

ITEM FOR FINANCE COMMITTEE

CAPITAL INVESTMENT FUND

HEAD 972 – TRADING FUNDS

Subhead 115 Other investments - Post Office Trading Fund

Members are invited to approve a commitment of \$4,611.3 million as trading fund capital from the Capital Investment Fund to the Post Office Trading Fund to finance the redevelopment of the Air Mail Centre of Hongkong Post.

PROBLEM

The Government plans to redevelop the Air Mail Centre (AMC) of Hongkong Post (HKP) located at the Hong Kong International Airport (HKIA). With advanced design, expanded capacity equipped with intelligent technologies and up-to-date machineries, the redeveloped AMC will operate with enhanced efficiency in meeting the demand for cross-border e-commerce (CBEC) postal services of the booming e-commerce industry and contributing to developing the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) as a postal and logistics hub for the country.

PROPOSAL

2. We propose to create a commitment to enable the injection of \$4,611.3 million as trading fund capital from the Capital Investment Fund (CIF) to the Post Office Trading Fund (POTF) to fund the redevelopment project. The proposed appropriation of funds from the CIF to the POTF will be subject to the approval by the Legislative Council (LegCo) of a resolution to be moved by the Secretary for Commerce and Economic Development.

/JUSTIFICATION

JUSTIFICATION

Continuous Growth of CBEC

3. The global CBEC has been continuously developing and rapidly expanding in the past decade. Online trading and shopping has become part of the daily life of people and merchants around the world. In 2020, the Mainland China CBEC import and export trade reached RMB1.69 trillion (around HK\$2 trillion), which is over 30%¹ year-on-year growth. Respectively over 50% and 20% of the Mainland China CBEC export and import sales came from the GBA. The booming growth of e-commerce worldwide has generated an ever-increasing demand for cross-border logistics, air delivery and transshipment services around the world. The above developments bring about business opportunities and challenges to logistics operators and postal administrations worldwide.

Sharpen Hong Kong's Competitive Edge

4. As an international commerce and logistics centre and an aviation hub, Hong Kong should be able to serve as a significant stop in the global CBEC delivery network with our prime geographical location as well as unique edges such as first-class air freight on infrastructure, advanced logistics infrastructure and strong international postal network. The Airport Authority Hong Kong is expanding the existing express air cargo terminal, and commissioning new infrastructure such as a new premium logistics centre and a new airside intermodal cargo handling facility on Lantau Island to consolidate Hong Kong's status as an international hub for air freight.

5. However, freight delivery is not the only means for delivery of CBEC goods. No matter how vigorous the development of commercially operated logistics services is, there is still a sizeable market for international postal services as well as delivery of e-commerce goods through postal channel. With extensive geographical coverage, simpler customs clearance procedures and lower import taxes, postal channel has been widely chosen by e-commerce traders as the means of delivery. In fact, postal channel currently dominates the world's e-commerce delivery market with 45% to 65% market share by volume.

6. Therefore, Hong Kong must continue to develop both cargo logistics and cross-border postal infrastructure, thereby ensuring that Hong Kong can maintain its status as an international aviation and logistics hub in the era of

/booming

¹ Source: General Administration of Customs of the People's Republic of China.

booming growth in CBEC. There is a genuine need to enhance the facilities and operational capacity of the AMC, which is a key infrastructure for handling air postal delivery and e-commerce mails, in order to accommodate future development. In fact, in our engagement with the logistics industry, in response to the plan of HKP to incorporate cold chain and temporary warehousing facilities in the future AMC and to explore collaboration with private logistics service providers on this, many leading logistics service providers and cargo terminal operators (CTOs) in the airport welcomed the plan, and expressed interest in collaborating with HKP in this regard. In addition, timely upgrading of cross-border postal infrastructure of Hong Kong would ensure that HKP can continue to offer a convenient, reliable and affordable delivery option to the public, online shopping platforms and traders, etc.

7. The Financial Secretary announced in the 2018-19 Budget 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, the Financial Secretary announced that the Government would submit a funding application to LegCo within this year to redevelop AMC and bring it into operation in end 2027 the earliest.

Developing the GBA as a Postal and Logistics Hub for the Country

“Implementation Opinions on the Promotion of the Development of Postal Industry of the Guangdong-Hong Kong-Macao Greater Bay Area”

8. The proposed project dovetails with the national plan to develop the GBA as a postal and logistics hub for the country. The “Implementation Opinions on the Promotion of the Development of Postal Industry of the Guangdong-Hong Kong-Macao Greater Bay Area”² (“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, envisages that the GBA would take a leading role in the development of the postal industry of the 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. The development directions in the Implementation Opinions include –

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² Available at http://www.spb.gov.cn/zc/flfgjzc_1/202012/t20201221_3656022.html.

- (a) establishing a smooth and highly efficient delivery network and international postal and express delivery hub by capitalising on a cluster of world-class airports in the GBA;
- (b) supporting the postal administrations of Guangdong, Hong Kong and Macao in strengthening complementarity of advantages in the conveyance and handling of inward and outward airmail; and putting in place coordinated development of postal services of the three places that complement and support each other in the development of the GBA;
- (c) capturing the full advantages of the Hong Kong-Zhuhai-Macao Bridge to speed up the development of an express logistics network for postal and delivery services in the GBA;
- (d) reinforcing Hong Kong's status as an international hub for air freight;
- (e) assisting in the expansion of import and export businesses of CBEC; pressing ahead with the coordinated development of postal express delivery and e-commerce business to support external trade transformation and the CBEC; and
- (f) expediting the capacity expansion and efficiency enhancement of the postal industry by developing new forms of business such as supply chain services, cold chain and express delivery, time certain delivery, as well as integrated warehousing and delivery.

9. The "Implementation Opinions" states that by 2025, the mailing and delivery services in GBA will reach the standard of serving this international first-class bay area and a world-class city cluster. This whole postal services system will play an increasingly fundamental and strategic role in the economic and social development of the GBA. By 2035, innovation-driven, convenient and efficient mailing and delivery services will prevail in the GBA, thus further strengthen the international competitiveness of the postal industry in GBA and provide exemplary guidance for the development of the postal industry in the country.

Redeveloping the AMC to Take Forward the "Implementation Opinions"

10. Under the GBA policy framework, postal administrations of the Mainland, HKP and Macao Post will work closely together to further strengthen mutual collaboration. Specifically, China Post and HKP will explore promoting "single-window customs clearance" implementation that facilitates customs

/clearance

clearance and tax payment online for inward express mail from Hong Kong and Macao. Regarding the proposal to step up the development of hardware facilities, such as operating sites for inward and outward mails as well as express items in the GBA as stated in the “Implementation Opinions”, the redeveloped AMC will incorporate the latest technology and largely enhanced capacity so as to support the overall positioning and the development directions of the postal industry in the GBA. China Post also takes note of the redevelopment plan.

11. The redevelopment of the AMC is pivotal to Hong Kong in establishing more efficient postal and logistics collaboration with other GBA cities. It will also serve to create enormous business opportunities for logistics and postal operators in the region, achieving mutual growth and bringing the effect of stimulation and capacity enhancement. If products from the Mainland (in particular the GBA) could transit directly through Hong Kong to key markets such as European countries and the United States, instead of through other transit points in the region, delivery time can reduce by at least half a day. Nevertheless, if in terms of capacity and functionality, the facilities in the AMC are insufficient to cope with the relevant delivery demand, the relevant postal business will probably move to other cities in the region.

Limitations of the Existing AMC

Original Design Constrains Ability to Cope with Present and Future Needs amidst Drastic Change in Market Demand

Encl. 1 12. The AMC is all along the key postal infrastructure for handling all outbound and inbound airmail, cross-border mail and transit airmail in Hong Kong (a location map of the AMC is at Enclosure 1). Built during the development of the HKIA in 1990s and opened in June 1998, the AMC was designed to handle mainly letter mails, which was the majority amongst all types of mails then. It is therefore unable to cater for the current and future demand for air freight e-commerce mail. In the past ten years from 2010-11 to 2019-20, the volume of both inbound and outbound e-commerce air mails³ handled by HKP has surged significantly by around 50%. Besides, 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. In 2019-20, of all mails processed by the existing AMC, about 80% were e-commerce mails, and only around 20% were letter mails.

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³ E-commerce, by definition from the World Customs Organization, refers to physical transaction/shipment (including local and cross-border) that are initiated online and destined to consumers (either business to consumer or consumer to consumer).

13. Overall speaking, it is the common trend for HKP and postal administrations worldwide to leverage their pre-existing resources and postal network to grow their e-commerce delivery business both locally and globally to serve the needs of the market and the public.

Mere Refurbishment being Inadequate to Solve the Problems

14. With a net operational floor area (NOFA) of around 12 600 m², the existing AMC consists of only a single-storey 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). The design of the loading areas in the hall is also outdated. For instance, it cannot facilitate any automatic unloading of mail bags from trucks (and hence still relies on manual handling); 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 traffic⁴. Due to its spatial limitation and configuration, we are unable to solve the problems merely through refurbishment such as machinery replacement or minor works (see further details in paragraph 27 below). Therefore, it is necessary to redevelop the AMC to cope with the demand in the long run.

Need for Early Redevelopment

15. Due to the above limitations, the existing AMC is unable to handle the continuously growing CBEC mail traffic, rendering a need for HKP to commission the CTOs in the HKIA⁵ to handle part of the mail traffic from time to time. The traffic volume under the existing AMC has already reached 34 000 tonnes in 2018-19, 85% of its existing maximum capacity of some 40 000 tonnes. With the expected completion of the Three-Runway System of the HKIA in 2024, air cargo volume is anticipated to surge and potentially take up almost all of the handling capacity of these CTOs in the next five to ten years, thereby constraining the capacity of CTOs to help handle HKP's demand. With the booming CBEC market and HKP's new business strategies, the traffic volume is projected to exceed the maximum capacity of the existing AMC by 2023-24 the earliest. If the AMC is not redeveloped, it will not be able to handle the increasing CBEC mail traffic. As such, there is an imminent need to redevelop the AMC.

/Accommodate

⁴ 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.

⁵ The CTOs include Hong Kong Air Cargo Terminals Ltd., Cathay Pacific Cargo Terminal and Asia Airfreight Terminal.

Accommodate Future Needs through Redeveloping the AMC

Enhancing Handling Capacity by Full Utilisation of Land

16. 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 m⁶ 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. The annual handling capacity would increase 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.

Introduction of New Facilities and Application of Advanced Technologies

17. The preliminary plan of operation at each floor of the new building is as follows⁷ –

- (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 traditional and e-commerce mails; 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.

Encl. 2 A cross-sectional view of the existing AMC and the new AMC is at Enclosure 2.

/Brand

⁶ 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. HKO accepted the report, including its Windshear and High Impact Weather Panel. 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 during the detailed design stage as required by HKO.

⁷ The new building will adopt methods of modular planning and regular structural grid to allow maximum flexibility for upgrading and alteration of the operation hall in future. The detailed design of the new building will be finalised before project tendering.

Brand New Material Handling System (MHS)

18. The new AMC will also incorporate a modern centralised MHS comprising the use of artificial intelligence technologies, automation and digitalisation to facilitate efficient processing of mail items and customs clearance. For instance, under the new MHS, sorting capacity will increase by 20 times from the existing 1 000 pieces per hour to 20 000 pieces per hour; the storage capacity for air freight containers of the Elevating Transfer Vehicle will also increase by eight times from the existing 50 storage spaces to 400 storage spaces. The new system is similar to the ones being used by leading logistics services providers and overseas mail processing centres. The operation of this technologically advanced MHS and the functions of its major components are set out at Enclosure 3.

Encl. 3

Equip AMC for Exploring New Business Lines

19. Leveraging the excellent aviation 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 such new business facilities at the redeveloped AMC.

20. The demand for high-value perishable and fresh products from Mainland China Inbound CBEC has been strong and growing in recent years. The market size of cold chain logistics industry in the Mainland 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 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 will be a good location for including new cold chain facilities.

21. The redeveloped AMC is well positioned, amongst other functions, to serve as temporary storage to facilitate efficient logistics process for high-value Mainland 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

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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 very much constrained. As stated in paragraph 6 above, HKP will explore collaborating with private logistics operators who will bring in the expertise and market experience to operate these new facilities.

Facilities for Delivery of Mails with ECLB

22. Upon the completion of the new building, the new facilities for handling mails with ECLB will also equip AMC to better meet such demands in the market.

Strategic Functions of the Redeveloped AMC

23. As outlined above, the new AMC will transform from a traditional mail centre for handling incoming and outgoing mail bags into 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 logistics and postal hub in the GBA, the strategic functions of the redeveloped AMC will include the following –

- (a) contributing to high value-added logistics services, e.g. cold chain, handling and temporary warehousing of high-valued and fast-moving goods, at its strategic location at the HKIA;
- (b) contributing 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) bringing a faster and higher quality of service for customers with enhanced efficiency by applying intelligent technologies at the new AMC.

Supporting Future Business Strategies

24. The redevelopment of the AMC will provide the necessary infrastructure to support the new business strategies for local and GBA e-commerce mails to be pursued by HKP in the next five years and beyond (details at Encl. 4 Enclosure 4). This includes partnering with leading logistics operators to provide a

Encl. 4

/new

new kind of full solution including air freight conveyance, customs clearance and last mile delivery in overseas destinations for offering diversified and efficient service for customers.

25. In contrast with private logistics operators that are generally profit-oriented, HKP is obliged to fulfil the basic postal needs of the Hong Kong community through providing efficient and affordable postal services and serving last mile delivery even for very remote areas. Same as other postal administrations around the world, HKP will put its strategic focus on the development of CBEC delivery, in the light of the downward trend in traditional postal mail. At the same time, HKP is actively re-engineering its business process, with a view to implementing new measures to provide services that are more efficient, flexible and convenient to customers, and to keep enhancing the quality of service to the public and businesses (details at Enclosure 4).

26. The redeveloped AMC will adopt business strategies that operate on a high degree of automation and digitalisation, as well as collaborate with logistics services providers in the market on operating the new cold chain and temporary warehouse for high value and fast-moving goods facilities, so as to tap on the professional expertise, market sensitivity and experience of the industry. For mail handling, as the redeveloped AMC will still rely on postal channel as a major channel for the inbound and outbound shipment, its operation will hence continue to depend on the knowledge and experience of the existing staff of HKP who are familiar with the postal procedures and policies to handle mail items under postal channel through the redeveloped AMC. In addition, HKP will strengthen its sales and marketing team, including the recruitment of such professionals from the logistics sector.

OTHER OPTIONS CONSIDERED

27. Other than redeveloping the AMC, the option of refurbishing of the existing AMC has been considered but was found not feasible due to the following reasons –

- (a) refurbishment will not be able to fully exploit the good location of the AMC for providing more handling capacity and supporting the future strategic development of the postal industry in the GBA. Owing to design and layout constraints posed by the existing building structure, refurbishing the existing AMC will only provide a maximum handling capacity of around 60 000 tonnes, which is three times smaller as compared to the handling capacity of the redeveloped AMC;

/(b)

- (b) the major deficiencies of the existing building, such as the docking arrangement, and lack of space for processing and storage for increasing e-commerce traffic, cannot be resolved by refurbishment; and
- (c) 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 ARRANGEMENT

28. The estimated total project cost, comprising design and construction of the new AMC, related demolition, acquisition of new equipment and construction of a Decanting Building at the existing AMC site (to ensure that basic postal service will continue without interruption during the redevelopment project)⁸ is \$4,611.3 million in money-of-the-day (MOD) price. The estimated cost for the design and construction of the new AMC is shown below with detailed breakdown provided at Enclosure 5.

Encl. 5

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

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⁸ To ensure that basic postal service will continue without interruption during the redevelopment of the AMC, a Decanting Building will be constructed at the existing AMC site (see Enclosure 1 for the location) 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. That said, the Decanting Building will be a single-storey construction with basic building services facilities such as air conditioning and fire services. 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 operate at other facilities such as CTOs in the HKIA. The processing capacity of these interim measures is expected to be sufficient to handle the increasing international mail traffic volume during the construction period of the new AMC (the overall international traffic volume for HKP is projected to increase from about 35 000 tonnes in 2021-22 to 55 000 tonnes by 2026-27). Upon the completion of the new AMC in 2027-28, the international mail traffic volume temporarily handled in General Post Office and other facilities will be transferred to the new AMC.

29. HKP has derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the years from 2020 to 2030. Subject to funding approval, HKP will deliver the construction works for new AMC Building through a lump sum contract so as to minimise the risk of cost fluctuation and ensure cost efficiency. HKP will bear the recurrent operating costs of the redeveloped AMC.

30. Taking into account HKP's Development Reserve and Retained Earnings amounting to \$2 billion as at end March 2020, it would not be able to fund the \$4.6 billion redevelopment project on its own. Financing the redevelopment of AMC through loans would be undesirable as repayment of loan principal and interest expense would increase the financial burden and operating cost of HKP, necessitating more frequent and steeper upward postage adjustments to achieve cost recovery. Therefore, the Government proposes to provide full funding support in the form of trading fund capital for the POTF to finance the redevelopment proposal. Subject to the Finance Committee's approval, the Secretary for Commerce and Economic Development will move a resolution for the LegCo's approval for the appropriation of funds from the CIF to the POTF.

FINANCIAL IMPLICATIONS

31. Subject to funding approval, the proposed capital injection is as follows –

Year	Proposed capital injection (\$ million)
2021-22	780.8
2025-26	1,239.6
2026-27	1,546.5
2027-28	1,044.4
Total	4,611.3

FINANCIAL VIABILITY

32. The redevelopment of the AMC would increase its annual handling capacity to 180 000 tonnes, which is 4.5 times of the existing 40 000 tonnes, enabling it to cater for the projected traffic volume of HKP for the next 15 to 20 years. With the booming CBEC market and HKP's new business strategies as

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mentioned above, the target growth rate of international mail traffic in the new AMC is 4% to 5.5% per year (compared to the current international mail traffic growth rate of around 1% to 2% per year), reaching 141 000 to 179 000 tonnes by the end of 2046-47, close to the new AMC's maximum capacity of around 180 000 tonnes. HKP also aim to achieve around 3% to 4% CBEC market share in the coming years from the existing 1% to 2%. The following table shows that the new AMC can cope with the growth of the international mail volume for the next 15 to 20 years –

	2027-28	2030-31	2034-35	2039-40	2046-47
Estimated traffic volume handled by the new AMC (tonnes)	65 000 – 76 000	73 000 – 90 000	86 000 – 112 000	105 000 – 146 000	141 000 – 179 000

33. Besides, intelligent technologies in the new AMC will enable a high degree of automatic conveyance of mail items or bags to the appropriate floors and areas for handling, hence achieving greater cost effectiveness. The total operating cost for the new AMC will decrease by around 11% to \$240.8 million in 2027-28, as compared to the estimated operating cost (without new AMC) of \$271.5 million, but with a 3.6 fold increase in the NOFA of the new AMC from the current 12 600 m² to 46 000 m² in future.

34. Given the above, the financial assessment shows that the new AMC could generate a profit⁹ of around \$1.0 billion to \$1.3 billion in 2030-31. Without redevelopment, the profit generated from the existing AMC will be around \$0.5 billion to \$0.6 billion in 2030-31. The new AMC will start generating profit from 2027-28 when it commences operation. It will result in an additional profit of around \$0.5 billion to \$0.7 billion in 2030-31, which will gradually increase over time to about \$2.2 billion to \$3.2 billion in 2046-47.

35. While the new AMC will serve to generate positive returns, HKP is obliged to fulfil Universal Service Obligations (USO) to provide traditional mail services to the local community at a low price. In recent years, traditional mail services brought about operating losses due to the decline in volume of letter mail.

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⁹ Refers to Earnings before Interest, Tax, Depreciation and Amortization.

We expect operating losses to continue due to the increased trend of e-substitution. The additional return generated from the new AMC will therefore be essential in cross-subsidising the continued loss of local USO services. In fact, local traditional letter mail services are considered to be a loss-making business for most postal administrations and would generally require cross-subsidisation by profits generated from international mail services.

EXPECTED BENEFITS

36. In terms of economic contributions, the redevelopment of the AMC will bring about considerable benefits to the economy, mainly from additional traffic to be handled in Hong Kong. With HKP's new business strategies and business re-engineering process, the redeveloped AMC will bring about, including direct, indirect and induced impacts, \$1,600 million to \$1,800 million of gross value-added¹⁰ and 2 400 to 2 500 full time jobs to a wide range of relevant industries, such as air and land transport, warehouse and storage, utilities and other professional and business support industries in 2027-28 upon coming into operation¹¹. Such gross value-added and local jobs created from operations will reach about \$3,600 million to \$4,400 million, and 5 100 to 5 700 full time jobs by 2046-47, i.e. 20 years after the redeveloped AMC commences operation.

37. The AMC would also bring a variety of intangible economic benefits to Hong Kong. Locally, increased air mail handling capacity attained through the AMC redevelopment would not only attract regional and 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 both 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 Enclosure 6.

Encl. 6

38. Over the construction period until mid-2027, we estimate that the AMC redevelopment will generate some 1 600 man-years of full time direct employment.

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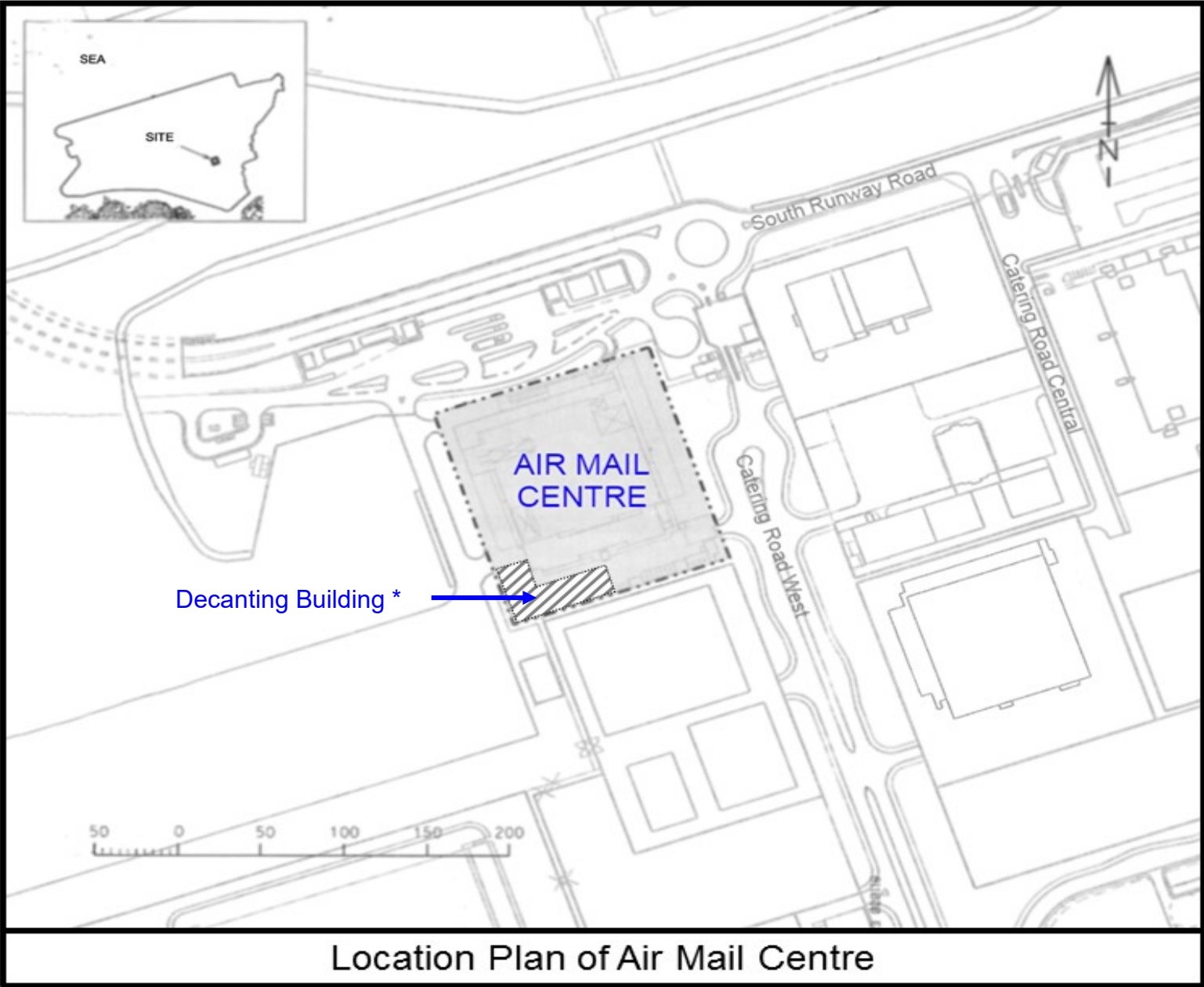
¹⁰ The gross value-added figures contained in this paragraph are at 2019 prices.


¹¹ We aim to complete the redevelopment project in 83 months after funding approval and appropriation to the POTF.

PUBLIC CONSULTATION

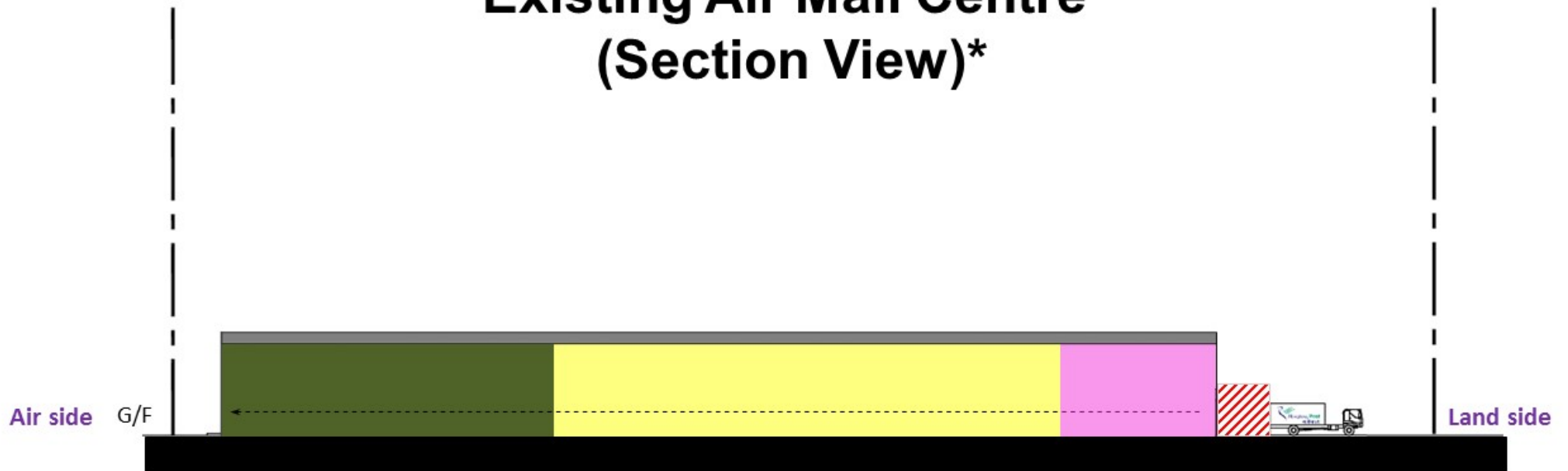
39. We briefed the LegCo Panel on Economic Development (the Panel) on our plan to redevelop the AMC at its meeting on 22 March 2021, including the plan to seek Finance Committee's approval of a commitment of \$4,611.3 million for appropriation from the CIF to the POTF to finance the project. Members in general agreed that Hong Kong should support the overall positioning and the development directions of the postal industry in the GBA. Most members also noted the need for HKP to redevelop the AMC, in order to fulfil Hong Kong's role and functions in the development of GBA postal hub. A supplementary information note was provided to the Panel on 13 April 2021 in response to questions raised by some members at the Panel meeting.

Commerce and Economic Development Bureau
Hongkong Post
April 2021




Legend	
	Shaded area denotes the location of Decanting Building to be constructed for operation during the demolition of existing Air Mail Centre (AMC) and construction of the new AMC.
* Not to scale	


Existing Air Mail Centre (Section View)*





LEGEND

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

 Operation hall

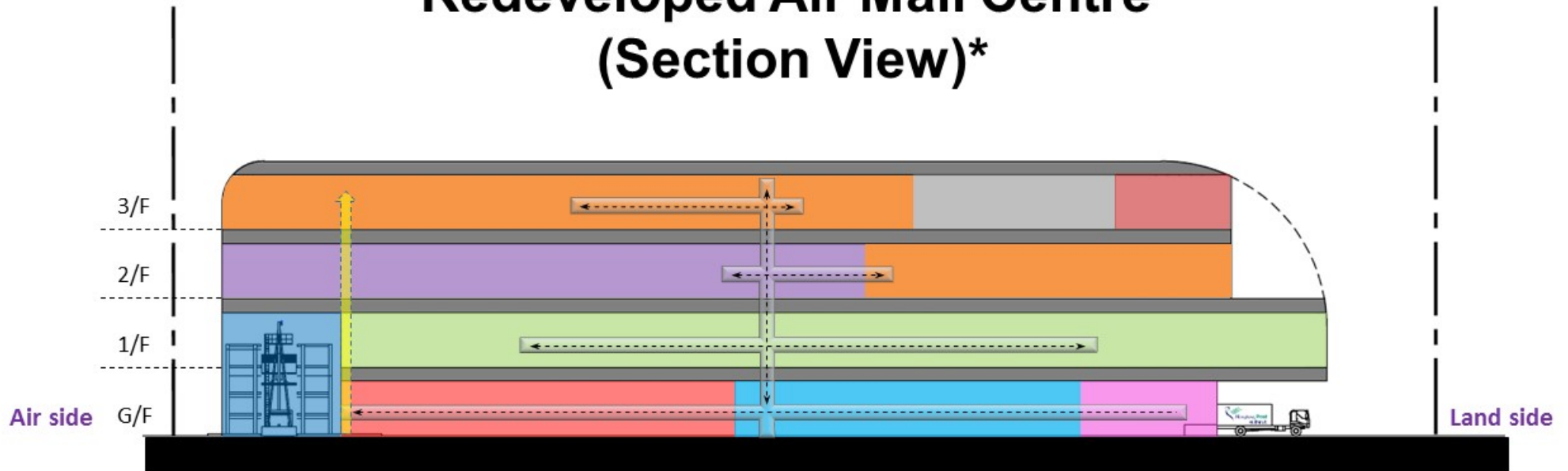
 Loading / Unloading area

 Mail flow

 Vehicle manoeuvring area reserved for unloading (without platform)

* Not to scale

Redeveloped Air Mail Centre (Section View)*



LEGEND

E-commerce parcels/packets (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 traditional and e-Commerce mails
Outward mail security screening	E-commerce parcels/packets (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

Operation of the Material Handling System and Functions of the Major Components

In essence, the artificial intelligence technologies automatically assign trucks entering into the new Air Mail Centre (AMC), to the appropriate loading dock for unloading of mails. Henceforth, robots will carry the mail bags to the operating hall for transportation via internal automatic conveyance system to different floors for robotic and mechanised sortation. Sorting capacity will increase by 20 times from the existing 1 000 pieces per hour to 20 000 pieces per hour. Likewise, there will be automatic storage and retrieval system in the Warehouse Management System for high value and fast-moving goods through the use of high throughput automatic shuttle. With the assistance of digitalisation, mails in the AMC can be rapidly retrieved for x-ray screening. Also, there will be more tracking points to facilitate closer tracking from acceptance through air conveyance to last mile delivery. Advanced Elevating Transfer Vehicle (ETV) will be installed in the new AMC with around 400 storage spaces, as compared to the current 50 spaces, for transporting air freight containers and storing them before handing over to airlines. In sum, the application of these modern technologies in the new AMC will enable Hongkong Post to collaborate effectively with other postal administrations in the Guangdong-Hong Kong-Macao Greater Bay Area for the postal development of the area. Major components and functions of the Material Handling System are as follows –

(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 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 has been 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)

(III) 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

An Internal Conveyor System will interconnect all the above equipment and other facilities at different floors of the redeveloped AMC. The system will efficiently convey mail items or bags 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, the Internal Conveyor System will convey all prepared mail bags to the ground floor of the new AMC for departure security screening, which will also be conducted automatically with latest security screening technology.

New Business Strategies of Hongkong Post (HKP)

With the increasing trend of e-substitution, the delivery demand for e-commerce mails arising from the booming of global e-commerce market, the growth of the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) cross-border e-commerce (CBEC) market, as well as technological advancement, HKP has also been progressively enhancing and strengthening its business development strategies for e-commerce mails in tandem. In fact, many postal administration worldwide has been grasping the new opportunities in e-commerce market, by changing their strategic focus to e-commerce mail delivery, and thereby also mitigating the decline in the demand for traditional letter mail services. In this connection, HKP has developed 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 digitalisation and modern infrastructure development, so as to contribute to the economic development of the GBA.

2. Specifically, the new business strategies to be pursued by HKP henceforth will include, amongst others, the following –

- (a) developing new “Special Lane” services^{Note} for Mainland China outbound CBEC markets, with Belt and Road countries being one of the key focus areas, and developing the equipment containing lithium batteries business;
- (b) enhancing HKP's conveyance and last mile delivery channels to provide local and South China CBEC trade agents economical and efficient Mainland China inbound CBEC services through delivering via Hong Kong to the Mainland;

/(c)

^{Note} 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.

- (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 digitalisation level and hence user experience.

3. HKP is also actively re-engineering its business process this year to make its e-commerce mail delivery service better meet the modern day expectations of customers and the public for this type of mail service. This includes –

- (a) aside from the prevailing postal channel, partnering with leading logistics operators to provide a new kind of full solution including air freight conveyance, customs clearance and last mile delivery in overseas destinations for offering diversified and efficient service for customers;
- (b) widely extending the current network of HKP iPostal Stations which provide 24-hour service for mail collection;
- (c) setting up 24-hour automatic iPostal Kiosks to enable customers to continue mail and packet posting outside business hours of post office throughout the territory;
- (d) providing contactless e-payment options in full range through its online platforms, mobile apps, post office counters and kiosk machines;
- (e) with the application of digitalisation, customers in future who select e-commerce services with tracking service feature, their recipients will receive notification on the expected delivery date before delivery, and they will have flexibility to change the door delivery date or to change to collect the mail items from iPostal Stations/post office counters; and
- (f) through adoption of technological and robotic solutions, the handling of e-commerce packages will be enhanced.

4. With the enhanced e-commerce business strategies and process re-engineering as mentioned above, HKP will provide more efficient, diversified, flexible and user-friendly services.

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)
A. <u>New AMC Building</u>	
(a) Foundation related works	331.6
(i) Demolition of existing building and advance works	35.6
(ii) Excavation and footings	137.3
(iii) Drainage	38.8
(iv) Energy conservation	38.5
(v) External works	81.4
(b) Building*	1,014.3
(c) Building services*	608.6
(d) The fees for services of third party experts and engineers for preliminary and professional works like design, planning, project management and quantity surveying –	
(i) Project management	38.1
(ii) For the building, electrical and mechanical engineering, quantity surveying, building services, structural engineering, fire services, etc. and acquisition of new equipment, technology and machinery, specialist fees	168.3
(iii) Resident site staff cost	38.4
(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
(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.

(II) Decanting Building and associated decantation	
Item	Cost estimates (in MOD price) (\$ million)
(a) Decanting Building	171.9
(i) Foundation related works, structural works, builder's works, building services and fire services installation	164.0
(ii) Removal of decanting building	7.9
(b) The fees for services of third party experts, and engineers for preliminary and professional works like design, planning, project management and quantity surveying –	22.6
(i) Project management	3.8
(ii) For the building, quantity surveying, fire services, etc. specialist fees	15.0
(iii) Resident site staff cost	3.8
(c) Contingencies of (a) – (b)	36.9
(d) Decantation associated costs	549.0
(i) Refurbishment works and procurement of equipment (including modification works and x-ray screening machines to meet security requirements)	13.7
(ii) Rental and service fees payable to third party (e.g. Cargo Terminal Operators) for providing e-commerce mails processing services to Hongkong Post	443.8
(iii) Decantation associated contingencies	91.5
Total	780.4

Economic Impact Assessment (EIA) of the Air Mail Centre (AMC) Redevelopment

INTRODUCTION

Hongkong Post (HKP) has appointed an independent economic consultant (the Consultant) to conduct an 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 below.

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 AMC during the **Operational Stage** (i.e. when the project is completed and will handle the **additional traffic volume 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 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 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)

- (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 main 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 (i.e. the 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 (i.e. the 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, the Consultant estimated that the AMC redevelopment will result in some \$1.1 billion direct value added (at 2019 prices) and some 1 600 man-years of direct full time employment².

Operational Impacts

7. The Consultant estimated that the operation of the redeveloped AMC will bring about considerable benefits to the economy, mainly from additional traffic to be handled in Hong Kong. If the new business strategies and restructuring are successfully implemented, the operation of the redeveloped AMC will bring

/about

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

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 Statics Department.

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

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 attract regional and 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 both 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.

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