

香港特別行政區政府
保安局



The Government of the
Hong Kong Special Administrative Region
Security Bureau

香港添馬添美道 2 號

2 Tim Mei Avenue, Tamar, Hong Kong

本函檔號 Our Ref.:

來函檔號 Your Ref.:

電話號碼 TEL. NO. : 2810 2632

傳真號碼 FAX. NO. : 2810 7702

By Fax : 2543 9197

2 January 2019

Mr Anthony Chu
Clerk to Public Accounts Committee
Legislative Council
Legislative Council Complex
1 Legislative Council Road
Central, Hong Kong

Dear Mr Chu,

Public Accounts Committee

Consideration of Chapter 3 of the Director of Audit's Report No. 71

Procurement of operational equipment by the Hong Kong Police Force

I refer to your letters dated 17 December 2018 to Secretary for Security and Commissioner of Police. I enclose herewith our consolidated written response to the questions raised by the Public Accounts Committee for your perusal.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Andrew Tsang', written over a horizontal line.

(Andrew Tsang)
for Secretary for Security

c.c.

Secretary for Financial Services and the Treasury

Fax : 2537 3210

Commissioner of Police

Fax : 2866 2579

Director of Electrical and Mechanical Services

Fax : 2882 9042

Director of Government Logistics

Fax : 2116 0183

Director of Audit

Fax : 2583 9063

Public Accounts Committee
Consideration of Chapter 3 of the Director of Audit's Report No. 71
Procurement of Operational Equipment by the Hong Kong Police Force

Response from Security Bureau and Hong Kong Police Force

Part 2: Implementation of major information and communications technology projects

Questions 1 and 4

According to paragraph 2.2, HKPF has set up an Information and Communications Systems Strategy Steering Committee to oversee the departmental information technology strategy and implementation, and adopted a three-tier project governance structure for each major information and communications technology ("ICT") project. However, according to paragraphs 2.3 and 2.31, there were delays of 60 months and 45 months respectively in implementing the Virtual Workstation project and the Second Generation of Communal Information System project which had deferred the realization of the intended benefits including enhanced operational efficiency and annual cost savings of over \$100 million as mentioned in paragraphs 2.16 and 2.27. What measures will the Administration take to prevent recurrence of similar delays in future? Will the Administration consider conducting a review of the ICT project governance to see if there is room for improvement in light of the substantial delays in these projects?

Reply

The HKPF is fully committed to improving the effectiveness of its ICT project governance and has thoroughly examined the major causes of delay in ICT projects in light of the Audit observations and recommendations. The delays in the two ICT projects were mainly attributable to (a) time taken in the tendering process; (b) technical problems encountered during implementation, such as dealing with the compatibility issue of legacy applications on the Virtual Workstation; and (c) complexity of the system and time taken in system design and implementation in the Second Generation of Communal Information System ("CIS2") project.

In the case of tendering process, significant delay to the Virtual Workstation project was caused by the cancellation of the first tender as there was no conforming bid given the stringent tender requirements.

In line with the Audit's recommendation, the HKPF will improve on the preparation of future ICT project tenders by avoiding over-prescribing requirements and making the tender specifications more easily comprehensible.

The tender preparation process involves consultation with a number of parties including the Department of Justice ("DoJ"), the Government Logistics Department ("GLD") and the Intellectual Property Department ("IPD"). The process could be a long-drawn one. In this regard, the Office of the Government Chief Information Officer ("OGCIO") has developed a set of Standard Terms and Conditions ("T&C") for IT Tenders jointly with the DoJ, GLD and IPD in 2013. The HKPF has since adopted the Standard T&C in its tender preparations which has helped speed up the process.

As regards technical issues encountered during project implementation, in light of the lessons learnt, the complexity of large-scale IT systems such as the CIS2 must not be underestimated. It must be properly reflected in the project timelines. The Information Systems Wing ("ISW") will conduct more in-depth market researches covering a wider scope to obtain market information, and strive to identify technical uncertainties and possible counter measures, especially when dealing with new or emerging technologies, so as to make more realistic estimations on the project timelines in the funding papers submitted to the Finance Committee of the Legislative Council.

As regards ICT project governance, the existing protocol of managing outsourced ICT projects, including the three-tier project governance structure, is developed based on international project management best practices including those good practices promulgated by "Projects In Controlled Environment" ("PRINCE"). Under the three-tier governance structure, the project steering committee at the top level is responsible for authorizing project expenditures and securing resources for the project, endorsing acceptance of project deliverables, giving disposition on change requests and approvals for the project to proceed to the subsequent phase. The project assurance team, being the second tier, makes recommendations to the project steering committee in monitoring the project progress, tracking incurred costs and time against budget and timeline, and considering change requests. The project team works closely with the contractor in providing inputs (e.g. user requirements), providing feedback (e.g. on system design) or validating /evaluating project deliverables (e.g. by conducting user acceptance test). The project team holds regular checkpoint meetings with the contractor to monitor the project progress and to update the project steering committee

and project assurance team any issues of significance. The project steering committee and project assurance team will meet as and when necessary to consider change requests and changes to project timeline. For example, in view of the delay of the CIS2 project, the project steering committee and project assurance team met intensively and had each held eight meetings during 2015 and 2016 to deliberate on the major issues and provide steer on the way forward.

As per existing practice, the OGCIO compiles an annual progress report on the implementation of Government computer systems for submission to the Finance Committee of the Legislative Council. The annual report sets out the latest position of the projects, the latest financial position, as well as the latest projected implementation date. To ensure that ICT projects are implemented in a timely manner, the Security Bureau will continue to closely scrutinize the returns provided by the HKPF by seeking detailed justifications for any deviation from the project timeline, the remedies undertaken by the HKPF/contractor, as well as a more realistic estimate on the revised project timeline.

The HKPF will continue to further improve the effectiveness of ICT project governance. ISW will promulgate the Audit observations and recommendations for the reference of all future committees and teams in the three-tier governance structure (i.e. a project steering committee, a project assurance team and a project team) to ensure that the lessons learnt will benefit personnel involved in these roles in the future.

Question 5

According to paragraphs 2.5 and 2.8, the Third Generation Command and Control Communications System (“the CC3 system”) was mainly implemented by two contracts for the design, supply, delivery, installation and implementation (Contracts A and B), together with project-related activities other than Contracts A and B. The estimated cost of the two contracts was \$849.7 million (comprising \$812.7 million for Contract A based on a market research conducted by the Hong Kong Police Force (“HKPF”) in January 2001 and \$37 million for Contract B). However, in March and May 2003, Contracts A and B were awarded at a total of \$370.3 million, significantly lower than the estimated cost of \$849.7 million. Was the market research done properly? Does HKPF have any other projects with significant over-estimation of tender prices?

Reply

The HKPF fully recognizes the importance of market research before the preparation for information and communications technology (“ICT”) project tenders. The cost estimate of \$812.7 million for Contract A was made by the HKPF based on the result of a market research (i.e. Request for Information) with the assistance of the then Government Supplies Department in January 2001 to obtain budgetary and technical information from 42 respondents. The difference between the pre-tender estimation and the final contract sum was mainly due to the successful tenderer of Contract A being both a key player in the field of the terrestrial trunked radio technology and a major equipment manufacturer, enabling it to leverage this advantage in lowering the development and implementation costs. This unique circumstance was specific to the eventual winning bidder, and could not have been accounted for in relation to all potential bidders. As a matter of fact, the bidding prices received from the other six tenderers for Contract A were HK\$537 million, HK\$597 million, HK\$654 million and HK\$878 million (submitted by three bidders). The significantly lower-than-estimated tender price (i.e. \$333.8 million for Contract A) was therefore entirely attributable to the specific contractor who eventually won the contract. In the circumstances, the HKPF considers that the market research was done properly in accordance with the established protocol.

There is no other similar project undertaken by the HKPF with significant difference between the estimated and actual contract prices.

Question 6

According to paragraph 2.7 and Table 4, over a period of 11 years from September 2004 to July 2015, the CC3 Executive Committee (ICT project steering committee of HKPF) approved 43 items of extension and enhancement work, including 33 items approved after the CC3 system was rolled out in March 2006. These 43 work items were only completed by February 2016 with a total cost of \$322 million charged to the CC3 project subhead. Does HKPF agree that the cost of the extension and enhancement work could not have been funded by the CC3 project vote had there not been an over-estimation of the tender price of Contract A? How did HKPF justify that the expenditure of \$322 million was within the ambit of the approved funding? Can HKPF provide an analysis together with justifications of how the 43 work items in Appendix C were within the ambit of the project scope as stated in the funding paper of 2001 and approved by the Finance Committee (“FC”)?

Given the long time lapse after the completion of CC3 system in 2006, why did HKPF not consult the Financial Services and the Treasury Bureau (“FSTB”) on the propriety of charging into the CC3 project vote the expenditures of the extension and enhancement work?

Reply

The HKPF agrees that had there not been a significant difference between the estimated and actual contract price of Contract A, it would have had to identify alternative funding sources to complete the necessary extension and enhancement work of the CC3 Project.

An analysis of the 43 extension and enhancement work items to the CC3 Project in Appendix C in relation to the proposal of CC3 as discussed in the FC funding paper and the related justifications is set out below –

CC3 proposal in the FC paper	Extension and enhancement work items
(A) <u>To provide comprehensive radio coverage</u> , including, for example, (i) to extend CC3 radio coverage to indoor locations which was all along an intention of the Project; (ii) to provide CC3 radio coverage to new border crossing facilities which could not have been done earlier before the facilities were ready; (iii) to expand system capacity which was incidental to the extension of CC3 radio coverage; (iv) to reconfigure microwave links for CC3 radio communications which would be blocked off by new building developments that were unforeseen; and (v) to enhance CC3 radio communication capacity in areas with increased demand.	1, 3, 7, 9, 10, 12, 16, 18, 19, 25, 28, 30, 35

CC3 proposal in the FC paper	Extension and enhancement work items
(B) <u>To enhance existing systems, replace ageing systems for business continuity and to decommission obsolete CC2 radio system,</u> including, for example, (i) to improve power supply and ventilation in CC3 equipment rooms to enhance system resilience; (ii) to replace obsolete hardware and software for relevant systems to continue functioning properly and to enhance system security; and (iii) to maintain system interface with the Registration of Persons System of Immigration Department subsequent to changes in the latter.	2, 5, 21, 22, 23, 31, 32, 33, 34, 36, 39, 40, 42, 43
(C) <u>To hire EMSD service or contract staff for CC3 work</u> with either (i) supplementary funding for initial work e.g. installation of CC3 equipment on police vehicles and postponement of Phase III roll-out schedule due to WTO HK Ministerial Conference which could not be foreseen or (ii) new commitment for the extension and enhancement work items.	4, 8, 13, 15, 17, 26, 29, 38
(D) <u>To enhance protection against eavesdropping and unauthorized access to radio system.</u>	11, 14
(E) <u>To improve emergency response,</u> e.g. provision of dual-capacity headsets (for both radio and telephone communications) to console operators and additional CC3 radio accessories to PTU officers.	20, 24, 41
(F) <u>To improve communications between frontline officers</u> by provision of CC3 radios to Marine officers who were using a different radio system to communicate with land formations and to a newly established PTU training company.	27, 37
(G) <u>To enhance command and control capability</u> by improving video facilities in command centres.	6

Internal funding approvals were obtained from the project steering committee (i.e. Executive Committee (“EC”)), which was the highest level of the three-tier governance structure under the “Projects In Controlled Environment” (“PRINCE”) methodology recommended by the Office of the Government Chief Information Officer (“OGCIO”). These approvals went through a vigorous internal examination process to ensure that the work items to be carried out were fully justified and within the project scope. Funding applications were submitted to the EC with detailed justifications.

As illustrated in the analysis, the HKPF had all along taken the view that the extension and enhancement items were closely associated with and incidental to the implementation of the project and hence within the project scope as stated in the FC funding paper. In the absence of these items, the CC3 Project could not be regarded as having been completed in accordance with the project objectives, though some of these items and activities were not explicitly outlined in the FC funding paper. On the basis of this interpretation, the HKPF continued to implement these items under the project vote and reported the updated implementation progress to the FC and the FSTB through annual reports up to the project closure in 2015-16, in accordance with the established requirements.

We agree with the Audit’s recommendations that sufficient information should have been provided on the implementation of ICT projects in FC funding papers (such as the phased implementation approach in the CC3 project) and make realistic assessment of the implementation schedule. HKPF will strive to improve on the preparation of FC funding papers for future ICT projects so that any envisaged phased implementation plan to cater for technical uncertainties and evolving circumstances will be clearly articulated.

We also agree with the Audit’s observation that, in case of doubt, we should consult the FSTB on the propriety of charging the expenditure of the extension and enhancement work into the project vote, in line with the spirit of Financial Circular No. 1/2004¹.

¹ Financial Circular No. 1/2004 on “Responsibility of Controlling Officers” stipulates, among others, that: (i) Controlling Officers must satisfy themselves that there are adequate procedures to monitor expenditure in order to ensure that it is only incurred within the limits and scope authorized; and (ii) where in doubt, Controlling Officers should consult the Treasury Branch.

Part 4: Procurement of other operational equipment

Question 7

According to paragraphs 4.4 and 4.11, in 2006-2007, HKPF obtained funding of \$6.2 million for the replacement of the aged vehicle-mounted electronic counter measures system (“ECMS”). In the event, the new ECMS was procured in 2014 after the lapse of some seven years after funding approval and conducting four tender exercises. What measures had HKPF taken to ensure that its capability in dealing with modern threats was not compromised during the lengthy procurement process and what was the related cost? What lessons have HKPF learned from the procurement of ECMS and what measures will HKPF take to prevent recurrence of similar problems in future procurement exercises?

Reply

The Electronic Counter Measures System (“ECMS”) is a vehicle-mounted broad-band jamming system to counter modern Radio Controlled Improvised Explosive Device (“RCIED”) threat. Before the ECMS was successfully procured in 2014, HKPF was using its existing Electronic Counter Measures (“ECM”) vehicle as supplemented by other alternative systems. The ability to counter modern RCIED threat was not compromised as the man-portable systems were maintained to counter such threat. While these man-portable systems did not have the exact capabilities of the vehicle-mounted set (e.g. in terms of mobility), the shortfall had been addressed by a more intense deployment tactic and additional manpower from existing resources.

At the time of commencement of the procurement exercise, the ECMS was a piece of highly sensitive and confidential equipment involving the application of new technology and a market of limited suppliers. Due to its sensitive nature, such systems were usually unadvertised. Its functionality and capability was not a subject of open discussion or disclosure for the sake of protecting its operational effectiveness and security concerns. The procurement was thus conducted through restricted tender with specified requirements to reflect our stringent operational needs. The procurement process was lengthened with repeated tender cancellations, which were partly due to factors beyond the control of HKPF, such as the failure of potential suppliers to obtain necessary permission from overseas governments, critical error in a price quoted by a tenderer, and the quoted price being unreasonably higher than the market price. Eventually, with increasing

demands for ECM technology worldwide and rapid advances in such technology in the span of only a few years, there were more suppliers in the market around the world that could meet our stringent requirements. The emergence of more “qualified” suppliers together with the relaxation of requirements had led to the success of the final exercise.

HKPF agrees with the Audit’s recommendations, including the use of open tender as far as practicable and the adoption of a more flexible tender approach for less essential requirements. Given the highly complicated radio frequency environment in Hong Kong and the requirement for high grade systems, HKPF will try to identify as many potential suppliers as possible in the early phase of market research in the procurement cycle. Wherever applicable, specifications will be classified into desirable requirements and mandatory requirements as appropriate to ensure the widest possible scope of potential suppliers without compromising operational requirements.

Question 8

According to paragraph 4.26(b), HKPF's records showed that the first-in-first-out method for managing stock had not been adopted to prevent prolonged storage of the combat boots which had a shelf life of three years after delivery date. Has HKPF taken any actions to improve stock management? According to paragraphs 4.22 to 4.25, in 2014 and 2015, HKPF awarded two contracts to the supplier for repairing 3 923 pairs of combat boots manufactured in 2009 and 2010 at a total cost of \$2 million. However, in 2016, the detachment of soles still occurred in 64 pairs of the 2014 repaired combat boots. After negotiation with the supplier and consulting the Department of Justice, HKPF accepted the supplier’s offer of replacing 300 of 599 pairs of the 2014 repaired boots in stock with new ones. To address the occupational and safety concern of police officers, HKPF disposed of the remaining 299 pairs of repaired boots in August 2017. What lessons has HKPF learned from the procurement of the boot repair service? What measures will HKPF take to prevent recurrence of similar problems in future?

Reply

Combat boots are used by police frontline officers in carrying out their law enforcement duties. In January 2008, it was decided to phase out the old combat boots through a replacement programme in 4 years. Having regard to the stock level in February 2008, HKPF conducted 5 procurement exercises from 2008 to 2012 for the supply of

new boots to meet the requirements of the replacement programme as well as the on-going and additional requirements of frontline officers.

Since the sole detachment problem was first noted in November 2012, the storehouse had examined the cause and considered possible solutions to address the problem while at the same time maintaining the issue of the boots to meet the continued demand from on-going boots replacement and additional requirements from frontline officers. Before the repair service was completed to rectify the sole detachment problem, there were times when the storehouse arranged exceptionally to issue the latest batch of combat boots to frontline officers for safety considerations. This was a special contingency measure to ensure quality and protection for frontline officers before the repair of the sole detachment problem was fully completed. It has always been the established practice of the HKPF to adopt the first-in-first-out method in managing stock in accordance with the principle of storehouse management.

We agree with the Audit's recommendation to improve stock management to prevent prolonged storage of goods taking into account their shelf lives. In fact, shortly after the discovery of the sole detachment problem, the delivery requirement in procurement contracts of combat boots had been revised from delivery according to fixed schedule to delivery on an "as and when required" basis. This has helped to avoid excessive stock held and maintain an optimal stock level to meet the operational needs, hence minimizing the risk of sole detachment in the stock held and the need for repair. Besides, we have taken measures to strengthen communication with user formations and monitor closely the actual stock consumption rate, before deciding on the timing for re-ordering for replenishment.

From the experience of the procurement of the boot repair service, and in line with the Audit's recommendation, we fully recognize and have reminded all procuring staff the need to include all the essential requirements and key provisions in contract documents in future to protect the Government's interests. We also believe that the improvement of stock management measures mentioned above is an effective way to prevent recurrence of the problems of prolonged storage and sole detachment in future.

Question 9

According to paragraphs 4.32 and 4.34, while the purchase of 124 body-worn video cameras (“BWVCs”) by the first quotation in December 2016 was made after a public order event, the purchase of 272 BWVCs by the second quotation in March 2017 (within a time span of four months) was to meet the operational need arising from the Anniversary of the establishment of the Hong Kong Special Administrative Region in July 2017 which is an annual event. Can HKPF explain why the procurement requirement for this annual event which could have been foreseen was not consolidated with that of the first purchase by quotation to achieve better economy of scale? According to paragraph 4.35(a), Audit's sample checking of HKPF's Stores Management Division's purchases by quotation from 2015-2016 to 2017-2018 revealed 13 cases of non-compliance with the requirement of Stores and Procurement Regulation 246, i.e. the cumulative value of repeated purchases of 13 items of operational equipment within 12 months had each exceeded the quotation limit of \$1.43 million. In 7 of the 13 cases, there were no documented reasons for not following the requirement. What measures will HKPF take to improve the situation?

Reply

Following the principle of prudent management of public resources, the HKPF has strived to adopt a gradual and cautious approach in the procurement of new operational equipment, like in the case of BWVCs to ensure the best use of public money. Hence, small quantities were initially purchased to test their application before wider roll-out and adoption. Subsequent to field trials from March 2013 to July 2015, Contract G was awarded in May 2016 after an open tender to purchase larger quantities. The procurement in December 2016 and March 2017 was mainly to meet operational need arising from new circumstances.

The decision for the procurement of 124 BWVCs in December 2016 was made after a public order event that took place in early November 2016 as the HKPF had identified an imminent operational need in enhancing officers’ capabilities to contain confrontational situations and to collect evidence when handling public order events of similar nature.

For the procurement of 272 BWVCs in March 2017, although the celebration of the Establishment of the HKSAR being an annual event was foreseeable, the 20th Anniversary celebration held on 1st July 2017 was associated with far more special events and activities, details of

which were only made available to the HKPF as the preparatory work unfolded. The year 2017 was also marked with heightened risk of terrorist attacks as a series of such attacks happened successively around the world. To ensure public order and public safety, effective policing of celebrative events and activities required a realistic threat assessment which could only be made closer to the operation when more information was available and the operational need for additional BWVCs was more concrete and explicit.

HKPF is obliged to comply with the SPR while providing adequate operational equipment for frontline officers to carry out law enforcement duties under changing circumstances and on a timely basis. HKPF agrees with the Audit's recommendations that greater efforts should be made to meet the SPR 246 requirement and to document the reasons when such requirement cannot be followed. In this regard, we shall explore the feasibility of bulk purchase by tender for regular items with delivery requirement in batches or on an "as and when required" basis, e.g. in procurement of cloth materials and running shoes. This will obviate the need for repeated purchase by quotation within 12 months which would exceed the financial limit of SPR 246. In addition, the procuring staff have been reminded that in very exceptional and unavoidable situations where SPR 246 cannot be followed, full justifications should be documented on file. HKPF will strive to seek continuous improvement and to comply with the SPR at all times.