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

**Minutes of the 27th meeting
held in Conference Room 1 of the Legislative Council Complex
on Friday, 31 May 2019, at 8:30 am**

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 Claudia MO

Hon Michael TIEN Puk-sun, BBS, JP

Hon Frankie YICK Chi-ming, SBS, JP

Hon WU Chi-wai, MH

Hon MA Fung-kwok, SBS, JP

Hon CHAN Chi-chuen

Hon CHAN Han-pan, BBS, JP

Hon LEUNG Che-cheung, SBS, MH, JP

Hon Alice MAK Mei-kuen, BBS, JP

Dr Hon KWOK Ka-ki

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 Holden CHOW Ho-ding
Hon Wilson OR Chong-shing, MH
Hon CHEUNG Kwok-kwan, JP
Hon HUI Chi-fung
Hon LUK Chung-hung, JP
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
Hon CHAN Hoi-yan

Member attending:

Hon SHIU Ka-fai

Member absent:

Hon Tanya CHAN

Public officers attending:

Mr Raistlin LAU Chun, JP	Deputy Secretary for Financial Services and the Treasury (Treasury) ³
Mr LAM Sai-hung, JP	Permanent Secretary for Development (Works)
Ms Bernadette LINN, JP	Permanent Secretary for Development (Planning and Lands)

Mr Elvis AU Wai-kwong, JP	Deputy Director of Environmental Protection (1)
Mr CHIU Kwong-kin	Assistant Secretary for Financial Services and the Treasury (Treasury) (Works) ²
Mr Thomas CHAN Tak-yeung	Principal Assistant Secretary for Development (Works) ³
Mr WONG Chung-leung, JP	Director of Water Supplies
Mr Wilson PANG Wai-shing	Assistant Director of Water Supplies (New Works)
Mr TAM Wai-kwong	Chief Engineer (Project Management) Water Supplies Department
Mr LO Yu-bun	Chief Engineer (Design) Water Supplies Department
Dr CHUI Tak-yi, JP	Under Secretary for Food and Health
Mr Chris FUNG Pan-chung	Deputy Secretary for Food and Health (Health) ³ (Acting)
Miss Sharon KO Yee-wai	Principal Assistant Secretary for Education (Higher Education)
Miss Winnie WONG Ming-wai	Deputy Secretary-General (1) University Grants Committee Secretariat
Mr Allen LEUNG Kin-tak	Chief Technical Adviser (Subvented Projects) Architectural Services Department

Attendance by invitation:

Mr FUNG Siu-man	Director of Campus Development Campus Development Office The Chinese University of Hong Kong
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Ms Nowell WONG Chak-hung	Director Resources Management and Development Planning Office The Chinese University of Hong Kong
Professor CHAN Ying-shing	Associate Dean (Development and Infrastructure) LKS Faculty of Medicine The University of Hong Kong
Mr Eddie YIU Kin-sang	Senior Assistant Director Estates Office The University of Hong Kong
Mr Ernest YUEN Chung-ming	Head of IT & Technology LKS Faculty of Medicine The University of Hong Kong

Clerk in attendance:

Mr Daniel SIN	Chief Council Secretary (1)6
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Staff in attendance:

Ms Mandy LI	Senior Council Secretary (1)6
Mr Patrick CHOI	Council Secretary (1)6
Ms Alice CHEUNG	Senior Legislative Assistant (1)1
Miss Yolanda CHEUK	Legislative Assistant (1)6
Ms Christy YAU	Legislative Assistant (1)8

Action

The Chairman advised that there were nine papers for discussion on the agenda for the meeting. Items 1 and 3 to 8 were funding proposals which had yet been deliberated by the Subcommittee at its previous meeting, while items 2 and 9 were new funding proposals submitted by the Administration. He reminded members that in accordance with Rule 83A of the Rules of Procedure ("RoP") of the Legislative Council, 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.

Meeting arrangements for dealing with the motion of no confidence in the Chairman

2. Dr KWOK Ka-ki pointed out that he had sent a letter ([LC Paper No. PWSC237/18-19\(01\)](#)) to the Subcommittee Chairman on 29 May requesting the Chairman to convene a special meeting for dealing with his motion of no confidence in the Chairman. He said that the proposal to develop artificial islands in the Central Waters would incur enormous works costs and had aroused widespread social concern. Nevertheless, he had asked questions for only four times regarding the funding proposal on studies related to artificial islands in the Central Waters (i.e. [PWSC\(2019-20\)5](#)), whereas some members had done so for only once, and some had not asked any questions at all. He expressed discontent about the Chairman's arrangements. He recalled that during the Subcommittee's discussion on the funding proposal concerning "Organic Resources Recovery Centre Phase 2" (i.e. [PWSC\(2018-19\)32](#)), the Chairman allowed some members to ask questions for as many as 14 times. He criticized the Chairman for according unequal treatment in his decision. Dr KWOK requested the Chairman to convene a special meeting as soon as possible for dealing with his motion of no confidence in the Chairman.

3. The Chairman advised that he had instructed the Secretariat to circulate Dr KWOK Ka-ki's letter to members for their information. Besides, the Secretariat would consult members on the arrangements for a special meeting, so that a suitable and feasible timeslot could be arranged for holding a special meeting to deal with Dr KWOK Ka-ki's motion. Therefore, Dr KWOK Ka-ki's motion of no confidence in the Chairman would not be dealt with by the Subcommittee at this meeting.

4. Mr Gary FAN agreed to the motion of no confidence in the Chairman proposed by Dr KWOK Ka-ki. He criticized the Chairman and took the view that it was inappropriate for him to deprive members of the time to raise questions about studies related to artificial islands in the Central Waters. The Chairman advised that the meeting on 25 May was already the third meeting for members to discuss the funding proposal concerning studies related to artificial islands in the Central Waters.

5. Mr Gary FAN was discontented with the Chairman convening additional meetings, in response to Administration's request, to discuss the funding proposals while refusing to hold a special meeting for dealing with the motion of no confidence in the Chairman proposed by Dr KWOK Ka-ki. Mr FAN sought the Chairman's elaboration on the justifications for according priority to convening additional meetings to discuss the relevant agenda item.

Dr Fernando CHEUNG shared a similar view that the Subcommittee should deal with Dr KWOK Ka-ki's motion of no confidence before the Administration submitted the relevant agenda item to the Finance Committee ("FC") for scrutiny.

6. The Chairman said that when considering the relevant arrangements for handling the matter, he had referred to the principles and practices adopted by the House Committee and FC for dealing with the relevant matter, and given due regard to the outstanding items on the agenda. Having considered the relevant factors, he was of the view that the Subcommittee should accord priorities to the funding proposals put forward by the Government.

Head 709 – Water

PWSC(2019-20)10	181WF	In-situ reprovisioning of Sha Tin water treatment works (South Works) – main works
	353WF	Uprating of Sheung Wong Yi Au fresh water supply system
	368WF	Improvement to Dongjiang water mains P4 at Sheung Shui and Fanling
	196WC	Implementation of Water Intelligent Network

7. The Chairman advised that the proposal (i.e. [PWSC\(2019-20\)10](#)) sought to upgrade the remaining part of 181WF, part of 353WF, 368WF and the remaining part of 196WC to Category A at an estimated cost of \$7,019.9 million, \$207 million, \$1,071.4 million and \$1,236 million respectively in money-of-the-day ("MOD") prices. On 26 March 2019, the Government consulted the Panel on Development on the proposed works. Members supported the submission of the funding proposal to the Subcommittee for consideration. A report on the gist of the Panel's discussions was tabled at the meeting.

181WF – In-situ reprovisioning of Sha Tin water treatment works (South Works) – main works

Construction costs

8. Dr KWOK Ka-ki considered that the estimated cost of \$7,019.9 million for the proposed works was exorbitant. He enquired about the latest works cost for expanding a water treatment work ("WTW") of a comparable size and the per-cubic-metre water treatment cost in the WTW

concerned. Mr CHU Hoi-dick raised a similar question. Dr KWOK also noted that the civil works involving the administration building under the proposed works would incur an estimated cost of \$489.7 million. He questioned whether the relevant construction cost was cost-effective.

9. Principal Assistant Secretary for Development (Works)³ ("PAS(W)3/DEVB") replied that in January 2013, the bureau obtained FC's funding approval for conducting "334WF – Expansion of Tai Po water treatment works and ancillary raw water and fresh water transfer facilities – part 2 works" to increase the output capacity from 400 million litres per day to 800 million litres per day, and that the estimated cost was \$6,176.7 million in MOD prices. As far as the estimated expenditure for the 181WF project was concerned, the bureau determined the relevant estimate with reference to the works costs of 334WF and "358WF – In-situ reprovisioning of Sha Tin water treatment works (South Works) – advance works". Under the proposed works, the South Works would be demolished and redeveloped, and its treatment capacity after redevelopment would be 550 000 cu m per day and higher than that of the expanded part of Tai Po WTW. Therefore, the 181WF project would also incur a higher estimated expenditure compared to the 334WF project.

Water demand

10. Mr Tony TSE noted that the proposed works sought to uprate the treatment capacity of the South Works of Sha Tin WTW from 360 000 cu m per day to 550 000 cu m per day to meet the increased water demand arising from new housing developments. He enquired about the Administration's projection of the number of residents whose demands could be met by the additional treatment capacity to be generated by the proposed works.

11. Chief Engineer (Project Management), Water Supplies Department, said that Sha Tin WTW and Tai Po WTW were the two major WTWs in Hong Kong providing fresh water supply to a large part of Kowloon, the Central and Western District on Hong Kong Island, and part of the New Territories, currently serving a total population of around 2.6 million. As it was envisaged that the population within the combined supply zone of Sha Tin WTW and Tai Po WTW would reach 3.4 million in 2036, it was important to ensure that the total treatment capacity of the two WTWs would be adequate to meet the increased water demand arising from the old and new developments within the combined supply zone.

Planned installation of chlorine generation plant

12. Mr Gary FAN pointed out that in October 2017, FC approved the funding proposal for "363WF – Upgrading of disinfection facilities in water treatment works" concerning the supply and installation of chlorine generation plant ("CGP") in 11 major WTWs and Tai Lam Chung No. 2 Chlorination Station, with a view to eliminating the risk of chlorine gas leakage associated with the transportation and storage of liquid chlorine, and hence resulting in enhancement of the safety of the disinfection operation. He enquired why the proposed works scope did not cover CGP installation for Sha Tin WTW and why the Administration's paper did not mention the progress of the CGP installation plan for major WTWs in Hong Kong.

13. PAS(W)3/DEVB and Director of Water Supplies ("DWS") explained that the works scope of "363WF – Upgrading of disinfection facilities in water treatment works" already covered CGP installation for Sha Tin WTW to cope with the quantity of chlorine gas used at Sha Tin WTW (including the North Works and the South Works after the latter's in-situ reprovisioning).

14. Mr Gary FAN and Mr CHU Hoi-dick asked when the Administration would complete the CGP installation plan for major WTWs over the territory. Mr CHU further enquired whether the Administration would conduct reprovisioning works for the North Works of Sha Tin WTW. PAS(W)3/DEVB replied that before completing the CGP installation plan, the Administration would import chlorine in liquid form from the Mainland, which would be transported to various existing WTWs for storage and use for disinfection of drinking water. PAS(W)3/DEVB and DWS advised that the CGP installation plan for WTWs had already commenced and was expected to complete in 2021.

15. Mr CHU Hoi-dick enquired about the Administration's projection of the number of WTWs requiring reprovisioning in the future, especially those works with an estimated cost of \$1 billion or above. DWS said that at present, the Water Supplies Department ("WSD") had no plan to conduct in-situ reprovisioning works for other WTWs, and that it had only planned to conduct expansion works for certain WTWs.

353WF – Upgrading of Sheung Wong Yi Au fresh water supply system

16. Mr CHU Hoi-dick noted that the proposed works scope included the laying of associated fresh water mains with an approximate total length of 5.5 km. He enquired whether the fresh water mains proposed to be laid were newly-built water mains, whether the construction works involving the associated fresh water mains would have traffic implications on Tai Po Road,

and whether the Administration intended to lay the associated fresh water mains at pavement sections.

17. DWS advised that Tai Po Road was currently equipped with water mains to supply water to users along Tai Po Road. Due to housing developments in Tai Po South area, it was necessary for the Administration to uprate the existing Ha Wong Yi Au fresh water pumping station and lay water mains to meet the increase in water demand. Chief Engineer (Design), Water Supplies Department ("CE(D)/WSD"), added that WSD would conduct the water main laying works at Tai Po Road, Shan Tong Road and Shan Yin Road. The department would conduct a traffic review for the proposed works before commencement of the construction works and would submit temporary traffic arrangement for approval by relevant authorities (such as the Transport Department ("TD")). In reply to a further enquiry from Mr CHU Hoi-dick, CE(D)/WSD said that the proposed works would take around three years for completion.

368WF – Improvement to Dongjiang water mains P4 at Sheung Shui and Fanling

18. Mr CHU Hoi-dick noted the Administration's estimation that about 90% of the water mains under the proposed project would be laid by conventional method (meaning that pipelines would be laid in trench, and the road must be opened up for the laying of pipelines), and around 10% of the water mains would be laid by the trenchless method. He enquired if there would be no traffic implication on road sections where pipelines would be laid by conventional method.

19. CE(D)/WSD replied that the proposed works scope comprised the replacement of about 5 km of aged glass reinforced plastic ("GRP") pipes of the section of Dongjiang ("DJ") water mains P4. As new pipelines of around 4.5 km to be laid by conventional method were mostly located at the roadside or the hard shoulder, no closure of traffic lanes would be required. WSD would carry out a traffic review at the construction stage to revisit the temporary traffic arrangements recommended at the design stage and consult TD before implementing the relevant temporary traffic arrangements.

20. Referring to Annex 1 to Enclosure 3 to [PWSC\(2019-20\)10](#), Mr CHU Hoi-dick enquired whether the Administration had planned to replace the existing DJ water mains P4 after completing the proposed works. DWS advised that the section of DJ water mains P4 marked by red dashed lines in Annex 1 to Enclosure 3 was GRP pipes that had been laid more than 30 years ago, and they had significant risk of bursts as they were approaching the end of their service life and were in a deteriorated condition. Therefore,

WSD needed to replace the section of the GRP pipes to ensure the reliability. As regards the section of DJ water mains P4 marked by black solid lines in Annex 1 to Enclosure 3, they were steel pipes in a satisfactory condition and there was no need for any replacement at this stage. In reply to a further enquiry from Mr CHU Hoi-dick, DWS advised that the department would replace aged GRP pipes with steel pipes which had a protective layer, and the expected service life of water pipes after replacement would be as long as 40 to 50 years.

196WC – Implementation of Water Intelligent Network

21. Mr Tony TSE enquired whether the Administration had proposed to enhance the remaining construction of the Water Intelligent Network ("WIN") in light of the unsatisfactory operational effectiveness of the District Metering Areas ("DMAs") established under WIN, and why the Administration intended to divide those DMAs that had been or would be established into smaller DMAs.

22. PAS(W)3/DEVB replied that WSD was progressively establishing WIN with the setting up of DMAs in the fresh water distribution network ("FWDN"). The Administration's target was to set up 2 400 DMAs in FWDN of Hong Kong. Some 1 760 DMAs had been established or were being established under other projects. The Administration proposed to upgrade the remaining part of the proposed works to Category A for the establishment of the remaining about 640 DMAs under WIN.

23. DWS added that under WIN, FWDN would be divided into discrete DMAs of manageable sizes with monitoring and sensing equipment installed in each DMA. Based on operational experience, dividing FWDN into smaller DMAs could help enhance effectiveness and efficiency in monitoring FWDN's condition.

24. In reply to a further enquiry from Mr Tony TSE, DWS said that it was the department considered that the number of DMAs to be set up in FWDN of Hong Kong, i.e. 2 400, was appropriate. Besides, the department would conduct a review of WIN's operation in a timely manner and adjust the number of DMAs where necessary.

Voting on PWSC(2019-20)10

25. There being no further questions from members on the item, the Chairman put [PWSC\(2019-20\)10](#) to vote. The Chairman instructed the Clerk to the Subcommittee to ring the division bell, and the division bell was rung for five minutes. Upon a division, 19 members voted for and no

member voted against the proposal. Two members abstained from voting. The votes of individual members were as follows:

For:

Mr Charles Peter MOK (Deputy Chairman)	Mr Tommy CHEUNG
Ms Starry LEE	Dr Priscilla LEUNG
Mr Frankie YICK	Mr LEUNG Che-cheung
Ms Alice MAK	Dr KWOK Ka-ki
Dr Helena WONG	Mr HO Kai-ming
Mr Holden CHOW	Mr Wilson OR
Mr CHEUNG Kwok-kwan	Mr LUK Chung-hung
Mr LAU Kwok-fan	Mr Gary FAN
Mr Vincent CHENG	Mr Tony TSE
Ms CHAN Hoi-yan	
(19 members)	

Against:

(0 member)

Abstained:

Mr CHAN Chi-chuen	Mr CHU Hoi-dick
(2 members)	

26. The Chairman declared that the item was endorsed by the Subcommittee. The Chairman consulted members on whether the item would require separate voting at the relevant FC meeting. Dr KWOK Ka-ki requested that the item (i.e. [PWSC\(2019-20\)10](#)) be voted on separately at the relevant FC meeting.

Head 708 – Capital Subventions and Major Systems and Equipment

PWSC(2019-20)13	61EF	Construction of a teaching-research complex in Tai Po Area 39
	65EG	Enhancement of facilities cum medical campus development

27. The Chairman advised that the proposal (i.e. [PWSC\(2019-20\)13](#)) sought to upgrade part of 61EF and part of 65EG to Category A at estimated costs of \$59.7 million and \$194.3 million in MOD prices respectively, with a view to upgrading and increasing the healthcare teaching facilities of The Chinese University of Hong Kong ("CUHK") and the University of Hong Kong ("HKU"). On 21 January 2019, the Government consulted the Panel on Health Services and the Panel on Education on the proposed works. Members supported the submission of the two funding proposals to the

Subcommittee for consideration. The gist of the Panels' discussions were tabled at the meeting.

28. Mr Abraham SHEK declared that he was a member of the HKU Court. Mr Tommy CHEUNG, Mr HO Kai-ming and Mr LAU Kwok-fan declared that they were members of the CUHK Council. Mr AU Nok-hin declared that he was a teaching staff of CUHK.

The two proposed projects

Expansion needs

29. The Deputy Chairman was concerned that while the Government had significantly increased the number of healthcare training places, the medical faculties and healthcare-related departments of CUHK and HKU now faced the problem of inadequate teaching space. He enquired how CUHK and HKU could strike a balance between the provision of space for teaching and that for research, what the respective proportions of teaching and research space distribution would be, and how the universities could ensure that the number of their healthcare teaching facilities (such as classrooms and research laboratories) could meet students' needs.

30. Under Secretary for Food and Health ("USFH") asserted that in order to meet the short-to-medium-term expansion needs, CUHK and HKU needed to upgrade and increase their healthcare-relevant teaching facilities with a view to coping with the additional University Grants Committee ("UGC")-funded healthcare training places as specified by the Government. Associate Dean (Development and Infrastructure), LKS Faculty of Medicine, The University of Hong Kong ("AD(D&I)/LKSFM/HKU"), advised that the 65EG project was mainly technology-enabled measures for teaching including telepresence solution and Augmented Reality ("AR")/Virtual Reality ("VR") implementation, and conversion works at existing premises. On the other hand, HKU would continue to utilize its existing space for research purpose. Director, Resources Management and Development Planning Office, The Chinese University of Hong Kong ("D/RMDPO/CUHK"), said that after the construction of a teaching-research complex ("T-RC") in Tai Po Area 39 was completed, the respective proportions of its teaching space and research space in the total net operating floor area of the entire T-RC would be around 32% and 40%.

31. The Deputy Chairman further enquired whether CUHK and HKU expected that the upgrading and increase of healthcare teaching facilities could cope with students' learning needs in the long run, and whether the universities would commence any expansion plan for the next stage based on

educational and research needs. D/RMDPO/CUHK replied that CUHK would undertake short-, medium- and long-term projects, including (a) renovation of facilities in Choh-Ming LI Basic Medical Sciences Building ("BMSB") (short-term project); (b) construction of T-RC in Tai Po Area 39 (medium-term project); and (c) construction of a multi-purpose building for CUHK's Faculty of Medicine and student residence around the Prince of Wales Hospital ("PWH") (long-term project). AD(D&I)/LKSFH/HKU advised that HKU would likewise undertake short-, medium- and long-term projects to improve its teaching facilities. 65EG, for instance, was a short-term project, whereas the redevelopment of Patrick Manson Building at No. 7 Sassoon Road and the construction of a university corridor at Sassoon Road Campus was a long-term project.

32. Ms Alice MAK enquired whether the proposed projects could meet the demand resulting from UGC's increase in the number of subsidized healthcare training places as it would take several years to complete those medium-term projects. She also enquired how the universities could ensure adequate clinical placement and learning opportunities for students before upgrading and increasing their healthcare teaching facilities.

33. The Chairman pointed out that while members of the Panel on Health Services and the Panel on Education supported the implementation of the proposed projects, they questioned why the Administration had failed in the early submission of the funding proposals for those projects. Ms Alice MAK urged the Administration to submit on a priority basis those funding proposals for projects geared to the upgrading of universities' healthcare-relevant teaching facilities (including The Prince Philip Dental Hospital) and for their expansion plans, so as to avoid any hindrance to their abilities to enhance their healthcare personnel training due to hardware constraints.

34. Ms CHAN Hoi-yan pointed out that the Administration had significantly increased the number of UGC-funded training places for medical students from 250 in the 2005-2006 academic year to 470 in the 2016-2017 academic year. As the medical faculties of the two universities were plagued by the problem of inadequate space, she considered that in the future, the Administration should expeditiously submit the funding proposals concerning the expansion of their medical school buildings for the timely improvement of the teaching facilities in the relevant universities.

35. USFH advised that CUHK and HKU would undertake various short-, medium- and long-term projects to renovate their existing teaching facilities and develop new buildings. Director of Campus Development, Campus Development Office, The Chinese University of Hong Kong

("DCD/CDO/CUHK"), said that the renovation works for certain facilities in BMSB (including the expansion of anatomy dissecting laboratories) would be completed in September 2019.

36. Mr Holden CHOW noted that the respective estimated costs of the two proposed projects were \$59.7 million and \$194.3 million. He requested the Administration to explain how the two proposed projects differed from each other in nature, leading to an obvious discrepancy in their estimated costs.

37. DCD/CDO/CUHK advised that CUHK proposed to carry out a technical services consultancy, site investigation works and minor studies, as well as a quantity surveying consultancy for T-RC in Tai Po Area 39. The estimated expenditure for the consultancy study accounted for around 2% of the project cost. Senior Assistant Director, Estates Office, The University of Hong Kong ("SAD/EO/HKU"), advised that the proposed project recommended by HKU was extensive in scope, covering the virtual connection of five teaching buildings involving 56 teaching venues, so the estimated project cost was higher.

Research laboratories

38. Ms CHAN Hoi-yan enquired whether the proposed project would include the construction of biosafety level 3 ("P3") animal laboratories that were qualified for laboratory tests on highly dangerous viruses such as the SARS virus, so that research on infectious diseases could be undertaken. D/RMDPO/CUHK replied that laboratories with high-end equipment were essential to the conduct of research on medical teaching and experiments. The proposed project of CUHK would include a study on the equipment that was essential to high-end laboratories for such medical purposes as neurosurgery, regenerative medicine and minimally invasive surgery.

39. In reply to a further enquiry from Ms CHAN Hoi-yan, D/RMDPO/CUHK said that biosafety laboratories could be classified into different levels with stringent requirements, and the university would draw reference to the relevant specification requirements in setting up such laboratories. AD(D&I)/LKSFH/HKU advised that HKU's Faculty of Medicine had two P3 animal laboratories, one in the Laboratory Block on Sassoon Road, and the other in Queen Mary Hospital ("QMH").

61EF – Construction of a teaching-research complex in Tai Po Area 39

40. Dr Helena WONG said that she welcomed the funding proposal as it could improve the research facilities of the university. She enquired

whether the proposed T-RC could be opened to students from other academic departments (such as the sciences and nursing departments) in addition to medical students, and how many sizeable auditoriums would be set up in T-RC.

41. D/RMDPO/CUHK replied that T-RC would provide CUHK's Faculty of Medicine with additional teaching and research facilities, and such facilities would be open to medical and nursing students. The proposed T-RC would be equipped with three auditoriums that could serve as venues for international academic conferences and classrooms for students.

42. Mr HO Kai-ming expressed support for the proposed project which would train up more healthcare personnel for providing services to Hong Kong people. Mr HO enquired when the Administration would upgrade the project of constructing a multi-purpose building and student residence around PWH to Category A as a means of meeting the needs of CUHK's medical students during their clinical placement at PWH.

43. Deputy Secretary for Food and Health (Health)3 (Acting) ("DS(H)3/FHB(Atg)") advised that the bureau would submit funding proposals to FC in batches during the period from 2021-2022 and 2024-2025 having regard to the preparations for the project, so that the works could expeditiously commence in phases.

44. Mr HO Kai-ming was concerned about the remote location of Tai Po Area 39 where the proposed T-RC was planned to be built. He enquired about the ancillary facilities in the vicinity of the proposed T-RC. In view of the long distance between T-RC and BMSB, he enquired how the operation of T-RC and BMSB could meet the learning and resting needs of medical students, so as to alleviate the need for students to travel for a long time between the two medical buildings.

45. Mr AU Nok-hin also expressed concern about facility shortage in Tai Po Area 39. Noting from the Government's paper that the proposed T-RC would be equipped with recreational facilities, he sought details of the relevant recreational facilities, including whether any catering facilities or any shared facilities for other students would be provided. He also urged CUHK to enhance transport connection between Area 39 and CUHK's campus.

46. DCD/CDO/CUHK advised that even though Tai Po Area 39 was not located in the core area of CUHK's campus, the area was still close to the Hong Kong Science Park. In fact, CUHK had taken forward a number of projects in Area 39 and its nearby regions, including the construction of the

Lo Kwee-Seong Integrated Biomedical Sciences Building in 2012, the provision of around 300 hostel places in CW Chu College completed in 2013, and the provision of around 700 hostel places in the postgraduate student hostel, which had been completed in 2018. He pointed out that the construction of T-RC in Area 39 would help generating a synergistic effect in the region. The aforementioned college and postgraduate student hostel were equipped with canteens, multi-purpose activity space, student activity centres, etc. The university would consider members' views and refine the design of the proposed T-RC. In terms of transportation for Area 39, the university had provided shuttle bus services between Area 39, MTRCL's University Station and the university campus. It was convenient for students to travel between Area 39, the MTR station concerned and BMSB.

47. Dr KWOK Ka-ki expressed support for the two proposed projects. He was concerned that while the number of medical students in CUHK had increased year after year, the healthcare, education and student accommodation facilities of CUHK would be insufficient to meet students' needs. He questioned why the Administration did not kick off the construction of a multi-purpose building and student residence around PWH in advance but gave priority to constructing T-RC in Area 39. He enquired about how the construction of T-RC would benefit teaching and learning.

48. D/RMDPO/CUHK stressed that after the construction of T-RC was completed, teaching space would increase by 32%, and in addition to providing further teaching and research spaces, students might share space, facilities and equipment in T-RC. As for CUHK's long-term works project of constructing a multi-purpose building and student residence around PWH, it could tie in with the provision of hostel places for senior medical students who were required to undergo clinical placement. The university would conduct a review in a timely manner to explore how best to expedite the completion of the long-term project.

49. Mr Jeremy TAM enquired about the original land use planning for Tai Po Area 39, including whether any building was allowed on the site. DCD/CDO/CUHK replied that CUHK submitted its land use application concerning Tai Po Area 39 to the Administration around 10 years ago. Tai Po Area 39 was now designated for "education" and "government, institution or community" purposes. Following the development sequence of various projects and with the completion of the relevant site formation works in Tai Po Area 39 by the Civil Engineering and Development Department the Administration would hand over the site in question to CUHK for the development of various facilities.

50. Mr Jeremy TAM questioned why the Administration had yet to hand over the site to CUHK for development despite the latter's submission of a land use application concerning Tai Po Area 39 to the Administration as early as 10 years ago. He considered that the Administration and/or CUHK should make effective use of the land resources and take forward the development of other teaching facilities in Area 39 concurrently. Mr TAM requested the Administration to explain in details the planning and development plans of Tai Po Area 39.

51. DCD/CDO/CUHK explained that the site formation works undertaken by the Administration in Area 39 must dovetail with CUHK's development plans. To support the implementation of the four-year undergraduate programme under the new academic structure for senior secondary education and higher education (i.e. the "3+3+4" academic structure), CUHK needed additional space and facilities. Among others, it had already submitted an application to the Administration for developing a centralized general research laboratory complex in Area 39. CUHK had been granted the required site and completed the construction of the centralized general research laboratory complex (block 1) and a student hostel in the vicinity. Other capital works projects in Area 39 had also been completed in phases.

52. Dr Helena WONG enquired whether there was any room for constructing additional floors on top of the proposed T-RC, including whether its foundation could withstand the construction of any additional floors, so as to allow flexibility for increasing the number of healthcare training places in the future.

53. DCD/CDO/CUHK replied that according to the development plan of Area 39, the height restriction of the site was designated at 46.5 m above the principal datum. In light of members' views, the study on the proposed project would include an estimate of T-RC's structural loading, so as to dovetail with the possibility for future expansion.

54. Dr Helena WONG also enquired whether the proposed T-RC would be equipped with those technology-enabled measures as implemented by HKU for teaching. D/RMDPO/CUHK indicated that the proposed T-RC would be equipped with multi-disciplinary, simulation-based educational facilities, so that students from various allied health disciplines could learn together.

65EG – Enhancement of facilities cum medical campus development

55. Dr Helena WONG noted that under the proposed project, telepresence solution would be adopted. While the university encouraged the use of online teaching modes, she questioned whether the relevant proposal could ensure that its teaching quality could be maintained. Dr WONG considered that medical students should receive training in a centralized teaching venue, or else it would be difficult for university professors to have good interaction with students and assist them with their learning. She enquired whether the relevant teaching support measures were temporary in nature.

56. Mr Tony TSE expressed support for the proposed project. He enquired how HKU would apply the relevant VR and AR technologies.

57. AD(D&I)/LKSFH/HKU explained that the proposed project sought to enable virtual connection by telepresence solution across different teaching venues at the Sassoon Road medical campus buildings and QMH. The adaptation of contemporary technologies such as VR and AR in teaching, especially of anatomy/physiology and clinical skills helped alleviate the strain on existing space and training facilities. Besides, beginning from the 2019-2020 academic year, the number of medical and nursing UGC-funded first-year-first-degree annual intake places of HKU would be increased by around 50. The short-term measures, involving mainly technology-enabled initiatives, aimed to ensure that the standard and quality of training rendered to medical and nursing students would not be compromised because of the increase in class size against the constraints imposed by no immediate corresponding increase in physical space. Furthermore, students could acquire knowledge about more complicated surgical procedures through VR technologies, and university professors could answer students' queries via online learning modes. In connection with a further enquiry from Mr Tony TSE as to whether HKU would develop in the direction of adopting VR technology, AD(D&I)/LKSFH/HKU replied in the affirmative.

58. Mr CHAN Chi-chuen noted from the Government's paper that the major expenditure for the proposed project would be procurement of special furniture and equipment, and the estimated expenditure was \$159.1 million. He requested the Administration to provide supplementary information on the details of the special furniture and equipment to be procured, together with a comparison on the guidelines and procedures adopted by local universities and the Hospital Authority for procuring medical devices, including the monitoring system and the degree of autonomy. Regarding the university's adoption of telepresence solution and adaptation of contemporary technologies such as VR and AR in teaching, Mr CHAN enquired how HKU would ensure alignment of the technologies with the latest technological

development, and the estimated useful lifespan for the technology. He also enquired about the estimated expenditure for the adaptation of the relevant technologies.

(Post-meeting note: The Administration's supplementary information was circulated to members vide [LC Paper No. PWSC260/18-19\(01\)](#) on 11 July 2019.)

59. SAD/EO/HKU replied that the proposed project comprised the conversion works for additional anatomy dissecting laboratories and storage for cadavers at the Laboratory Block on No. 21 Sassoon Road, including an addition of 10 dissecting tables and some 40 cadaver storage spaces. Head of IT & Technology, LKS Faculty of Medicine, The University of Hong Kong, said that the virtual connection of various teaching venues through technology could enable students to learn together virtually at the same venue and disseminate information among themselves. The relevant telepresence solution was introduced as early as 1993, and it had increasingly sophisticated thus far. The university expected that the system could stay on-trend for a period of 10 years and address the existing problem of inadequate space in university in the short term.

60. Mr Holden CHOW was glad to learn about HKU's adaptation of VR and AR technologies. He enquired whether the relevant technologies were exclusive to HKU students' learning process, and whether HKU would consider opening up the relevant technologies to students of other universities/institutions. SAD/EO/HKU responded that the university would consider the suggestion if necessary.

61. Dr KWOK Ka-ki pointed out that the proposed project did not cover the increase of the gross floor area and clinical teaching facilities in the university and the provision of additional hostel places for medical students. He enquired why HKU did not implement the medium-term project on a priority basis, i.e. the construction of additional academic building and ancillary facilities for HKU's Faculty of Medicine. He also enquired about the timetable for submitting the funding proposal of the medium-term project and the expected commencement and completion dates of the medium-term project.

62. AD(D&I)/LKSFH/HKU advised that the auditorium in the Sassoon Road medical building had a capacity of up to 230 students, but the number of HKU's medical first-year-first-degree intake places would be increased to 265 in September 2019. As such, the existing space would not be able to accommodate all students. In view of the above, the university considered that before the completion of the medium-term project, it was

necessary to adopt telepresence solution as an urgent stop-gap solution to enable the virtual connection of various teaching venues at the Sassoon Road medical campus and QMH and the virtual spatial expansion of teaching venues.

63. SAD/EO/HKU added that in terms of medium-term project, the university was conducting a feasibility study on student hostel development and planned to submit a report on the feasibility study to the Administration in September this year before putting forth a funding proposal to the Subcommittee and FC in 2020-2021. The construction of the proposed clinical training facility centre would be completed in phases and able to provide 300 and 400 hostel places in 2024 and 2026 respectively. Besides, HKU was developing a new academic building at No. 3 Sassoon Road, and it would be equipped with teaching and research facilities. The construction of the building was expected to complete by 2022. The university would also consult the Administration on the expansion of its medical building at No. 3 Sassoon Road in due course.

64. Mr AU Nok-hin urged HKU to enhance its ancillary transport facilities, so as to dovetail with the increase in its healthcare teaching facilities.

Healthcare manpower planning

65. Mr KWONG Chun-yu enquired about the maximum number of medical students that could be accommodated by the proposed T-RC and the Administration's plan for increasing the number of healthcare training places in a bid to alleviate the manpower shortage of doctors. DS(H)3/FHB(Atg) advised that the Administration and UGC would follow a triennial planning cycle to conduct planning work for the UGC-funded institutions, and map out afresh the academic development direction for UGC-funded institutions for the next three-year funding period. With the successive completion of various short-, medium- and long-term projects, the respective healthcare teaching facilities of CUHK and HKU could accommodate around 400 medical students. Subject to the findings of the healthcare manpower projection, the Administration would recommend UGC to increase the number of subsidized healthcare training places.

66. Mr KWONG Chun-yu expressed concern about the massive wastage of doctor manpower in the public healthcare sector in recent years. He enquired whether the Administration could conduct the review on healthcare manpower earlier. DS(H)3/FHB(Atg) reiterated that the Administration would conduct manpower planning and projections for healthcare professionals once every three years in step with the triennial planning cycle

of UGC. The results of the next projection exercise were expected to be published in 2020. UGC would, according to the Administration's proposal, discuss with the relevant institutions on the distribution of additional academic place.

67. Dr Helena WONG requested the Administration to provide supplementary information on its projection of the long-term manpower demand for local healthcare professionals, including manpower projections for doctors, nurses, other allied health professionals, etc., before submitting the two funding proposals to FC for consideration. Dr WONG pointed out that such information would be useful to assessing whether there would be adequate manpower of qualified healthcare personnel in Hong Kong for coping with future needs and supporting the development of the healthcare system.

(Post-meeting note: The Administration's supplementary information was circulated to members vide [LC Paper No. PWSC260/18-19\(01\)](#) on 11 July 2019.)

68. Dr Helena WONG pointed out that there were views in the community objecting to the proposal on the importation of overseas qualified doctors to serve in the public healthcare system, so the local healthcare system should rely on the graduates trained by local universities as the major source of healthcare manpower. She enquired how CUHK and HKU would estimate the maximum number of first-year medical students that they could accommodate with their additional healthcare teaching facilities, and whether the two universities could each accommodate 400 medical students with the additional facilities concerned. Mr KWONG Chun-yu raised a similar question.

69. D/RMDPO/CUHK advised that with a view to alleviating manpower shortage, CUHK would maintain a steady supply of locally-trained graduates. While CUHK had not capped the number of healthcare training places, it already faced the problem of inadequate teaching space, so it must undertake short-, medium- and long-term projects in order to cope with the demand of additional medical students. If the Administration saw the need to increase the number of healthcare training places in the future, CUHK would consider building additional floors on top of its existing buildings in order to increase teaching space.

70. AD(D&I)/LKSFH/HKU said that their development direction was similar to that of CUHK, in the sense that HKU would provide training for allied health professionals based on social demand for healthcare services and the resources provided by UGC.

[At 10:25 am, the Chairman asked members whether they agreed to extend the meeting until the two projects had been voted on. No member raised objection.]

Voting on PWSC(2019-20)13

71. There being no further questions from members on the item, the Chairman put [PWSC\(2019-20\)13](#) to vote. At members' request, the Chairman ordered a division. The Chairman instructed the Clerk to the Subcommittee to ring the division bell, and the division bell was rung for five minutes. Upon a division, 29 members voted for and no member voted against the proposal. No member abstained from voting. The votes of individual members were as follows:

For:

Mr Abraham SHEK
Ms Starry LEE
Mr Michael TIEN
Mr MA Fung-kwok
Mr CHAN Han-pan
Ms Alice MAK
Dr Helena WONG
Mr Andrew WAN
Mr Holden CHOW
Mr CHEUNG Kwok-kwan
Mr LAU Kwok-fan
Mr KWONG Chun-yu
Mr Gary FAN
Mr Vincent CHENG
Ms CHAN Hoi-yan
(29 members)

Mr Tommy CHEUNG
Dr Priscilla LEUNG
Mr Frankie YICK
Mr CHAN Chi-chuen
Mr LEUNG Che-cheung
Dr Fernando CHEUNG
Mr Alvin YEUNG
Mr HO Kai-ming
Mr Wilson OR
Mr LUK Chung-hung
Dr CHENG Chung-tai
Mr Jeremy TAM
Mr AU Nok-hin
Mr Tony TSE

Against:

(0 member)

Abstained:

(0 member)

72. The Chairman declared that the item was endorsed by the Subcommittee. The Chairman consulted members on whether the item would require separate voting at the relevant FC meeting. Dr Helena WONG requested that the item (i.e. [PWSC\(2019-20\)13](#)) be voted on separately at the relevant FC meeting.

73. The meeting ended at 10:30 am.

Council Business Division 1
Legislative Council Secretariat
17 July 2019