

**For discussion
on 4 May 2010**

Legislative Council Panel on Security

**Updating and Replacement of
Fire Services Equipment and Apparatus**

Purpose

This paper informs Members of the existing procedures for procuring fire services equipment and apparatus, and the Administration's proposed measures for expediting the relevant processes.

No. 4 Alarm Fire in Cheung Sha Wan

2. A No.4 Alarm fire broke out at Lai Cheong Factory Building in Cheung Sha Wan on 8 March 2010. A Senior Fireman, YEUNG Chun-kit, unfortunately lost his life while battling the blaze. Three other firemen who were injured have now recovered and been discharged from the hospital.

Progress of investigation

3. A task force was set up by the FSD on the day of the incident to make a thorough investigation into the cause of the fire and the reasons that led to the casualties of the firemen. The investigation will also look into the delay in upgrading the fire to No. 3 Alarm and its impact on the incident. The investigation is still in progress. The task force will complete the investigation as soon as possible and submit a report to the Police. The Coroner has decided to investigate the death of Senior Fireman YEUNG. In this connection, the Police have already initiated an independent investigation into the case and will submit an investigation report to the Coroner.

Updating and replacement of fire services equipment

4. The Administration attaches great importance to ensuring the safety of frontline personnel, and has frequently updated and replaced fire services equipment. As fire services equipment are required to suit the actual environment and needs of different places, there is no common set of specifications for such equipment internationally. On the whole, the existing equipment of the FSD can be favourably compared with those used by fire brigades in other places. That said, the FSD still adopts a forward-looking procurement strategy by closely monitoring new developments in fire services equipment and availability of new products in the market, so as to further enhance the safety of frontline personnel in fire fighting and rescue operations.

5. Generally speaking, fire services equipment can be categorised into fire appliances, protective equipment, fire-fighting equipment, rescue equipment and communication systems. In deciding whether to update or replace its equipment, the FSD will have regard to a number of factors, including the availability of new products in the market, relevant international standards, as well as the service life and maintenance records of the existing equipment. Where necessary, the FSD will bid for funding for the procurement following the established mechanism.

6. In the past two years, the Administration allocated a total of about \$600 million for the purchase of fire services equipment, including breathing apparatus, a radio communications system, fire appliances, fire-fighting equipment and rescue equipment.

7. In 2010-11, the Administration has earmarked about \$170 million for the procurement of various fire services equipment, including fire appliances and rescue equipment. Also included in the earmarked funding is the replacement of fire tunics and over trousers for all fire personnel, and an increase in the number of fire tunics and over trousers provided for each fireman from one to two sets.

Procurement procedures

8. The replacement of fire services equipment normally involves a number of steps, which include drawing up specifications, tendering,

manufacture, installation and testing. The time required for the entire process depends on the complexity of the equipment, its specifications, price and the quantity procured. For the procurement of equipment with relatively simple specifications and readily available stock, such as fire fighting hose and protective gloves, the time required would be shorter. The whole process will normally be completed in around 6 months.

9. With respect to fire services equipment that are purchased for the first time, or replacement of existing equipment that requires substantial changes to the specifications, or equipment with no readily available stock, the time required for procurement would be relatively longer. Using the procurement of common fire appliances as an example, the steps involved and the normal lead time required based on past experience are as follows –

- Design and Specifications: the FSD and relevant departments would normally start the process of design and drawing up specifications after funding is approved. Where necessary, frontline personnel would be consulted. This process usually takes about 5 months;
- Tendering: After finalising the design and specifications, the FSD and relevant departments would proceed with the tendering process. It involves the preparation of tender documents, invitation to tender, tender evaluation and preparation of contract document. After securing the approval of the tender board, the procurement contract can be formally awarded. The tender process takes about 7 months;
- Manufacture and delivery: this normally takes 12 to 18 months depending on the quantity and complexity of the equipment ordered.

Upon delivery of the fire appliances, the FSD and relevant departments would conduct the necessary testing so as to ensure their compliance with the specifications. In addition, depending on the type of appliance, the FSD may need to carry out some basic assembly to the vehicle body. Where necessary, the FSD would provide appropriate training to frontline personnel to ensure that they can operate the new appliances in a safe and effective manner before deploying the new appliances to full operational use. The above testing, assembly and training usually take about 3 to 6 months.

Measures to expedite the procurement process

10. When the Legislative Council Public Accounts Committee discussed the procurement of ambulances in 2009, the Administration has already indicated that we would adjust the procurement procedures in order to shorten the lead time required for procuring ambulances. Similar arrangements are also applicable to the procurement of fire services equipment. Using the procurement of common fire appliances as an example, the new arrangements are as follows –

- Before funding is approved, the FSD and relevant departments would make an early start in drawing up the design and specifications for the equipment;
- After finalising the design and specifications, the FSD and relevant departments would immediately kick off the tendering process, with a view to completing all tendering procedures and securing the approval of the tender board before funding is available;
- When funding is available, the FSD and relevant departments would award the procurement contract as soon as possible; and
- Where possible, the FSD would request the manufacturer to advance the delivery of some of the equipment so as to facilitate the provision of training at an earlier time. This would enable frontline personnel to become familiar with the operation of the new equipment before full delivery.

With the adoption of the above measures, the entire process for procuring fire appliances can be shortened by about a year.

11. In conclusion, the above new arrangement aims to expedite the entire procurement process by making an early start on the time-consuming but unavoidable procedures (e.g. drawing up specifications and tender documents, tendering, etc). The FSD has adopted a similar approach when procuring the fire tunics and over trousers with funding allocated for the 2010-11 financial year. By making an early start in working with relevant departments on the design, specifications and tender documents, the FSD is now in a position to award the procurement contract by May 2010. All fire tunics and over trousers are expected to be delivered by March next year.

12. The above improvement measures are applicable to most fire services equipment, especially those requiring frequent replacement. However, for equipment that are extremely complex and expensive, (e.g. the radio communications system of the FSD), the FSD may need to engage a consultant to prepare the detailed design and specifications for the system. In such cases, we would seek funding approval from the Finance Committee as early as practicable so that Members' views can be fully taken into consideration when the detailed design and specifications are prepared.

Advice sought

13. Members are invited to note the content of this paper.

Security Bureau
Fire Services Department
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