

For discussion  
on 6 July 2009

## **Legislative Council Panel on Security**

### **Proposed Introduction of the Medical Priority Dispatch System**

#### **Purpose**

This paper seeks Members' views on the Administration's proposal for introducing a Medical Priority Dispatch System (MPDS) to enhance the emergency ambulance service and to provide quicker response to people in greatest need.

#### **Background**

2. The Fire Services Department (FSD) is committed to providing effective and efficient emergency ambulance services for everyone who needs to be conveyed to a hospital as soon as possible to receive prompt medical attention. In 2008, the Department received some 600 000 emergency ambulance calls, or about 1 640 calls a day on average. Its performance pledge is to handle 92.5% of emergency ambulance calls within the response time target of 12 minutes.

#### **Existing Ambulance Dispatch System**

3. Under the existing dispatch system, when an emergency ambulance call is received, FSD operators will follow a simple questioning protocol to obtain the basic call information, such as the location of the patient and the nature of his sickness or injury. Once the call has been confirmed, FSD will dispatch the nearest available ambulance to the scene.

4. The main issue with the existing dispatch system is that it does not effectively target valuable ambulance resources to those in greatest need. At present, ambulances are dispatched on a next-in-queue basis irrespective of the nature of the sickness or injury. All emergency ambulance calls are treated with the same priority and the same response time target of 12 minutes applies. Nevertheless, the degree of urgency of ambulance calls varies widely – there are calls involving patients in life-threatening conditions (e.g. a heart attack) on one end of the spectrum, and calls from people with very minor complaints (e.g. itchy skin) on the other. In order to provide better services to the more critical patients, we consider that there is merit to prioritise calls and handle them in accordance with their degree of urgency.

## Proposal for the Introduction of MPDS

5. In order to enhance our emergency ambulance service, we propose –
- (a) to pursue the implementation of MPDS to categorise and prioritise response to emergency ambulance calls in accordance with their degree of urgency;
  - (b) to categorise emergency ambulance calls into three categories, namely “Response 1” calls for critical or life-threatening cases, “Response 2” calls for serious but non-life-threatening cases, and “Response 3” calls for non-acute cases;
  - (c) to pledge for a better response time target for critical or life-threatening cases. Specifically, we propose 9 minutes for Response 1 calls (i.e. critical or life-threatening cases), 12 minutes for Response 2 calls (i.e. serious but non-life-threatening cases), and 20 minutes for Response 3 calls (i.e. non-acute cases); and
  - (d) to maintain the current service pledge of achieving the new response time targets in 92.5% of the cases for all categories of calls.

The above proposal is summarised in the table below –

<b>Response Level</b>	<b>Degree of Urgency</b>	<b>Target Response Time</b>	<b>Response Time Achievement</b>
Response 1	Critical or life-threatening	9 minutes	92.5%
Response 2	Serious but non-life-threatening	12 minutes	92.5%
Response 3	Non-acute	20 minutes	92.5%

## Broad Dispatch Framework of MPDS

### *Receiving a call*

6. Under the proposed MPDS, a set of structured questions will be asked to solicit the essential information from the caller. The MPDS questioning protocol is based on a clinically supported framework endorsed by the International Academy of Emergency Dispatch<sup>1</sup>. Ambulance calls will be categorised according to the urgency of a patient's medical conditions as reflected by the caller's response to the protocol questions.

7. The questions will be phrased in simple and laymen language and mainly close-ended. They are designed to identify a potentially life-threatening situation readily. The most obvious and critical cases can be identified as early as the third entry question under the MPDS questioning protocol. To ensure that the questions are effective and easy to understand, the protocol will be adapted by medical experts to suit the local culture and language environment.

### *If in doubt, dispatch immediately*

8. To facilitate callers (e.g. elderly persons) who may not be able to give clear responses to the protocol questions, FSD would strictly adhere to the overriding principle of "***if in doubt, dispatch immediately***". In other words, in the event that the caller is not able to give clear or specific responses to the questions, the operator will err on the safe side, classify the call as a Response 1 call, and dispatch an ambulance immediately.

### *Post-dispatch advice*

9. The proposed MPDS will also enable FSD to provide further assistance and comfort especially to critical patients at the earliest opportunity immediately following the urgent dispatch of the nearest ambulance. The operator will stay on line with the caller to provide some self-help or first aid advice before the arrival of the ambulance crew. Such advice is widely practised by advanced ambulance services overseas and clinically proven to be effective in avoiding further aggravation and improving the patient's condition by appropriate intervention. Such advice is entirely voluntary, and callers have complete discretion whether to take or follow such advice.

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<sup>1</sup> The International Academy of Emergency Dispatch is a non-profit standard-setting institution promoting safe and effective emergency dispatch services world-wide.

## Overseas Practices

10. In formulating the proposal on the MPDS, we have made reference to the good practices overseas. Advanced ambulance services in over 20 countries (including cities in Australia, Canada, the United Kingdom and the United States) have already adopted a priority dispatch system to prioritise their response to ambulance calls in accordance with their degree of urgency. Most countries or cities adopt a response time target of 8 to 10 minutes for the most critical cases, and a longer response time target for the non-acute calls. For example –

City / Province	Response Time Targets
Toronto, Canada	Within 9 minutes in 90% of critical, life-threatening and serious cases; and within 21 minutes in 90% of non-acute cases.
London, United Kingdom	Within 8 minutes in 75% of immediately life-threatening cases; no target set for cases that are not serious or life-threatening.
Queensland, Australia	Within 10 minutes in 68% of Emergency Transport; no target set for non-urgent cases.

## Way Forward

11. On 3 July 2009, we launched a four-month public consultation on the proposal for introducing the MPDS in Hong Kong. The consultation document is attached at **Annex**. We will carefully consider all the comments and views received during the consultation period before finalising the proposal. We will inform the Panel of the outcome of the consultation in due course.

**Security Bureau**  
**Fire Services Department**  
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