life infrastructure projects such as 3RS. As such, they will likely form a core part of AAHK's whole financing plan for 3RS. While market capacity in HKD bonds is limited, the USD markets provide substantial liquidity, provided that the credit and pricing are appropriate. Foreign exchange risk will need to be considered and managed for non-HKD bond issuance.

(b) Retail bonds

A portion of the incremental borrowings will likely be in the form of retail bonds to increase public participation and engagement in the 3RS project. This will be perceived positively since the bonds would allow the participation of the general public in the 3RS and enable them to take home financial benefits arising from investment in the project. However, the tenor of retail bonds is likely to be short when compared to the long term nature of the 3RS investment and the pricing may be less competitive when compared to other sources. Hence, the quantum and terms of retail bond issuance will require further study.

(c) Islamic Bond/Sukuk

Sukuk will also be considered. The Government issued two Islamic bonds in 2014 and 2015. The bonds were issued to increase the profile of Hong Kong as a centre for Islamic finance and as a template for other issuers to utilize Hong Kong to issue their Islamic bonds. Islamic bonds are more complex than conventional financing and in the short term are unlikely to offer a pricing advantage. However, there may be a strategic benefit in diversifying the investor base supporting AAHK to include investors in various parts of the world seeking Islamic compliant structures. If AAHK were to issue Islamic bonds, it would likely represent a small portion of the overall financing.

(d) Commercial bank loans

AAHK has established good relationship with major regional and international banks and has been an active participant in the Hong Kong syndication bank loan market. There is currently good market liquidity with appetite to lend up to 5 to 7 years at

competitive costs. Longer term commercial bank loans could be available with the support of export credit agencies for certain imported components of the 3RS project. Strong appetite to lend to AAHK is therefore anticipated. The tenor of bank loans could be complementary to the long dated bond. The bank loan market could provide an important funding source for AAHK.

(e) Revolving Credit Facilities

AAHK has maintained revolving credit facilities and this is considered important for 3RS to provide new financing and a flexible buffer in case capital expenditure is faster than expected or if the capital markets are closed or unattractive for a period of time. In early December 2015, AAHK signed a five-year \$5 billion revolving credit facility with 21 local and international banks. AAHK received overwhelming responses with an oversubscription of 3.4 times at an initial commitment of \$17.01 billion. The tight pricing also represented the lowest among club or syndicated bank loan deals in Hong Kong market with the same tenor over the past 48 months.

16. AAHK will monitor the market conditions closely and determine the detailed financing plan as the market allows, and execute it based on established guiding principles in paragraph 14 above.

17. A diagram summarising the overall 3RS funding plan is at **Annex D**.

Financial Return

18. The 3RS project, based on the latest key assumptions, would generate a financial internal rate of return (“IRR”) of about 8% on standalone basis³. This IRR is calculated based on incremental cash flows (revenues, operating expenses and capital expenditure) generated by the 3RS project relative to a two-runway system baseline case. The IRR estimated by AAHK’s financial advisor under the 3RS financial arrangement study is substantially higher than that in the financial feasibility study completed in

³ Calculated based on incremental cashflows (revenues, operating expenses and capex) generated by the 3RS project relative to a 2-runway scenario (traffic capped at 77mppa, 420,000 ATM p.a.) up to FY2046/2047, after taking into account incremental tax. For reference, AAHK’s latest weighted average cost of capital (“WACC”) is approximately 8% based on internal assessment.

2011, mainly because of the incremental revenue from ACF and changes in other operating assumptions. In any case, the IRR does not take into account any economic benefits and it should not be confused with economic benefits contributed by the 3RS project, mainly in terms of the contribution to the wider Hong Kong economy as a whole. Compared with Two-Runway System (“2RS”), the 3RS will bring additional economic benefits of \$455 billion (2012 dollars) over the 50-year period and additional employment opportunities of 80,000 direct and indirect/induced jobs, which represent substantial incremental economic contribution to Hong Kong in the long term.

AAHK’s Statutory Power under the Airport Authority Ordinance

19. At the Subcommittee’s meeting on 3 November 2015, AAHK was asked to provide information about the legal basis for charging the ACF and retain operating surplus. AAHK’s response is set out below.

(a) Levying of Airport Construction Fee

20. Section 5(1)(a) of the AAO states that AAHK “shall, in accordance with this Ordinance and also in accordance with the objective of maintaining Hong Kong’s status as a centre of international and regional aviation, provide, operate..., develop and maintain, at...Chek Lap Kok, an airport for civil aviation.”

21. Section 7(1) of AAO states that AAHK “shall have the power to do anything which is requisite or expedient, or is calculated to facilitate, or is conducive or incidental to, the performance of any of its functions and which is not inconsistent with any other provision of this Ordinance...”

22. Section 7(2) of AAO states that without affecting the generality of section 7(1) of AAO, the AAHK “may...subject to section 34 where applicable, determine the amount of charges and fees.”

23. Section 34 of AAO does not apply to ACF because Section 34 of AAO only concerns “airport charges” which are specially defined in Section 2 of AAO.

24. As made clear in Section 2 of AAO, the definition of “airport charges” ONLY “means charges payable in connection with the landing, parking or taking off of aircraft at the Airport”.

(b) Retention of Operating Surplus

25. Section 26 of AAO states that AAHK “may” declare and pay dividends to the Government. It is for the AAHK Board to decide whether to declare dividend, and the amount of such dividend, if any. The proposal of not declaring dividend for the purpose of financing the 3RS project was duly considered and approved by AAHK Board.

26. In short, according to legal advice it has obtained, AAHK is empowered to charge ACF and retain operating surplus. AAHK has also been advised that for as long as there are ongoing legal proceedings such as judicial reviews, AAHK cannot provide more information.

Financial Advisor’s Opinion on the 3RS Financial Arrangement Plan

27. HSBC’s opinion is that, based on AAHK’s strong credit profile, AAHK will be able to raise the incremental debt of \$69 billion as set out in the financial arrangement plan.

28. HSBC has undertaken “what-if” analysis to test the financial robustness and prudence of the 3RS financial arrangement plan by assessing the impact of potential downside scenarios on the financial position of AAHK, including:-

- (a) Decline in all revenues of up to 15%;
- (b) Overspend on capital cost of up to 20%;
- (c) Overspend on capital cost of up to 50%;
- (d) Single adverse event e.g. similar to the SARS outbreak in 2003;
or
- (e) Up to a 2% increase in the cost of borrowing.

These scenarios are for sensitivity testing purpose and do not reflect HSBC’s expectation of possible outcomes. HSBC concludes that in the event that these downside scenarios were to occur, AAHK would still be able to raise further debt to fund the consequential funding shortfall.

29. HSBC considers that the incremental debt of \$69 billion to be near or at the estimation of the maximum level of debt that AAHK should include in the working case financial arrangement plan for 3RS in order to leave AAHK with the capacity to raise additional funding from debt to meet shortfalls in downside scenarios (if they arise) whilst complying with a reasonable interpretation of the principles of financial prudence and

management standards set out in the AAO.

30. In case of downside situations which have a more severe financial impact than those considered in paragraph 28 above, and AAHK reasonably projects that a funding shortfall is likely to arise which cannot prudently be met with additional indebtedness, AAHK is recommended to revisit its financial plan. AAHK may look to develop other revenue streams or access alternative forms of financing other than senior debt.

The Way Forward

31. AAHK will update and seek guidance from the Government in relation to the execution of the detailed financing plan.

Advice Sought

32. Members are invited to note the issues raised in this paper.

Airport Authority Hong Kong
December 2015

Annex A

Key differences between the MP2030 financial feasibility study and 3RS financial arrangement plan

	MP2030 financial feasibility study	3RS financial arrangement study
Report date	2011	2015
Study purpose	Financial feasibility assessment for both 2RS and 3RS as development option	Financial arrangement plan for 3RS
Study scope	<p>Assess the financial viability for both 2RS and 3RS such as IRR, net present value (“NPV”), WACC assessments, etc.</p> <p>Determine the size of funding gap (but not the source of funding).</p>	<p>Determine the size of funding gap and study the detailed source of funding</p> <p>(include updating IRR)</p>
Conclusion	<p>Size of funding gap was calculated.</p> <p>Source of funding was yet to be concluded.</p> <p>Incremental external borrowing could be one of the funding sources.</p>	<p>Source of funding includes retaining operating surplus, levying of ACF and external borrowing.</p> <p>In the event of downside scenarios tested by AAHK’s financial advisor, AAHK can raise additional debt to meet the funding shortfall if such arises.</p>

Annex B

Summary of Key Working Case Assumptions for the 3RS Project Financial Projects

<u>Parameters</u>	<u>Assumptions</u>
Airport Charges	To be brought back to the level in year 2000 starting FY2016/17 and subsequent increases in line with inflation. AAHK shall propose the actual adjustment mechanism after consulting with the stakeholders.
Surplus Funds	AAHK will retain surplus funds from operations and apply these to meet the costs of 3RS until completion of 3RS.
Airport Construction Fee	Fee charged per departing passenger , the level of which is dependent on the class (first/business or economy), distance (long haul or short haul) and type of travel (origination/destination or transfer/transit), applied from FY2016/17 until repayment of the 3RS project debt projected to be in FY2030/31.
Retail Revenue	As per AAHK's 5-year business plan*, grow in line with passenger growth and CPI thereafter.
Consumer Price Index	As per AAHK's 5-year business plan*, 3% per annum thereafter.
Traffic Growth	As per AAHK's 5-year business plan*, period thereafter is in line with IATA Consulting's base case traffic forecast used in the Environmental Impact Assessment report which has incorporated the 2-runway system capacity constraint before 3RS commences operations.
Capex	HKD141.5bn (MOD prices) per estimates from AAHK and their external consultants.
Routine Replacement of Fixed Assets	AAHK will continue to invest in committed capital projects, such as Midfield development and the routine replacement of fixed assets.
Cost of Borrowing	5.0% per annum over the projection period

Note:

* The 5-year business plan refers to the 2014-2019 5-year plan prepared by AAHK

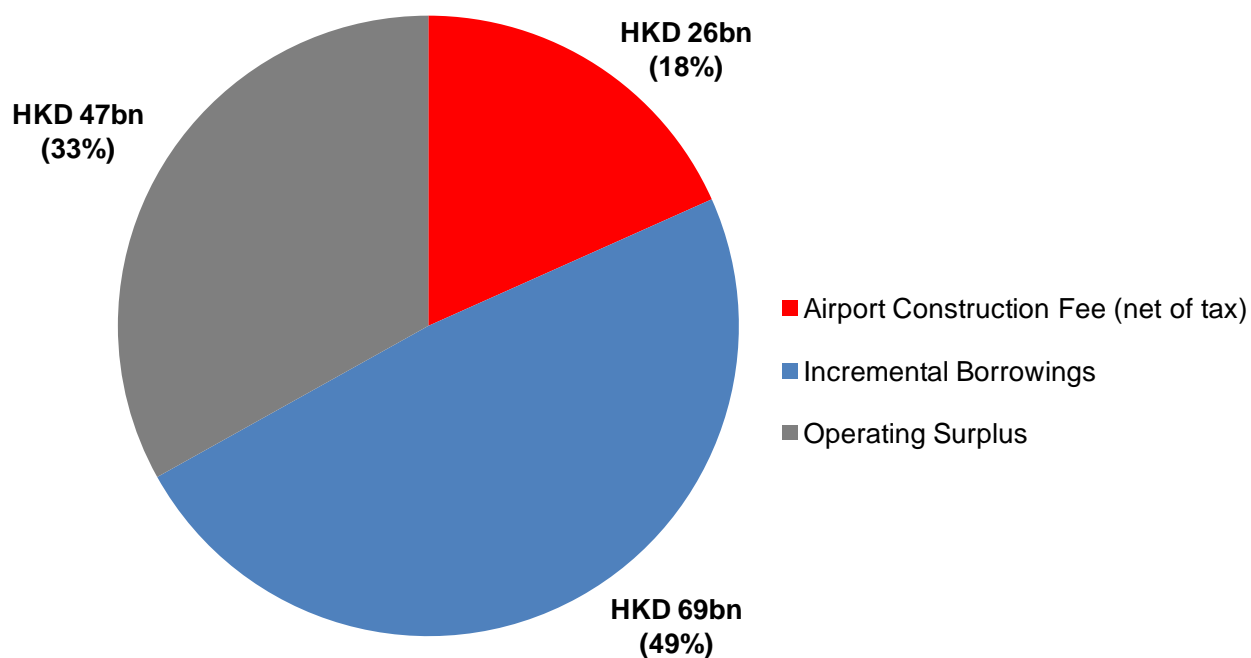
Source: AAHK, 3RS Consultancy Study: Financial Arrangement for Three-runway System (3RS) at HKIA – Financial Advisor Report, HSBC (2015)

Charging Mechanism of the Revised ACF Regime

ACF (\$ per departing passenger)		First/ Business Class	Economy
	Long haul	\$180	\$160
	Short haul	\$160	\$90*

* To maintain the competitiveness of HKIA's hub status, ACF for short haul economy TT passengers is set at \$70.

3RS Funding Plan



Notes: (1) The numbers above are subject to rounding.

(2) The operating surplus has incorporated revenue from Airport Charges

Source: AAHK, 3RS Consultancy Study: Financial Arrangement for Three-runway System (3RS) at HKIA – Financial Advisor Report, HSBC (2015)