

**For discussion on
22 March 2021**

**Legislative Council Panel on Economic Development
Redevelopment of the Air Mail Centre of Hongkong Post**

PURPOSE

This paper seeks Members' support for Government's plan to redevelop the Air Mail Centre ("AMC") of Hongkong Post ("HKP") located at the Hong Kong International Airport ("HKIA") and the proposed financial arrangements.

BACKGROUND

2. The AMC is the key postal infrastructure for handling all outbound, inbound and cross-border mail and transit airmail in Hong Kong. Opened in June 1998, it was built during the development of the HKIA, and was designed to handle mainly letter mails, which accounted for the majority of all mail items back in the 1990s. A location map of the AMC in the HKIA is at **Annex A**.

3. More than twenty years into its operation, the spatial limitation and configuration of the AMC has constrained its ability and adversely impacted on its operational efficiency to cope with the present day and future demands for handling air delivery and e-commerce traffic. More importantly, there is a need to equip the AMC with the latest technology, and to enhance its capacity in order for Hong Kong to positively contribute to developing the Guangdong-Hong Kong-Macao Greater Bay Area ("GBA") as a postal and logistics hub for the country.

4. Against the above, in the 2018-19 Budget, the Financial Secretary announced that the Government would consider the redevelopment of the AMC to enhance its efficiency and capacity. The 2018 Policy Address reiterated the need for HKP to boost the operating efficiency and handling capacity of the AMC with advanced equipment. In the 2021-22 Budget recently released, the Financial Secretary announced that the Government would submit a funding application to the Legislative Council ("LegCo") within this year to redevelop

the AMC, with a view to bringing it into operation by end 2027 the earliest.

JUSTIFICATIONS FOR THE REDEVELOPMENT

Insufficient Space and Outdated Configuration of the Existing AMC to Cope with the Continued Growth of E-commerce Mail Traffic

5. The booming growth of e-commerce worldwide has generated an ever-increasing demand for cross-border logistics and air delivery and transshipment services around the world. In the past ten years from 2010/11 to 2019/20, the volume of both inbound and outbound e-commerce air mails handled by HKP has surged significantly by around 50%. Also, with the rising trend of e-substitution in the digital age, the volume of outbound traditional letter mails by air has declined by five-fold in the same period.

6. The existing AMC, consisting of a mail processing hall on the ground floor and a mezzanine floor for administrative and ancillary facilities (e.g. offices, staff changing room, restroom and canteen), has been in operation for over two decades. With a net operational floor area (“NOFA”) of around 12 600 m², the space and configuration of the existing AMC are no longer adequate to meet the current and future requirements in terms of handling capacity and mode of operation. The outdated design of the loading areas prohibits any automatic unloading of mail bags from trucks, and the single-storey layout limits any expansion and further mechanisation of the mail processing hall for placement of new machinery to cater for the booming e-commerce mail traffic. Specifically, with the current layout, the existing AMC can only accommodate two machine systems: one for sorting large parcels, and another (the Elevating Transfer Vehicle) for handling the Unit Load Device of aircrafts, which has only 50 storage positions. In order to release space for processing the e-commerce mail traffic as far as possible, old machines which were mainly used for handling letter mail traffic have already been removed after expiry of their designed lifespan. Notwithstanding this, the existing two machines are inadequate to catch up with the e-commerce traffic growth. The heavy reliance on manual labour has also greatly constrained the overall efficiency of the AMC.

7. Due to the above limitations of the AMC, HKP has from time to time commissioned the Cargo Terminal Operators (“CTOs”) in the HKIA¹ to cope with the continuous growth of cross-border e-commerce (“CBEC”) mail traffic. Yet, with the expected completion of the Three-Runway System of the HKIA in 2024, it is anticipated that air cargo volume will surge and would potentially take up almost all of the handling capacity of these CTOs in the coming five to ten years. As the current AMC has no space for handling more CBEC mail traffic, there is an imminent need to redevelop the AMC to meet this booming demand.

Consolidating and Enhancing Hong Kong’s Position as a Competitive Postal and Logistics Hub in the GBA

8. HKP has a crucial role to play in developing the GBA as a postal and logistics hub for the country, by leveraging Hong Kong’s prime geographical location especially as an aviation hub, advanced logistics infrastructure and our strong international postal network, as well as creating synergy with other cities in the GBA to achieve mutual growth. The “Implementation Opinions on the Promotion of the Development of Postal Industry of the Guangdong-Hong Kong-Macao Greater Bay Area” (“Implementation Opinions”) promulgated jointly by the State Post Bureau, the National Development and Reform Commission, the Ministry of Transport, the Ministry of Commerce and the General Administration of Customs in December 2020 put forth development directions, including –

- (a) establishing a smooth and highly efficient delivery network;
- (b) taking advantage of the complementary strengths of postal administrators of Guangdong, Hong Kong and Macao in the conveyance and handling of inward and outward airmail;
- (c) leveraging the express logistics network of the GBA to give full play to the advantages of land transport through the Hong Kong-Zhuhai-Macao Bridge;

¹ The CTOs include Hong Kong Air Cargo Terminals Ltd., Cathay Pacific Cargo Terminal and Asia Airfreight Terminal.

- (d) reinforcing Hong Kong's status as an international hub for air freight; and
- (e) assisting in the expansion of import and export business of CBEC including by speeding up digitisation and adoption of new business modes like supply chain services, cold chain facilities² and courier network, time certain delivery, as well as integrated warehousing and delivery.

The “Implementation Opinions” positions the GBA to take a leading role in the development of the postal industry of our country. The postal services in the GBA would be further developed towards catering for medium to high end products by providing more high quality and standardised as well as internationally leading services.

9. In order to support the overall positioning and the development directions of the postal industry in the GBA, there is a need for HKP to redevelop the AMC by equipping it with the latest technology and enhancing its capacity, so as to optimise its role and functions in this framework for an international first-class bay-area and world-class cluster. The redevelopment of the AMC is pivotal to HKP in fulfilling its important role in the development of the GBA, leveraging Hong Kong's edge as an international aviation hub that provides excellent connectivity to places around the world.

10. Indeed, the China CBEC market size has expanded rapidly over the past decade. Respectively over 50% and 20% of the China CBEC export and import sales come from the GBA, presenting enormous business opportunities for logistics and postal operators in the region. More importantly, given its simpler customs clearance procedures, lower taxation and extensive geographic coverage with reasonable postal rates, postal channel remains the most common way to deliver CBEC goods. With close proximity to other GBA cities and excellent flight connectivity with the rest of the world, Hong Kong has been a prime location supporting China CBEC deliveries. Delivery time can be shortened by at least half a day if products from the GBA could transit directly

² Cold chain facilities are temperature-controlled facilities in the supply chain for temperature sensitive products.

through Hong Kong to key markets such as European countries and the United States, instead of through other transit points in the region.

PROPOSED REDEVELOPED AMC BUILDING

The AMC Building

11. The NOFA of the existing AMC is only around 12 600 m², with only one storey of mail processing area. We propose to maximise the development potential of the existing AMC site, and redevelop it into a four-storey building within the maximum building height of 34 m by making full use of its plot ratio. The total NOFA after redevelopment will be approximately 46 000 m² (equivalent to a plot ratio of around 2.7), which is around 3.6 times of that of the existing AMC building. Methods of modular planning and regular structural grid will be adopted to allow maximum flexibility for upgrading and alteration of the operation hall in future. The preliminary plan of operation at each floor of the new building is as follows, with the detailed design to be finalised before project tendering –

- (a) ground floor for loading and unloading of mails, including facilities for handling cold chain products and mails with equipment containing lithium batteries (“ECLB”), large handling facilities for lifting items or bags onto freight containers and security screening machines;
- (b) 1/F for mechanised sorting/robotic solutions for handling mails and e-commerce products; and
- (c) 2/F and 3/F for processing e-commerce parcels and packets including cross-border and international traffic, warehouse management system for fast-moving high value goods and customs clearance.

A cross-sectional view of the existing AMC and the new AMC is at **Annex B**.

12. The redevelopment project is expected to complete in 83 months after funding approval and appropriation to the Post Office Trading Fund (“POTF”). In order to meet the requirement set by the Hong Kong Observatory (“HKO”) to avoid any possible adverse impact to the operation of the runway, HKP conducted a “Wind Study” in 2018 on the maximum height and roof-top shape of the redeveloped AMC building. The report was accepted by HKO, including its Windshear and High Impact Weather Panel³. HKP has also consulted the Civil Aviation Department on technical feasibility regarding the height and security programme of the proposed redevelopment. HKP will conduct another Wind Study as required by HKO during the detailed design stage.

Technologies and Machineries

13. The new AMC will be equipped with intelligent technologies that facilitate efficient processing of mail items and customs clearance, allowing the incorporation of more tracking points to facilitate closer tracking from acceptance through air conveyance to last mile delivery. While the existing AMC requires labour-intensive manual handling on receipt, segregation and conveying of mails to different areas for processing, the intelligent technologies in the new AMC will enable automatic conveyance of mail items or bags to the appropriate floors and areas for handling. There will be a centralised Material Handling System (“MHS”), which is widely used in the postal and logistics industry. During the procurement stage of the MHS, HKP will conduct tendering and adopt vigorous testings before acceptance of the MHS. Major components and functions of the MHS are provided in **Annex C**.

14. In sum, the application of intelligent technologies in the new AMC will enable HKP to collaborate effectively with other postal administrations in the GBA for the postal development of the area.

³ It is a specialised user consultation group on HKO’s aviation weather services that comprises representatives from major aviation stakeholders.

The Decanting Building

15. To ensure that basic postal service will be maintained without interruption during the redevelopment of the AMC, a Decanting Building will be constructed at the existing AMC site to handle inbound and outbound handover functions with airline representatives. As a postal administration, HKP needs to receive mails from other postal administrations, dispatch outbound mails for air conveyance, as well as provide for the related customs inspection. An in-situ temporary building with minimal structure will therefore be required for taking of mails to and from airlines and also for customs clearance. And the mail processing functions in the existing AMC will be temporarily relocated to General Post Office of HKP while the e-commerce mail processing will be carried out at other facilities, like the CTOs, in the HKIA.

STRATEGIC FUNCTIONS OF THE NEW AMC

16. After redevelopment, the new AMC will transform from a traditional mail centre for handling incoming and outgoing mail bags to one of the strategic postal and high value-added logistics hubs in the GBA. To meet the future vision of HKP as an integral part in consolidating and enhancing Hong Kong's position as a competitive postal and logistics hub in the GBA, the strategic functions of the redeveloped AMC will include the following –

- (a) contributes to high value-added logistics services, e.g. cold chain, handling and temporary warehousing of high-valued fast-moving goods, at the strategic location at the HKIA;
- (b) contributes to a greater volume of outbound, inbound, transit and cross-border mails through its modern facilities and collaboration with other postal administrations in the GBA to reinforce Hong Kong's position as an aviation hub in the GBA, and facilitates the expansion of both local and cross-border import and export e-commerce business; and
- (c) brings a faster and higher quality of service for customers with the enhanced efficiency by applying intelligent technologies at the new AMC.

17. In particular, for (a) above, leveraging the excellent air network of Hong Kong, well-established postal channel and good international reputation, HKP will explore collaborating with the private logistics operators to offer competitive Hong Kong-based offshore warehousing and cold chain services to CBEC merchants and platforms at the redeveloped AMC. The demand for high-value perishable and fresh products from China Inbound CBEC has been strong and growing in recent years. The market size of cold chain logistics industry in China has achieved a compound annual growth rate (“CAGR”) of 15% from 2016 to 2019, reaching US\$52.4 billion in 2019, and is projected to grow onwards at a CAGR of 18% to some US\$138.6 billion in 2025. Meanwhile, cold chain facilities in Hong Kong have been short in supply. Given the special building requirements of cold chain facilities, it is much more preferable to develop these facilities in new buildings in designated areas that are away from conventional commercial and residential districts. Located in the HKIA with comprehensive logistics infrastructure support and close proximity to the airport runways, the redeveloped AMC is a good location for including new cold chain facilities.

18. The redeveloped AMC is well positioned, amongst other functions, to serve as temporary storage to facilitate efficient logistics process for high-value China CBEC products such as pharmaceutical products and electronics, taking advantage of the close proximity to the runways in the HKIA. As stated in the “Implementation Opinions”, in order to establish a pilot and leading zone in the GBA to promote the innovative and integrated development of the national postal industry, it is pivotal to speed up the expansion of value-added services including supply chain service, cold chain courier, time certain delivery and warehousing, etc. Without the redevelopment of the AMC, the capability of HKP to support Hong Kong in achieving the above vision would be much constrained. In our engagement with the logistics industry, many leading logistics service providers and CTOs in the airport have expressed interest in collaborating with HKP at the redeveloped AMC in these service areas to capture the rising demand in China CBEC because of its strategic location with airside access.

NEW BUSINESS STRATEGIES FOR DEVELOPMENT OF LOCAL AND GBA E-COMMERCE MAILS

19. All along, the majority of HKP's business is on handling of traditional mails. Yet with the increasing trend of e-substitution, the booming of global e-commerce market and the growth of the GBA market, as well as technological advancement, HKP considers it necessary to accelerate enhancing and strengthening its business development strategies for e-commerce mails in tandem. The redevelopment of the AMC provides the necessary infrastructure to support the new strategies to be pursued by HKP in the next five years and beyond.

20. HKP has developed its new business strategies for the next five years based on the following three principles –

- (a) to be a trustworthy delivery service provider through bringing modern, convenient and affordable postal services to people;
- (b) to leverage HKP's good postal reputation and strong international postal network, contribute to Hong Kong's status as an aviation and logistics hub by bringing in more mail traffic volume and enhancing postal delivery options for e-commerce business; and
- (c) to aspire to collaborate with other postal administrations in the GBA to create a leading postal network for provision of e-commerce delivery service through expediting digitisation and modern infrastructure development, so as to contribute to the economic development of the GBA.

21. The new strategies that will be pursued by HKP henceforth include, amongst others, the following –

- (a) developing new “Special Lane” services⁴ for Mainland China

⁴ This is a customised international delivery solution provided for international online shopping platforms in shipping their large volume of goods to overseas recipients. HKP has collaborated with various postal administrations, including Russia Post, etc., to establish express lane.

outbound CBEC markets, with Belt and Road countries being one of the key focus areas, and developing the ECLB business;

- (b) enhancing HKP's conveyance and last mile delivery channels to provide local and South China CBEC trade agents economical and efficient China inbound CBEC services through delivering via Hong Kong to the Mainland;
- (c) strengthening partnership with more e-commerce platforms for delivery solutions in key CBEC markets; and
- (d) providing economical, efficient and diversified inbound and outbound CBEC services to local and GBA markets through business process re-engineering, enhancing digitisation level and hence user experience.

22. HKP is actively re-engineering its business process in order to better serve the modern day delivery needs, including new needs arising from local and GBA e-commerce development. This is being done through aside from existing collaboration with overseas postal administrations, partnering with leading logistics operators to provide a new kind of full international delivery solution that includes air freight conveyance, customs clearance and last mile delivery in overseas destinations for offering diversified and efficient service for customers; widely extending the current network of HKP iPostal Stations which provide 24-hour service for mail collection; and likewise the 24-hour automatic Postal Kiosks for mail and packet posting throughout the territory. HKP will also provide contactless e-payment options in full range through its online platforms, mobile apps, post office counters and kiosk machines. Through adoption of technological and robotic solutions, the handling of e-commerce packages will be enhanced.

23. With the implementation of the new business strategies and process re-engineering as mentioned above, HKP will provide more efficient and diversified services as compared to the present approach in providing traditional mail services.

OTHER OPTIONS CONSIDERED

24. Other than the redevelopment, the option of refurbishment of the existing AMC has been considered but was found not feasible, for the following considerations –

- (a) refurbishment will not be able to maximise the use of the good location of the AMC for providing more handling capacity. The existing building structure of the operation area will constrain the new design and layout, limiting the handling capacity of refurbished building, which is three times smaller as compared to the handling capacity of the redeveloped AMC;
- (b) the existing major deficiencies of the building, such as docking arrangement, and lack of space for processing and storage for increasing e-commerce traffic, cannot be resolved by refurbishment;
- (c) the refurbishment works would adversely affect the daily operation of the existing AMC and reduce its operation efficiency; and
- (d) only redevelopment can enable the full use of the site including using all four sides of the AMC instead of only three sides now as constrained by the existing building layout.

PROPOSED FINANCIAL ARRANGEMENTS

25. The estimated total project cost, comprising design and construction, related demolition, decantation and acquisition of new equipment is HK\$4,611.3 million in money-of-the-day (“MOD”) price. The estimated cost for the design and construction of the new AMC, on par with other HKP buildings and construction works, is shown below with detailed breakdown provided in **Annex D**.

Items	Amount (in MOD price) (\$ million)
Estimated cost for the new AMC Building	2,598.5
Estimated cost for acquisition of new equipment, technology and machinery	1,232.4
Estimated cost for the Decanting Building and decantation associated costs	780.4
Total	4,611.3

26. HKP will seek full funding support from the Government in the form of trading fund capital for POTF to finance the redevelopment proposal. Subject to the Finance Committee's ("FC") approval, the Secretary for Commerce and Economic Development will move a resolution for the LegCo's approval of the appropriation of funds from the Capital Investment Fund into POTF.

ECONOMIC AND FINANCIAL ASSESSMENT

27. The redevelopment of the AMC would increase its annual handling capacity by about 4.5 times, from the existing 40 000 tonnes to 180 000 tonnes, enabling it to cater for the projected traffic volume of HKP for the next 15 to 20 years.

28. Based on the financial assessment, with the implementation of new business strategies and business re-engineering process, the additional capital injection into POTF by the Government for the redevelopment of the AMC is projected to generate positive financial returns over the medium-to-long term up to 2046/47.

29. In terms of economic contributions, the redevelopment of the AMC is likely to bring about considerable benefits to the economy, mainly from additional traffic to be handled in Hong Kong. With the implementation of new business strategies and business re-engineering process, the redeveloped AMC is projected to bring about, including direct, indirect and induced impacts, HK\$1,600 million to 1,800 million of gross value-added⁵ and 2 400 to 2 500 full time jobs to a wide range of relevant industries, such as air and land transport,

⁵ The gross value-added figures contained in this paragraph are at 2019 prices.

warehouse and storage, utilities and other professional and business support industries in 2027/28 when it comes into operation. Such gross value-added and local jobs created from operations will reach about HK\$3,600 million to HK\$4,400 million, and 5 100 to 5 700 full time jobs by 2046/47, which is 20 years after the redeveloped AMC commences operation.

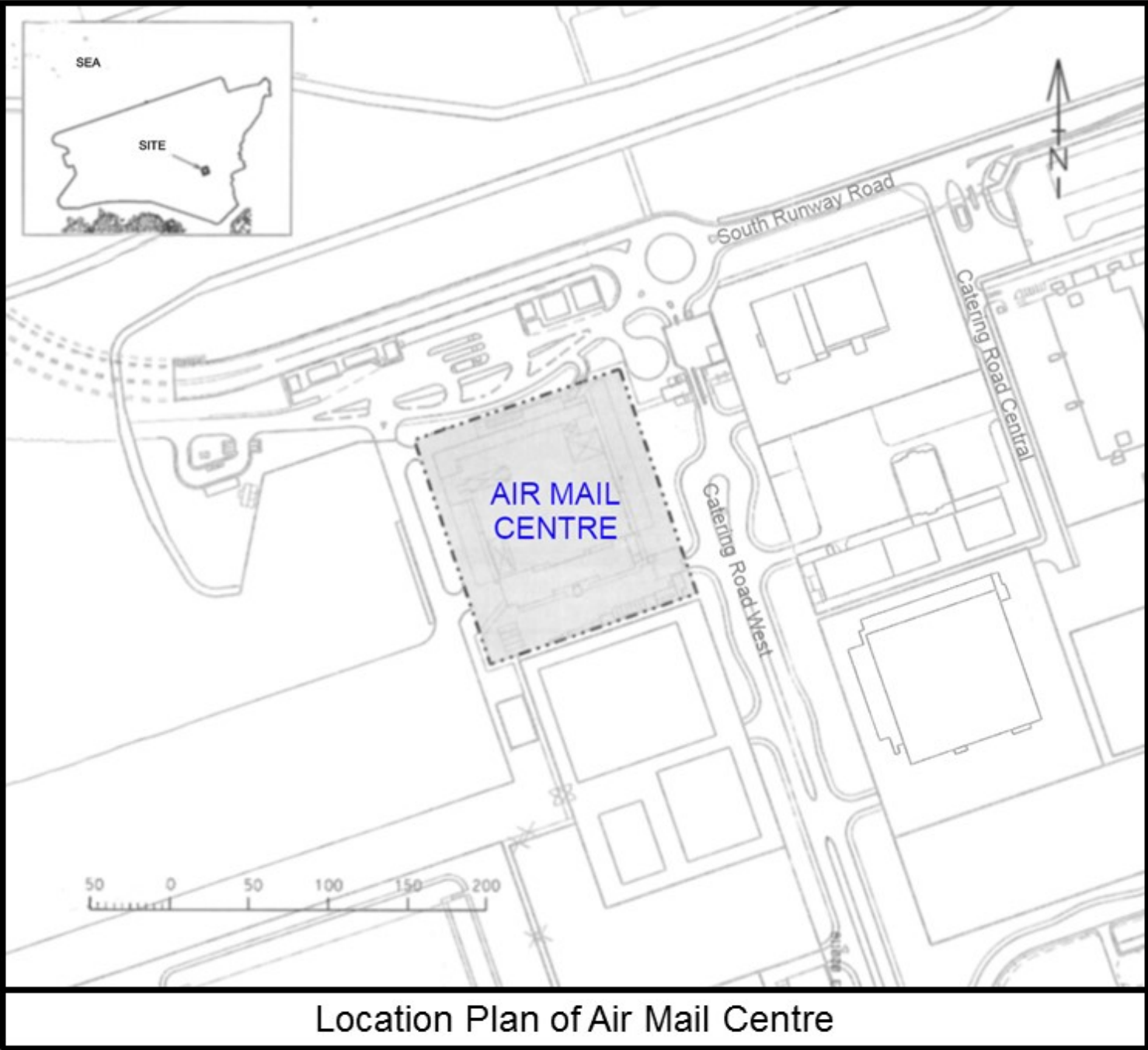
30. The AMC would also bring a variety of intangible economic benefits to Hong Kong. Locally, the increase in air mail handling capacity and efficiency attained through the AMC redevelopment would not only help attract regional or global logistic players to consider strengthening or establishing their supply chain operations in Hong Kong, but could also enable HKP to better assist cross-border inbound and outbound e-commerce businesses in Hong Kong and the GBA. More broadly, the redeveloped AMC aligns with Hong Kong's positioning as the aviation and logistics hub in the GBA as stated in the "Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area", and could further enhance Hong Kong's role as a strategic postal and high value-added logistics hub in the GBA. The detailed economic impact assessment is at **Annex E**.

31. Over the construction period until mid-2027, it is estimated that the AMC redevelopment will generate some 1 600 of full time direct employment (in man-years).

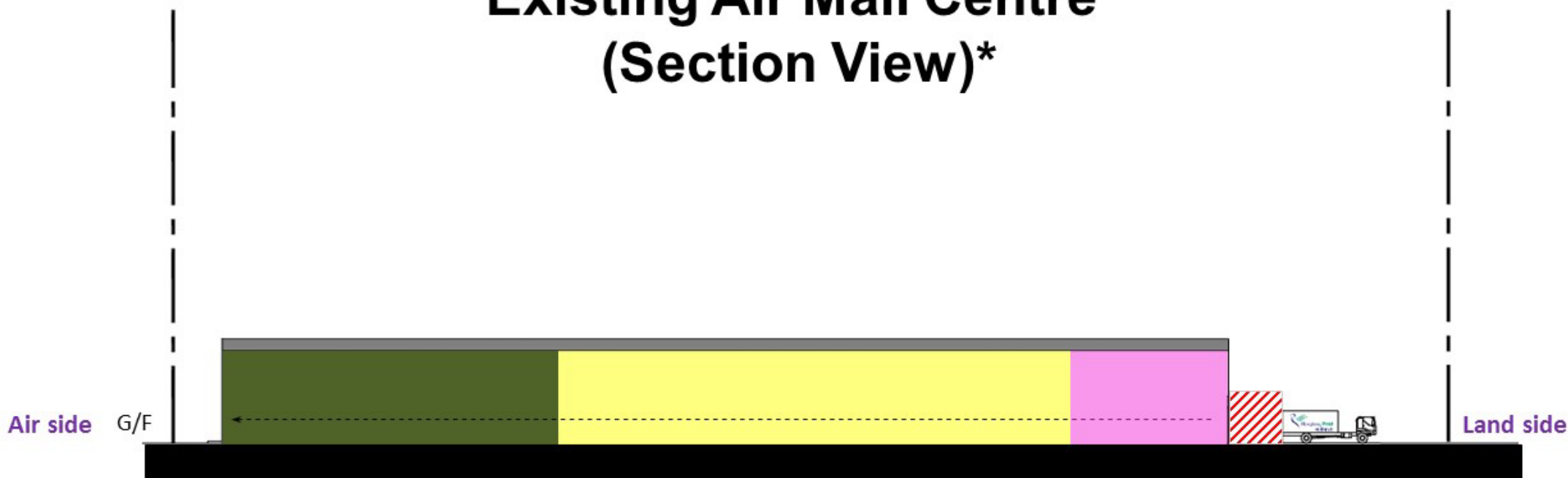
ADVICE SOUGHT

32. Members' support is sought for the redevelopment of the AMC and the proposed financial arrangements as set out in paragraphs 25 to 26 above. With Members' support, we will submit the proposed financial arrangements to the FC for its consideration and approval, followed by a LegCo resolution seeking appropriation of the necessary funds into POTF.


Commerce and Economic Development Bureau
Hongkong Post
March 2021




Existing Air Mail Centre (Section View)*





LEGEND

 Staging area and Elevated Transfer Vehicle for handling air freight containers (50 nos. of storage positions)

 Operation hall

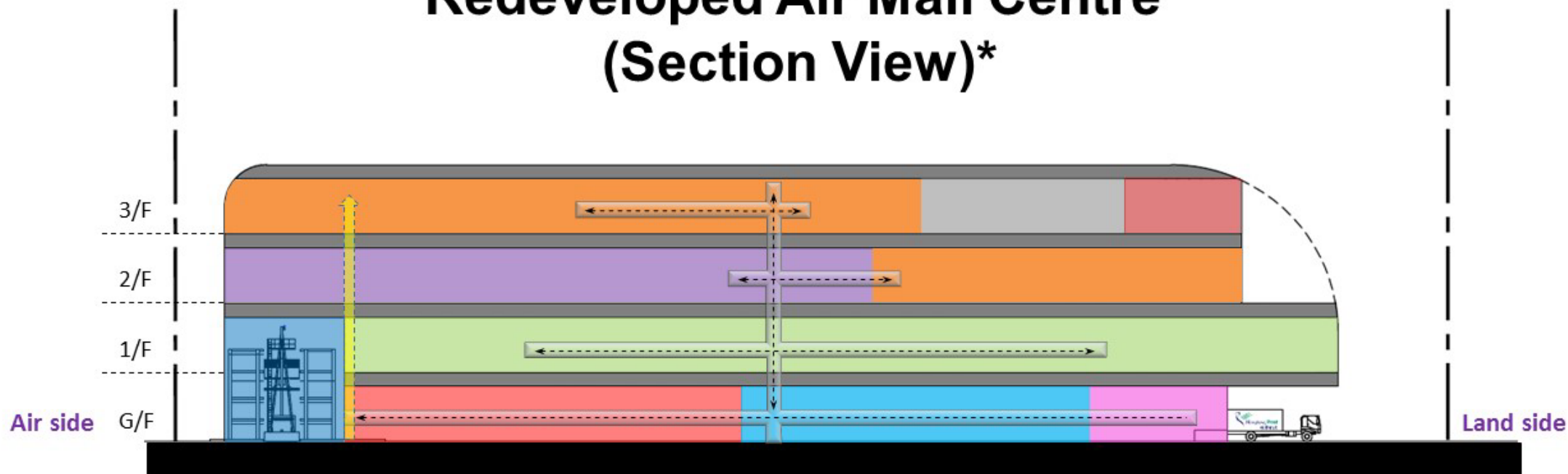
 Loading / Unloading area

 Mail flow

 Vehicle manoeuvring area reserved for unloading (without platform)

* Not to scale

Redeveloped Air Mail Centre (Section View)*



LEGEND

- | | | |
|--|--|--|
| E-commerce parcels/packages (including cross-border and international traffic) | C&ED inspection area | Office area |
| Warehouse Management System for fast-moving high value goods | Mail flow | Internal Conveyor System linking functional areas |
| Elevating Transfer Vehicle for handling air freight containers (400 nos. of storage positions) | Direct Lift linking other floors | Mechanised Sorting/ Robotic Solution and dispatching preparation for mails and e-Commerce products |
| Outward mail security screening | E-commerce parcels/packages (Cold room and ECLB items handling area) | Loading / Unloading area with platforms |

The above view is for illustrative purpose only and subject to further development during detailed design stage.

* Not to scale

Major Components and Functions of the Material Handling System

(I) Cross-belt Sorter / Robotic Solutions

The cross-belt sorter and/or robotic solutions are widely used in automating the sortation process of mail items in the postal and logistics industry. With the high growth of e-commerce traffic, more packet-sized items are expected in the future. Sorting these items with up-to-date machine in the redeveloped Air Mail Centre (“AMC”) could greatly improve both the efficiency and accuracy of the current operation.

(II) Warehouse Management System

The Warehouse Management System is an automated storage and retrieval system that could achieve high throughput with the use of shuttle. It is widely used in warehouse and distribution facilities for years and recently the technology has been extended for use in e-commerce and postal facilities as well. It will greatly assist the handling of high value and fast-moving goods in the redeveloped AMC.

(III) Elevating Transfer Vehicle (“ETV”)

The ETV is used for transporting air freight containers and storing them before handing over to airlines. It has been used in the current AMC and other Cargo Terminal Operators. With the expected growth in mail traffic, a larger-scale and more advanced ETV will be installed in the redeveloped AMC with around 400 storage spaces, comparing to the current 50 spaces, so as to cope with future demand.

(IV) Internal Conveyor System

All the above equipment and other facilities at different floors of the redeveloped AMC will be interconnected by an Internal Conveyor System. Mail items or bags will be efficiently conveyed through the system from their arrival at the AMC to the appropriate sorting machineries or processing areas automatically. This method is commonly used in many e-commerce handling facilities, such as large global online shopping platform and e-tailor. When it is time for lifting mails to airlines, all prepared mail bags will be conveyed through the Internal Conveyor System to the ground floor of the new AMC for departure security screening, which will also be conducted automatically with latest security screening technology.

Annex D1

Breakdown of the Cost Estimates for Air Mail Centre (“AMC”) Redevelopment

(I) New AMC Building and acquisition of new equipment, technology and machinery		
Item	Cost estimates (in money-of-the-day (“MOD”) price) (\$ million)	Remarks
A. <u>New AMC Building</u>		
(a) Foundation related works	331.6	Includes demolition of the existing building, excavation, footings, drainage, energy conservation, external works
(b) Building*	1,014.3	Includes structural works, external finishes, builder’s works
(c) Building services*	608.6	Includes electrical installation, mechanical ventilation and air conditioning, fire services, plumbing and drainage, lift installation
(d) Consultants’ fee	244.8	Includes project management, specialist consultancy fees (for the building and acquisition of new equipment, technology and machinery) and resident site staff cost
(e) Contingencies of (a) – (d)	399.2	-
<i>Sub-total of (a) – (e)</i>	<i>2,598.5</i>	-
B. <u>Acquisition of new equipment, technology and machinery</u>		
(f) Acquisition of new equipment, technology and machinery	1,036.1	Includes procurement and installation of Material Handling System, Elevating Transfer Vehicle System and loose furniture
(g) Contingencies of (f)	196.3	-
<i>Sub-total of (f) – (g)</i>	<i>1,232.4</i>	-
Total	3,830.9	-

* As advised by the Project Strategy and Governance Office of Development Bureau, the estimated cost per Construction Floor Area (“CFA”) is \$23,500/m² (i.e. estimated cost of building and building services of \$1,236.8 million at September 2020 price level divided by CFA of 52,655 m²) is considered reasonable.

Annex D2

(II) Decanting Building and decantation associated costs		
Item	Cost estimates (in MOD price) (\$ million)	Remarks
(a) Decanting Building	171.9	Includes the following: (i) Foundation related works and removal of decanting building (ii) Building: Structural works and builder's works (iii) Building services and fire services installation
(b) Consultants' fee	22.6	Includes project management, specialist consultancy fees and resident site staff cost
(c) Contingencies of (a) – (b)	36.9	-
(d) Decantation associated costs	549.0	Includes the following: (i) Operational costs (ii) Relocation and fitting out costs
Total	780.4	

Annex D3

Estimated cashflow for AMC redevelopment (in MOD price)			
Year	Cost estimates for the new AMC Building and acquisition of new equipment, technology and machinery (\$ million)	Cost estimates for the Decanting Building and decantation associated costs (\$ million)	Total (\$ million)
2021-22	25.2	2.4	27.6
2022-23	77.7	37.7	115.4
2023-24	146.6	205.3	351.9
2024-25	155.2	130.7	285.9
2025-26	1,106.2	133.4	1,239.6
2026-27	1,384.1	162.4	1,546.5
2027-28	792.1	107.0	899.1
2028-29	84.8	0.9	85.7
2029-30	59.0	0.6	59.6
Total	3,830.9	780.4	4,611.3

**Economic Impact Assessment of the Air Mail Centre (“AMC”)
Redevelopment**

INTRODUCTION

Hongkong Post (“HKP”) has appointed an independent economic consultant (“the Consultant”) to conduct an Economic Impact Assessment (“EIA”) for the AMC redevelopment. The assessment results, including the impact on the whole Hong Kong economy in terms of gross value added and full time employment as well as intangible economic impacts, are summarised in this Annex.

SCOPE AND METHODOLOGY

2. The economic impact could stem from two sources –
 - (a) the first source is the impact generated from the **civil engineering and construction-related activities undertaken during the Construction Stage**; and
 - (b) the second source would be the impact arising from the operation of the AMC during the **Operational Stage** (i.e. when the project is completed and the **additional traffic volume to be handled in Hong Kong stemming from the redevelopment of the AMC**).
3. Theoretically, construction impacts should be considered separately from the EIA for the operational stage. Construction impacts, relevant to the development costs for redeveloping the AMC and the related revenues of local construction companies, are spread over the duration of the development period and come to an end once the construction is completed.
4. The operational impacts for the AMC redevelopment are assessed using a typical and well-accepted approach for government infrastructure projects, based upon the traffic volume, product mix and operational performance of the redeveloped AMC, including –
 - (a) **direct economic impacts** arising from the operation of the AMC per se;

- (b) **indirect economic impacts** cover impacts generated from further expenditure on goods and services from HKP to support the whole supply chain of the AMC operation, such as expenditure on airlines for air conveyance and business support operators such as cleansing and security, etc.; and
- (c) **induced economic impacts** arising from the spending of additional wages created from direct and indirect economic impacts.

5. Taking into consideration the new business strategies for e-commerce and Guangdong-Hong Kong-Macao Greater Bay Area (“GBA”) development of HKP as set out in the Panel paper, two sets of economic impact during the operational stage are compiled under different potential business development cases, including –

- (a) **implementing new strategies and business process re-engineering (“Lower Case”)** – with long-term traffic growth of 4.0%¹ per annum for international products; and
- (b) **implementing new strategies and business process re-engineering with more positive economic outlook (“Upper Case”)** – with long-term traffic growth of 5.5% per annum for international products.

ASSESSMENT RESULTS

Construction Impacts

6. The total cost for redeveloping the AMC is \$4,611.3 million at money-of-the-day price. Over the construction period until mid-2027, it is estimated that the AMC redevelopment will result in some \$1.1 billion direct value added (at 2019 prices) and some 1 600 of direct full time employment (in

¹ The long-term traffic growth rates under different business cases of HKP are projected with reference to the traffic growth on e-commerce of overseas postal administrations.

man-years)².

Operational Impacts

7. The operation of the redeveloped AMC is estimated to bring about considerable benefits to the economy, mainly from additional traffic to be handled in Hong Kong. If the new business strategies are successfully implemented, the operation of the redeveloped AMC is projected to bring about \$1.6 billion to \$1.8 billion of gross value-added³ and 2 400 to 2 500 local full time jobs (including direct, indirect and induced impacts) to a wide range of different relevant industries (such as air and land transport, warehouse and storage, utilities and other professional and business support industries) in the Hong Kong economy in 2027/28.

8. Such gross value-added and local jobs created from operations will reach about \$3.6 billion to \$4.4 billion and 5 100 to 5 700 full time jobs respectively by 2046/47, which is 20 years after the redeveloped AMC commences operations.

Gross Economic Impact Under Different Business Cases

	2027/28	2036/37	2046/47
Total Gross Value Added (\$ million)			
Lower Case	1,571	2,396	3,578
Upper Case	1,805	3,108	4,427
Total Full Time Employment Created (No.)			
Lower Case	2 443	3 479	5 063
Upper Case	2 517	4 029	5 652

² The construction impact is estimated using the conventional approach adopted in typical government infrastructure projects. Value added and number of jobs are calculated by multiplying the total development costs of \$3.5 billion (at 2019 prices) by “Value Added to Gross Value of Construction Contracts Ratio” of 30% “Employment Created per Million of Spending” of 0.46 respectively based on the construction and architectural, surveying and engineering services statistical data in 2018 provided by Census and Statistics Department.

³ All the gross value-added figures in this paper are at 2019 prices.

Wider Economic Impacts

9. Redevelopment of the AMC would also bring a variety of intangible economic impacts to Hong Kong. On the local level, the increase in air mail handling capacity in Hong Kong arising from the AMC redevelopment would not only help attract regional or global logistic players to consider strengthening or establishing their supply chain operations in Hong Kong, but would also enable HKP to better assist cross-border in-bound and outbound e-commerce businesses in Hong Kong and the GBA. More broadly, the redeveloped AMC aligns with Hong Kong's positioning as the aviation and logistic hub in the GBA as stated in the "Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area", and could further enhance Hong Kong's role as a strategic postal and high value-added logistics hub in the GBA.