

立法會
Legislative Council

Ref : CB2/PL/SE

Panel on Security

Background brief prepared by Legislative Council Secretariat

Emergency ambulance service

Purpose

This paper summarises the discussions so far held by Members on emergency ambulance service (EAS).

Background

2. In 1986, a consultancy study of the provision of ambulance services in Hong Kong was conducted. The consultancy study recommended, inter alia, that a 10-minute target travel time should be achieved for 95% of emergency calls. This recommendation was endorsed by the Executive Council in 1987 and had since been used as the basis for the development of EAS.

3. The Fire Services Department (FSD) commissioned another consultancy study in 1995 to update the findings of the 1986 study, and explore how EAS could be further improved. The study recommended, inter alia, that the 10-minute travel time target should be retained as the performance target until it could be achieved consistently, and that FSD should move towards replacement of travel time by response time for performance measurement of EAS.

4. According to the Administration, response time is the interval between the time of call and the arrival of an ambulance at the street level of the scene. It is the sum of two consecutive components, namely, the activation time and the travel time. Activation time is the duration between the receipt of a call and the time when the despatch procedure is completed. Travel time refers only to the time taken by an ambulance to travel to the street level of the scene.

Relevant deliberations of the Panel on Security and the Panel's Subcommittee

Measures to improve emergency ambulance service

5. The measures taken by the Administration to improve EAS was discussed at the meeting of the Panel on Security on 20 November 1997.

6. At the meeting, members expressed concern about the performance of EAS, as FSD had responded to 91.7% of emergency ambulance calls within the 10-minutes travel time target in 1994, but only 89.7% in 1996, which was much below the target of 95%.

7. The Administration advised that it was actively implementing the recommendations of the consultancy study conducted in 1995. The consultancy study recommended, among others, that

- (a) the 10-minute travel time target should be retained until it was consistently achieved; and
- (b) a plan should be drawn up for adopting response time as the performance target for EAS;

Adoption of a 12-minute response time as the performance target for emergency ambulance service

8. At the meeting of the Panel on Security on 13 October 1998, members were briefed on the Administration's plan to implement on 1 November 1998 a performance pledge of responding to 92.5% of emergency ambulance calls within a response time of 12 minutes, which comprised an activation time of two minutes and a travel time of 10 minutes.

9. Noting that FSD had responded to about 98% of emergency calls within 16 minutes, some members enquired about the response time for the remaining 2% of emergency calls. The Administration advised that the response time for these remaining emergency calls ranged from 17 minutes to 30 minutes.

10. Regarding some members' questions on whether activation time should be set at one minute, the Administration said that about one-third of emergency calls between 8:30 am and 11:30 pm had to be responded by ambulances on the road, and the activation time was longer in such cases.

11. At members' request, the Administration undertook to review the performance target for EAS.

Administration's review of response time and performance target for emergency ambulance service

12. At the meeting of the Panel on Security on 28 January 2000, the Administration briefed members on its review of response time and performance target for EAS and concluded that the 12-minute response time target was a reasonable and practical one.

13. Some members expressed concern that the response time of EAS was calculated on the basis of the time when an ambulance or ambulance-aid motorcycle first arrived at the scene of an incident. Some of these members considered that the arrival time of ambulance-aid motorcycles should not be used in the calculation of the overall response time performance of EAS.

14. The Administration informed members that an ambulance-aid motorcycle would be despatched in the case of a heart attack or casualties which required treatment at the earliest opportunity. When an ambulance-aid motorcycle was despatched to the scene of an incident, an ambulance would also be despatched.

15. Members decided at the meeting that a subcommittee should be formed to examine in detail issues relating to EAS.

Response time target and effect of the response time performance of ambulance-aid motorcycles on the overall performance

16. Following the decision at the meeting of the Panel on Security on 28 January 2000, the Subcommittee on Emergency Ambulance Service was formed to study in detail issues relating to EAS. The Subcommittee held two meetings on 4 and 23 May 2000.

17. The Subcommittee noted that according to statistics covering the period between December 1999 and February 2000 provided by the Administration, 93.15% of EAS calls met the 12-minute response time target. Of all the responded calls, 0.94% had to rely on ambulance-aid motorcycles for fulfilling the response time target. In 92.21% of the cases, ambulances were able to arrive at the scene within a response time of 12 minutes.

18. The Subcommittee had examined how the response time target adopted by FSD compared with those in overseas cities. According to the Administration, the performance target compared favourably with any overseas standards. Many metropolitan cities had not set any performance targets for emergency ambulance service. The Administration was confident that with the Third Generation Mobilizing System in place, further improvement in performance could be made.

19. The Subcommittee considered that the inclusion of the response time of ambulance-aid motorcycles had minimal effect on the overall response time performance of emergency ambulance service.

20. The Subcommittee recommended that separate statistics on the response time performance of ambulances and ambulance-aid motorcycles should be kept in order to assess the effect of ambulance-aid motorcycle on the overall response time performance of EAS.

Funding proposal for the Third Generation Mobilising System of the Fire Services Communication Centre

21. At the meeting of the Panel on Security on 6 April 2000, the Administration briefed members on its proposal to replacing the Second Generation Mobilising System with a Third Generation Mobilising System to facilitate mobilisation of fire and ambulance resources for fire fighting and rescue operations. Funding for the proposal was approved by the Finance Committee at its meeting on 12 May 2000.

Related information

22. A number of questions relating to EAS were raised by Members at the Council meetings on 3, 24 March 2004, 27 April and 11 May 2005. A list of these questions is in the **Appendix**.

Relevant papers

23. For details of the discussions, members may wish to refer to the following documents -

Minutes

- (a) minutes of the meeting of the Panel on Security on 20 November 1997 (PLC Paper No. CB(2)901);
- (b) minutes of the meeting of the Panel on Security on 13 October 1998 (LC Paper No. CB(2)751/98-99);
- (c) minutes of the meeting of the Panel on Security on 28 January 2000 (LC Paper No. CB(2)1325/99-00);
- (d) minutes of the meeting of the Panel on Security on 6 April 2000 (LC Paper No. CB(2)1817/99-00);
- (e) minutes of the meeting of the Subcommittee on Emergency Ambulance Service on 4 May 2000 (LC Paper No. CB(2)1941/99-00);

- (f) minutes of the Finance Committee meeting on 12 May 2000 (LC Paper No. FC157/99-00);
- (g) minutes of the meeting of the Subcommittee on Emergency Ambulance Service on 23 May 2000 (LC Paper No. CB(2)114/00-01);

Report

- (h) Report of the Subcommittee on Emergency Ambulance Service (LC Paper No. CB(2)2270/99-00);

Papers

- (i) Administration's paper entitled "Emergency ambulance service" for the meeting of the Panel on Security on 20 November 1997 (PLC Paper No. CB(2)618(05));
- (j) Administration's paper entitled "Performance indicator for the emergency ambulance service" for the meeting of the Panel on Security on 13 October 1998 (LC Paper No. CB(2)382/98-99(03));
- (k) Administration's paper entitled "Review of Response time and performance target for the emergency ambulance service" for the meeting of the Panel on Security on 28 January 2000 (LC Paper No. CB(2)830/99-00(04));
- (l) Administration's paper entitled "Replacement of Communications and Mobilizing System for Fire Services Department" for the meeting of the Panel on Security on 6 April 2000 (LC Paper No. CB(2)1554/99-00(04));
- (m) Paper for the Finance Committee meeting on 12 May 2000 (FCR(2000-01)13);
- (n) Administration's paper entitled "Information provided by the Administration upon the request of the Subcommittee on Emergency Ambulance Service" for the meeting of the Subcommittee on Emergency Ambulance Service on 23 May 2000 (LC Paper No. CB(2)1545/99-00(01)); and
- (o) Administration's paper entitled "Emergency ambulance service" for the meeting of the Subcommittee on Emergency Ambulance Service on 23 May 2000 (LC Paper No. CB(2)1452/99-00(02)).

24. The above papers are available on the website of the Legislative Council (<http://www.legco.gov.hk>).

Council Business Division 2
Legislative Council Secretariat
31 May 2005

**Information provided by the Administration in response to
issues raised by Members at Council Meetings**

Council meeting on 3 March 2004

At the Council meeting on 3 March 2004, Ir Dr Hon Raymond HO asked a question on the shortage of ambulances. The question and the reply are in **Annex A**. They are also available at <http://www.legco.gov.hk/yr03-04/english/counmtg/hansard/cm0303ti-translate-e.pdf>.

Council meeting on 24 March 2004

2. At the Council meeting on 24 March 2004, Hon LEUNG Fu-wah asked a question on the shortage of ambulancemen and its impact on EAS. The question and the reply are in **Annex B**. They are also available at <http://www.legco.gov.hk/yr03-04/english/counmtg/hansard/cm0324ti-translate-e.pdf>.

Council meeting on 27 April 2005

3. At the Council meeting on 27 April 2005, Hon SIN Chung-kai asked a question on the use of the Third Generation Communication and Mobilising System in the deployment of ambulances. The question and the reply are in **Annex C**. They are also available at <http://www.legco.gov.hk/yr04-05/chinese/counmtg/floor/cm0427ti-confirm-c.pdf>.

Council meeting on 11 May 2005

4. At the Council meeting on 11 May 2005, Hon KWONG Chi-kin asked a question on the response time performance after the Third Generation Communication and Mobilising System came into operation. The question and the reply are in **Annex D**.

**Extract from the official Record of Proceedings
of the Legislative Council meeting on 3 March 2004**

Ambulance Service

14. **DR RAYMOND HO** (in Chinese): *Madam President, it has been reported that, in the morning of the ninth of last month, a sick old woman in LaiChi Kok was not taken to the hospital speedily for treatment because no ambulance was available at that time. In this connection, will the Government inform this Council:*

- (a) *of the number of cases in the past three years in which the patients were not taken to hospitals speedily due to shortage of ambulances;*
- (b) *of the measures to improve the situation in which patients cannot be taken to hospitals speedily due to shortage of ambulances; and*
- (c) *whether it has reviewed if more ambulances should be procured to meet the demand for the service; if it has, of the result of the review?*

SECRETARY FOR SECURITY (in Chinese): Madam President, the incident referred to in the preamble of the question occurred in the morning of 9 February this year at Phase 8, Mei Foo Sun Chuen. The emergency call was received at 8.01 am, and an ambulance aid motorcycle arrived at the scene at 8.11 am and rendered first aid service to the patient immediately. This is in line with the Fire Services Department's (FSD) performance standard for an ambulance or an ambulance aid motorcycle to reach the scene within 12 minutes of the emergency call. First Responders and an ambulance were also deployed to the scene. The patient was conveyed to Princess Margaret Hospital by the ambulance which reached the hospital at 8.42 am.

Answers to the specific questions are:

- (a) We measure the performance of our emergency ambulance services by our performance pledge. Our performance pledge is that our ambulances or ambulance aid motorcycles arrive at the scene within 12 minutes of the emergency calls for at least 92.5% of such calls.

In the past three years, our performance compared against this performance pledge is:

	2001		2002		2003	
No. of emergency ambulance calls	463 154		487 420		464 223	
No. of calls attended within target response	425 000	(91.8%)	447 274	(91.8%)	432 649	(93.2%)
No. of calls unattended within target response time	38 154	(8.2%)	40 146	(8.2%)	31 574	(6.8%)

- (b) The percentage of ambulance calls attended to within the target response time in 2001 and 2002 was 0.7% less than the pledged target of 92.5%. In 2003, apart from the additional resources allocated by the Government, the FSD also introduced a series of improvement measures, including the implementation of staggered shift system in 17 ambulance depots which targets ambulance resources at the peak hours in the evening, and the setting up of an Urgent Care Fleet, which releases more resources to attend to emergency ambulance calls. The Urgent Care Fleet comprises 12 two-man crew ambulances which replace the usual three-man crew ambulances and are tasked for the transfer of patients in critical conditions from one hospital or medical institution to another for emergency treatment or examination. As a result of the introduction of these improvement measures, response time performance in 2003 reached 93.2%, exceeding the pledged performance target of 92.5% by 0.7%.

In a bid to utilize resources more flexibly and further enhance emergency ambulance services, the FSD is studying the feasibility of criteria-based dispatch of emergency ambulances whereby such resources can be better targeted at patients or injured persons in critical conditions so that they can receive earlier treatment.

- (c) The FSD reviews the level and deployment of ambulance resources from time to time. The FSD will procure 10 additional ambulances in the 2003-04 and 2004-05 financial years and the first batch of seven new ambulances will be delivered in the middle of this year.

**Extract from the official Record of Proceedings
of the Legislative Council meeting on 24 March 2004**

Manpower of Ambulancemen

3. **MR LEUNG FU-WAH** (in Cantonese): *Madam President, it has been reported that the Hong Kong Fire Services Department Ambulancemen's Union has reflected the shortage of ambulancemen to the Administration, and its adverse impact on the quality of accident and emergency (A&E) service. In this connection, will the Government inform this Council:*

- (a) *of the current number of serving ambulancemen, the average numbers of times and hours per shift for which they are deployed to provide A&E service, and how these figures compare with those 12 and 24 months ago;*
- (b) *of the planning details of the A&E service for the next three years, including the performance pledge and staffing establishment; and*
- (c) *whether, other than the recruitment of 28 ambulancemen earlier to fill some of the vacancies, it plans to recruit more ambulancemen to relieve the work pressure of the serving staff; if so, of the details of the plan; if not, the reasons for that?*

SECRETARY FOR SECURITY (in Cantonese) : Madam President,

- (a) The Fire Services Department (FSD) currently has 2 322 ambulance staff. The table below shows the average number of times per shift for which the ambulancemen were deployed to provide emergency ambulance service in 2003, and the corresponding figures in 2001 and 2002. The FSD does not have data on the average number of hours per shift for which the ambulancemen were deployed to provide emergency ambulance service. According to past statistics, on average it takes about an hour to handle an emergency ambulance call.

<i>Year</i>	<i>Average number of times per shift for which ambulancemen were deployed to provide emergency ambulance service (12 hours per shift)</i>
2001	5.2
2002	5.2
2003	4.9

- (b) The performance pledge of the FSD is to arrive at the scene within 12 minutes of the emergency ambulance calls for at least 92.5% of such calls. To further enhance the emergency ambulance service, the FSD plans to deploy Emergency Medical Assistants on all ambulances for full provision of paramedic ambulance service in the first quarter of 2005.

In the coming three years, a number of ambulance depots will be commissioned or constructed. These include the Braemar Hill and Penny's Bay Depots which will be completed this year, the Mong Kok and Kwai Chung Depots which have been allocated funding, and the depot in Kowloon Tong which is under planning. The FSD will also procure seven ambulances in 2004 and 2005. Moreover, the Third Generation Mobilizing System at the Fire Services Communication Centre will be commissioned in the second quarter of this year. This would enable the FSD to deploy its ambulance resources more effectively.

In the light of the above developments, we will closely monitor the demand for ambulance service and response time performance each year and consider whether adjustment to staff establishment is required.

- (c) Despite the need to reduce government expenditure and the civil service establishment, the FSD has been granted special approval to recruit 28 ambulancemen. This shows the importance that we attach to the ambulance service. The recruitment exercise is underway and is scheduled to be completed by July 2004.

To further improve the ambulance service and better utilize the existing resources, the FSD has introduced a series of measures, including the "staggered shift system" and "strategic move-up arrangement", as well as flexible deployment of ambulance resources in response to demand from the various districts. The Department will seek to improve workflow by studying the feasibility of introducing a criteria-based

dispatch system for the emergency ambulance service. In addition, it will procure additional equipment and introduce new technology with a view to upgrading the quality of the service. With the commissioning of the Third Generation Mobilizing System in the second quarter of this year, ambulance resources can be more effectively deployed. We believe that the above measures will help to relieve the work pressure of front-line ambulancemen and improve their working conditions.

MR LEUNG FU-WAH (in Cantonese): *Madam President, according to part (b) of the Secretary's reply, it is planned that a number of ambulance depots in Braemar Hill, Penny's Bay, Mong Kok and Kwai Chung and Kowloon Tong will be commissioned in the future. However, in the entire main reply, why is there no mention of any planning for a proportional increase in staff establishment?*

SECRETARY FOR SECURITY (in Cantonese): Madam President, the main purpose of constructing new ambulance depots is to provide more expeditious emergency ambulance service to residents in the respective districts. The FSD will consider this matter from the angle of the overall ambulance resources and take corresponding measures to tie in with the commissioning of the new ambulance depots through flexible deployment of manpower and resources.

MS LI FUNG-YING (in Cantonese): *Madam President, can the Secretary clarify whether the 28 new recruit ambulancemen are intended to meet the requirements arising from the new ambulance depots or are they really intended to relieve the present workload of front-line staff?*

SECRETARY FOR SECURITY (in Cantonese): Madam President, the 28 ambulancemen to be recruited in this financial year, that is, in 2004-2005, are intended mainly to enable the FSD to enhance its flexibility in the deployment of ambulance resources overall. I think that this measure is intended on the one hand to meet the increase in workload in the future, and it will on the other enable the Director of Fire Services to have greater flexibility in the deployment of resources to meet demands in the future.

MR LAU CHIN-SHEK (in Cantonese): *Madam President, it is stated in part (b) of the main reply that the performance pledge of the FSD is to arrive at the scene within 12 minutes of the emergency ambulance calls for at least 92.5% of such calls. May I know if this is the performance pledge or the actual performance now? If this is the actual*

performance now, then how much is the time required to arrive at the scene for the remaining 7.5% of calls? With the provision of an additional 28 persons, can this problem be solved?

SECRETARY FOR SECURITY (in Cantonese): Madam President, we do not have any information on this. At present, what we can achieve is to arrive at the scene within 12 minutes of the emergency ambulance calls for at least 92.5% of such calls. As regards how long it takes in the remaining percentage of cases, I do not have the relevant information on hand.

MR LAU CHIN-SHEK (in Cantonese): *Could the Secretary provide the additional information in writing? However, I still wish to ascertain if it is the performance pledge to arrive at the scene within 12 minutes of the emergency ambulance calls for at least 92.5% of such calls or has this already been attained? If this is not the performance pledge, then what is it?*

SECRETARY FOR SECURITY (in Cantonese): Madam President, this is our performance pledge and what we have accomplished is that we have fulfilled the pledge. In 2003, the services provided by us actually achieved better than this performance pledge. In 2003, our performance was that we arrived at the scene within 12 minutes of the emergency ambulance calls for 93.2% of such calls.

PRESIDENT (in Cantonese): Secretary, could you provide a written reply to the Honourable Member?

SECRETARY FOR SECURITY (in Cantonese): I have to go back and check it up. If we have the information on this, a written reply will be provided. **(Appendix II)**

PRESIDENT (in Cantonese): Mr LAU Chin-shek, has your supplementary not been answered?

MR LAU CHIN-SHEK (in Cantonese): *Yes. The Secretary has not answered if the additional 28 persons will bring about any improvement to the remaining 7.5% of cases.*

SECRETARY FOR SECURITY (in Cantonese): We hope that with the additional 28 persons, the present performance pledge can at least be maintained. It would be most desirable if we could over achieve.

MR TAM YIU-CHUNG (in Cantonese): *Madam President, may I ask the Secretary how many complaints there were in the past three years against the late arrival of ambulances, thus leading to delays in rescue or even deaths?*

SECRETARY FOR SECURITY (in Cantonese): Madam President, I wish to give the additional information in writing, for I do not have the information on hand. **(Appendix III)**

MR CHAN KWOK-KEUNG (in Cantonese): *Madam President, the Secretary mentioned in the main reply that ambulance depots would be constructed in Braemar Hill, Penny's Bay, Mong Kok, Kwai Chung and Kowloon Tong, but the number of ambulances would increase only by seven. May I know if these seven ambulances are adequate for so many ambulance depots?*

SECRETARY FOR SECURITY (in Cantonese): Madam President, as I said just now, at present, we have to deploy the overall resources flexibly to cope with the work arising from these new ambulance depots. We all know that the finance of the Government is very tight. We hope to cope with the additional work in future with the limited resources. We certainly hope that we can maintain the present level of service provided to the public as far as possible, that is, to fulfil our performance pledge. We consider it sufficient to have seven additional ambulances for the several new ambulance depots in the next few years.

MR JAMES TO (in Cantonese): *Madam President, part (a) of the main reply by the Government indicates that for the last three years, if calculated on the basis of 12 hours per shift, there has been a decrease in the average number of times per shift for which ambulancemen were deployed to provide emergency ambulance service. That means each ambulanceman is deployed for a lesser number of times per shift. Judging from these figures, it seems the situation is improving. May I know, when the Government showed these figures to the Ambulance Officers Association, what comments it got concerning the fact that the average number of operations per shift was 4.9? Did the Association indicate what level of work should be reached before they consider it appropriate? What are the figures or quantifiable indicators that can really reflect the actual manpower shortage?*

SECRETARY FOR SECURITY (in Cantonese): Madam President, I take regrets to say that I have not discussed with the Association about the manpower increase. Nevertheless, since I have received a letter from the Association, and as far as I understand it, their major complaint was that the anticipated increase of 72 posts for ambulancemen for the year 2003-04 had not materialized. This was mainly because the Director of Fire Services had made efforts to flexibly deploy manpower and streamline procedures in the year 2003-04, so the FSD managed to make use of the limited resources to fulfil the present performance pledge. I understand that the principal demand of the Association has to do with why the anticipated increase in the number of ambulancemen posts did not materialize. To my understanding, what they took issue with was not the number of operations per shift that they consider appropriate.

MR JAMES TO (in Cantonese): *Madam President, if the Ambulance Officers Association has suggested any quantifiable figures, could the Government provide the information to us in writing? As I have asked, has the Government ever received any such quantifiable figures from the Ambulance Officers Association indicating that they were overloaded with work and short of manpower? Apart from the planned increase of 72 ambulancemen posts as mentioned by the Secretary, are there any other data? If yes, can a written reply be given to us?*

SECRETARY FOR SECURITY (in Cantonese): Madam President, I will be glad to provide such information if there is any. **(Appendix IV)**

MR MICHAEL MAK (in Cantonese): *Madam President, I am aware that the FSD has earlier on launched a service called the First Responder Scheme (I cannot recall its Chinese translation). Under this Scheme, firemen will be the first ones to arrive at the scene and attend to the injured. Has the shortage of ambulancemen anything to do with this scheme?*

SECRETARY FOR SECURITY (in Cantonese): Madam President, "first responder" is translated as "先遣急救員". The roles of first responders are assumed by front-line firemen who have completed an advanced ambulance course and passed the examination. They must complete four weeks of ambulance training which consists of one week of classroom training and three weeks of paramedical practical training on board an ambulance. The course mainly trains officers how to keep patients' airways free of obstruction, as well as maintaining respiration and blood circulation when tendering care to patients, so as to prevent any further deterioration in their conditions. First responders must also receive training on how to operate an automated external defibrillator. The

main purpose of launching this First Responder Scheme is to send these firemen with first-aid training to provide appropriate first-aid to the injured or the sick before the arrival of ambulancemen at the scene, so as to increase the patients' chances of survival. They are not intended to replace the ambulancemen. The main purpose is to enhance service quality, not to reduce the quantity of service.

MR NG LEUNG-SING (in Cantonese): *Madam President, part (c) of the main reply refers to a "strategic move-up arrangement". May I ask the Secretary to introduce to us what kind of special strategy is this "strategic move-up arrangement"? Will it be extended to other operational teams?*

SECRETARY FOR SECURITY (in Cantonese): Madam President, in fact, for one moment, I could hardly make any sense out of the translation for "strategic move-up". It refers mainly to the cross-district deployment of our ambulances and ambulancemen. Sometimes, when a disaster unfortunately strikes in a certain district, most or all of the ambulancemen or ambulances will already have been deployed. In order to cope with emergency situations in that particular district, we have to deploy ambulances and ambulancemen from other districts, where the workload is not so heavy, to the district that has a greater need of them. That is what is meant by "strategic move-up".

PRESIDENT (in Cantonese): We have already spent 16 minutes on this question. Last supplementary question.

DR TANG SIU-TONG (in Cantonese): *Madam President, it is mentioned in part (b) of the main reply that the Braemar Hill and Penny's Bay Depots will be commissioned this year. May I know how many ambulancemen will be required on their commissioning?*

SECRETARY FOR SECURITY (in Cantonese): Madam President, I will give a written reply to the Honourable Member. **(Appendix V)**

Appendix II

WRITTEN ANSWER

Written answer by the Secretary for Security to Mr LAU Chin-shek's supplementary question to Question 3

Regarding the average response time of ambulances that could not arrive at the scene within the target response time of 12 minutes, relevant figures of 2002, 2003 and the first two months of 2004 are as follows:

<i>Year</i>	<i>2002</i>	<i>2003</i>	<i>2004 (January and February)</i>
Number of emergency ambulance calls that were not attended to within the 12-minute target response time	40 875	32 129	6 941
Average response time (minutes)	15.3	15.5	15.4

Appendix III

WRITTEN ANSWER

Written answer by the Secretary for Security to Mr TAM Yiu-chung's supplementary question to Question 3

Regarding the number of complaints of late arrival of ambulances that led to death of the patients, out of a total of 1 628 207 ambulance calls handled by the Fire Services Department from 2001 to 2003, 24 complaints were received on the late arrival of ambulances. Investigation conducted by the Department revealed that in 10 of the 24 complaint cases, the ambulances were unable to arrive at scene within the target response time of 12 minutes. Amongst the 10 cases, one involved the death of a patient. The Coroner's Court ruled that the patient had died as a result of an accident.

Appendix IV

WRITTEN ANSWER

Written answer by the Secretary for Security to Mr James TO's supplementary question to Question 3

The Fire Services Department has not received any quantified workload indicator from the Ambulancemen's Union either to show that they are over-worked, or as a reference to the amount of work that they would consider as reasonable.

WRITTEN ANSWER

Written answer by the Secretary for Security to Dr TANG Siu-tong's supplementary question to Question 3

As regards the manpower provision for the Braemar Hill Ambulance Depot, two Ambulance Officer posts have been created and a total of 36 ambulance staff, comprising five Principal Ambulancemen, seven Senior Ambulancemen and 24 Ambulancemen will be internally deployed to the new depot. Four ambulances will be deployed to the depot upon its commissioning.

Approval has been given for the creation of two Ambulance Officer posts and for the purchase of four ambulances for the Penny's Bay Ambulance Depot. The Fire Services Department will review the overall demand for ambulance service in the Southwest New Territories and Lantau Island, and redeploy existing ambulance resources to the depot to tie in with the opening of the Disneyland Theme Park. The Department will keep the demand for ambulance service in the Penny's Bay area under review to assess the long-term manpower requirement of the depot.

Annex C

(Translation)

LEGCO QUESTION NO. 8

(Written Reply)

Asked by Hon SIN Chung-kaiDate of meeting : 27.4.2005Replied by : Secretary for SecurityQuestion

In May 2000, the Finance Committee of the Legislative Council approved a provision of \$718.6 million for developing the Third Generation Communication and Mobilizing System in the Fire Services Communication Centre. It has been reported that the new system was officially launched last month in the New Territories, operating in parallel with the old system. However, a number of problems emerged and led to chaos in the deployment of ambulances. In this regard, will the Government inform this Council of :

- (a) the problems that have occurred since the launching of the new system and their causes, and the remedial measures adopted;
- (b) the reasons for arranging parallel operation of the old and new systems; and given its problems, whether the full operation date of the new system will be postponed; if so, of the additional resources involved; and
- (c) the benefits brought about by the new system, and how they compare with the benefits originally anticipated?

Reply

Madam President,

Our plan is to commission the Third Generation Mobilizing System (TGMS) by phases and the system started operation in the New Territories Fire Command (NTFC) on 1 March 2005. We have since been fine-tuning the

system in the light of the practical experience gained in the NTFC and staff response. Taking into account such experience and the results of the fine-tuning, we will decide on the timetable for commissioning the new system in the Hong Kong Island and Kowloon Fire Commands.

- (a) From running the TGMS in the NTFC, we have identified a number of technical and hardware problems and taken remedial actions. The main examples include:

Central system

Some parameter settings in the central system had affected the accuracy of the search and dispatch of fire services resources. For example, the TGMS constantly monitors and records the location of all fire appliances and ambulances through the Automatic Vehicle Location System for emergency dispatch. However, the design of the vehicle positioning devices allows for a deviation of 2 to 20 metres. The experience of running the TGMS in the NTFC shows that this deviation might cause the central computer to register inaccurate vehicle stand-by positions.

In addition, upon receipt of an emergency call, the central system will use the incident location as the centre of an initial search algorithm to search for available fire appliances/ambulances within the initial search area which could reach the incident location within the target response time. In practice, however, it was found that some vehicles outside the initial search area, owing to particular road configurations, could have reached the site of incident within a shorter response time, but were not dispatched because they were located outside the initial search area.

The Fire Services Department (FSD) and the system contractor have rectified the above problems by fine-tuning the relevant parameter settings.

Individual sub-system

The Mobile Data Terminal (MDT) is a sophisticated touch-screen computer installed on fire appliances and ambulances. It facilitates

Q.8

the retrieval and dissemination of operational information between frontline staff and the TGMS Communication Centre. During the early stage of its use, FSD has encountered some hardware and technical problems related to the MDT, including:

- The MDT installed on an ambulance/fire appliance is not a standalone device but has to be operated in connection with other equipment such as Vehicle Positioning System and Wireless Digital Network. The vibration of a running ambulance/fire appliance may loosen the connection between the MDT and other equipment, and may even cause damage to the hard disks of the MDT, thus affecting its normal operation. After review, the contractor has replaced all defective hardware and equipment. Suitable mounting devices have been installed to secure the MDTs, thus protecting them from the vibration of running vehicles.
- Before the commissioning of the new system in the NTFC, FSD had provided training to and organized seminars for relevant staff. After the commissioning of the new system, FSD has held more than 10 discussion forums with staff to receive their feedback on their experience of operating the new system and to further elaborate on the appropriate operation procedures of the MDTs. To address the common problems of MDT operation, a simplified operation manual has also been issued to frontline staff for quick reference.
- The MDTs need to operate on a 24-hour basis. Standalone batteries with sufficient capacity are therefore provided in fire appliances/ambulances. However, the function of some of those batteries had dropped owing to their having been installed for a considerable period of time. All the defective batteries have since been replaced by FSD and the Electrical and Mechanical Services Department. Additional battery chargers have been procured to facilitate the recharging of batteries when fire appliances/ambulances are on stand-by at the fire stations and ambulance depots. In addition, steps have been taken to reinforce the knowledge of frontline staff on the proper care and maintenance of batteries.

- At different stages during the implementation period, the contractor had installed different versions of MDT software on individual fire appliances and ambulances. Owing to the incompatibilities of different software versions, the MDTs might not function smoothly under certain specific circumstances. This problem has now been fixed.
- (b) Since the TGMS started operation in the NTFC on 1 March 2005, the Second Generation Mobilizing System (SGMS) has ceased to handle emergency calls in the NTFC but has been on stand-by mode, so that in case the new system encountered any insurmountable problems, emergency dispatch could still be undertaken by the old system. Meanwhile, emergency calls for the Hong Kong Island and Kowloon Fire Commands are still undertaken by the SGMS.

Since the SGMS and TGMS are being operated simultaneously to handle emergency calls in Hong Kong/Kowloon and the New Territories, FSD can no longer flexibly deploy manpower resources between the two Communication Centres in cases where there is a sudden surge in the number of calls in any one of the Centres. Therefore, additional manpower is needed to address this situation. The expenditure involved was \$760,000 in March 2005.

Although we have identified a number of problems in the initial stage of commissioning, the efficiency of the new system is improving after fine-tuning and since frontline staff are now better-acquainted with the operation of the system. If the new system continues to run smoothly in the NTFC, FSD anticipates that the new system would be implemented in the Hong Kong Island and Kowloon Fire Commands by the middle of this year.

- (c) Performance of the new system has shown considerable improvement over the old system in the accuracy of search and dispatch of fire services resources. In addition, automation of certain procedures, such as automatic turn-out broadcast, reduces the workload of the staff in the Communication Centres. The new system also enables frontline staff to update operational data directly through equipment installed on board fire appliances and ambulances without the assistance of staff in the Communication Centres.

Q.8

We expect that when the relevant staff are familiarized with the mode of operation of the new system and when all necessary fine-tuning is done, the new system will be able to yield its intended efficiency and functionality in full and cater to the rise in the number of emergency calls in future without the need to increase the number of staff in the Fire Services Communication Centre.

Annex D

(Translation)

LEGCO QUESTION NO. 8

(Written Reply)

Asked by Hon KWONG Chi-kin Date of meeting : 11.5.2005Replied by : Secretary for SecurityQuestion

The Third Generation Communication and Mobilizing System in the Fire Services Communication Centre started operation first in the New Territories Fire Command ("NTFC") on 1 March. In this connection, will the Government inform this Council

- (a) since the commissioning of the new System;
- (i) of the percentage of times for which fire engines of NTFC reached the scenes within six minutes (i.e. target arrival time) from the time building fire calls in built-up areas were received;
 - (ii) of the percentage of times for which ambulances arrived at the addresses calling for ambulances within 12 minutes (i.e. target arrival time) from receiving emergency ambulance calls;
 - (iii) how the above percentages compare to the relevant percentages for the 12 months prior to the operation of the new System; and
 - (iv) of the average time taken for ambulances of NTFC to depart for action ("the deployment time"), after the Fire Services Communication Centre has received emergency ambulance calls, the difference between this average time and that in the 12 months prior to the operation of the new system, and the causes of the difference;

- (b) whether it has assessed, with the commissioning of the new System, if the target deployment time for emergency ambulance services may be shortened from two minutes to one minute, thereby reducing the overall target arrival time from 12 minutes to 11 minutes after; and
- (c) the reasons for delaying the full operation of the new System and the extra expenses incurred as a result of the delay?

Reply

Madam President,

Before we provide the statistics as requested, we have to point out that it is not appropriate to assess the efficacy of the Third Generation Mobilizing System (TGMS) on the basis of data obtained since its commissioning in the New Territories Fire Command (NTFC) in March this year as compared to those pertaining to the previous 12 months. Such comparison would lead to various problems, including -

- (a) the new system has been in operation in the NTFC for less than three months. Statistics from such a short period may not be able to reflect the long-term situation;
- (b) the demand for and performance of emergency ambulance and fire services are affected by seasonal factors. The comparison of statistics covering a few months with those of a whole year would not be appropriate; and
- (c) we expect that for a new system such as the TGMS which is both large-scale and high-tech, it is inevitable that some fine-tuning of the system as well as staff adjustment would be needed at the initial stage. Such problems would prevent the system from fully yielding its intended performance.

Our reply to the specific questions is -

- (a) Since the commissioning of TGMS in the NTFC on 1 March -
- (i) there were 1 029 and 829 building fire calls in built-up areas of the New Territories in March and April respectively. Fire-fighters were able to reach the scenes of incident within the 6-minute target response time in 826 and 695 calls respectively, representing 80.3% and 83.8% of the total number of calls;
 - (ii) there were 21 098 and 20 043 emergency ambulance calls in the New Territories in March and April respectively. Ambulance crews were able to arrive at the scenes within the 12-minute target response time in 17 022 and 17 393 calls respectively, representing 80.7% and 86.8% of the total number of calls;
 - (iii) the corresponding percentages in the 12 months prior to the commissioning of the new system are 94.3% (for building fire calls) and 89.7% (for emergency ambulance calls) respectively; and
 - (iv) the average time taken for dispatching ambulances was 4.7 minutes and 2.3 minutes in March and April respectively. Fire Services Department (FSD) has not kept statistics on the average time taken for dispatching ambulances in the 12 months prior to the commissioning of the new system.

The dispatch time of the new system in March and April was short of being satisfactory. This was because some software and hardware of the system did not perform fully as expected in the initial stage of operation, and the relevant staff were not fully familiarized with the operation of the new system. FSD has been working closely with the contractor to fine-tune the system. Given this, and as relevant staff gained more operational experience, substantial improvement to the situation has been made. We expect that there will be further improvement to the operation of the new system in the future.



- (b) The new system is designed primarily to handle the forecast growth in emergency calls until 2013 without the need to increase the number of staff in the Fire Services Communication Centre. In addition, under certain circumstances, the new system could shorten the time for dispatching vehicles to the scenes of incident. However, it is difficult to quantify the amount of time saved in advance and thus no target has been set to reduce the dispatch time for ambulances from two to one minute. It is premature to assess how much time the new system could save. We expect that such assessment could only be made after the new system has been fully implemented and operational for some time.

- (c) It was our plan in designing the TGMS that the new and old systems would operate in parallel during the initial commissioning of the new system, so that in case the new system encountered any insurmountable problems, emergency dispatch could still be undertaken by the old system. This is to ensure that the provision of emergency rescue service would not be affected.

The new system has started operation in the NTFC first. If the operation continues to run smoothly, FSD anticipates that the new system would be implemented in the Hong Kong Island and Kowloon Fire Commands by the middle of this year.

Given that the old and new systems handle emergency calls in Hong Kong/Kowloon and the New Territories respectively and the two systems are installed on different floors of the Fire Services Headquarters, FSD can no longer flexibly deploy manpower resources between the two Communication Centres in cases where there is a sudden surge in the number of calls in any one of the Centres. Therefore, additional manpower is needed to address this situation. The expenditure involved was \$1.53 million as of end April 2005.

