

Laying of the Report Report No. 51 of the Director of Audit on the results of value for money audits was laid in the Legislative Council on 26 November 2008. The Committee's supplemental report (Report No. 51A) on Chapter 4 of the Director of Audit's Report was tabled on 20 May 2009.

2. **The Government Minute** The Government Minute in response to the Committee's Report No. 51A was laid in the Legislative Council on 21 October 2009. The latest position and the Committee's further comments on these matters are set out in paragraphs 3 and 4 below.

Emergency ambulance service
(Part 4 of P.A.C. Report No. 51A)

3. The Committee was informed that:

Use of the emergency ambulance service ("EAS")

Measures taken to facilitate and ensure optimal deployment of emergency ambulance resources

- the Administration had put forward its proposal on the implementation of a Medical Priority Dispatch System ("MPDS") in Hong Kong so as to prioritise the dispatch of ambulances in accordance with the degree of urgency of ambulance calls. The Legislative Council Panel on Security ("the Security Panel") was briefed on the proposal at its meeting on 6 July 2009. A public consultation was being conducted to collect views on the proposal. The Administration would consider all comments received during the consultation period carefully before finalising the proposal, and would inform the Security Panel of the outcome of the consultation in due course;
- the Fire Services Department ("FSD") had also taken other measures, including conducting a sample survey and launching an electronic Ambulance Journey Records System ("AJRS") to collect information on the degree of urgency of emergency ambulance calls, and stepping up efforts to encourage the proper use of EAS. In respect of the sample survey, the FSD completed an analysis on a randomly selected sample of about 10,000 emergency ambulance calls received in 2008. The survey result showed that around 10% of the cases did not appear to be in need of EAS. The survey result would be used to draw the public's attention to the proper use of EAS in the FSD's educational programmes;

Progress made in implementing the electronic ambulance journey records

- the development of the electronic AJRS had been completed. The FSD was providing staff with the necessary training on the system's operation and planned to launch the new system on a trial basis in November 2009;

Measures taken to step up efforts to encourage the public's proper use of EAS

- to enhance awareness among the public on the proper use of EAS, the FSD had organised an Ambulance Service Campaign with the theme of "Do Not Misuse Ambulance". Promotional banners had been displayed in 18 districts since mid-August 2009. Posters had been displayed at government offices, hospitals and clinics of the Hospital Authority ("HA"), housing estates, schools, community centres, elderly homes and facilities of various non-government organisations. A one-hour promotional television programme was also produced and broadcast on 5 September 2009 drawing over 1.4 million viewers;
- the FSD would join hands with the HA, the Auxiliary Medical Service and the Hong Kong St. John Ambulance to promote the proper use of their ambulance services. Relevant promotional activities included a roving exhibition outside the Shatin Town Hall in late October 2009. Information on the ambulance service provided by these organisations had also been consolidated and publicised at their websites to give the public a better understanding of the ambulance service available in Hong Kong. In addition, the FSD had obtained the agreement of the HA to show promotional videos at their Accident & Emergency ("A&E") Departments and clinics starting from 1 November 2009. The FSD had also initiated an outreach programme to schools to educate children on the objectives of EAS;

Performance measurement

Timetable and result of the review of the 12-minute target response time for EAS

- the Administration was consulting the public on the proposal on the implementation of MPDS for the dispatch of ambulances in Hong Kong. If the proposed MPDS was acceptable to the public, it would lead to fundamental changes to the mode of ambulance dispatch and operations, and the response time target would be adjusted accordingly. Therefore, the Administration would revisit the target response time for EAS after the way forward on the MPDS proposal was clear;

Progress made in identifying suitable sites in the New Territories ("NT") Region for constructing additional ambulance depots

- in view of the growing demand for EAS in the northern part of the NT Region, measures had been taken to increase the deployment points in that part of the NT Region. The FSD had set up a temporary ambulance standby point at Dills Corner Garden in Kwu Tung (from late September 2009 until the end of 2009). In addition, it would use the Ta Kwu Ling Rural Centre Government Building as a temporary ambulance day-time standby point (from October 2009 until July 2012) and was pursuing the use of the Lady Ho Tung Dispensary in Kwu Tung as a long-term standby point from the start of 2010. The Administration had also identified a site of suitable size in Sheung Shui for the construction of a new ambulance depot and was examining the feasibility of this works project;

Review of the allocation of ambulance resources among individual divisions

- the FSD had reviewed the allocation of ambulance resources to individual divisions, namely the Hong Kong Division, Kowloon Division, NT East & West Division, and NT South Division, taking into account all relevant factors, including the service demand in the respective areas and the response time performance, the existing network of ambulance depots and deployment points, the location of A&E Departments, and the size of their geographic coverage. To ensure that the performance target was achieved in all Divisions, the FSD had redeployed resources and provided new shifts at certain locations with greater service demand, such as the Tai Po East Fire Station and Yuen Long Ambulance Depot. The FSD would continue to monitor closely the response time performance of all Divisions and allocate new shifts as appropriate to Divisions;

Maintenance of ambulances

Review on the appropriateness of the FSD joining the Minimum Cost Refurbishment Programme ("MCRP") for its ambulances and reactivating refurbished ambulances for rescue operations

- the FSD joined the MCRP for the refurbishment of 10 ambulances only as a temporary measure to enhance ambulance availability on a need basis. All refurbished ambulances had been retired from service and replaced by new ones in early 2009;

Keeping and making use of management information on the breakdown and maintenance history of individual ambulances, and maintaining the availability of the ambulance fleet at a level that can meet public expectation

- starting from the end of 2008, the FSD had been receiving from the Electrical and Mechanical Services Department ("EMSD") daily reports on the number of ambulances kept at each of its workshops as well as quarterly performance reports on ambulance availability. These reports enabled the FSD to monitor more closely the maintenance service provided by the EMSD under the Service Level Agreement ("SLA"), make more timely decisions on the deployment of ambulances, and take proactive measures to enhance the availability and reliability of ambulances. For further improvement in this area, the FSD was exploring with the EMSD the feasibility of establishing an Ambulance Management Information System for the provision of more timely and detailed information on the breakdown and maintenance history of individual ambulances. With the benefit of more comprehensive information on vehicle breakdown and maintenance, the Administration was reviewing the mechanism for determining the provision of a maintenance reserve;

Review of the causes and consequences of the increase in breakdowns and improvement measures taken

- the FSD and the EMSD had reviewed the causes of the increase in breakdowns. The major factors included:
 - (a) the ageing ambulances with diminished reliability due to wear and tear;
 - (b) malfunction of certain vulnerable parts such as the battery and the cooling system; and
 - (c) the effect of heat and humidity in the summer months;
- to minimise breakdowns, the FSD, in collaboration with the EMSD, had taken the following measures to enhance the availability and reliability of the ambulance fleet:
 - (a) the frequency of preventive maintenance of ambulances increased from once every four months to once every three months starting from August 2008;
 - (b) the frequency of preventive maintenance of ambulances with accumulative mileages over 400,000 km or having abnormal maintenance history was further increased to once every two months starting from May 2009;

- (c) a bulk replacement programme was implemented between February and August 2009 to replace parts that were more susceptible to breakdowns. These vulnerable parts included main battery, fan belt, tensioner, damper, fan driver, upper and bottom hose, coolant and gear lever assembly, radiator assembly, alternator, starter assembly, water pump assembly, coil ignition, slide idle speed actuator, fuel pump, gear shaft, gear change lever, slated gate and wire cable;
 - (d) a fault monitoring mechanism was established such that whenever there was premature failure of any ambulance part, the EMSD would conduct an analysis of the problem and carry out thorough checking/repair of all other ambulances of the same model/years of service to prevent the occurrence of the same problem;
 - (e) more technical staff were deployed by the EMSD to undertake repair and maintenance of ambulances in Siu Ho Wan and Fan Garden workshops. The service hours of the Tuen Mun and Fan Garden workshops had also been extended; and
 - (f) two quick-repair workshops were set up at the Yuen Long Ambulance Depot and Shatin Ambulance Depot by the EMSD in April and June 2009 respectively. By providing immediate service at a convenient location, these workshops were able to shorten the ambulance downtime in the NT Region considerably;
- the FSD had also issued guidelines on the "use and care of ambulances" and some small tips on the checking of ambulances to all ambulance drivers to assist them in identifying possible problems with the ambulances at an early stage. To minimise breakdowns and unscheduled maintenance due to traffic accidents, instruction had been issued to remind all ambulance drivers to be conversant with the relevant driving regulations, instructions and guidelines;
 - since the implementation of the above improvement measures, the breakdown rate of ambulances had improved significantly. Between June to August 2009, the average number of breakdowns per month was reduced by some 70% compared to figures for the same period of the past two years;

Procurement of replacement and additional ambulances

Review of the provision of ambulance resources to the FSD

- the Administration had reviewed the provision of ambulance resources in the FSD with a view to ensuring satisfactory delivery of ambulance service. Additional resources were provided for the FSD to create 121 new posts to strengthen its EAS, replace 73 town ambulances and procure 21 additional town ambulances to meet increase in service demand. In the first eight

months of 2009, the response time performance of the FSD's EAS was 92.8%, which met the FSD's performance pledge of 92.5%. The Administration would continue to take a multi-pronged approach in meeting the response time performance pledge, including exploring the possibility to introduce the MPDS with a view to giving priority to people in urgent need of medical assistance, and stepping up public education to encourage the public to make judicious use of ambulance service. The Administration would report the result of the MPDS review to the Security Panel;

Review of the mechanism for the replacement of ambulances, and progress made in planning for the replacement in future to ensure that the problems caused by the ageing ambulance fleet will not recur

- to address the problem of ageing ambulances, the Administration was in the process of replacing 196 ambulances with new ones. As at August 2009, a total of 70 new ambulances had been delivered and commissioned to front line service. Another 30 new ambulances were expected to be delivered before the end of 2009. The remaining 96 ambulances would be delivered in batches before the end of 2010. Over 80% of the FSD's ambulance fleet would be replaced by new ambulances by the end of 2010. The new ambulances would bring the average age of the entire ambulance fleet from over eight years in 2008 down to below two years in 2010;
- the Administration had reviewed the mechanism for the replacement of ambulances and identified room for improvement. The relevant bureaux and departments were working out a new mechanism for the replacement of ambulances. This aimed to provide the FSD with the resources to even out the number of ambulances to be replaced each year and pursue a more steady programme of replacement in the long run, hence maintaining the average age of the ambulance fleet at a healthy level;

Review of the existing methodology of estimating the number of additional ambulances required to meet the projected increase in emergency calls

- the procurement of additional ambulances was to provide the vehicles necessary for the manning of additional ambulance shifts. The number of additional ambulances to be required was estimated on the basis of the number of additional shifts plus an allowance for maintenance. The Administration had reviewed this methodology and found it to be in order. As the mechanism for maintenance reserve was being reviewed, which might have a bearing on the methodology, the Administration would revisit the methodology when the review was completed;

Measures taken to strengthen the FSD's internal information and resource management functions

- to strengthen the FSD's internal information and resource management functions, the FSD had enlisted the assistance of the Efficiency Unit to conduct a study and identify areas for improvement. The study had commenced in September 2009 and was expected to take four months to complete;

Progress made in implementing other audit recommendations

Review of the effectiveness of publicity campaigns

- the FSD had completed an evaluation of the effectiveness of its publicity campaigns (including the Ambulance Service Campaign and the Announcement of Public Interest) for 2008 following the Good Practice Guide issued by the Information Services Department. The 2008 publicity campaigns were found to be effective and attracted wide media coverage. In the future, the FSD would conduct similar evaluation on an annual basis to review the effectiveness of its publicity campaigns;

Review of the reasons for the decrease in the percentage of emergency calls answered within the 10-minute travelling time despite the implementation of the Third Generation Mobilising System

- the FSD had conducted a review to ascertain the reasons for the decrease in the percentage of emergency calls answered within the 10-minute travelling time. According to the review, long travelling distance was a major cause. This was particularly so in the NT Region, in light of its comparatively larger geographical coverage. To achieve the performance target, the FSD had been making efforts to improve the coverage by establishing additional ambulance depots and deployment points and had redeployed resources and provided new shifts at certain existing locations, such as the Tai Po East Fire Station and Yuen Long Ambulance Depot;

Measures taken to improve the response time of ambulances in view of the FSD's failure to achieve the performance target for EAS for the first six months of 2008, and review of the ambulance turnout time

- the FSD had created additional posts and procured additional town ambulances to strengthen its EAS and improve the response time performance. Furthermore, the FSD had improved the response time through a number of other measures, including the replacement of ambulances to prevent breakdowns caused by ageing ambulances, enhanced maintenance, and public education to promote the proper use of EAS. In the first eight months of 2009, the response time performance had improved to 92.8%;

- subject to the development of the MPDS proposal, the FSD had concluded the internal benchmark study on the turnout time of ambulances. In view of the complexity of the issues involved, which required further specialist knowledge and professional inputs, the FSD was considering the engagement of a consultant to conduct a further study;

Measures to enhance the Daily Ambulance Availability ("DAA") for the provision of EAS

- the FSD had taken various measures to enhance the DAA, including speeding up the recruitment process, closely monitoring the sick leave situation, and working in collaboration with the EMSD to enhance the availability of ambulances through better maintenance. The FSD would continue to monitor the operational need to deploy off-duty ambulancemen to man additional ambulances when necessary;

Review of the efficiency and effectiveness of the Urgent Care Ambulance Service ("UCAS")

- the FSD had conducted a comprehensive review on the efficiency and effectiveness of the UCAS. The results reaffirmed that for the handling of inter-hospital transfers, it was more efficient and effective to use urgent care ambulances with their two-member crews than emergency ambulances, which were manned by three ambulancemen. To further enhance the availability of urgent care ambulances and their utilisation, the FSD had taken a number of improvement measures, which included closer liaison with the HA personnel to shorten the waiting time at hospitals, and adjustment to the duty pattern of urgent care ambulances so that they covered longer service hours in the daytime to meet the demand profile and improve the utilisation rate;

Training of Emergency Medical Assistant ("EMA") II

- the FSD had assessed the number of EMA II required for providing paramedic ambulance service. Based on the existing strength and ambulance shift, a shortfall of 82 EMA IIs was identified. The FSD would make up the shortfall by training sufficient EMA IIs by 2010-2011;

Specifying the percentage of emergency cases to be reviewed by clinical support officers ("CSOs"), and ensuring that the reviews are reliable assessments of the performance of paramedic ambulance staff

- having considered the advice of its Medical Directors, the FSD had decided to set the percentage of emergency cases to be reviewed by the CSO at 2%. The CSO's work would be monitored by their supervisors to ensure that their review assessments were reliable and any irregularities in the performance of paramedic ambulance staff detected in the course of the reviews were

properly rectified;

Keeping of management information on the deployment of resources for the provision of training in Cardiopulmonary Resuscitation ("CPR") and Public Access Defibrillation ("PAD"), and review of the cost-effectiveness of the provision of such training by the FSD

- the FSD had reviewed the issue and was now maintaining a management information system to keep and manage the deployment of resources for the provision of Community CPR and PAD training so as to ensure the cost-effectiveness of such training;

Setting of a target availability for ambulances with a service period exceeding the design serviceable life of seven years, and review of the serviceability of the ambulance fleet

- under the updated SLA, the target availability for all the ambulances was 92% irrespective of the age of ambulances. This measure would help minimise the frequency of breakdowns and enhance the availability and reliability of the ambulance fleet. Further to the implementation of a series of enhanced maintenance measures and the replacement of ambulances, the availability and reliability of the ambulance fleet would be improved;

Expediting the process for replacing ambulances

- to expedite the process for replacing ambulances, the Administration would adopt the following measures with immediate effect:
 - (a) the EMSD would start drawing up the design and specifications at the same time when the FSD was preparing its funding bid for the replacement of ambulances with a view to completing the process within four months before the announcement of Resources Allocation Exercise ("RAE") results; and
 - (b) the Government Logistics Department would in parallel start making pre-tender preparation upon submission of the RAE bid by the FSD, with a view to completing the preparatory work and inviting tender as soon as funding was secured; and
- with the above measures, the replacement process (i.e. from the bidding of funds to the actual delivery of ambulances) would be shortened from 33 months to 25 months (i.e. a reduction of eight months).

4. The Committee wishes to be kept informed of further development on the subject.