For discussion
on 26 March 2019

LEGISLATIVE COUNCIL PANEL ON DEVELOPMENT

Proposed Creation of Two Permanent Posts of Chief Electrical and Mechanical Engineer in Electrical and Mechanical Services Department

PURPOSE

This paper seeks Members' views on the following staffing proposals of the Electrical and Mechanical Services Department ("EMSD") –

Head 42 – EMSD (Regulatory Services)

(a) creation of one permanent Chief Electrical and Mechanical Engineer ("CEME") (D1) post in the Gas and General Legislation Branch ("GGLB") to strengthen the administration and study of lift and escalator safety; and

Electrical and Mechanical Services Trading Fund ("EMSTF")

(b) creation of one permanent CEME (D1) post in the Engineering Services Branch 2 ("ESB2") to strengthen the provision of hospital engineering services for the implementation of the Hospital Authority's Hospital Development Plans ("HDPs").

PROBLEM

2. The EMSD needs additional support at Chief Engineer level to cope with the implementation of the new and on-going initiatives related to lift and escalator safety as well as the extra workload arisen from the HDP projects.

PROPOSAL

3. We propose to create a permanent CEME post in each of the GGLB and the ESB2 to strengthen the administration and study of lift and escalator safety and to provide engineering support services to the Hospital Authority ("HA") for the HDP projects.

Enhancement of the safety of aged lifts and escalators

4. At present, the directorate officers of the EMSD have been fully engaged in their respective duties. The CEME/General Legislation ("CEME/GL") in the GGLB is not only responsible for administering and enforcing four pieces of legislation[1], but also for staff administration and financial control tasks. Coupled with the fact that the Government is actively implementing a series of measures to enhance the safety of aged lifts and escalators, CEME/GL's workload has been substantially increased and stretched him/her beyond the limit. Therefore, we have an urgent need to create a permanent CEME (D1) post in GGLB so as to share CEME/GL's workload, including taking over his/her various tasks in enhancing the safety of aged lifts and escalators, in particular the implementation of the Lift Modernisation Subsidy Scheme ("LIMSS"), the carrying out of related inspections and subsequent enforcement work, and the feasibility study on implementing mandatory modernisation of aged lifts and escalators in phases[2].

Hospital Development Plan

5. In the 2016 Policy Address, the Government announced that $200 billion would be earmarked for the HA to implement the Ten-year HDP[3]. Subsequently, in the 2018 Policy Address, the Government invited the HA to commence the planning of the second Ten-year HDP, involving about $270 billion. The two ten-year HDPs will have 35 projects in total with an estimated total expenditure of about $470 billion. As the HDP projects progress, the EMSD will provide professional engineering services to the HA for the construction of new hospitals and redevelopment of existing hospitals, so that the quality of the electrical and mechanical facilities in the new hospitals can be ensured and that the existing hospital services will not be affected during the redevelopment. These additional professional engineering services result in a substantial increase in the EMSD's workload, in particular at the level of chief engineer. Therefore, we are in urgent need to create a CEME (D1) post in ESB2 to lead, oversee, monitor and control the delivery of the professional engineering services for the HA's HDPs, including formulating policies, standards and instructions for the professional and technical teams, and maintaining regular high level liaison with the HA, thereby facilitating the successful implementation of the HDP projects. In addition, the CEME post will also provide professional engineering services[4] to the HA in the implementation of hospital improvement and renovation projects outside the ambit of the HDP so as to

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1 They are the Lifts and Escalators Ordinance (Cap. 618), the Aerial Ropeways (Safety) Ordinance (Cap. 211), the Amusement Rides (Safety) Ordinance (Cap. 449), and the Builders' Lifts and Tower Working Platforms (Safety) Ordinance (Cap. 470).

2 This is a new task.

3 The HA is responsible for the implementation of the HDPs, which is overseen and monitored by the Food and Health Bureau.

4 This is a new task.

align the standards and quality of these hospital improvement and renovation projects with those of the HDP projects. This will help enhance the public hospital facilities, thereby improving the public health services.

Appendices I to IV

6. The organisation charts of the EMSD showing the situation before and after the creation of the two proposed CEME posts are illustrated in **Appendices I** to **IV**.

JUSTIFICATION

7. Currently, there are 16 permanent chief engineers (D1) posts in total in the EMSD responsible for the regulatory work or trading services. There are nine chief engineers[5] responsible for the regulatory work, who have to lead and oversee the work of the professional teams in the department in enforcing and implementing various ordinances[6]; administering and implementing related plans, agreements and systems; planning legislative work as well as providing professional advice to government departments and public organisations. There are seven chief engineers[7] responsible for the trading services, who have to lead and oversee the professional teams in the department to provide government departments and public organisations with operation and maintenance services in respect of electrical, mechanical, air-conditioning and building services ("EMABS") engineering systems, and furniture and equipment ("F&E") items (including biomedical electronic equipment); and with project management services in respect of minor electrical and mechanical ("E&M") engineering works.

8. The EMSD was set up in 1982 and since then the workload of the department have been increasing. Over the past 20 years, the Finance Committee ("FC") of the Legislative Council ("LegCo") only approved the EMSD to create (a) one permanent chief building services engineer and (b) one permanent CEME and one permanent chief electronic engineer in 2000 and 2015 respectively. They are responsible for planning and steering the work of the Energy Efficiency Office and the Railway Branch in the department respectively. Since then, the EMSD has not increased the establishment of any directorate officers to cope with the additional workload. Since 2015, the scope of work and workload of the EMSD have been increasing prominently. In respect of the regulatory work, the additional tasks

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5 These permanent chief engineer posts are created under Head 42 – EMSD.

6 They are the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598), the Buildings Energy Efficiency Ordinance (Cap. 610), the District Cooling Services Ordinance (Cap. 624), the Public Health and Municipal Services Ordinance (Chapter 132), the Electricity Ordinance (Chapter 406), the Gas Safety Ordinance (Cap. 51), the Oil (Conservation and Control) Ordinance (Cap. 264), the Lifts and Escalators Ordinance (Cap. 618), the Aerial Ropeways (Safety) Ordinance (Cap. 211), the Amusement Rides (Safety) Ordinance (Cap. 449), the Builders' Lifts and Tower Working Platforms (Safety) Ordinance (Cap. 470), the Mass Transit Railway Ordinance (Cap. 556), the Tramway Ordinance (Cap. 107), the Peak Tramway (Safety) Regulations (Cap. 265A) and the Airport Authority (Automated People Mover) (Safety) Regulation (Chapter 483C).

7 These permanent chief engineer posts are created under the EMSTF.

include strengthening inspection on LPG vehicle maintenance workshops and education on gas safety measures to the trade, monitoring the development and application of new refrigerants with low global warming potential in the air conditioning and refrigeration market, strengthening inspection on maintenance works of aged lifts and escalators carried out by registered contractors, providing support to the Urban Renewal Authority ("URA") for the implementation of the LIMSS, executing energy efficiency improvement projects for E&M engineering systems and introducing innovation and technology projects for enhancing work efficiency in government departments and public organisations, etc. In respect of the trading services, owing to the completion and coming into operation of various newly constructed government facilities and replacement of mechanical and electrical assets, the additional workload has increased tremendously. The turnover of the services provided by the EMSD on the provision of operation and maintenance services to EMABS engineering systems and F&E items (including biomedical electronic equipment) of government departments and public organisations, and project management services for minor E&M engineering works has increased significantly from $2.65 billion in 1997-98 to $6.51 billion in 2017-18. The workload is indeed excessive.

9. After a comprehensive review, all the directorate officers of the EMSD have spared no effort to discharge their duties and they are too busy to take up additional duties. Therefore, we are in urgent need to increase chief engineer support in the GGLB and ESB2 to cope with the new and ongoing tasks.

(A) Proposed creation of a permanent CEME post in GGLB

10. Hong Kong is a densely populated city with increasing number of high-rise buildings and barrier free access. The demand for lifts and escalators is therefore growing continuously.

11. The operation of lifts and escalators in Hong Kong is regulated by the Lifts and Escalators Ordinance (Cap. 618) ("the Ordinance"). The Ordinance came into force on 17 December 2012, which stipulates that the Responsible Person[8] ("RP") for each lift/escalator shall ensure that the lift/escalator is kept in a proper state of repair and in safe working order, and that the installation, testing and examination, maintenance and demolition of lifts/escalators shall be carried out by registered personnel, namely Registered Contractors ("RCs"), Registered Engineers ("REs") and Registered Workers ("RWs"), and persons under their supervision.

12. Since the Ordinance came into operation, the average number of incidents involving failure of lift and escalator equipment[9] per year has been

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[8] i.e. the owner or a person responsible for the management of the lift/escalator.

[9] Lift and escalator incidents involving failure of lift and escalator equipment refer to interruption of normal lift or escalator services due to wear and tear or fault of the lift and escalator components or associated equipment.

remarkably reduced as compared with that before the Ordinance was put into effect, from an average of 28 cases per year in 2010 – 2012 to an average of 7.8 cases per year in 2013 – 2017, representing a reduction of 72%.

New tasks related to enhancing safety of aged lifts and escalators

13. As at end 2018, there were about 68 000 lifts and 9 700 escalators in Hong Kong. Over 51.5% (or about 35 000) of the lifts and 40.2% (or about 3 900) of the escalators in Hong Kong reached an age of 20 years or above. As for newly installed lifts and escalators, there are about 1 300 lifts and 200 escalators put into services every year, which brings the overall number of lifts and escalators on the rise continuously.

14. Over the past six years, the number of inspections conducted by the General Legislation Division ("GLD") of the GGLB was maintained at above 10 000 per year. As the number of lift and escalator installations increases with time and the existing lifts and escalators become aged gradually, we have to increase the number of inspections; extend the coverage of inspections; strengthen focused publicity and monitor the performance of registered persons in order to enhance the safety of lifts and escalators.

15. The two serious lift incidents[10] in 2018 involved aged lifts not equipped with safety devices up to the latest standards. In view of this, the Development Bureau ("DEVB") and the EMSD immediately formulated short-term, medium-term and medium to long-term measures to enhance the safety of aged lifts as follows:

(a) In respect of the short-term measures, the EMSD has increased its non-directorate officers to step up the surveillance of aged lifts since June 2018. The EMSD also issued the "Code of Practice for Lift Works and Escalator Works (2018 Edition)" in August 2018 requiring RPs and RCs to step up the maintenance of aged lifts which have not been modernised, in particular those components which may affect the safe operation of lifts. At the same time, the EMSD has increased surveillance to ensure the quality of maintenance works carried out by RCs.

(b) In respect of the medium-term measures, the Government has announced to launch a $2.5 billion LIMSS over six years starting from FY 2019–20 to promote lift modernisation in the community through the provision of financial incentive with appropriate professional support to building owners in need.

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[10] A lift incident happened on 8 April 2018 at Block 2 of Waterside Plaza in Tsuen Wan resulting in injury of two passengers while the other lift incident happened on 11 May 2018 at Paris Court of Sheungshui Town Centre resulting in fatality of one passenger.

(c) In respect of the medium to long-term measures, the EMSD will study the feasibility of mandating lift modernisation works, by making reference to relevant experience in other countries and the enactment and enforcement of similar ordinances in Hong Kong as well as taking into account the impact on the community and the industry.

16. The Government briefed Members of the LegCo Panel on Development about the measures mentioned in paragraph 15 above on 29 May 2018. Subsequently, the funding application of the LIMSS[11] was approved by the FC on 7 December 2018.

17. Summarising the new tasks and initiatives mentioned in paragraphs 14 and 15, the GLD has to undertake the following additional tasks –

(a) Participating in the formulation of the LIMSS and providing technical advisory and support services during the implementation stage;

(b) Strengthening inspections on the lift modernisation works implemented under the LIMSS;

(c) Stepping up the maintenance requirements of aged lifts and the associated inspections;

(d) Upgrading the existing computer system and lift database as well as lift works reporting system to cope with the tasks under item (b) above and the mandatory lift modernisation probably implemented in the future;

(e) Stepping up inspections on escalators;

(f) Facilitating the public and the trade in enhancing the safety of aged lifts and escalators through focused publicity and public education work;

(g) Taking prosecution and disciplinary actions resulting from the implementation of the above tasks; and

(h) Conducting feasibility study on introducing legislative requirements to mandate modernisation of aged lifts.

Additional directorate officer in GLD

18. Currently, there is only one CEME, titled CEME/GL, in the establishment of the GLD. In addition to supervising the respective professional teams in enforcing the four pieces of legislation (paragraph 4 above), CEME/GL is responsible for providing advice and support in relation to general enquiries and incidents involving E&M installations which are outside the purview of any specific

[11] The Government will partner with the URA to implement the LIMSS.

bureaux, departments or other divisions within the EMSD. Besides, CEME/GL also supervises and manages two dedicated teams responsible respectively for administering the voluntary registration scheme and studying the feasibility of introducing mandatory registration for the vehicle maintenance trade. CEME/GL is already overloaded with his/her work and it is very difficult for him/her to take up the additional tasks mentioned in paragraph 17 above. To carry out the preparatory work for these new tasks, the EMSD established two professional teams of non-directorate officers in the GLD last year and has planned to further increase the strength of non-directorate staff in 2019 – 20 to better cope with the new tasks. In view of the above, the GLD is in urgent need to establish a permanent CEME (D1) to share the existing and new workload of CEME/GL.

Re-organisation and re-titling within the GLD

19. Following the creation of the proposed CEME post, the duties of the GLD can be reshuffled to achieve greater operational efficiency. The new CEME will be titled as CEME/GL2. In addition to supervising and steering the professional teams in a new division, GLD2, which are spun off from the existing GLD (to be renamed as GLD1 upon the establishment of GLD2) for discharging enforcement duties associated with aged lifts and escalators[12], he/she will also take up the duties mentioned in paragraph 17 above, including supervision and administration of the team redeployed from GLD1 for the provision of technical advisory and support services for the LIMSS.

20. CEME/GL2's dedicated effort in undertaking the new tasks mentioned in paragraph 17 above will be critical for the smooth implementation of the policy initiatives for enhancing the safety of aged lifts and escalators. The work concerned requires to be implemented in phases to suit the market situation to avoid inflating the market price for the modernisation works and, in the long run, there will be voluminous inspection and follow-up enforcement actions required to be handled. Therefore, we need to have an officer at directorate level who possesses technical expertise and professional knowledge to lead dedicated teams to carry out the work. The job description of CEME/GL2 is given in **Appendix V**. After reorganisation, the existing CEME/GL will be retitled as CEME/GL1. The job description of CEME/GL1 is given in **Appendix VI**.

Appendix V

Appendix VI

(B)Proposed creation of a permanent CEME post in ESB2

21. To tackle the challenge of a rapidly ageing population, it was announced in the 2016 Policy Address that $200 billion would be earmarked for the

[12] The daily enforcement of the Ordinance, including complaints or enquiries handling, incident investigation, inspection on new installations or major alterations, inspection on maintenance handover and annual examinations of lifts and escalators are excluded. These tasks will continue to be undertaken by GLD1.

HA to implement the Ten-year HDP which covers the redevelopment or expansion of 11 existing hospitals, and the construction of a new acute hospital, three community health centres and one supporting services centre for the HA. Projects that have already commenced under the HDP include the construction of a new acute hospital at Kai Tak Development Area, redevelopment of Kwong Wah Hospital, Kwai Chung Hospital, Prince of Wales Hospital, Queen Mary Hospital, Grantham Hospital and Our Lady of Maryknoll Hospital, as well as the extension of the Operating Theatre Block of Tuen Mun Hospital and the expansion of Haven of Hope Hospital. Other projects in the pipeline include expansion of North District Hospital and Lai King Building in Princess Margaret Hospital, etc.

22. In the 2018 Policy Address, the Government invited the HA to commence planning of the second Ten-year HDP, covering a total of 19 projects with an estimated total expenditure of about $270 billion. Coupled with the first Ten-year HDP, the total estimated expenditure is $470 billion.

New engineering services supporting HA's HDP

23. The EMSD is currently providing comprehensive operation and maintenance services for EMABS engineering systems and F&E items (including biomedical electronics equipment) and minor works project management services for public hospitals and clinics under the HA. Furthermore, the EMSD also supports the HA in the procurement of EMABS engineering systems and F&E items, and provides testing and commissioning services for new EMABS engineering systems and F&E items before they are put into use.

24. Under the current arrangement, the HA would engage her project consultants and contractors for the project management and implementation of the HDP projects. As most of these mega projects cover various highly precise EMABS systems and involve a lot of complicated in-situ redevelopment works, substantial modification of the existing EMABS systems is generally required. It is of particular importance to ensure that the existing hospital service would not be affected during the redevelopment.

25. As the engineering works agent of the HA, the EMSD will establish a new and dedicated division consisting of professional and inspectorate grade staff in 2019 – 20 to provide professional engineering services to the HDP projects as follows –

(a) Provision of professional vetting on the design of EMABS engineering systems and F&E items to meet special hospital operational requirements;

(b) Provision of professional advice in respect of the engineering design of the modification and decanting of existing EMABS engineering

systems to ensure proper interfaces between new and existing services;

(c) Provision of on-site supervision services for modification works by contractors on existing EMABS engineering systems including coordination with project team, hospital management team, and operation and maintenance team;

(d) Review of the commissioning requirements and processes for incorporation into the construction and commissioning programme to ensure that proper and sufficient testing and commissioning will be conducted; and

(e) Provision of acceptance service for installations to ensure proper installation of the new EMABS engineering systems and F&E items, thereby facilitating taking over of the new EMABS engineering systems and F&E items by the EMSD for subsequent operation and maintenance.

26. The services mentioned in paragraph 25 above are crucial for the successful implementation of the projects under the HDP. These services can (a) ensure the normal and uninterrupted public health services of existing hospital buildings; (b) achieve seamless transition from construction phase to operation phase of the hospitals to be redeveloped in-situ; and (c) safeguard the quality of engineering systems to be installed in the new and redeveloped hospitals under the HDPs.

27. Apart from the HDP projects, the HA has been implementing various hospital improvement and renovation projects to upgrade the facilities in public hospitals with a view to enhancing the public health services. These improvement and renovation projects covering EMABS engineering systems in hospital buildings are implemented by the HA, which are of very similar arrangement as the implementation of the HDP. In 2017, the HA appointed the EMSD to provide professional engineering services in the continual implementation of these improvement and renovation projects, so as to align the standards and quality of these hospital improvement and renovation projects with those of the HDP projects.

Additional directorate officer in ESB2

28. As stated in paragraph 9 above, all the directorate officers of the EMSD have spared no effort to discharge their current duties and they are too busy to take up additional tasks. We therefore have a pressing need to create an additional CEME post (D1), titled as Chief Engineer/Health Sector 2 ("CE/HS2"), to effectively deliver the professional engineering services mentioned in paragraphs 25 and 27 above. The work calls for the technical expertise and professional knowledge of an officer at directorate level to provide holistic steer and oversight at the planning, design and implementation stage of various projects. Upon completion of the new projects, the CE/HS2 will share the increased workload arising from the operation and

maintenance services to the EMABS engineering system and biomedical electronic equipment in relation to the HDP. CE/HS2's job description is given in **Appendix VII**.

Appendix VII

29. Following the creation of the proposed CE/HS2 post, the existing CE/HS of the ESB2 will be retitled as Chief Engineer/Health Sector 1 ("CE/HS1") and will continue to oversee his/her professional teams for the provision of operation and maintenance, procurement and minor works project management services for EMABS engineering systems and biomedical electronics equipment to over 40 public hospitals and 70 clinics of the HA, the Prince Philip Dental Hospital, the clinics and health centres of the Department of Health ("DH"), and laboratories of the DH and the Government Laboratory. The job description of CE/HS1 is given in **Appendix VIII**.

Appendix VIII

ALTERNATIVES CONSIDERED

30. We have comprehensively reviewed the feasibility of redeploying existing chief engineers within the EMSD to take up the duties of the two proposed CEME posts (paragraphs 7 to 9 above). The EMSD concludes that the existing chief engineers' duties are extremely heavy. It is operationally not feasible for them to take up additional duties without adversely affecting the discharge of their current duties as stated at **Appendix IX**.

Appendix IX

FINANCIAL IMPLICATIONS

Staff proposal for further enhancing lift and escalator safety

31. The proposed creation of the CEME (D1) post in the GGLB will bring about an additional notional annual salary cost at mid-point of $1,836,600. The additional full annual average staff cost, including salaries and staff on-cost, is around $2,576,000.

32. Apart from the proposed CEME post in the GGLB, 11 permanent non-directorate posts will be created to cope with the increasing workload. The additional notional annual mid-point salary is $ 7,616,640, and the full annual average staff cost involved, including salaries and staff on-cost, is about $11,226,000.

33. We have reserved the necessary provision to cater for the expenses of this proposal.

Staff proposal for supporting HA's HDP

34. In the meantime, the proposed creation of the CEME (D1) post in ESB2

will bring about an additional notional annual salary cost at mid-point of $1,836,600. The additional full annual average staff cost, including salaries and staff on-cost, is around $2,576,000.

35. Apart from the proposed CEME post, ten permanent non-directorate posts will be created in EMSD to cope with the additional workload. The additional notional annual mid-point salary is $8,476,230 and the full annual average staff cost involved, including salaries and staff on-cost, is about $13,086,000 for the ten new posts.

36. The EMSTF is a part of the EMSD for providing comprehensive E&M engineering solutions and services to other government departments and public organisations in Hong Kong, including the HA. The EMSTF, being a separate financial and accounting entity established under the Trading Fund Ordinance (Cap. 430), has to meet all its expenditure from its trading fund operation, including the full staff cost of civil servants being employed. There is sufficient provision under the EMSTF annual budget to cover the additional costs of the staff proposal for the ESB2.

BACKGROUND

37. The EMSD plays a dual role in (a) providing regulatory services with regard to the safety of electricity, gas, lift and escalator, amusement rides, railway and energy efficiency, as well as executing regulatory control over a number of various E&M facilities; and (b) providing comprehensive E&M engineering solutions and services to other government departments and public organisations in Hong Kong.

38. The GGLB is responsible for, among other duties, the administration and regulatory control over lift and escalator safety[13], whereas the ESB2 is responsible for, apart from offering various kinds of E&M engineering solutions and services to other government departments and public organisations, providing hospital engineering services to support the operation of hospitals under the purview of the HA.

[13] Lift and escalator safety is within the policy purview of the Development Bureau.

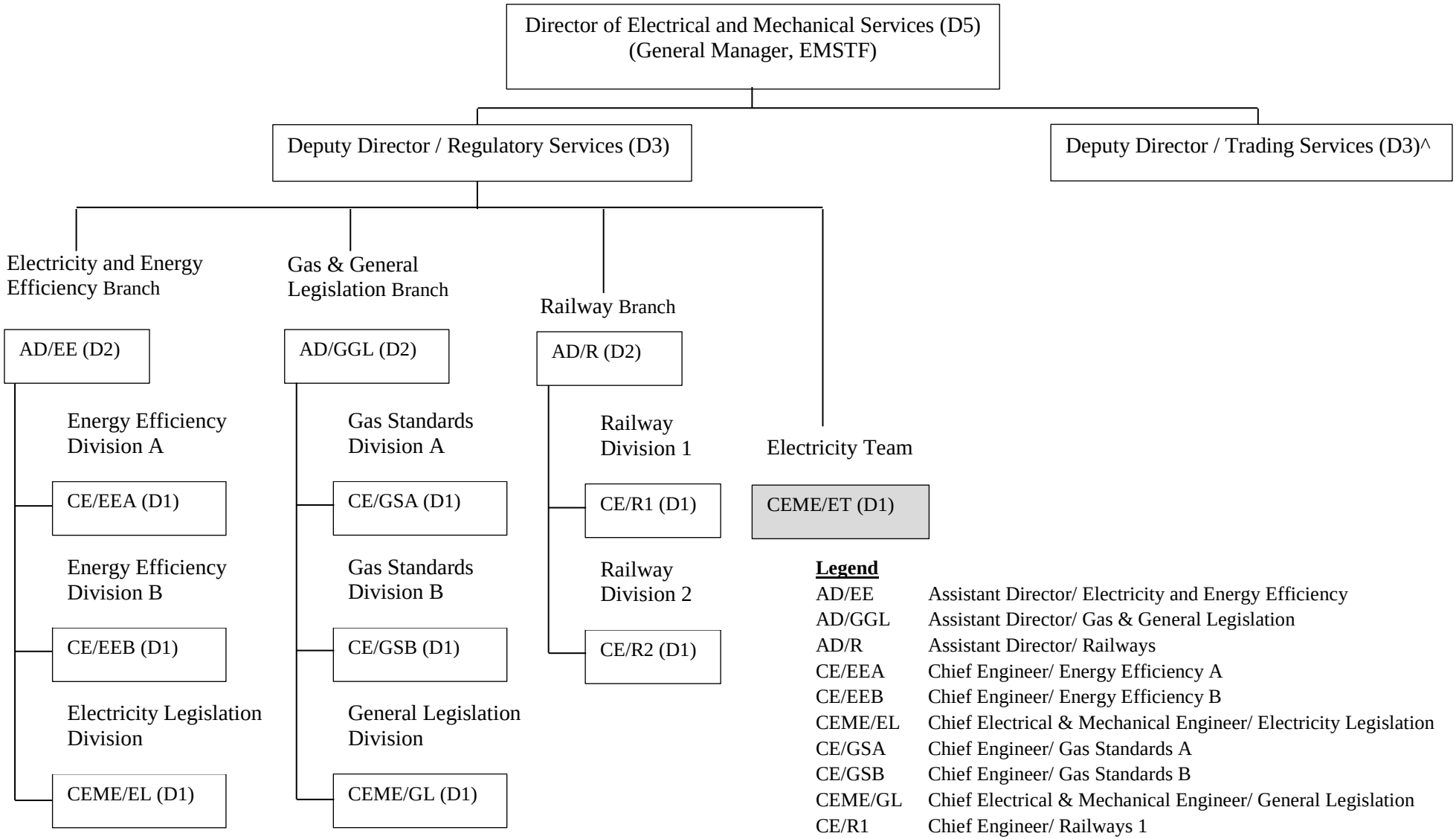
ADVICE SOUGHT

39. Members are invited to comment on the proposal. We plan to seek the required resources from the LegCo in accordance with the established procedures.

Development Bureau
Electrical and Mechanical Services Department
March 2019

Appendix I

Existing Organisation Chart of Electrical and Mechanical Services Department (Regulatory Services)
(Established under Head 42 – Electrical and Mechanical Services Department)

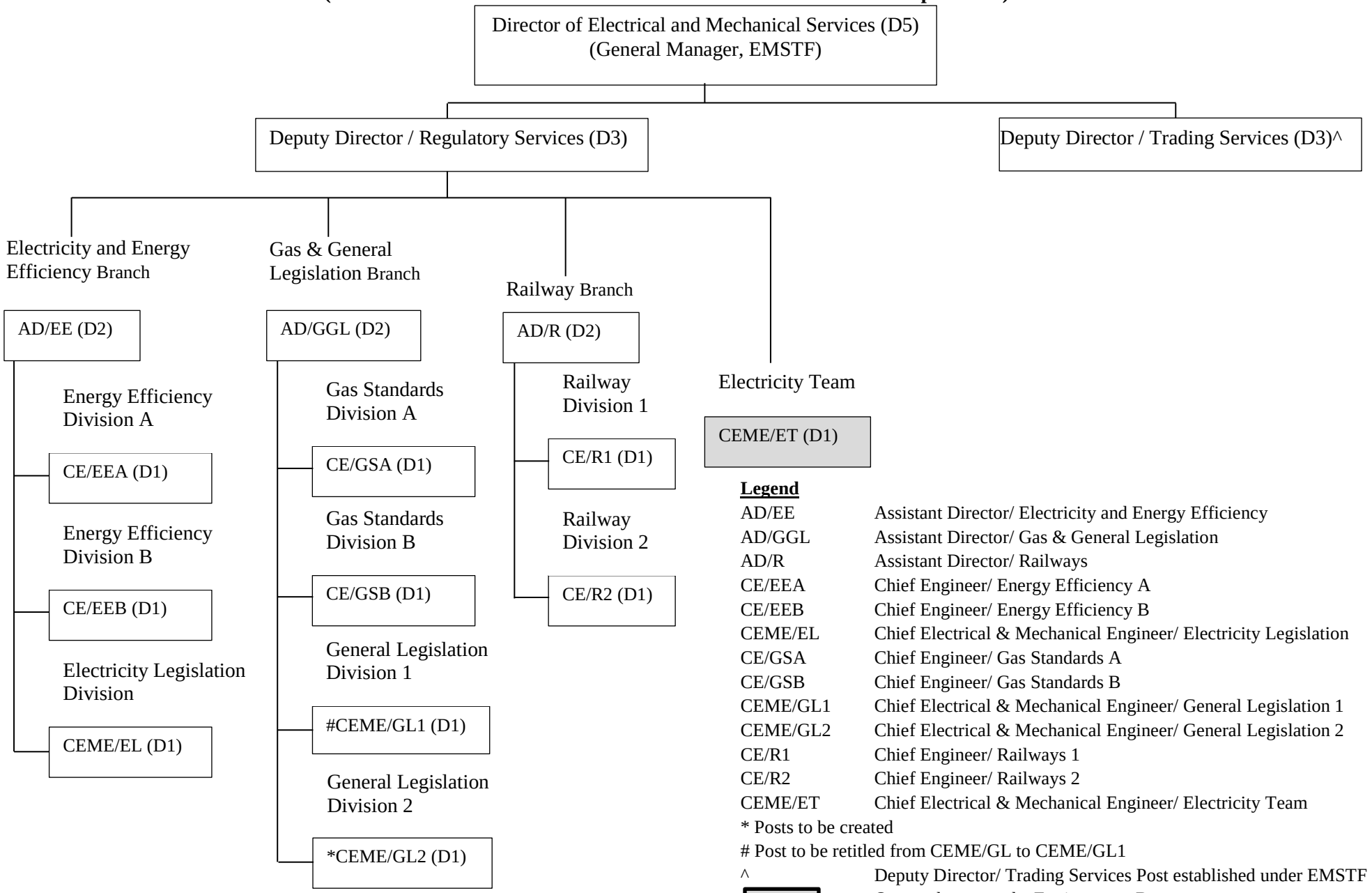


Legend

AD/EE	Assistant Director/ Electricity and Energy Efficiency
AD/GGL	Assistant Director/ Gas & General Legislation
AD/R	Assistant Director/ Railways
CE/EEA	Chief Engineer/ Energy Efficiency A
CE/EEB	Chief Engineer/ Energy Efficiency B
CEME/EL	Chief Electrical & Mechanical Engineer/ Electricity Legislation
CE/GSA	Chief Engineer/ Gas Standards A
CE/GSB	Chief Engineer/ Gas Standards B
CEME/GL	Chief Electrical & Mechanical Engineer/ General Legislation
CE/R1	Chief Engineer/ Railways 1
CE/R2	Chief Engineer/ Railways 2
CEME/ET	Chief Electrical & Mechanical Engineer/ Electricity Team
^	Deputy Director/ Trading Services Post established under EMSTF
	On attachment to the Environment Bureau

Appendix II

Proposed Organisation Chart of Electrical and Mechanical Services Department (Regulatory Services)
(Established under Head 42 – Electrical and Mechanical Services Department)



Legend

AD/EE	Assistant Director/ Electricity and Energy Efficiency
AD/GGL	Assistant Director/ Gas & General Legislation
AD/R	Assistant Director/ Railways
CE/EEA	Chief Engineer/ Energy Efficiency A
CE/EEB	Chief Engineer/ Energy Efficiency B
CEME/EL	Chief Electrical & Mechanical Engineer/ Electricity Legislation
CE/GSA	Chief Engineer/ Gas Standards A
CE/GSB	Chief Engineer/ Gas Standards B
CEME/GL1	Chief Electrical & Mechanical Engineer/ General Legislation 1
CEME/GL2	Chief Electrical & Mechanical Engineer/ General Legislation 2
CE/R1	Chief Engineer/ Railways 1
CE/R2	Chief Engineer/ Railways 2
CEME/ET	Chief Electrical & Mechanical Engineer/ Electricity Team

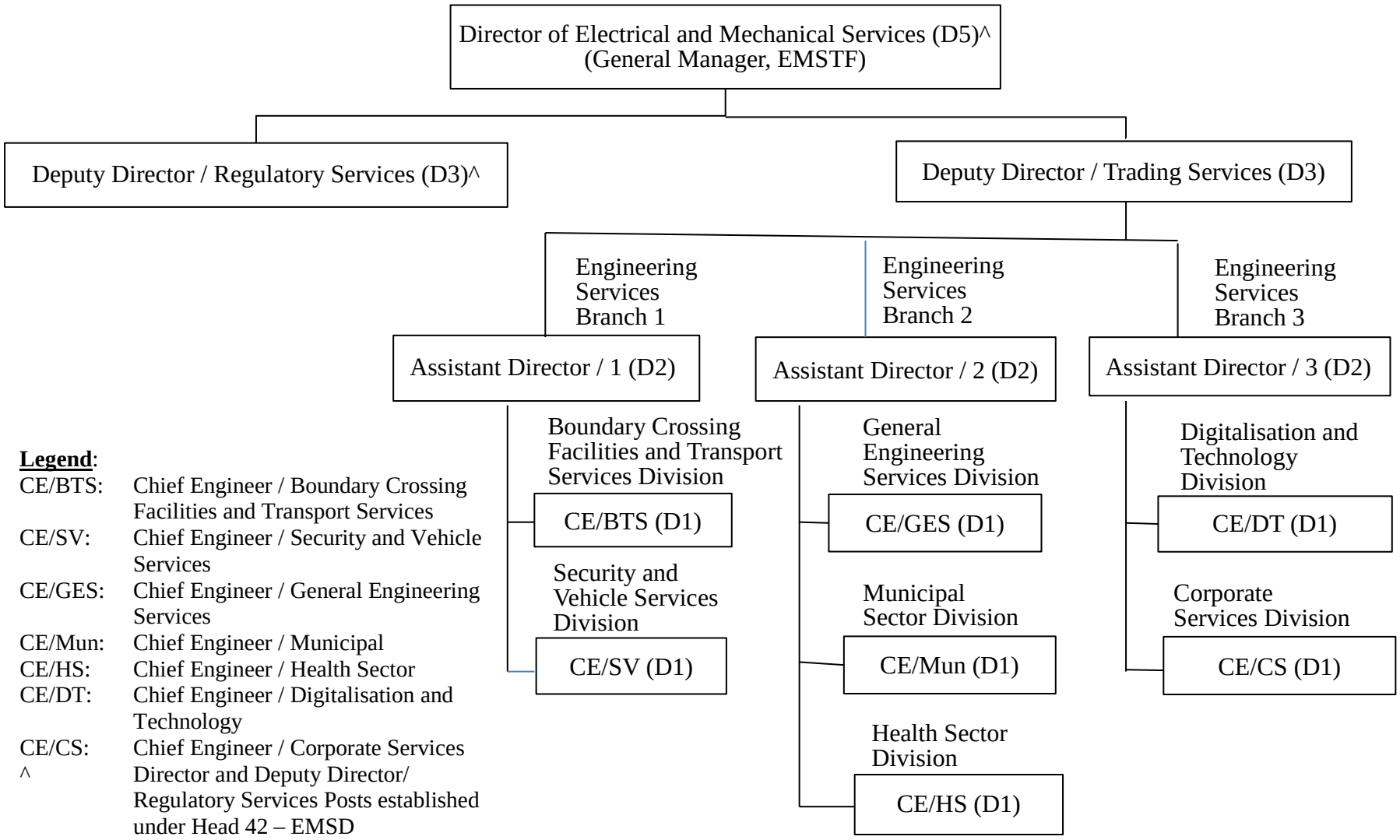
* Posts to be created

\# Post to be retitled from CEME/GL to CEME/GL1

^ Deputy Director/ Trading Services Post established under EMSTF

On attachment to the Environment Bureau

Existing Organisation Chart of the Electrical and Mechanical Services Department (Trading Services) (Established under EMSTF) **Appendix III**

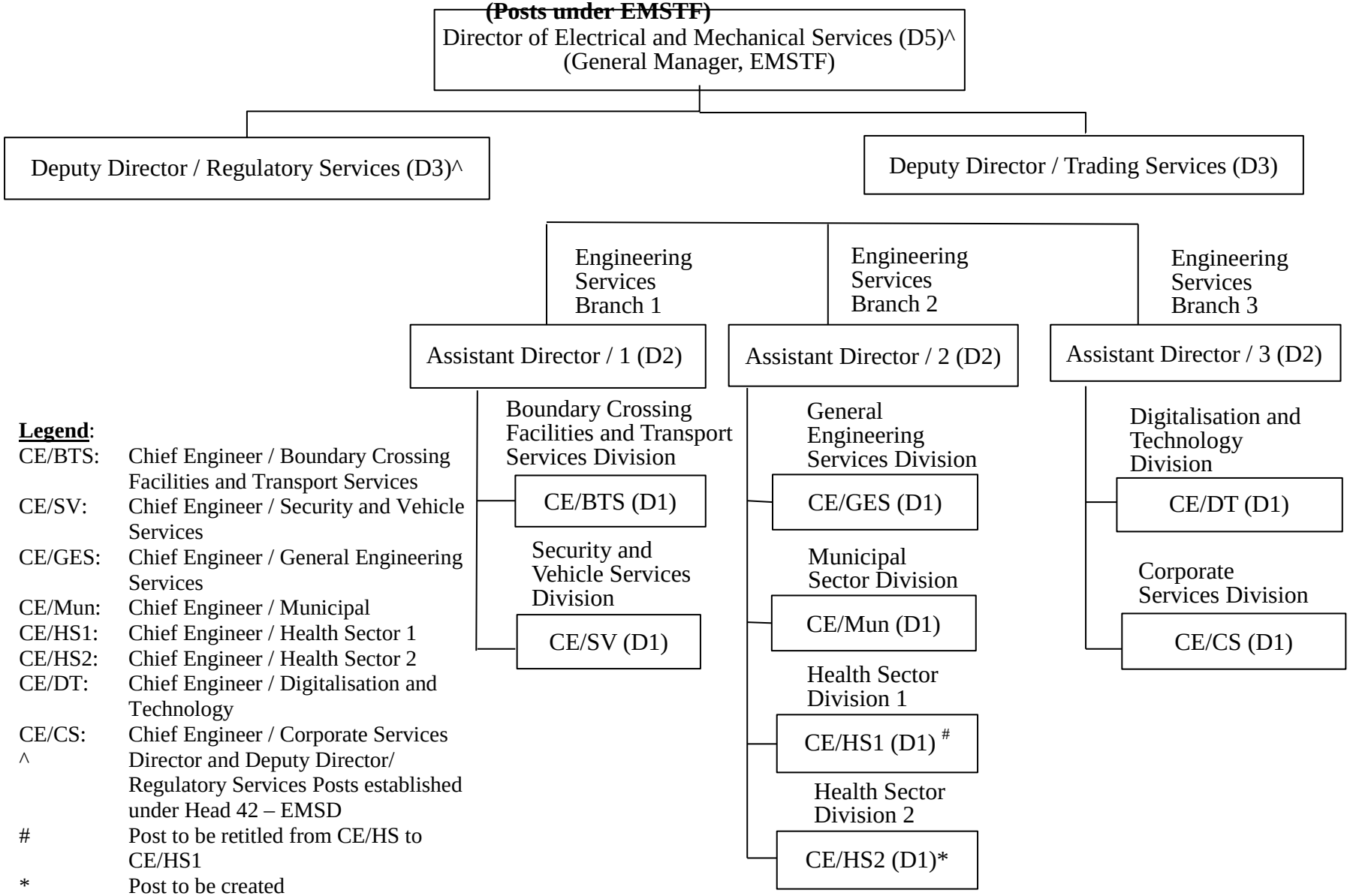


Legend:

CE/BTS:	Chief Engineer / Boundary Crossing Facilities and Transport Services
CE/SV:	Chief Engineer / Security and Vehicle Services
CE/GES:	Chief Engineer / General Engineering Services
CE/Mun:	Chief Engineer / Municipal
CE/HS:	Chief Engineer / Health Sector
CE/DT:	Chief Engineer / Digitalisation and Technology
CE/CS:	Chief Engineer / Corporate Services
^	Director and Deputy Director/ Regulatory Services Posts established under Head 42 – EMSD

Appendix IV

Proposed New Organisation Chart of the Electrical and Mechanical Services Department (Trading Services)
(Established under EMSTF)
(Posts under EMSTF)



Legend:

CE/BTS:	Chief Engineer / Boundary Crossing Facilities and Transport Services
CE/SV:	Chief Engineer / Security and Vehicle Services
CE/GES:	Chief Engineer / General Engineering Services
CE/Mun:	Chief Engineer / Municipal
CE/HS1:	Chief Engineer / Health Sector 1
CE/HS2:	Chief Engineer / Health Sector 2
CE/DT:	Chief Engineer / Digitalisation and Technology
CE/CS:	Chief Engineer / Corporate Services
^	Director and Deputy Director/ Regulatory Services Posts established under Head 42 – EMSD
#	Post to be retitled from CE/HS to CE/HS1
*	Post to be created

Appendix V

Job Description of

New Chief Electrical and Mechanical Engineer / General Legislation 2

Grade/ Rank : Chief Electrical and Mechanical Engineer (D1)

Responsible to : Assistant Director/Gas & General Legislation (D2)

Main Duties and Responsibilities

1. To be responsible for supervision of stepped-up surveillance checks of routine maintenance and special maintenance of aged lifts carried out by registered contractors as well as implementation of other short-term measures to enhance the safety of aged lifts, thereby further protecting public safety.

2. To monitor and facilitate the implementation of the Lift Modernisation Subsidy Scheme and to oversee the subsequent inspections during the modernisation works and after the completion of modernisation works so as to speed up the modernisation of aged lifts and enhance lift safety.

3. To lead a team to carry out feasibility studies of mandating the implementation of lift modernisation works by making reference to relevant experience in other countries and the enactment and enforcement of similar ordinances in Hong Kong as well as taking into account the impact on the community and the trade.

4. To supervise the stepped-up inspections on maintenance works of escalators, in particular aged escalators and long escalators, so as to enhance the monitoring of the performance of registered personnel as well as to strengthen the deterrence against low performers.

5. To provide professional steer and clear directives in relation to the prosecution / disciplinary actions arising from the implementation of the measures for enhancement of the safety of aged lifts and escalators.

6. To undertake high level administrative and regulatory oversight duties as well as maintain liaison with stakeholders including interested groups, trade associations, owners associations, District Council members, LegCo members, etc. for policies, regulatory control and legislative proposals related to aged lifts and escalators.

7. To supervise and administer the team providing technical advisory and support services to the URA for formulation and implementation of the LIMSS.

8. To oversee the administration work and staff management of the General Legislation Division 2.

Appendix VI

Job Description for

Chief Electrical and Mechanical Engineer / General Legislation 1

(Post title before reorganisation: Chief Electrical and Mechanical Engineer / General Legislation)

Grade / Rank : Chief Electrical and Mechanical Engineer (D1)

Responsible to : Assistant Director / Gas & General Legislation (D2)

Main Duties and Responsibilities

1. To oversee the administration and enforcement of the Aerial Ropeways (Safety) Ordinance (Cap. 211), the Amusement Rides (Safety) Ordinance (Cap. 449), and the Builders' Lifts and Tower Working Platforms (Safety) Ordinance (Cap. 470) in all aspects, together with the daily operation of the Lifts and Escalators Ordinance (Cap. 618), including complaints or enquiries handling, incident investigation, inspection on new installation or major alterations, inspection on maintenance handover and annual examination of lifts and escalators.

2. To administer the vetting and approval for use permit in relation to new models or new installations of lift, escalator, aerial ropeway, amusement ride, builder's lift and tower working platform to be introduced into Hong Kong or put into service in the territory.

3. To provide steer and directives for the introduction and implementation of new legislative proposal / legislative amendment and codes of practice / guidance notes for the purpose of improving safety standards and enhancing public safety for lifts, escalators, aerial ropeways, amusement rides, builders' lifts and tower working platforms, and similar mechanical devices and installations.

4. To administer the registration schemes of trade personnel and undertake audits on the organization and operation of contractors to ensure they are fit and proper to continue to be registered and discharge the statutory duties.

5. To provide administrative and secretariat support for the establishment and operation of disciplinary and appeal boards under the four pieces of legislation mentioned in item 1 above.

6. To oversee the planning and implementation of publicity programme and activities, such as conducting seminars and exhibitions, and informing the registered personnel, owners, and members of the public about their duties and obligations under the various ordinances, and carrying out lift maintenance price survey and administering the contractors' performance ratings which are published for reference.

7. To maintain liaison with various organisations and government departments for the promotion of safety and new / existing legislation concerning mechanical devices and installations.

8. To provide professional steer and clear directives in relation to the prosecution / disciplinary actions arising from the enforcement of the various ordinances.

9. To administer various registration schemes of vehicle maintenance trade and oversee the staff management and financial control of a professional team for the development of a regulatory regime for the vehicle maintenance trade.

10. To oversee the administration and staff management of the General Legislation Division 1.

Appendix VII

Job Description for
New Chief Engineer / Health Sector 2

Grade / Rank : Chief Electrical and Mechanical Engineer (D1)

Responsible to : Assistant Director / 2 (D2)

Main Duties and Responsibilities

1. To lead and steer the new Health Sector Division 2 ("HSD2") in providing professional engineering services to the Hospital Authority ("HA") in the implementation of Hospital Development Plan ("HDP") projects at strategic level.
2. To oversee the provision of professional vetting on the design of electrical, mechanical, air-conditioning, and building services ("EMABS") engineering systems and furniture and equipment items ("F&E items") (including biomedical electronics equipment) in the HDP projects to meet special hospital operation and maintenance requirements.
3. To oversee the provision of professional engineering design input on the modification and decanting of existing EMABS engineering systems for all interfaces between new and existing services.
4. To oversee the provision of on-site supervision services for required diversion and interfacing works by contractors on existing EMABS engineering systems to ensure normal public health services of existing hospital buildings.
5. To oversee the review of commissioning requirements and process of the EMABS engineering systems and F&E items of the HDP projects to ensure proper and sufficient testing and commissioning to be conducted.
6. To oversee the provision of acceptance services for new EMABS engineering systems and F&E items in the new / redeveloped hospital buildings from operation and maintenance perspectives.
7. To maintain regular high level liaison with HA Head Office and the related Clusters, thereby facilitating the successful delivery of the professional services on HDP projects to the HA.
8. To oversee the provision of professional engineering services on EMABS engineering systems in the implementation of improvement and renovation projects for public hospitals.
9. To share the workload of the operation and maintenance services of the EMABS engineering systems and biomedical electronic equipment upon completion of new projects of HDP
10. To oversee administration and manage staff of the HSD2.

Appendix VIII

Job Description for

Chief Engineer / Health Sector 1

(Post title before reorganisation: Chief Engineer / Health Sector)

Grade / Rank : Chief Electronics Engineer (D1)

Responsible to : Assistant Director / 2 (D2)

Main Duties and Responsibilities

1. To lead the Health Sector Division 1 ("HSD1") for the provision of operation, maintenance, procurement and minor works project management for biomedical electronics, electrical, mechanical, building services, and general electronics installations to meet customers' needs and expectation.

2. To ensure that the Division is run according to established policies and pricing strategies and be responsible for the profit and loss, cost effectiveness and customer satisfaction of the Division.

3. To propose changes to policies and pricing strategies to enhance the potential of the Division and its long term viability to cope with the rapid advancement in engineering technologies particularly in biomedical electronics sector.

4. To liaise closely with customers at senior management level to identify their needs and quality expectations, as well as possible policy/operational changes affecting the services of the Division.

5. To prepare and implement strategic business and development plans for the Division including the packaging, the type and quality of services as well as the development of new services and facilities.

6. To establish operational directives and procedures, set and monitor performance indicators and targets for critical electrical and mechanical systems and biomedical electronics equipment, identify deviating trends, conducts investigations and implements corrective actions.

7. To lead the implementation of Work Improvement, Business Process Improvement and quality management in relation to the Integrated Management System of the Division.

8. To motivate and manage staff and contribute to the organization development, manpower planning and development of the Division, in particular the development of expertise in hospital engineering systems and biomedical electronics systems.

Appendix IX

Main Duties and Responsibilities of the Existing Chief Engineers in the Electrical and Mechanical Services Department

Major duties and responsibilities of the Chief Engineers in the Electrical and Mechanical Services Department are summarised in the following paragraphs.

Regulatory Services

Under Assistant Director / Electricity and Energy Efficiency ("AD/EE")

Chief Engineer / Energy Efficiency Division A ("CE/EEA")

2. CE/EEA assists AD/EE in providing professional support and advice to the policy bureau on the formulation of policies, strategies and initiatives on energy efficiency and conservation and the application of renewable energy. He/She develops the Voluntary and Mandatory Energy Efficiency Labelling Scheme for electrical and gas appliances / equipment, and promote public awareness on the use of energy-efficient appliances. He/She is responsible for the administration and enforcement of the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598). He/She promotes the adoption of energy-efficient technologies, renewable energy, energy audits and the best practices in the public and private sectors as well as the application of new and emerging energy efficiency technologies. He/She is also responsible for coordinating with policy bureaux, government departments and private organisations for the promotion of energy programmes promulgated by international / regional / local energy organisations such as Asia-Pacific Economic Cooperation and participating in their activities.

Chief Engineer / Energy Efficiency Division B ("CE/EEB")

3. CE/EEB assists AD/EE in providing professional support and advice to the policy bureau on the formulation of policies, strategies and initiatives on energy efficiency and conservation and the application of renewable energy. He/She promotes wider use of Water-cooled Air Conditioning System in Hong Kong. He/She is responsible for the administration and enforcement of the Buildings Energy Efficiency Ordinance (Cap. 610) and District Cooling Services Ordinance (Cap. 624). He/She oversees the implementation of the district cooling system at the Kai Tak Development. He/She provides support to studies on provision of district cooling systems in new development areas and oversees subsequent implementation works. He/She is also responsible for the regulation of improperly maintained or contaminated fresh water cooling towers under the Public Health and Municipal Services Ordinance (Cap. 132).

Chief Electrical and Mechanical Engineer / Electricity Legislation ("CEME/EL")

4. CEME/EL assists AD/EE in the management and administration of the regulatory functions related to electricity safety. He/She is responsible for the administration and enforcement of the Electricity Ordinance (Cap. 406) for ensuring safe electrical installations, safe household electrical products and the safe and reliable supply of electricity. He/She introduces and implements new legislative proposals / legislative amendments and codes of practice / guidance notes for the purpose of improving safety standards of the electrical industry and enhancing electricity safety of the public. He/She assists AD/EE in providing support to the Director of Electrical and Mechanical Services in the Daya Bay Contingency Plan and related technical advice on nuclear power safety. He/She is also responsible for maintaining liaison with outside organisations / government departments for the promotion of electricity safety and new / existing legislation.

Under Assistant Director / Gas and General Legislation ("AD/GGL")

Chief Engineer / Gas Standards A ("CE/GSA")

5. CE/GSA assists AD/GGL in monitoring the performance of Hong Kong and China Gas Co. Ltd. to ensure that its gas production plants and notifiable gas installations are operated to the highest possible standards and that the requirements of the Gas Safety (Gas Supply) Regulations are fully complied with. He/She is responsible for the operation of registration scheme for gas contractors and installers and manages the quality assurance of Towngas and cylinder liquefied petroleum gas ("LPG") installation work in all market sectors. He/She manages the investigation, preparation and processing of cases for prosecution under the Gas Safety Ordinance (Cap. 51). He/She is also responsible for the processing of complaints from members of the public and representative groups concerned with the safe supply and use of gas. He/She gives expert advice to professional agencies in both public and private sectors on the supply and use of cylinder LPG and town gas premises and coordinates activities associated with the promotion of gas safety. He/She is responsible for developing, introducing and monitoring new training packages for the gas industry in conjunction with training establishments in the private and public sectors.

Chief Engineer / Gas Standards B ("CE/GSB")

6. CE/GSB assists AD/GGL in administering the Gas Safety Ordinance (Cap. 51) and subsidiary regulations on behalf of the Gas Authority, the Oil (Conservation and Control) Ordinance (Cap. 264) on behalf of the Director of Oil Supplies and implementing the devised comprehensive monitoring regime on the development of refrigerants of low Global Warming Potential ("GWP"). He/She monitors the performance of gas supply companies to ensure that LPG terminals, gas production plants and notifiable gas installations are operated to the highest standards and that the requirements of the Gas Safety (Gas Supply) Regulations are fully complied with. He/She also assists AD/GGL in advising the Secretary for the Environment on aspects of gas supply on behalf of the Gas Authority. He/She monitors the implementation of the voluntary Code of Practice with the major oil companies and the Hong Kong and China Gas Co. Ltd. on strategic reserve of gas oil and naphtha respectively. He/She also represents the Gas Authority on the Coordinating Committee on Land Use Planning and Control relating to Potentially Hazardous Installations. To ensure gas safety arising from the low GWP refrigerants, he/she also assists AD/GGL to reinforce the liaison and communication with stakeholders in the air-conditioning and refrigeration trade and relevant government departments, conduct surveillance inspections, and roll out education and publicity activities to the trade and public.

Chief Electrical and Mechanical Engineer / General Legislation ("CEME/GL")

7. CEME/GL assists AD/GGL in administering the Lifts and Escalators Ordinance (Cap. 618), the Aerial Ropeways (Safety) Ordinance (Cap. 211), the Amusement Rides (Safety) Ordinance (Cap. 449) and the Builders' Lifts and Tower Working Platforms (Safety) Ordinance (Cap. 470). He/She oversees the enforcement of the legislation in respect of the safety of lifts and escalators, aerial ropeways, amusement rides, builders' lifts and tower working platforms, and other general mechanical installations and to ensure that proper actions are taken in respect of non-compliance and against offenders. He/She is also responsible for the introduction and implementation of new legislative proposal / legislative amendment and codes of practice / guidance notes for the purpose of improving safety standards and enhancing public safety. He/She administers the registration schemes and the staff management and financial control of a professional team for the development of a regulatory regime for the vehicle maintenance trade. He/She maintains liaison with outside organisations and government departments for the promotion of safety and new / existing legislation of a mechanical nature.

8. Upon creation of CEME/GL2, CEME/GL will be retitled as CEME/GL1 and will continue to oversee the Aerial Ropeways (Safety) Ordinance (Cap. 211), the Amusement Rides (Safety) Ordinance (Cap. 449), and the Builders' Lifts and Tower Working Platforms (Safety) Ordinance (Cap. 470) in all aspects, together with the daily operation of the Lifts and Escalators Ordinance (Cap. 618), including complaints or enquiries handling, incident investigations, inspections for new installations or major alterations, inspection of handovers and annual examinations of lifts and escalators. All administration and enforcement in relation to aged lifts and aged escalators, provision of advisory and technical support for the formulation and implementation of the LIMSS, and study of the feasibility for mandating modernisation for aged lifts and aged escalators will be taken up by CEME/GL2.

Under Deputy Secretary for the Environment ("DS(E)") and Deputy Director / Regulatory Services ("DD/RS")

Chief Electrical and Mechanical Engineer / Electricity Team ("CEME/ET")

9. CEME/ET is part of EMSD's establishment and is attached to the Environment Bureau. He/She assists DS(E) and DD/RS in providing professional advice and proposals for implementation of the initiatives and measures of the Scheme of Control Agreements (SCAs) with the power companies, review of the SCAs and matters related to energy policy and electricity industry, formulation of future fuel mix for electricity generation, and review of development of the electricity market and related regulatory framework in Hong Kong. He/She directs the operation and management of the Electricity Team for monitoring the power companies' performance under the SCAs, especially in the Auditing Review, Tariff Review and Development Plan Review, and provides professional advice on the regulation of the power companies under the SCAs, especially in the Auditing Review, Tariff Review and Development Plan Review, and provides professional advice on the regulation of the power companies under the SCAs. He/She is responsible for attending meetings of the Legislative Council and the Energy Advisory Committee to help explain the Government's objectives and proposals and meetings with the power companies on their electricity-related matters under the SCAs. He/She is also responsible for managing consultancy studies related to development of the electricity market and regulatory regime, monitoring of power companies, and assessment of power companies' development plans.

Under Assistant Director / Railways ("AD/R")

Chief Engineer / Railways 1 ("CE/R1")

10. CE/R1 assists AD/R in ensuring the safe operation of the existing railway system and in developing policies and strategies with regard to railway safety. He/She oversees the safe operation of existing railway lines (including Kwun Tong Line, Tseung Kwan O Line, Tsuen Wan Line, Airport Express, Tung Chung Line, Disneyland Resort Line and, Light Rail), Trams and Peak Tramway. He/She leads the Railways Branch in executing the regulatory functions in accordance with the relevant Ordinances, Regulations and Operating Agreement (i.e. the Mass Transit Railway (MTR) Ordinance (Cap. 556), Tramway Ordinance (Cap. 107) and Peak Tramway (Safety) Regulations (Cap. 265A)). He/She also oversees investigations of railway incidents and the improvement measures of the railway operator. He/She supervises the safety preventive measures on railway operation by MTRCL and the supervisory audits conducted by the Railways Branch on MTRCL's safety and asset management system. He/She is responsible for maintaining close liaison with the railway operator's management to give guidance and advice on railway safety matters and major modifications of the existing railway lines. He/She also assists with the inter-departmental coordination work with regard to railway safety and security. He/She provides the Transport and Housing Bureau with professional advice and technical support in respect of railway safety matters and attends meetings of the Panel on Transport of the Legislative Council or its Subcommittee on Matters Relating to Railways in respect of safety matters of existing railway system.

Chief Engineer / Railways 2 ("CE/R2")

11. CE/R2 assists AD/R in in overseeing safety related matters of existing railway lines and the new railway projects, and monitor the safety performance of these new railways after they commence operation. He/She oversees the safe operation of the existing railway lines (including Island Line, South Island Line, West Rail Line, Ma On Shan Line, East Rail Line and High Speed Rail) in accordance with the Mass Transit Railway (MTR) Ordinance (Cap. 556) and the Automated People Mover at the Hong Kong International Airport in accordance with the Airport Authority (Automated People Mover) (Safety) Regulation (Cap. 483C). He/She also oversees safety related matters of the new railway projects (including Tuen Ma Line and North South Line of the Shatin to Central Link). He/She chairs the inter-departmental working group on safety matters of new railway projects. He/She assists with the inter-departmental coordination work with regard to railway safety and security. He/She is

responsible for overseeing the interface between existing railway system and new railway projects and the safety inspections, tests and trial-runs of new railway projects, and to oversee their safety performance after they commence operation. He/She also provides the Transport and Housing Bureau with professional advice and technical support in respect of new railway projects and provides the Transport and Housing Bureau and relevant departments with professional advice on the safety related issues of the recommended railway schemes in the Railway Development Strategy 2014. He/She attends meetings of the Panel on Transport of the Legislative Council or its Subcommittee on Matters Relating to Railways in respect of safety matters of new railway projects

Trading Services

Under Assistant Director / 1 ("AD/1")

Chief Engineer / Boundary Crossing Facilities and Transport Services ("CE/BTS")

12. CE/BTS assists AD/1 in heading the Boundary Crossing Facilities and Transport Services Division for the provision of operation, maintenance, procurement and minor works project management services for electrical, mechanical, building services, and electronics installations to meet customers' needs and expectation. He/She ensures that the Division is run according to established policies and pricing strategies and is responsible for the profit and loss, cost effectiveness and customer satisfaction of the Division. He/She proposes changes to policies and pricing strategies to enhance the potential of the Division and its long term viability to cope with the rapid advancement in engineering technologies. He/She also liaises closely with customers at senior management level to identify their needs and quality expectations, as well as possible policy/operational changes affecting the services of the Division. He/She prepares and implements strategic business and development plans for the Division including the packaging, the type and quality of services as well as the development of new services and facilities. He/She establishes operational directives and procedures, sets and monitors performance indicators and targets for critical electrical and mechanical systems, identifies deviating trends, conducts investigations and implements corrective actions. He/She leads the implementation of Work Improvement, Business Process Improvement and quality management in relation to the Integrated Management System of the Division. He/She also motivates and manages staff and contributes to the organization development, manpower planning and development of the Division, in particular the development of expertise in electrical and mechanical systems in boundary crossing facilities, roads and tunnels.

Chief Engineer / Security and Vehicle Services ("CE/SV")

13. CE/SV assists AD/1 in heading the Security and Vehicle Services Division for the provision of operation, maintenance, procurement and minor works project management services for electrical, mechanical, building services, and electronics installations and government vehicles to meet customers' needs and expectation. He/She ensures that the Division is run according to established policies and pricing strategies and is responsible for the profit and loss, cost effectiveness and customer satisfaction of the Division. He/She proposes changes to policies and pricing strategies to enhance the potential of the Division and its long term viability to cope with the rapid advancement in engineering technologies. He/She also liaises closely with customers at senior management level to identify their needs and quality expectations, as well as possible policy/operational changes affecting the services of the Division. He/She prepares and implements strategic business and development plans for the Division including the packaging, the type and quality of services as well as the development of new services and facilities. He/She establishes operational directives and procedures, sets and monitors performance indicators and targets for critical electrical and mechanical systems, identifies deviating trends, conducts investigations and implements corrective actions. He/She also leads the implementation of Work Improvement, Business Process Improvement and quality management in relation to the Integrated Management System of the Division. He/She motivates and manages staff and contributes to the organization development, manpower planning and development of the Division, in particular the development of expertise in electrical and mechanical systems in emergency services facilities and vehicle procurement and maintenance.

Under Assistant Director / 2 ("AD/2")

Chief Engineer / General Engineering Services ("CE/GES")

14. CE/GES assists AD/2 in heading the General Engineering Services Division for the provision of operation, maintenance, procurement and minor works project management services for electrical, mechanical, building services, and electronics installations to meet customers' needs and expectation. He/She ensures that the Division is run according to established policies and pricing strategies and is responsible for the profit and loss, cost effectiveness and customer satisfaction of the Division. He/She also proposes changes to policies and pricing strategies to enhance the potential of the Division and its long term viability to cope with the rapid advancement in engineering technologies. He/She also liaises closely with customers at senior management level to

identify their needs and quality expectations, as well as possible policy/operational changes affecting the services of the Division. He/She oversees and implements the building services engineering works in the Additions, Alterations and Improvement, refurbishment and fitting-out projects in existing government premises. He/She prepares and implements strategic business and development plans for the Division including the packaging, the type and quality of services as well as the development of new services and facilities. He/She establishes operational directives and procedures, sets and monitors performance indicators and targets for critical electrical and mechanical systems, identifies deviating trends, conducts investigations and implements corrective actions. He/She also leads the implementation of Work Improvement, Business Process Improvement and quality management in relation to the Integrated Management System of the Division. He/She motivates and manages staff and contributes to the organization development, manpower planning and development of the Division, in particular the development of expertise in building services systems. He/She also leads and promotes the synergy among the operation and maintenance teams stationing in various depots as well as the Alterations, Additions and Improvements teams and project management teams who work under the operational environment of the Property Services Branch and the Project Management Branch of the Architectural Services Department so as to maintain a close working partnership with all concerned working partners.

Chief Engineer / Municipal ("CE/Mun")

15. CE/Mun assists AD/2 in heading the Municipal Sector Division for the provision of operation, maintenance, procurement and minor works project management services for electrical, mechanical, building services, and electronics installations to meet customers' needs and expectation. He/She ensures that the Division is run according to established policies and pricing strategies and is responsible for the profit and loss, cost effectiveness and customer satisfaction of the Division. He/She proposes changes to policies and pricing strategies to enhance the potential of the Division and its long term viability to cope with the rapid advancement in engineering technologies. He/She also liaises closely with customers at senior management level to identify their needs and quality expectations, as well as possible policy/operational changes affecting the services of the Division. He/She prepares and implements strategic business and development plans for the Division including the packaging, the type and quality of services as well as the development of new services and facilities. He/She establishes operational directives and procedures, sets and monitors performance indicators and targets for critical electrical and mechanical systems, identifies deviating trends,

conducts investigations and implements corrective actions. He/She also leads the implementation of Work Improvement, Business Process Improvement and quality management in relation to the Integrated Management System of the Division. He/She motivates and manages staff and contributes to the organization development, manpower planning and development of the Division, in particular the development of expertise in electrical and mechanical systems in crematorium, ferry/cruise terminals, cultural and leisure venues.

Chief Engineer / Health Sector ("CE/HS")

16. CE/HS assists AD/2 in heading the Health Sector Division for the provision of operation, maintenance, procurement and minor works project management services for biomedical electronics, electrical, mechanical, building services, and general electronics installations to meet customers' needs and expectation. He/She ensures that the Division is run according to established policies and pricing strategies and is responsible for the profit and loss, cost effectiveness and customer satisfaction of the Division. He/She proposes changes to policies and pricing strategies to enhance the potential of the Division and its long term viability to cope with the rapid advancement in engineering technologies particularly in biomedical electronics sector. He/She also liaises closely with customers at senior management level to identify their needs and quality expectations, as well as possible policy/operational changes affecting the services of the Division. He/She prepares and implements strategic business and development plans for the Division including the packaging, the type and quality of services as well as the development of new services and facilities. He/She establishes operational directives and procedures, sets and monitors performance indicators and targets for critical electrical and mechanical systems and biomedical electronics equipment, identifies deviating trends, conducts investigations and implements corrective actions. He/She leads the implementation of Work Improvement, Business Process Improvement and quality management in relation to the Integrated Management System of the Division. He/She motivates and manages staff and contributes to the organization development, manpower planning and development of the Division, in particular the development of expertise in hospital engineering systems and biomedical electronics systems.

17. Upon creation of CE/HS2, CE/HS will be retitled as CE/HS1 and will continue to oversee the provision of operation and maintenance of EMABS engineering systems and biomedical electronics equipment to hospitals and clinics of the HA, the Prince Philip Dental Hospital, the clinics and health centers of the Department of Health, as well as laboratories of the Department of Health and the Government Laboratory. The original duties of overseeing

the provision of engineering services on hospital improvement and renovation projects will be transferred to the new CE/HS2.

Under Assistant Director / 3 ("AD/3")

Chief Engineer / Corporate Services ("CE/CS")

18. CE/CS assists AD/3 in leading and managing the Corporate Services Division to provide central and business supporting functions at corporate level. He/She reviews policies, business strategies and objectives for the long term viability of EMSTF and manages the development of strategic planning at corporate level. He/She is also responsible for planning, directing and supervising activities not only on customer services and marketing but also on quality assurance, business process and methodology for better efficiency and effectiveness at corporate level. He/She plans, directs and supervises activities on procurement and on training and development for all ranks of staff at corporate level. He/She reviews organisational structure and manning levels and implements organisational changes to meet corporate objectives and business needs.

Chief Engineer / Digitalisation and Technology ("CE/DT")

19. CE/DT assists AD/3 in leading and managing the Digitalisation and Technology Division to drive digitalisation transformation in EMSTF at corporate level. He/She monitors strategic goals on innovation and digitalisation transformation. He/She also liaises smart city project trial and development. He/She is responsible for managing development and implementation of building information modelling asset management and integrated asset management. He/She provides support to other Divisions of the EMSTF in developing best practices on Electrical and Mechanical, Building Services, Electronics and Information Technology aspects. He/She also manages IT strategic support and oversee IT security for EMSD.