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**Public Works Subcommittee of the Finance Committee
of the Legislative Council**

**Minutes of the 32nd meeting
held in Conference Room 1 of the Legislative Council Complex
on Monday, 25 June 2018, at 2:30 pm**

Members present:

Ir Dr Hon LO Wai-kwok, SBS, MH, JP (Chairman)
Hon Charles Peter MOK, JP (Deputy Chairman)
Hon Abraham SHEK Lai-him, GBS, JP
Hon Tommy CHEUNG Yu-yan, GBS, JP
Hon Starry LEE Wai-king, SBS, JP
Hon CHAN Hak-kan, BBS, JP
Dr Hon Priscilla LEUNG Mei-fun, SBS, JP
Hon Paul TSE Wai-chun, JP
Hon Claudia MO
Hon Michael TIEN Puk-sun, BBS, JP
Hon Frankie YICK Chi-ming, SBS, JP
Hon WU Chi-wai, MH
Hon YIU Si-wing, BBS
Hon MA Fung-kwok, SBS, JP
Hon CHAN Chi-chuen
Hon CHAN Han-pan, JP
Hon LEUNG Che-cheung, SBS, MH, JP
Hon Alice MAK Mei-kuen, BBS, JP
Dr Hon KWOK Ka-ki
Hon Christopher CHEUNG Wah-fung, SBS, JP

Dr Hon Fernando CHEUNG Chiu-hung
Dr Hon Helena WONG Pik-wan
Hon Alvin YEUNG
Hon Andrew WAN Siu-kin
Hon CHU Hoi-dick
Dr Hon Junius HO Kwan-yiu, JP
Hon HO Kai-ming
Hon LAM Cheuk-ting
Hon Holden CHOW Ho-ding
Hon Tanya CHAN
Hon CHEUNG Kwok-kwan, JP
Hon HUI Chi-fung
Hon LUK Chung-hung
Hon LAU Kwok-fan, MH
Dr Hon CHENG Chung-tai
Hon KWONG Chun-yu
Hon Jeremy TAM Man-ho
Hon Gary FAN Kwok-wai
Hon AU Nok-hin
Hon Vincent CHENG Wing-shun, MH
Hon Tony TSE Wai-chuen, BBS

Members absent:

Hon Wilson OR Chong-shing, MH

Public officers attending:

Mr Raistlin LAU Chun, JP	Deputy Secretary for Financial Services and the Treasury (Treasury) ³
Mr HON Chi-keung, JP	Permanent Secretary for Development (Works)
Ms Doris HO Pui-ling, JP	Deputy Secretary for Development (Planning and Lands) ¹
Mr WONG Chuen-fai	Assistant Director of Environmental Protection (Environmental Assessment)

Ms Margaret HSIA Mai-chi	Principal Assistant Secretary for Financial Services and the Treasury (Treasury) (Works)
Dr Raymond SO Wai-man, BBS, JP	Under Secretary for Transport and Housing
Mr Wallace LAU, JP	Deputy Secretary for Transport and Housing (Transport) ⁴
Mr Kelvin NG	Assistant Secretary for Transport and Housing (Airport Expansion Project Coordination Office) ^A
Mr Frank WONG Tak-choi	Project Director (1) Architectural Services Department
Mr David CHAK Wing-pong	Project Director (2) Architectural Services Department
Ms Athena FUNG Chi-shan	Senior Project Manager 122 Architectural Services Department
Ms Mandy IP Man-wai	Senior Project Manager 124 Architectural Services Department
Mr HO Tak-hei	Senior Project Manager 233 Architectural Services Department
Miss Linda SO Wai-sze	Deputy Director-General of Civil Aviation (2)
Mr Raymond NG Che-on	Assistant Director-General of Civil Aviation (Air Traffic Engineering Services)
Mr Raymond LI Kwok-chu	Assistant Director-General of Civil Aviation (Air Traffic Management)
Mr HUI Man-ho	Chief Electronics Engineer (Projects) Civil Aviation Department
Miss Sharon LAU Sum-yee	Assistant Director of Hong Kong Observatory (Aviation Weather Services)

Mr LI Luen-on	Principal Experimental Officer (Three Runway System Project) Hong Kong Observatory
Mr Andy YEUNG Yan-kin	Assistant Director of Fire Services (Headquarters)
Mr YIP Yun-yu	Divisional Commander (Air) Fire Services Department
Mr Vincent MAK Shing-cheung, JP	Deputy Secretary for Development (Works) ²
Ms Irene PANG Oi-ling	Chief Assistant Secretary (Works) ³ Development Bureau
Mr Edwin TONG Ka-hung, JP	Director of Drainage Services
Mr LEUNG Wing-yuen	Chief Engineer (Sewerage Projects) Drainage Services Department

Attendance by invitation:

Mr WONG Koi-hou	General Manager (Engineering, Third Runway) Airport Authority Hong Kong
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Clerk in attendance:

Ms Doris LO	Chief Council Secretary (1) ²
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Staff in attendance:

Mr Raymond CHOW	Senior Council Secretary (1) ⁶
Ms Anki NG	Council Secretary (1) ⁶
Ms Christina SHIU	Legislative Assistant (1) ²
Ms Christy YAU	Legislative Assistant (1) ⁷
Ms Clara LO	Legislative Assistant (1) ⁸

The Chairman advised that there were two funding proposals on the agenda for the meeting. The first proposal was carried over from the previous meeting of the Subcommittee, while the second proposal was a new submission from the Administration. He reminded members that in accordance with Rule 83A of the Rules of Procedure ("RoP") of the Legislative Council ("LegCo"), they should disclose the nature of any direct or indirect pecuniary interests relating to the funding proposals under discussion at the meeting before they spoke on the proposals. He also drew members' attention to Rule 84 of RoP on voting in case of direct pecuniary interest.

Head 703 – Buildings

PWSC(2018-19)25	69GI	Provision of Air Traffic Control Facilities to support the Three-Runway System at the Hong Kong International Airport
	70GI	Provision of Aviation Weather Services Facilities to support the Three-Runway System at the Hong Kong International Airport
	176BF	Provision of Fire Services Facilities to support the Three-Runway System at the Hong Kong International Airport

2. The Chairman advised that the proposal, i.e. [PWSC\(2018-19\)25](#), sought to upgrade 69GI, 70GI and 176BF to Category A at the estimated costs of \$1,902.9 million, \$281.5 million and \$2,605.8 million in money-of-the-day ("MOD") prices respectively for the provision of air traffic control ("ATC") facilities, aviation weather services facilities and fire services facilities to support the Three-Runway System ("3RS") at the Hong Kong International Airport ("HKIA"). The Subcommittee commenced deliberation on the proposal at the meeting on 22 June 2018.

Project cost

3. Ms Claudia MO noted that having regard to the development stages of 3RS, the Administration would seek LegCo's funding approval in batches for the development of the associated government facilities. The estimated project cost in MOD prices of the first batch of works, which included the three capital works projects mentioned above and the associated procurement, was about \$8.1 billion, and the latest total estimated cost of all government facilities was about \$17.5 billion. Ms MO and Mr CHAN Chi-chuen enquired whether the development of the proposed government support facilities was a must, and whether the cost estimate would go up in future.

Ms MO, Mr CHAN and Mr AU Nok-hin were concerned whether the Administration or the Airport Authority Hong Kong ("AAHK") would be held responsible in the event of cost overrun.

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

5. USTH supplemented that if the works progressed smoothly, it was believed that those government facilities could be completed within budget. In the event of cost overrun, additional funding would be sought from LegCo in accordance with the relevant procedures.

6. Dr KWOK Ka-ki and Mr CHU Hoi-dick pointed out that the capital cost of 3RS was around \$141.5 billion according to AAHK's estimate. They queried if the Administration had been aware that the estimated cost of providing the government support facilities was \$17.5 billion three years ago when AAHK was making preparations for 3RS development, and whether the estimated cost had been included in the capital cost of 3RS. Mr CHU enquired whether the capacity of the government support facilities proposed to be built had taken into account the estimated capacity of HKIA up to 2035 (i.e. up to 120 million passengers per year) or up to 2030 (i.e. 100 million passengers per year); if the latter was the case, whether further funding would have to be sought in future to expand the capacities of those support facilities. In addition, Mr CHU cited media reports in 2014 that the budget of around \$141.5 billion covered only the project cost of Phase 1 of 3RS and the total cost would be around \$200 billion according to the Government's internal estimates.

7. USTH replied that the Administration had informed the Panel on Economic Development in 2015 that while related government facilities should be developed for 3RS, more detailed planning and design would be carried out having regard to the development stages of 3RS before the cost estimates could be finalized. Separate funding proposals would be submitted to LegCo for those works. Moreover, during the course of

developing the government facilities at HKIA, the Administration had to amend the design proposal and works details from time to time in the light of actual circumstances. As regards the funding request for the remaining government facilities, the timing of its submission to LegCo could be determined only after completion of the planning and preliminary design.

8. USTH added that the Administration made half-yearly reports to the LegCo Panel on Economic Development on the progress of 3RS development. The last report was made in April 2018. On the whole, the 3RS project was progressing as planned and the expenditure concerned was within budget. The proposed government facilities would support the operation of 3RS under construction and could meet the air traffic demand at least up to 2030. As for the planning for the airport beyond 2030, AAHK would formulate development strategies from time to time in the light of its business and development needs, and the Administration would provide various government facilities having regard to actual situation. However, it was believed that the hardware facilities would not require many changes as the efficiency and safety of airport operation could be enhanced through software updates and other initiatives, such as upgrading the aviation weather services equipment of the Hong Kong Observatory ("HKO") and the air navigation services equipment of the Civil Aviation Department ("CAD"). USTH clarified that the total cost estimate of 3RS of around \$200 billion was not found in the information currently available to the Administration.

9. Mr Holden CHOW said that at the meeting of the Panel on Economic Development on 28 May 2018, the Administration had explained the need to develop the government facilities in support of 3RS. Panel members also understood that the Administration had to seek LegCo's funding approval for developing those facilities. Mr Tony TSE supported the proposed projects. He and Dr Junius HO enquired about the total capital cost of the whole 3RS project; the respective shares of the Administration and AAHK; and the reasons why the Administration had to finance the development of those government facilities.

10. USTH replied that the operation of 3RS should comply with the security and operational requirements of ICAO. As such, it was necessary for the Administration to provide government services and facilities in such areas as air navigation, emergency rescue, weather information and immigration control. That included the ATC tower, fire stations, police stations, observatory facilities, customs, and quarantines and port health control facilities. The Administration would undertake the development of the relevant government support facilities for 3RS and submit timely the relevant funding requests to LegCo. This practice was in line with that adopted for the construction and development of the two-runway system of

HKIA in the 1990s. At that time, the cost of the support facilities provided by the Government accounted for about 11% of the total project cost, as compared to about 12% under the current proposal for the government facilities in support of 3RS.

11. Mr WU Chi-wai pointed out that for the new ATC tower (and the associated accommodation for CAD, HKO, the Hong Kong Police Force and the Customs and Excise Department) and the link bridge, the Administration estimated that the construction unit cost was \$98,225 per square metre of construction floor area in MOD prices. He enquired about the reason for the high construction unit cost.

12. Project Director (1), Architectural Services Department ("PD(1)/ArchSD") replied that the construction cost of the ATC tower was comparable to that of the old ATC tower, less the cost arising from the works constraints to avoid affecting the existing airport operation and the need to meet the latest design requirements of ICAO. The cable ducts under the proposal would be scattered across a site area of 650 hectares, among which 35 and 23 kilometres of cable ducts would be constructed for CAD and HKO respectively. In addition, waterproof works, structural excavation works and temporary support works were also required. Under 69GI, about 80 facilities were to be linked up by the cable ducts.

13. At the request of Mr WU Chi-wai, the Administration would provide supplementary information on 69GI setting out the relevant figures and works details to explain why the construction unit cost of the new ATC tower was as high as \$98,225 per square metre in MOD prices.

(Post-meeting note: The supplementary information provided by the Administration was circulated to members vide [LC Paper No. PWSC293/17-18\(01\)](#) on 12 July 2018.)

14. Mr AU Nok-hin noted that pending the commissioning of the new ATC tower by end 2024, the third runway would be under the control of an interim ATC tower. He enquired whether the construction cost of the interim ATC tower was borne by AAHK and whether it was included in the capital cost at around \$141.5 billion for 3RS. General Manager (Engineering, Third Runway), Airport Authority Hong Kong ("GM/AAHK") replied that the construction cost of the interim ATC tower was borne by AAHK and was included in the cost estimate at around \$141.5 billion for 3RS.

15. Mr AU Nok-hin noted that the contingencies provided under 69GI was \$173 million, which accounted for about 9% of the capital cost of the

project. The percentage was lower than the 10% to 11% generally applied to other works projects. He enquired about the reason for that. PD(1)/ArchSD replied that the amounts of contingencies for individual projects were determined according to their unique circumstances, and it was hence difficult to make a direct comparison.

16. Mr LEUNG Che-cheung said that he supported the proposed item. He pointed out that the advantages of Hong Kong lied in its quality aviation and transport services, as well as the synergies with the development of the Guangdong-Hong Kong-Macao Greater Bay Area. He enquired whether efforts could be made to utilize and enhance the existing government facilities at HKIA (such as the runway weather forecast facilities) as far as practicable to obviate the need to build brand new support facilities so as to reduce the capital cost.

17. Assistant Director of Hong Kong Observatory (Aviation Weather Services) ("AD/HKO") replied that in accordance with the International Standards and Recommended Practices of ICAO, each runway had to be equipped with its own meteorological equipment to capture the weather data at specific locations of the runway for transmission to the pilots of flights taking off and landing, so as to safeguard the safety of flights. The data collated, including wind speed and runway visual range, had to be captured by independent monitoring facilities of each runway. In addition, each runway was currently equipped with its own Light Detection and Ranging system to detect the windshear at individual runways in fine weather. The Administration considered it necessary to separately provide the third runway with similar meteorological equipment and monitoring facilities in future for monitoring and detecting weather conditions on the runway.

Entrustment fees payable to Airport Authority Hong Kong for the three proposed projects

18. Ms Claudia MO, Mr CHAN Chi-chuen, Dr KWOK Ka-ki, Mr AU Nok-hin, Dr Fernando CHEUNG and Mr Jeremy TAM sought details of the agreement on entrusting the design and construction of the three projects to AAHK, and the entrustment fees payable to AAHK. Mr CHAN Chi-chuen enquired whether there was room for negotiation regarding the entrustment fees.

19. Mr Gary FAN noted that the entrustment fees totalled around \$570 million, accounting for 16.5% of the construction cost. He enquired about the rationale for determining the entrustment fees and the basis of calculation, as well as the details concerning the division of project duties. Mr Jeremy TAM asked about the detailed calculation of the entrustment fees.

Mr Tony TSE sought a detailed breakdown of the construction support and airport on-cost under the entrustment fees. Mr FAN and Mr TSE enquired why the entrustment fees for the proposed projects were higher than the percentage of around 12.5% generally applicable to the on-cost of entrusted works, such as the on-cost payable to the Hong Kong Housing Authority ("HKHA") for the entrustment works associated with public housing developments.

20. Noting that the entrustment fees payable to AAHK for the relevant ATC facilities accounted for 16.5% of the construction cost, Mr Tony TSE remarked that while the amount of consultants' fees for works projects in general were determined in advance, the entrustment fees payable to AAHK would fluctuate with the construction cost. He enquired whether the entrustment fees would increase correspondingly if the construction cost rose in future.

21. USTH replied that in view of the complexity of the construction works and the need to build the proposed government facilities at an operating airport, the Administration entrusted the design and construction of those facilities to AAHK so that the works could be carried out in conjunction with the 3RS project in a holistic and timely manner. Time and cost of design could also be saved. For AAHK, the cost so incurred had to be recovered. The entrustment fees payable to AAHK were in line with the cost recovery principle, and the level was considered reasonable according to the Administration's evaluation. The total cost estimate of the proposed projects would be confirmed only after completion of the detailed design and tender exercise. The Administration was confident that the projects could be completed within budget.

22. USTH added that the entrustment fees payable by the Administration to public organizations for the design and construction of a works project being entrusted normally accounted for about 12.5% of the construction cost. Owing to the unique nature of the 3RS project, the entrustment fees payable to AAHK for the entrusted design and construction of the proposed government facilities adopted the percentage of 16.5%. In addition to design and project management, two special expenditure items, namely the "Owner-Controlled Insurance Programme ("OCIP") in Construction Contracts ("CC")" for the project and "Construction support and airport on-cost", were also included under the proposed projects. Simply put, given the unique circumstances of HKIA and that it was in operation, the insurance programme required was best taken out by AAHK. The two special expenditure items were not applicable to other entrustment works. GM/AAHK said that since the design and construction arrangements of the 3RS project and development of the associated government facilities called

for coordination and smooth interface, the Administration entrusted the construction of the government facilities to AAHK as part of the coordination efforts.

23. Dr CHENG Chung-tai pointed out that AAHK had been collecting the Airport Construction Fee ("ACF") from the public since 2015 on the pretext of self-financing the construction of 3RS but now the Administration was also seeking LegCo's funding approval for constructing the support facilities for 3RS. He found this unreasonable. Dr CHENG and Mr AU Nok-hin enquired whether there was double-charging on the part of AAHK by collecting the ACF while accepting the 16.5% entrustment fees for construction of the government facilities.

24. Mr AU Nok-hin sought details of the "OCIP in CC" and the "Construction support and airport on-cost" in relation to Mr Gary FAN's enquiry. He also sought a breakdown of the fees charged for design, project management, insurance, construction support and airport on-cost under the on-costs payable to AAHK for the three proposed projects, and information on the types of construction works included in the entrustment agreement. Mr AU was also concerned that the Administration had not set out the full details of the relevant works in its paper. Dr KWOK Ka-ki enquired if performance pledges and clauses on cost overrun arrangements were included in the entrustment agreement, say, whether the entrustment fees would be reduced in the event of cost overrun. Dr Fernando CHEUNG enquired about how the entrustment agreement compared with the relevant entrustment agreement and on-cost for the construction of HKIA.

25. USTH replied that the Government had to provide the proposed government facilities associated with 3RS to ensure the efficient and safe operation of HKIA. The 16.5% entrustment fees were paid to AAHK under the principle of cost recovery and had nothing to do with the ACF collected by AAHK for 3RS development. Hence, there was no double-charging. In view of the concern of Mr AU Nok-hin, the Administration would review the works details set out in the relevant paper. As regards the concern of Dr KWOK Ka-ki, the Administration would examine the clauses on cost overrun arrangements. Given the unique circumstances of HKIA, the Administration considered the amount of entrustment fees payable to AAHK reasonable. It would also provide a supplementary information paper detailing:

- (a) the reasons and criteria for setting the entrustment fees at a percentage higher than that of the on-cost payable for government entrustment works (e.g. the on-cost payable to HKHA for the entrustment works associated with public

housing developments) at around 12.5%;

- (b) a breakdown of the fees charged for design, project management, insurance, construction support and airport on-cost under the on-costs payable to AAHK for the proposed projects;
- (c) details of the OCIP in CC and the construction support and airport on-cost; and
- (d) whether the entrustment agreement related to 3RS included performance pledges and clauses on cost overrun arrangements, and how it compared with the relevant entrustment agreement and on-cost for the construction of HKIA at Chek Lap Kok.

(Post-meeting note: The supplementary information provided by the Administration was circulated to members vide [LC Paper No. PWSC293/17-18\(01\)](#) on 12 July 2018.)

26. PD(1)/ArchSD supplemented that ArchSD undertook the construction of the existing ATC tower of HKIA in the absence of any entrustment arrangements. The entrustment fees incurred for other facilities in the past were comparable to those of the proposed projects. The Administration would also entrust similar works to the Hospital Authority, HKHA or other organizations at comparable entrustment fees. The entrustment agreement between the Administration and AAHK was under negotiation, and the relevant details were being followed up concurrently. Prior approval of the Financial Services and the Treasury Bureau was required for finalizing the agreement.

27. Dr CHENG Chung-tai noted that according to the Administration's estimation, the 69GI project would generate about 43 300 tonnes of construction waste in total; Of those, about 90% of the inert construction waste would be reused for the 3RS reclamation works provided that the reclamation works were ongoing and there were no surplus filling materials on site, while the remaining non-inert construction waste (about 10%) would be disposed of at landfills. He enquired whether the Administration would work out the value of the inert construction waste to be used as filling materials and make deduction from the entrustment fees payable to AAHK.

28. PD(1)/ArchSD replied that the Administration's policy was to encourage on-site reuse of inert construction waste. As the materials concerned could also be reused in the 3RS reclamation works, the

Administration encouraged AAHK to use those inert construction waste as filling materials in the 3RS reclamation works as far as practicable.

Facilities, design and construction of the projects

Construction period and expansion arrangements

29. Mr YIU Si-wing said that he supported the proposed projects. He pointed out that even if 3RS was not to be built, the government facilities associated with the runways would still require regular enhancement or replacement. Mr YIU noted that the third runway was expected to be commissioned in 2022. As work procedures (e.g. design, tender exercise, etc.) and arrangements (e.g. staff training, etc.) would have to be gone through after obtaining the funding approval for the construction of the support facilities, he enquired about the measures in place to ensure that the support facilities would be ready for use in 2022 to tie in with the commissioning of the third runway; whether the facilities under the proposed projects could meet the air traffic demand up to 2030 only; and whether in-situ expansion of such facilities was feasible in future if necessary.

30. USTH replied that the Administration was confident that the relevant facilities could meet the ICAO requirements when the full 3RS was commissioned in 2024. AAHK had long-term planning for the future development of HKIA to ensure that its operation and development could match future demand and challenges. GM/AAHK supplemented that the proposed facilities could meet future demand. While HKIA was expected to handle 607 000 flight movements per year by 2030, the design currently pursued could handle up to 620 000 flight movements per year and other associated facilities could also be expanded in future.

31. Mr AU Nok-hin enquired whether there were clauses on risks and responsibilities sharing in the agreement on the construction works entrusted to AAHK by the Administration. PD(1)/ArchSD replied that in addition to a provision reserved for inflationary adjustment, AAHK was required to make compensation in the event of works delay pursuant to the entrustment agreement.

Supervising works progress

32. Mr Tony TSE enquired about the measures the Administration had in place for effective supervision of the implementation of the proposed works by AAHK. He also enquired whether sufficient manpower was deployed to the Airport Expansion Project Coordination Office ("AEPCO").

33. USTH replied that the Administration required AAHK to make timely reports on problems encountered. ArchSD and AEPCO under the Transport and Housing Bureau would also closely monitor the construction progress of the government facilities. At present, a three-tier notification system had been established. The first tier was the regular meetings between the Permanent Secretary for Transport and Housing and the Chief Executive Officer of AAHK; the second tier was the monthly meetings between the Head of AEPCO and the Executive Director, Third Runway, of AAHK, and the third tier was the monthly work meetings between AEPCO and the engineering team of AAHK for the 3RS project. In addition to those tiers of meetings, special meetings were also held to follow up on the construction works and review the progress reports. As for manpower deployment, the Administration had sought funding approval of the Finance Committee ("FC") for manpower enhancement of AEPCO. The proposal, if approved, could facilitate the effective execution of the relevant tasks.

Air Traffic Management System and airspace issues

34. Mr Frankie YICK said that he supported the proposed projects. He opined that the government facilities in support of 3RS were indispensable for HKIA. Noting some Members' criticisms about the procurement of the Air Traffic Management System and the run-in period after its commissioning, he pointed out that those problems had been duly fixed. In 2017, CAD and AAHK were particularly efficient in dealing with the flight backlogs after typhoons, and the number of flights handled by the newly commissioned system was significantly increased as compared with that of the old system. Furthermore, the Administration had also explained many times the airspace issues related to 3RS. He urged the Administration to continue to take forward in full swing the development of 3RS and the associated government facilities, so that Hong Kong could maintain its status as a regional aviation hub and play its due role in the Guangdong-Hong Kong-Macao Greater Bay Area.

35. Mr Michael TIEN pointed out that he had proposed a motion at the Panel on Economic Development urging the Administration to provide information showing that the Airspace Plan could support the maximum capacity of 3RS prior to submitting the item to FC for approval. However, the motion was negatived. He said that a thorough grasp of the airspace data related to 3RS was the pre-requisite for giving support to the proposed projects. He noted that the governments of the Mainland, Hong Kong and Macau were conducting a technical analysis on 3RS, including fast time simulation and enhanced data exchange, to reaffirm that the maximum runway capacity of 102 air traffic movements ("ATMs") per hour could be achieved under 3RS operation given the airspace arrangement among the

three places. He enquired about the earliest time for the fast time simulation to obtain the preliminary results, and how the Administration could ensure that the maximum runway capacity of 102 ATMs per hour could be achieved under 3RS operation pending the preliminary results. He requested the Administration to provide information to confirm that the maximum runway capacity per hour under 3RS operation could still be achieved in case neighbouring airports were also undergoing expansion works and using the airspace concerned.

36. Deputy Secretary for Transport and Housing (Transport)⁴ replied that the governments of the three places were conducting fast time simulation (computer simulation using real data) to assist in designing the relevant facilities (e.g. flight paths). The Administration would determine the follow-up actions in the light of the preliminary results, which were expected to be available in 2019. The long-term target runway capacity of 102 ATMs per hour under 3RS operation was worked out on the basis of the agreement reached by the governments of the three places in 2007 which covered the use of airspace by five airports in the Pearl River Delta after their respective expansion. As such, it had been an established target for the Civil Aviation Administration of China, CAD of Hong Kong and the Civil Aviation Authority of Macau since 2007. Fast time simulation used real data for computer simulation in order to assist in designing the relevant facilities (e.g. flight paths). Mr Michael TIEN said that in the absence of relevant information to prove that the proposed government facilities could support the maximum capacity of 3RS, he would have no choice but to abstain from voting on all funding proposals submitted by the Administration to LegCo on 3RS development.

Facilities proposed to be constructed

37. Mr Holden CHOW said that as explained by the Administration, it was necessary to build a new ATC tower at a suitable location since the existing ATC tower was at a distance from the new 3RS and its view would be blocked by new facilities. He enquired whether the service scope of the proposed new ATC tower could cover other new runways, if any, to be built to meet future demand. Deputy Director-General of Civil Aviation (2) ("DDGCA(2)") replied that the proposed new ATC tower, which was in close proximity to the third runway and the northern portion of HKIA, could meet the demand of 3RS. As to whether the new ATC tower could meet the demand of other new runways, if any, to be built to meet future demand, it would depend on the location of such new runways and other factors.

38. Mr Jeremy TAM enquired whether automatic ground lighting system (Follow-the-Greens, or "FTG") would be installed at the taxiways of 3RS to

guide pilots in parking and taxiing planes. If so, AAHK might have to install some equipment in advance at the current stage in respect of 3RS development to interface with FTG, and consider whether the installation of FTG in future would require another round of excavation and installation works. DDGCA(2) replied that the Administration kept a close eye on the international development regarding the installation of FTG and would take into account the support for the automatic FTG system when making preparation for the procurement of air navigation services equipment. In designing the cable ducts, AAHK was also mindful of providing support for FTG.

Management, repair and maintenance of the proposed facilities

39. Dr Fernando CHEUNG enquired about the parties responsible for the management, repair and maintenance of the proposed government facilities, and whether the construction of such facilities was governed by the Buildings Ordinance (Cap. 123).

40. USTH replied that the proposed government facilities were all owned by the Government, which was also responsible for their repair and maintenance. The construction of those facilities was governed by the Buildings Ordinance (Cap. 123). Chief Electronics Engineer (Projects), Civil Aviation Department, replied that as in the case of the existing ATC tower, ArchSD would undertake the building repair and maintenance of the new ATC facilities while those of the associated electrical and mechanical facilities were expected to be taken care of by the Electrical and Mechanical Services Department ("EMSD"). AD/HKO replied that the repair and maintenance of the aviation weather services facilities were undertaken by ArchSD and EMSD. Assistant Director of Fire Services (Headquarters) responded that ArchSD undertook the building repair and maintenance of the new fire station at HKIA while EMSD was responsible for those of the electrical and mechanical facilities and fire service vehicles.

41. At the request of Dr Fernando CHEUNG, the Administration would provide supplementary information setting out the government departments to be held responsible for the respective repair and maintenance of the relevant ATC facilities, aviation weather services facilities and fire services facilities and the estimated costs incurred.

(Post-meeting note: The supplementary information provided by the Administration was circulated to members vide [LC Paper No. PWSC293/17-18\(01\)](#) on 12 July 2018.)

Other concerns

42. Mr WU Chi-wai said that the Panel on Economic Development had discussed the acquisition of air navigation services equipment, including the Ground Based Augmentation System ("GBAS") for navigation purpose, at its meeting on 28 May 2018. He enquired about the timetable for procuring the air navigation services equipment and submitting the relevant funding request, and was particularly concerned about the time when GBAS could commence operation, given that GBAS would help improve the re-scheduling and arrangement of flights and enhance the competitiveness of HKIA. He also noted that airlines must install the relevant equipment in their aircraft in order to support the use of GBAS.

43. DDGCA(2) replied that the Administration intended to submit as soon as possible the funding request to FC for procuring the air navigation services equipment, so that the procurement of GBAS could be arranged expeditiously. It would also discuss with airlines the installation of airborne equipment to support the use of GBAS, so as to maximize the cost-effectiveness of the system. At present, about 25% of the flights of the largest airline in Hong Kong could use GBAS, and the proportion was expected to rise to 70% to 80% in 2025. The Administration would continue to discuss with other airlines the early installation of airborne equipment for using GBAS.

44. Dr KWOK Ka-ki enquired about the Administration's progress in implementing the recommendations raised in the 2015 report of the Public Accounts Committee ("PAC") on the administration of ATC and related services. He also enquired about the new measures or systems the Administration would introduce when acquiring the new ATC facilities to ensure that incidents similar to the Air Traffic Management System procured from Raytheon ("the Raytheon incident") would not recur.

45. DDGCA(2) replied that the Administration had implemented all the recommendations raised in the PAC report published in June 2015 on the administration of ATC and related services, and had submitted the progress report to PAC. Learning a lesson from the Raytheon incident, the Administration would conduct more market surveys and on-site inspections, and participate in more major international conferences and exhibitions on air navigation services equipment when acquiring the new equipment, so as to better manage the tendering and procurement processes at the stages of tender preparation and evaluation to prevent the recurrence of similar incidents.

46. At the request of Dr KWOK Ka-ki, the Administration would provide supplementary information as follows:

- (a) the implementation of the recommendations raised in Chapter 4 titled "Administration of the Air Traffic Control and Related Services" of PAC Report No. 63 published in June 2015; and
- (b) the new measures or systems the Administration would introduce when conducting the tender exercise for acquiring the new ATC facilities to ensure that incidents similar to the Raytheon incident would not recur.

(Post-meeting note: The supplementary information provided by the Administration was circulated to members vide [LC Paper No. PWSC293/17-18\(01\)](#) on 12 July 2018.)

47. Ms Claudia MO referred to paragraph 3 of the supplementary information paper submitted by the Administration for the meeting of the Panel on Economic Development on 28 May 2018 (LC Paper No. [CB\(4\)1286/17-18\(01\)](#)), which stated that CAD would fully recover the cost of providing air navigation services by two methods, one of which was to collect en-route navigation charges ("ENCs") from airlines for aircraft overflying the Hong Kong Flight Information Region ("FIR") but not taking off/landing at HKIA. She enquired about the details of collecting ENCs; whether HKIA could stay competitive internationally with the collection of ENCs; and how the Hong Kong FIR was designated.

48. DDGCA(2) replied that the current rate of ENCs was \$4.2 per nautical mile flown, which was quite low when compared with those charged by neighbouring regions including the Mainland, Vietnam, Taiwan, Singapore, Australia and the Philippines for aircraft of similar sizes. FIR was a civil aviation terminology referring to the region of global airspace assigned by ICAO to different places for provision of air navigation services. CAD of Hong Kong was responsible for providing air navigation services for the airspace known as the Hong Kong FIR.

49. In response to Mr LEUNG Che-cheung's enquiry on the construction of a vehicular bridge to connect HKIA with Sha Lo Wan, USTH said that the Administration was discussing the issue with stakeholders.

Motions proposed under paragraph 32A of the Public Works Subcommittee Procedure

50. At 4:32 pm, the Chairman said that he had received one motion proposed by Mr CHAN Chi-chuen under paragraph 32A of the Public Works

Subcommittee Procedure. He said that the proposed motion was directly related to the agenda item. The wording of the motion was as follows:

(Translation)

"I move under paragraph 32A of the Public Works Subcommittee Procedure that 'as the Hong Kong Government has already forgone the interest income of more than \$4 billion by waiving the interest payment of the Airport Authority Hong Kong ("AAHK") during the construction of the Three-Runway System ("3RS") of the airport, and according to today's funding submission, another \$568 million has to be paid to AAHK for design, project management, insurance, construction support and airport on-cost of the air traffic control facilities, aviation weather services facilities and fire services facilities, which are indispensable facilities of 3RS that many members of the public consider should be self-financed by AAHK, this Subcommittee requests the Government to take out from the funding proposal the costs payable to AAHK for design, project management, insurance, construction support and airport on-cost of the air traffic control facilities, aviation weather services facilities and fire services facilities, so as to reduce the costs of the relevant projects and ensure the proper use of public money.'"

51. The Chairman put to vote the question that the motion be proceeded forthwith. At the request of members, the Chairman ordered a division and the division bell was rung for five minutes. Fifteen members voted for and 14 members voted against the question. No member abstained from voting. The votes of individual members were as follows:

For:

Mr Charles Peter MOK (Deputy Chairman)	Ms Claudia MO
Mr CHAN Chi-chuen	Dr KWOK Ka-ki
Dr Fernando CHEUNG	Dr Helena WONG
Mr Alvin YEUNG	Mr CHU Hoi-dick
Mr LAM Cheuk-ting	Ms Tanya CHAN
Dr CHENG Chung-tai	Mr KWONG Chun-yu
Mr Jeremy TAM	Mr Gary FAN
Mr AU Nok-hin	
(15 members)	

Against:

Mr Tommy CHEUNG	Ms Starry LEE
Mr CHAN Hak-kan	Mr Paul TSE
Mr Frankie YICK	Mr YIU Si-wing

Mr LEUNG Che-cheung
Dr Junius HO
Mr Holden CHOW
Mr LUK Chung-hung
(14 members)

Ms Alice MAK
Mr HO Kai-ming
Mr CHEUNG Kwok-kwan
Mr Vincent CHENG

Abstain:
(0 member)

52. The Chairman declared that the question was carried.

53. As no members indicated the wish to speak on the motion, the Chairman put the motion to vote. The Chairman ordered a division and the division bell was rung for five minutes. Fifteen members voted for and 16 members voted against the motion. No member abstained from voting. The votes of individual members were as follows:

For:

Mr Charles Peter MOK (Deputy Chairman)
Mr CHAN Chi-chuen
Dr Fernando CHEUNG
Mr Alvin YEUNG
Mr LAM Cheuk-ting
Dr CHENG Chung-tai
Mr Jeremy TAM
Mr AU Nok-hin
(15 members)

Ms Claudia MO
Dr KWOK Ka-ki
Dr Helena WONG
Mr CHU Hoi-dick
Ms Tanya CHAN
Mr KWONG Chun-yu
Mr Gary FAN

Against:

Mr Tommy CHEUNG
Mr CHAN Hak-kan
Mr Paul TSE
Mr YIU Si-wing
Ms Alice MAK
Mr HO Kai-ming
Mr CHEUNG Kwok-kwan
Mr Vincent CHENG
(16 members)

Ms Starry LEE
Dr Priscilla LEUNG
Mr Frankie YICK
Mr LEUNG Che-cheung
Dr Junius HO
Mr Holden CHOW
Mr LUK Chung-hung
Mr Tony TSE

Abstain:
(0 member)

54. The Chairman declared that the motion was negated.

Voting on PWSC(2018-19)25

55. There being no further motions proposed under paragraph 32A or further questions from members on the item, the Chairman put PWSC(2018-19)25 to vote. At the request of members, the Chairman ordered a division. Twenty-four members voted for and seven members voted against the proposal. No member abstained from voting. The votes of individual members were as follows:

For:

Mr Charles Peter MOK (Deputy Chairman)	Mr Tommy CHEUNG
Ms Starray LEE	Mr CHAN Hak-kan
Dr Priscilla LEUNG	Mr Paul TSE
Mr Frankie YICK	Mr YIU Si-wing
Mr LEUNG Che-cheung	Ms Alice MAK
Dr KWOK Ka-ki	Dr Helena WONG
Mr Alvin YEUNG	Dr Junius HO
Mr HO Kai-ming	Mr LAM Cheuk-ting
Mr Holden CHOW	Ms Tanya CHAN
Mr CHEUNG Kwok-kwan	Mr LUK Chung-hung
Mr KWONG Chun-yu	Mr Jeremy TAM
Mr Vincent CHENG	Mr Tony TSE

(24 members)

Against:

Ms Claudia MO	Mr CHAN Chi-chuen
Dr Fernando CHEUNG	Mr CHU Hoi-dick
Dr CHENG Chung-tai	Mr Gary FAN
Mr AU Nok-hin	

(7 members)

Abstain:

(0 member)

56. The Chairman declared that the item was endorsed by the Subcommittee. Mr Gary FAN requested that the item, i.e. PWSC(2018-19)25, be voted on separately at the relevant FC meeting.

Head 704 – Drainage**PWSC(2018-19)26 399DS Relocation of Sha Tin Sewage Treatment Works to caverns**

57. The Chairman advised that the proposal, i.e. PWSC(2018-19)26, sought to upgrade part of 399DS to Category A at an estimated cost of \$2,077.5 million in MOD prices for carrying out the first stage, i.e. site preparation and access tunnel construction, of the construction works for the relocation of Sha Tin Sewage Treatment Works ("STSTW") to caverns ("the proposed relocation project"). The Administration had consulted the Panel on Development on the proposed first stage of works ("Stage 1 Works") on 27 March 2018. Panel members supported the submission of the funding proposal to the Subcommittee for consideration. A report on the gist of the Panel's discussion was tabled at the meeting.

Scope, cost and schedule of works

58. Mr Gary FAN questioned the cost-effectiveness of relocating STSTW to caverns for the development of its existing site. Dr Helena WONG enquired about the respective cost estimates and completion dates of the five stages of the proposed relocation project, and whether in-situ redevelopment was more cost-effective. Mr CHAN Chi-chuen also enquired about the cost estimates of the remaining four stages of the relocation works and the arrangement of seeking funding approval.

59. Deputy Secretary for Development (Works)2 ("DS/DEV(W)2") said that in addition to the benefits generated, the Administration had also taken into account other factors in deciding the relocation of suitable government facilities to caverns. Commissioned in 1982, the facilities of STSTW would approach the end of their 50-year serviceable life in 2030. Regardless whether it would be relocated to caverns, redevelopment was necessary. The Administration, after study, considered it suitable to relocate STSTW to the nearby cavern complex at Nui Po Shan, A Kung Kok. This could release 28 hectares of land from its existing site for residential and other livelihood purposes and at the same time improve the environment of the current site and its surrounding area. According to a rough estimate, in-situ redevelopment would cost around \$10 billion in 2017 prices. As for the proposed relocation project, the ballpark estimate of the total construction cost based on provisional design was around \$27 billion, or around \$40 billion to \$50 billion in MOD prices. The last stage of demolition of the existing STSTW was expected to be completed in 2032. The Administration would seek funding approval for the construction works by stages. As only the detailed design for Stage 1 had been completed, the construction costs of the remaining four stages were just rough estimates.

60. At the request of Dr Helena WONG, the Administration would provide written information setting out the respective cost estimates and tentative completion dates of the five stages of works after the meeting.

(Post-meeting note: The supplementary information provided by the Administration was circulated to members vide [LC Paper No. PWSC292/17-18\(01\)](#) on 11 July 2018.)

61. Mr CHU Hoi-dick referred to the project of relocating the Diamond Hill Service Reservoirs ("DHSRs") to caverns. According to the Administration, the project could release about four hectares of land at an estimated cost of around \$3 billion in 2017 prices. In other words, a relocation cost of \$750 million would be incurred for every hectare of land being released from the existing site under the project. In this connection, Mr CHU enquired whether the Administration had set targets for the level of cost to be incurred in relocating government facilities to caverns, so as to assess the cost-effectiveness and worthiness of relocation projects.

62. DS/DEV(W)2 reiterated that the Administration would consider a number of factors (including cost-effectiveness) before implementing any measures to expand land resources. However, there were no rigid targets. In addition, the land development cost under the project to relocate DHSRs to caverns was \$80,000 per square metre, while that of STSTW was about \$90,000. The land development cost per square metre under the project of relocating STSTW to caverns, excluding the cost of around \$10 billion for in-situ redevelopment of STSTW as mentioned above, was lower than that of DHSRs. Director of Drainage Services ("DDS") supplemented that as the construction cost of STW was much higher than that of service reservoirs, the two were not comparable directly.

63. Mr CHU Hoi-dick suggested that to avoid confusion, the Administration should set out clearly in the information to be provided on project costs whether the cost estimates concerned were in constant or MOD prices.

64. DS/DEV(W)2 pointed out that cost estimates of different projects were presented in constant prices to facilitate comparison. In submitting the funding requests for works projects, the Administration currently adopted the general practice of setting out the cost estimates in MOD prices.

65. Mr AU Nok-hin enquired about the area to be occupied by STSTW after its relocation to caverns, and whether the caverns of Nui Po Shan had any spare space to accommodate the future expansion of STSTW.

66. DS/DEV(W)2 replied that STSTW would occupy an area of about 13 hectares after its relocation to caverns, and the proposed cavern complex at Nui Po Shan had enough room to accommodate the treatment works. Further developing the caverns of Nui Po Shan could be considered should STSTW need to be expanded in future.

Planning of the future land use of the existing site of Sha Tin Sewage Treatment Works

67. Dr Helena WONG enquired about the planned land use of the existing site vacated by the relocation of STSTW, including whether it would be used for public or private housing development to address the current shortage of housing land; if so, the public/private mix of the housing development ; and whether the site would be used for purposes other than housing development.

68. Dr Fernando CHEUNG requested the Administration to give an account of its planning for the site and the timetable of public consultation, and suggested that the Administration should stipulate certain preconditions when planning the future land use of the site, such as restricting its use to development of public housing and not luxury private properties.

69. DS/DEV(W)2 responded that the Administration had yet to finalize the land use of the existing site of STSTW to be vacated. The Administration would seek the funding approval of the Subcommittee and FC in due course for commencing a planning and engineering ("P&E") study and public consultation on the land use of the site. As the full completion of the proposed relocation project would take more than 10 years (which meant that the existing site would not be available for other development purposes until 2032 at the earliest), and the above P&E study would normally take three years to complete, the Administration considered that there was no urgency to commence the study at this stage.

70. DS/DEV(W)2 further said that the Administration had conducted a feasibility study on the proposed relocation project in 2012 which included a preliminary technical assessment on the feasibility of housing development at the existing site of STSTW. The assessment was based on a notional scheme that about 10 000 flats could be provided at the site. The Administration would further examine the scale and public/private mix of the housing development in the P&E study and the public consultation on the land use of the site in future.

71. Mr CHU Hoi-dick referred to the discussion paper ([PWSC\(2014-15\)2](#)) provided for the Subcommittee in 2014 seeking the funding approval for an

investigation and design study on the proposed relocation project, in which the Administration had stated that the existing site of STSTW would be used for purposes such as residential and commercial development. He queried why the Administration now advised that it had yet to finalize the land use of the site. Mr CHU and Dr Helena WONG requested the Administration to provide the following information: (a) the study report regarding the notional planning schemes of the future land use of the existing site of STSTW under the Administration's feasibility study on the proposed relocation project; and (b) the notional planning schemes of the future land use of the existing site of STSTW, including those related to the estimated number of about 10 000 flats that could be built, during the stage of feasibility study. Moreover, Dr WONG requested the Administration to provide information on whether it had considered in its planning of the future land use of the existing site of STSTW that housing development close to the western side of the site beside the stables of Sha Tin Racecourse should be avoided, so as to ensure an adequate human-animal separation.

(Post-meeting note: The supplementary information provided by the Administration was circulated to members vide [LC Paper No. PWSC292/17-18\(01\)](#) on 11 July 2018.)

72. Mr AU Nok-hin sought details of the aforementioned P&E study, including whether an engineering consultant would be engaged to conduct the study; the commencement and completion dates; and the cost required.

73. DS/DEV(W)2 replied that as mentioned before, the Administration considered that there was no urgency to commence the P&E study at this stage. Therefore, it did not formulate a specific timetable for conducting the study.

Proposed reclamation at Ma Liu Shui

74. Mr AU Nok-hin pointed out that in its supplementary information paper provided for the Panel on Development ([LC Paper No. CB\(1\)987/17-18\(01\)](#)), the Administration advised that the proposed relocation project and the proposed reclamation at Ma Liu Shui ("the proposed MLS reclamation") were two separate projects independent of each other. However, the Civil Engineering and Development Department ("CEDD") had completed another study earlier (i.e. the Study on Technical Issues Related to Potential Reclamation Site at Ma Liu Shui, or "the MLS Study") based on the co-development of the sites of STSTW and the proposed MLS reclamation in future. In this connection, Mr AU queried the contradiction, and doubted why the Administration commenced the proposed

relocation project before completing the consultation on the proposed MLS reclamation.

75. Mr Gary FAN said that he and many District Council members and residents of Sha Tin opposed the proposed MLS reclamation. Mr FAN also noticed that the proposed Stage 1 Works of STSTW, after its completion in 2022, would incur an additional annual recurrent expenditure of \$3 million, while the STSTW relocated to caverns would commence operation only in around 2030. In other words, the Administration would have to bear the additional recurrent expenditure arising from the proposed Stage 1 Works during the period between 2022 and 2030. In this connection, Mr FAN enquired whether the savings in recurrent expenditure to be achieved by postponing the proposed Stage 1 Works could offset the cost increase resulted from the deferral in works commencement. He held the view that the proposed Stage 1 Works should be put off until the consultation on the proposed MLS reclamation had been completed.

76. Mr CHAN Chi-chuen also enquired whether the progress of the proposed MLS reclamation would be affected if the proposed relocation project could not commence as scheduled, and vice versa.

77. Mr Alvin YEUNG said that members belonging to the Civic Party supported the proposed relocation project in principle, but had great reservations about the proposed MLS reclamation. He was also concerned about the implications of the housing structures on the ventilation of the area if the existing site of STSTW was used for housing development in future.

78. DS/DEV(W)2 stressed that the proposed relocation project and the proposed MLS reclamation were two separate projects independent of each other. From a technical perspective, the Administration could take forward either one of the projects, or implement the two projects either separately or together. Moreover, when conducting the MLS Study, CEDD had adopted a notional scheme under which the development of both the sites of STSTW and the proposed MLS reclamation would take place together. Nevertheless, it did not mean that the same notional scheme had to be adhered to in the future planning of the land use of the sites.

79. DDS further said that the five stages of works of the proposed relocation project were inter-related. The delayed commencement of the first stage would inevitably cause delay in the completion of the entire project and the project cost would also be driven up. As the rate of increase hinged on future inflation, it was difficult for the Administration to provide an accurate estimate at this stage.

80. Mr CHU Hoi-dick and Mr AU Nok-hin noted that the Administration had conducted a three-stage public engagement exercise on the proposed relocation project between 2012 and 2015. They requested the Administration to provide details on the public engagement exercise, including whether it had made known where the housing development at the existing site of STSTW would be located, and whether the public still thought that the proposed relocation project would improve the local landscape after being informed of the housing development at the site. They also considered that the Administration should have informed the public of the possible co-development of the sites of STSTW and the proposed MLS reclamation during its public consultation on the proposed relocation project, so that the public could learn the relevant information before deciding whether they should support the project.

81. DDS explained that enquiries on the future land use of the existing site of STSTW were received during the three-stage public engagement exercise on the proposed relocation project. However, as the relevant P&E study had not yet commenced during the consultation, the Administration was unable to confirm the future land use of the site. Besides, quite a few members of the public held the view despite the many green features provided for the existing STSTW, the relocation of such an obnoxious facility to caverns could still be conducive to improving the local landscape.

Environmental and traffic impacts of the proposed works

82. Mr AU Nok-hin relayed the concerns of green groups about the possible environmental implications arising from the proposed relocation project involving cavern excavation which would generate a lot of construction waste that could hardly be reused.

83. Mr CHAN Chi-chuen enquired whether the construction waste generated from the proposed Stage 1 Works would be transported to public fill reception facilities ("PFRFs") and landfills via the major trunk roads in Sha Tin, such as Tate's Cairn Highway, and about the average and maximum truck trips to/from the project site per day for transportation of those construction waste. Mr CHAN also enquired about the volume and disposal method of the construction waste expected to be generated from the remaining four stages of the proposed relocation project.

84. DDS and Chief Engineer (Sewerage Projects), Drainage Services Department ("CE(SP)/DSD"), replied that among the construction waste to be generated by the proposed Stage 1 Works, 2% would be reused on site, 31.1% would be reused at other construction sites (e.g. Lam Tei Quarries), 65% would be delivered to PFRFs for subsequent reuse, and 1.9% would be

disposed of at landfills. The construction waste would be transported to PFRFs and landfills via a temporary bridge to be built over and across A Kung Kok Street during the construction period, and via Ma On Shan Road. If necessary, the trucks carrying the construction waste might use Tate's Cairn Highway. The Administration would provide the information requested by Mr CHAN in writing after the meeting.

(Post-meeting note: The written response provided by the Administration was circulated to members vide [LC Paper No. PWSC292/17-18\(01\)](#) on 11 July 2018.)

85. Mr Alvin YEUNG was concerned about the potential implications of the operation of STSTW on the environment and residents in the vicinity after its relocation to the caverns of Nui Po Shan. Mr HO Kai-ming pointed out that there was no treated water supply in Mui Tsz Lam Village near Nui Po Shan. He urged the Administration to take the opportunity of the proposed Stage 1 Works to lay fresh water mains connected to the village. Mr HO also noted that a main access tunnel would be built under the proposed Stage 1 Works. He enquired whether the Administration had assessed the potential implications of the intensity of shock generated by the tunnel blasting works on residents nearby.

86. DS/DEV(W)2 responded that the proposed Stage 1 Works did not include laying of fresh water mains connected to Mui Tsz Lam Village. However, the Water Supplies Department was working on the detailed design of the relevant water mains, and would consult the villagers of Mui Tsz Lam Village in due course. DDS and CE(SP)/DSD added that the Administration had assessed the implications of the intensity of shock generated by the tunnel blasting works associated with the proposed Stage 1 Works on residents nearby. The assessment results showed that while the allowable vibration limits for general and sensitive structures (such as historic buildings) were 25 and 13 millimetres/second ("mm/s") respectively, the predicted vibrations of structures near the cavern complex would be far lower than 13 mm/s or 25 mm/s during the blasting works. In addition, the contractor undertaking the blasting works was required to apply to CEDD for a licence. The Administration would also monitor during construction if the intensity of shock generated by the tunnel blasting works was kept below the acceptable level.

87. Mr Gary FAN noticed that the existing emergency outfall of STSTW would continue to be utilized after the relocation of STSTW to caverns. Mr FAN enquired about the circumstances under which STSTW would utilize the emergency outfall; the serviceable life of the outfall; and whether the Administration had assessed the implications of the operation of the

emergency outfall on the residents if the existing site of STSTW would be used for housing development in future.

88. DDS said that treated sewage would be discharged by the emergency outfall in the event of mechanical failure of STSTW when the treated sewage could not be discharged to Kai Tak River via the pipework normally used. Besides, the Administration had conducted an environmental impact assessment for the proposed relocation project, which covered the implications of the emergency outfall operation on residents if the existing site of STSTW was used for housing development in future. The assessment findings showed that the impacts were at an acceptable level.

Voting on PWSC(2018-19)26

89. There being no further questions from members on the item, the Chairman put PWSC(2018-19)26 to vote. At the request of members, the Chairman ordered a division. Seventeen members voted for the proposal, and no member voted against it. Eight members abstained from voting. The votes of individual members were as follows:

For:

Mr Charles Peter MOK (Deputy Chairman)	Mr Tommy CHEUNG
Dr Priscilla LEUNG	Mr Michael TIEN
Mr Frankie YICK	Mr YIU Si-wing
Mr CHAN Han-pan	Ms Alice MAK
Mr Alvin YEUNG	Dr Junius HO
Mr HO Kai-ming	Mr Holden CHOW
Mr LUK Chung-hung	Mr LAU Kwok-fan
Mr Jeremy TAM	Mr Vincent CHENG
Mr Tony TSE	
(17 members)	

Against:

(0 member)

Abstain:

Mr CHAN Chi-chuen	Dr Fernando CHEUNG
Dr Helena WONG	Mr CHU Hoi-dick
Mr HUI Chi-fung	Dr CHENG Chung-tai
Mr Gary FAN	Mr AU Nok-hin
(8 members)	

90. The Chairman declared that the item was endorsed by the Subcommittee. Mr CHU Hoi-dick, Dr Helena WONG and Mr Gary FAN

requested that the item, i.e. PWSC(2018-19)26, be voted on separately at the relevant FC meeting.

91. The meeting ended at 6:14 pm.

Council Business Division 1
Legislative Council Secretariat
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