For discussion
on 26 May 2025

Legislative Council Panel on Transport
Subcommittee on Matters relating to Railways

Proposed Retention of Two Time-limited Supernumerary Directorate Posts (D1) in the Railways Branch of the Electrical and Mechanical Services Department to Strengthen Railway Safety Regulation

PROBLEM

Two time-limited supernumerary[1] directorate posts in the Railways Branch (RB) of the Electrical and Mechanical Services Department (EMSD), namely one Chief Electrical and Mechanical Engineer (CEME) (D1) (designated as Chief Engineer / Railways 3 (CE/R3)) and one Chief Electronics Engineer (CEE) (D1) (designated as Chief Engineer / Railways 4 (CE/R4)), will lapse on 16 July 2025. There is a need for the EMSD to retain the two time-limited directorate posts to enhance the regular and continuous safety regulation of railway services through a more stringent, proactive and comprehensive monitoring regime. At the same time, the EMSD will need to take forward the implementation of a number of new railway and Smart and Green Mass Transit Systems (SGMTS) projects, formulate safety standards for relevant new railway projects and regulatory frameworks for new operators, introduce and apply innovative technologies to enhance railway safety and asset maintenance performance, continue to conduct more comprehensive and direct audits on the MTR system, and continuously review and monitor the major asset replacement projects of the MTR.

PROPOSAL

2. We propose to retain one time-limited post of CEME (D1), designated as CE/R3, and one time-limited post of CEE (D1), designated as CE/R4, in the EMSD for a period of five years with effect from 16 July 2025 or upon approval by the

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[1] The civil service establishment includes posts on the permanent establishment and those on the non-permanent establishment (i.e. time-limited posts). Time-limited directorate posts are referred to as "supernumerary directorate posts", which are time-limited posts on the non-permanent establishment. It does not mean they are not counted towards the establishment.

Finance Committee (FC) of the Legislative Council (LegCo),whichever is the later, for leading the team to cope with the continuous expansion of the railway network and ensure the continued provision of safe, reliable and high-level railway services.

JUSTIFICATION

Background

Development of the railway network

3. Being the backbone of Hong Kong's public transport system, the railway carries more than five million passenger trips every day, accounting for more than 40% of the total public transport patronage. A reliable and efficient railway network with comprehensive coverage not only facilitates the daily travelling of the public and meets passengers' demand, but also promotes community development, strengthens community ties and generates economic value.

4. Under the "infrastructure-led" and "capacity-creating" vision, the railway network has continuously expanded over the past ten years. Currently, the Government is actively taking forward a number of local and cross-boundary railway projects that are under planning. In addition to the existing heavy rail and light rail networks, the Government will, in the light of the various development needs of communities, introduce emerging mass transit technologies, the systems of which may involve construction and operation by new operators. The railways will not only facilitate the travelling of local residents, but also develop the "Greater Bay Area (GBA) on the Rail" and play an important role in promoting the connectivity between Hong Kong and the Mainland. Looking ahead, Hong Kong's railway services will embrace more operators and a wider range of technologies, as well as connect to a broader network of destinations.

Important regulatory roles and staffing of the RB of the EMSD

5. The EMSD is the statutory railway safety regulator, and carries out railway safety regulatory work in accordance with the Mass Transit Railway Ordinance (MTRO) (Cap. 556), the Mass Transit Railway Regulations (Cap. 556A) and other legislations concerned. Currently, the RB of the EMSD is led by one Government Electrical and Mechanical Engineer (D2), designated as Assistant Director/Railways,

with four divisions headed by two CEMEs and two CEEs[2]. Of which, one CEME and one CEE (designated as CE/R1 and CE/R2 respectively) are permanent posts, while another CEME and CEE (designated as CE/R3 and CE/R4 respectively) are time-limited posts created in July 2021 for up to 15 July 2025. In addition, there are 43 professional staff and four technical staff in the RB.

6. The railway network operated by the MTR Corporation Limited (MTRCL) has served Hong Kong for years and is constantly expanding. Between 2015 and 2024, the total length of the MTR network increased significantly from 221 km to 271 km, including the Kwun Tong Line Extension and South Island Line commissioned in 2016, the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) commissioned in 2018, the Tuen Ma Line (Tai Wai to Hung Hom Section) commissioned in 2021, and the East Rail Line Cross-harbour Extension commissioned in 2022. On the other hand, the MTR network has served Hong Kong for more than 45 years. Many of the railway assets are entering into the asset replacement cycle progressively. To ensure that the high standards of railway services are maintained, the Government is committed to strengthening the regulation of the MTRCL, including the railway services it provides, as well as the maintenance and renewal of railway assets. With the continuous expansion of the railway network of the MTRCL, increasing patronage and assets entering replacement cycle, the RB/EMSD is faced with increasing workload and requirements for the regulation of the MTRCL, in order to meet the public's expectations of the safety and reliability of railway services. Existing staff are also burdened with heavy workload.

Outcomes achieved during the period of the time-limited posts to be retained

7. The main purpose of creating one CEME (i.e. CE/R3) and one CEE (i.e. CE/R4) time-limited posts in 2021 was to establish a regulatory regime for major

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[2] Railway operations encompass a range of complex specialised engineering systems, including permanent way, power distribution system, rolling stock and signalling systems. To discharge the duties on railway safety regulation, the RB/EMSD requires the support of relevant professional grade officers, including electrical and mechanical engineers and electronics engineers. Furthermore, given the importance and complexity of railway systems, as well as the public's attention and expectation of safe and reliable railway services, we must ensure that such high-level tasks as supervising the day-to-day work of other professional and technical support staff, reviewing from macro and strategic perspective the regulatory mechanisms of the RB/EMSD on the safety of railway services and new railway projects, and explaining the government's regulatory mechanisms and specific work to the LegCo, media, and the public as needed, are carried out by directorate officers of the relevant professional grades with rich professional knowledge, public administration experience and leadership.

railway systems, building upon the original "risk-based" approach and adopting a more proactive, comprehensive and preventive audit approach. The main responsibilities of these two posts were to conduct a comprehensive audit on the asset and safety management systems of the MTRCL's entire railway system, monitor the MTRCL's major asset replacement projects and regulate the safety of other railway projects concerned, etc..

8. Over the past three years, CE/R3 has led his team in the implementation of the regulatory framework of the "Comprehensive and Direct Assessment" (C&DA) piloted since July 2019. The C&DA is an important part of the work to strengthening railway safety regulation and monitoring. It involves reviewing the Asset Management Systems (AMS) of the MTRCL's four major railway assets (namely permanent way, power distribution system, rolling stock and signalling systems), as well as the Safety Management Systems (SMS) of various operating railway lines. Compared with the previous "risk-based" inspections and post-incident follow-up work, the C&DA can effectively identify at an early stage potential system defects and safety hazards in the railway system that may lead to railway incidents, thus preventing accidents before they occur. By Q1 2025, the EMSD had completed 52 routine audits and 12 special audits, basically completing the first cycle of audits of all systems in the 12 railway lines[3], with more than 1 300 improvement recommendations made to the senior management of the MTRCL for enhancing the safety and reliability of railway operation. More than 90% of the recommendations have been implemented by the MTRCL, while the remaining are being followed up continuously.

9. During the same period, CE/R4 led his team to closely monitor the progress and implementation of the MTRCL's asset replacement projects to ensure that railway services remained safe and reliable. The EMSD closely monitored the MTRCL's various asset replacement projects between 2021 and 2024, including the progressive roll-out of new urban line trains on the Kwun Tong Line and Island Line with the service life of the existing first-generation urban line trains suitably extended; the replacement and expansion of the light rail fleet; the renewal of trackside assets on the urban line sections; the replacement of high-voltage / low-voltage power systems and station chillers, etc.. In particular, the EMSD closely supervised the MTRCL in planning and implementing large-scale asset renewal works that could not be completed during the non-traffic hours overnight (i.e. the "golden two hours"), including the large-scale metal hanger replacement works in the Kwun Tong Line Tunnel that was successfully completed in 28 consecutive hours

[3] Namely nine local railway lines, Airport Express, XRL Hong Kong Section and Light Rail.

in July 2024, to ensure that the relevant asset renewal procedures were completed safely and within the scheduled time, so as to minimise the impact on daytime train services.

10. CE/R4 was also responsible for reviewing matters related to the safety regulation of railway projects, and led the team to monitor the progress of the Airport Authority Hong Kong's upgraded or newly constructed Automated People Mover (APM) systems to tie in with the three-runway system project of the Hong Kong International Airport, and conduct various statutory inspections and safety tests progressively to ensure the safe performance of the systems.

11. Moreover, CE/R4 served as the secretary of the Independent Monitoring Panel (IMP) appointed by the Government at the end of 2022 to assist the IMP in closely monitoring the comprehensive review of the railway asset management and maintenance regime conducted by the MTRCL in response to two major railway incidents in 2022. The IMP held a total of seven meetings with the MTRCL in six months and scrutinised the documents submitted by the MTRCL to ensure that the review findings and follow-up recommendations were complete and thorough. After the IMP published its report in mid-2023, CE/R4 continued to lead the EMSD team to follow up on the progress of the MTRCL in implementing the relevant recommended measures, with the aim of fundamentally optimising the overall asset management and maintenance system to further enhance the reliability of MTR services.

12. In addition to the above outcomes achieved, during the period, CE/R3 and CE/R4, together with the two permanent Chief Engineers of the RB, led the team to pilot a "Project Safety Review" (PSR) process for new railway projects, with a view to enhancing the long-term railway safety of the new projects. The process covers the whole project cycle, including such phases as preliminary design, detailed design, construction and installation and testing, etc.. It aims to systematically evaluate all aspects of the project in a holistic manner, thereby identifying potential issues at an early stage and following up with the project team and other relevant government departments as appropriate, so as to enhance long-term operational safety of railways and reduce additional works time as well as associated social costs. As at April 2025, the PSR process has been implemented in five MTR railway projects, including the Tung Chung Line Extension, Oyster Bay Station, Tuen Mun South Extension, Northern Link (NOL) Phase 1 Kwu Tung Station and Hung Shui Kiu Station projects.

13. In view of the importance of railway safety in maintaining the social and economic operations in Hong Kong, and the fact that a number of projects involving new regulatory framework(s) and operator(s) will be taken forward in the future, with the imminent expiry of the time-limited posts of CE/R3 and CE/R4, the Transport and Logistics Bureau (TLB) and the EMSD consider it necessary to retain the two time-limited posts for five years. Apart from continuously leading the team to strengthen the regulation of railway safety, the two time-limited posts proposed to be retained will also take up various new and important tasks, including leading and facilitating the implementation of the safety regulatory matters in several ongoing or planned railway projects and SGMTS projects, developing the regulatory framework(s) for relevant new railway projects, as well as introducing and applying innovative technologies to enhance railway services and asset maintenance performance. Details are set out in the ensuing paragraphs.

Taking forward a number of ongoing or planned railway and SGMTS projects

A number of large-scale local or cross-boundary railway projects and the SGMTS

14. Currently, there are nearly 20 railway projects under construction or planning. Among them, the construction works of five railway projects, namely the Tung Chung Line Extension, Oyster Bay Station, Tuen Mun South Extension, NOL Phase 1 Kwu Tung Station, and Hung Shui Kiu Station have commenced, while the advance construction works of the NOL Mainline have also commenced. Meanwhile, the Government is actively taking forward two cross-boundary railways, including the Hong Kong-Shenzhen Western Rail Link (HSWRL) (Hung Shui Kiu to Qianhai) and the NOL Spur Line. The "Hong Kong Major Transport Infrastructure Development Blueprint" promulgated in end 2023 also proposed various new strategic railways. Besides the aforementioned HSWRL, it also covered the Central Rail Link, Tseung Kwan O Line Southern Extension, NOL Eastern Extension, Northeast New Territories Line, etc.. Upon commissioning of these new railway projects, the total length of the railway network in Hong Kong will increase from the current 271 km to nearly 390 km.

15. In addition, the 2023 Policy Address also announced the introduction of three SGMTS in East Kowloon, Kai Tak and Hung Shui Kiu/Ha Tsuen. The SGMTS is the first of its kind to be constructed and operated in Hong Kong. Its design involves emerging mass transit technologies and it is different from the existing railway systems. The Government plans to engage new operators through open tender for the design, construction, operation and maintenance of these new

systems. Moreover, the Government has confirmed that the SGMTS will be adopted for the South Island Line (West), taking into consideration the topography of the alignment, technical feasibility and cost-effectiveness. In taking forward the implementation of the above projects, the RB/EMSD requires experienced directorate officers to work closely with the Highways Department (HyD) team to lead the safety and regulatory work throughout the planning, design and construction phases of the projects[4].

16. During the five-year period from 2025 to 2030, five railway projects of the MTRCL are expected to be commissioned progressively, including Kwu Tung Station (2027), Tung Chung Line Extension (2029), Tuen Mun South Extension, Oyster Bay Station and Hung Shui Kiu Station (2030). During the same period, critical progress is expected for projects such as the NOL Mainline and Spur Line, the HSWRL, and the SGMTS in East Kowloon, Kai Tak and Hung Shui Kiu/Ha Tsuen.

Establishing regulatory frameworks for new mass transit technologies, new operators and cross-boundary railway operation

17. At present, the Government regulates the MTRCL's railway services in accordance with the MTRO (Cap. 556) and the Operating Agreement signed between the MTRCL and the Government. The relevant regulatory framework applies to the MTRCL only. The Government will have to put in place new legislative and regulatory framework(s) for the future SGMTS and/or new railway operators to regulate matters relating to franchise, safety, service performance and so on.

18. As the regulator of railway safety in Hong Kong, the EMSD is required to provide advice on system and operational safety, including applicable technical standards and guidelines, reliability and long-term safety requirements, infrastructure and asset management, maintenance requirements, contingency plans, etc.. Regarding the regulation of operators of new railway projects, the EMSD is also required to draw on its rich experience in working with railway operators in the past and provide essential input to the preparation of new legislation and regulatory

[4] Relevant government departments have established communication platforms for each railway projects to closely monitor the implementation of all relevant aspects of the projects, as well as to jointly review and assess the progress and long-term operational safety of the railways. In particular, the EMSD participates in the Project Supervision Committee led by the HyD to give advice from the railway safety perspective, while the HyD participates in the Project Safety Review Committee led by the EMSD to offer advice from the project management and supervision perspectives.

regime. The above work involves complex technical issues, and requires the integration of the EMSD's experience as the existing regulator of railway safety for applying to the new mass transit systems and/or new railway operators, so as to ensure that the public can enjoy safe and reliable railway services. A dedicated directorate officer is necessary to oversee a multi-disciplinary team, to continue to provide support and advice on the safety regulatory regime of new railway projects, as well as technical comments, thereby facilitating the development of relevant safety technical guidelines and regulatory regime.

19. Furthermore, the cross-boundary railway projects under planning (namely the HSWRL (Hung Shui Kiu to Qianhai) and the NOL Spur Line) will involve substantial liaison work with the Mainland railway authorities on the operational arrangements and the regulatory framework for railway safety. The EMSD will have to draw on the experience gained during the construction and operation of the Hong Kong section of the XRL, and continue to liaise closely with the Mainland railway authorities, in order to formulate new regulatory framework(s) for the cross-boundary railway projects, covering train captain training, incident handling and investigation, contingency planning, and regulatory demarcation, etc.. It shall also set out the interoperability standards and statutory requirements for the above matters, with a view to developing the "GBA on the Rail". A dedicated directorate officer with the requisite experience and expertise is indispensable to lead and supervise these high-level cross-boundary liaison efforts, ensuring that the cross-boundary railway projects are taken forward in an orderly manner.

Regular implementation of the PSR process

20. The PSR process mentioned in paragraph 12 above is of immense benefits in tightly controlling the entire railway project life cycle as well as safeguarding the long-term operational safety of critical civil infrastructure, permanent way, rolling stock, power distribution system, signalling system and building services installations. The EMSD will regularise the PSR process to implement it on future new railway projects, and work closely with the HyD team to enhance long-term operational safety of railways. This paper proposes to retain the above two time-limited posts to continue to lead and execute the relevant work in collaboration with the existing manpower.

Continuously strengthening the regulation of railway safety

Continuing to conduct C&DA and monitor asset renewal for existing railways

21. As mentioned in paragraph 8 above, the C&DA conducted by the EMSD on the MTRCL's AMS and SMS has been effective in systematically detecting and identifying potential issues at an early stage to enable the formulation of targeted recommendations for improvement. Such work is important for the continuous improvement of the MTRCL's asset performance and the reduction of the risk of railway incidents, and therefore needs to be carried out on an on-going basis. Following the substantial completion of the first cycle of audits, the EMSD must continue to follow up on the improvement measures that are being progressively implemented by the MTRCL in various areas, including incident handling and recovery, asset life and quality control, as well as asset maintenance and replacement. The EMSD is consolidating its experience and preparing for the next five-year cycle of C&DA, which is expected to focus on auditing and re-assessing the higher risk areas identified in the previous cycle, such as asset life assurance, quality control of asset health monitoring, as well as asset maintenance and replacement, etc.; in the meantime, the EMSD will also step up the review of the relevant trainings and drills for MTRCL staff. Apart from regular audits, the EMSD anticipates that special audits shall be conducted in response to railway incidents. Based on previous experience, it is expected that around 10 to 12 audits will be conducted every year.

22. Since the commissioning of the MTRCL's railway system in 1979, many of the railways and related facilities have entered into their replacement cycles[5]. The MTRCL has committed to put in more than HK$65 billion in asset renewal and railway facilities maintenance over the five-year period from 2023 to 2027, in order to ensure that railway assets remain in good condition to serve passengers across their service lives. The MTRCL's major asset renewal projects currently underway include the upgrading of the signalling systems of MTR urban lines, replacement of trains and signalling system for the Disneyland Resort Line, deployment of 93 new urban line trains, etc.. Asset maintenance and renewal are routine and on-going tasks. The EMSD must closely monitor the asset renewal work of the MTRCL, and continue to follow up on the progress of the MTRCL in implementing the 13 recommendations made in the IMP's report, including the upgrade and transformation to technology-led maintenance, the further enhanced identification and mitigation of high-consequence low-frequency risk items, the establishment of

[5] The general service life of railway facilities is: (a) about 30 to 40 years for rolling stock; (b) about 20 to 30 years for signalling system; and (c) about 25 to 40 years for power distribution system.

a dedicated team for maintenance quality assurance, etc..

Application of innovative technologies to enhance railway services and asset maintenance performance

23. With the continuous expansion of the railway network and rising public expectation on railway services and safety, the RB/EMSD takes on the role of "innovation facilitator" and drives, with a new mindset, the MTRCL in applying innovative technologies to enhance the operational efficiency and safety of railways. In the light of the recommendations in the IMP's report mentioned in paragraph 11 above, the EMSD is actively following up on the MTRCL's efforts to accelerate the application of innovative technologies in railway services and asset maintenance. The use of innovative technologies to realise "smart railway" is conducive to enhancing the efficiency of asset management and maintenance and strengthening risk management and real-time monitoring of railway systems, thereby improving the reliability of railway services by preventing the occurrence of incidents or enhancing the efficiency of incident recovery. The EMSD will conduct feasibility studies and pilot projects on rail-tech solutions, and also work with the MTRCL to develop new technology applications. The EMSD expects to apply its accumulated knowledge and experience in railway regulation in assessing the safety of new railway projects and formulating the regulatory frameworks for various new mass transit systems, new operators and cross-boundary railways (see paragraphs 17 to 19 above), with a view to keeping the globally leading position of Hong Kong's railway service performance.

<u>Continuous need to strengthen support at directorate level</u>

24. With the significantly expanding railway network, the workload of the RB/EMSD has become increasingly heavy since its establishment. As mentioned in paragraphs 14 to 23 above, CE/R3 and CE/R4 need to undertake the new tasks of providing important support for the implementation of a number of large-scale railway projects and the SGMTS; as well as continuing to implement the C&DA and monitor the asset management and renewal projects of the MTRCL.

25. In view of the persistently high public expectation on the existing railway services and the timely delivery of new railway projects to tie in with the development of society and meet the public's transportation demand, we must ensure that such high-level tasks are undertaken by dedicated directorate officers with solid

professional knowledge, extensive experience in public administration, and leadership. We consider it necessary and practicable to retain the above two time-limited posts to strengthen railway safety regulation and support at directorate level in the RB/EMSD. The job descriptions of the posts of CE/R3 and CE/R4 proposed for retention are set out at Annex 1.

PROPOSED DURATION OF THE TIME-LIMITED POSTS

26. When the time-limited posts of one CEME (i.e. CE/R3) and one CEE (i.e. CE/R4) were created in July 2021, we indicated that the Government had a long-term need for additional manpower to continuously strengthen railway regulatory and monitoring work. After the four-year trial period, we consider the railway safety regulatory work of these two time-limited posts effective and must be carried out on a long-term basis to safeguard railway safety and maintain the social and economic operation in Hong Kong. In addition, with several railway projects currently in progress or in the pipeline, including cross-boundary railway and SGMTS projects that involve new systems, new technologies and new operators, we see a pressing need to retain the above two time-limited posts, namely one CEME and one CEE post, to lead relevant safety regulatory work. However, for prudent and proper use of resources, we propose to retain these two time-limited posts for a period of five years with effect from 16 July 2025 or the date of approval by the FC, whichever is later.

27. The retention of the above two posts for five years is essential to ensure that the relevant railway projects can be commissioned between 2027 and 2030 as planned, and that a new railway safety regulatory framework covering new technologies, new operators and cross-boundary elements can be put in place. The efforts will lay important foundations for the interface of regimes for the regulation of railway operational safety in the long run and for the post-2030 peak projects period. The five-year period also ties in with the new cycle of C&DA, enabling coherence in the audit work and the manpower deployment. The TLB and the EMSD will closely monitor the effectiveness of the two posts and review the long-term need for the posts again in due course.

NON-DIRECTORATE SUPPORT

28. CE/R3 and CE/R4 will be supported by a total of 20 professional non-directorate permanent posts in two divisions, on top of seven general grade staff that

support the four CEs in the RB. Postholders of these permanent non-directorate posts will be responsible for on-site regulatory and monitoring work on an ongoing basis to ensure railway safety. The current and proposed organisation chart of the RB is at Annex 2.

ALTERNATIVES CONSIDERED

29. We have carefully examined the feasibility of sharing the duties of the above two time-limited posts proposed to be retained amongst the incumbent officers of the same rank in the RB or in other Regulatory Services (RS) of the EMSD. Currently, CE/R1, CE/R2, CE/R3 and CE/R4 are responsible for different areas of regulatory work. As CE/R1 and CE/R2 are already fully occupied with their day-to-day duties, including the safe operation of the MTR railway system, the tramway, the Peak Tram, and the APM at HKIA, it is difficult for them to take up additional duties. Similarly, the day-to-day duties currently undertaken by existing officers of the same rank in other RS, including regulatory work on electrical safety, gas safety, mechanical safety, and energy efficiency, are already very heavy. It is difficult for these officers to take up additional duties. In addition, as the Government will need to implement in the future a number of new railway projects (including cross-boundary railway projects) and the SGMTS projects, which involve complex policy and technical issues, the EMSD must strengthen directorate support to lead the team in formulating the safety standards for the relevant new railway projects as well as the regulatory framework for new operators. Meanwhile, we consider it necessary to implement the C&DA on an on-going basis, and to monitor the asset management and renewal projects of the MTRCL, so as to ensure railway safety in Hong Kong. If the posts of CE/R3 and CE/R4 are lapsed, the RB will need to review its existing work and can only give priority to tasks that are more time-critical and crucial to the safe operation of the railway system. This approach is not conducive to the implementation of new railway projects and long-term safety of the railway system.

30. Furthermore, we have considered establishing the Railways Department (RD) as the Government's specialised department responsible for railway planning, implementation and safety regulation. This will involve the redeployment of the above two time-limited directorate posts and other posts in the RB/EMSD to the RD. However, the establishment of the new department will require additional recurrent manpower and resources. Under the steer of more prudent control of operating expenditure, we consider it necessary to reconsider the appropriate timing for the establishment of the RD having further reviewed resource allocation and work priorities. Nonetheless, we have implemented a series of strategies and workflow

processes with the MTRCL over the past few years to enhance the monitoring and control of railway projects, which include enhanced project supervision and communication platforms, strengthened monitoring and checking levels, establishment of proactive reporting and early warning mechanism, and trial of the PSR process (see paragraph 12 above). The existing railway management framework is relatively mature, providing a multi-level monitoring and communication platform for speedy exchanges between the MTRCL and various government departments and a clear mechanism for prompt reporting of major issues and risks identified, so that the MTRCL and the Government can discuss the strategy in handling these issues and take follow-up actions at an early stage. We will strive to use our creative thinking and maximise the effectiveness of our supervisory role building on the existing framework, and ensure railway safety and smooth project delivery.

31. The existing organisation chart of the RS of the EMSD and the job descriptions of the Chief Engineers/ CEMEs under thereunder are at Annex 3 and Annex 4 respectively.

FINANCIAL IMPLICATIONS

32. The notional annual salary cost at mid-point of the one CEME and one CEE time-limited posts proposed to be retained is $2,088,840 each ($4,177,680 for the two posts in total). The full annual average staff cost, including salaries and staff on-cost, is around $5,556,000. The EMSD has included the necessary provision in the 2025-26 Estimates and will reflect the resources required in the Estimates of subsequent years.

ADVICE SOUGHT

33. Members are invited to support the proposal of retaining the two time-limited directorate posts as set out above. Subject to Members' views, we will seek the endorsement of the LegCo Establishment Subcommittee and approval of the FC for the proposals.

Transport and Logistics Bureau
Electrical and Mechanical Services Department
May 2025

Annex 1

Proposed Job Description for Chief Engineer /Railways 3
Railways Branch (RB), Electrical and Mechanical Services Department

Rank : Chief Electrical and Mechanical Engineer (D1)
Responsible to : Assistant Director / Railways

Main Duties and responsibilities:

To continue strengthening the RB's regulatory functions and steering role to ensure railway safety by –

(i) monitoring and formulating strategies and plans, and providing guidance on the Comprehensive and Direct Assessment of the Asset Management System (AMS) and Safety Management System of the MTR Corporation Limited (MTRCL);

(ii) liaising with the MTRCL's senior management, monitoring the MTRCL's improvement measures on its asset management and maintenance regime, and formulating assessment strategies to monitor the effectiveness of the improvement measures and improvements in the AMS;

(iii) supporting the formulation of relevant policy, legislation and operating agreement to prepare for the new railway operator for the Hong Kong-Shenzhen Western Rail Link (HSWRL) (Hung Shui Kiu-Qianhai);

(iv) liaising with senior officials of Mainland railway authorities on the HSWRL (Hung Shui Kiu-Qianhai) and Northern Link Spur Line, and providing guidance on the safety regulation matters of new railway projects;

(v) advising the project management team of the Highways Department and the works team on new railway projects from the railway safety and regulatory perspectives to monitor the implementation, completion and commissioning of new railway projects;

(vi) monitoring the safe operation of the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link; and

(vii) providing the Transport and Logistic Bureau with professional advice and technical support and attending meetings of the Legislative Council Panel on Transport and its Subcommittee on Matters Relating to Railways.

Proposed Job Description for Chief Engineer /Railways 4
Railways Branch (RB), Electrical and Mechanical Services Department

Rank : Chief Electronics Engineer (D1)
Responsible to : Assistant Director / Railways

Main Duties and responsibilities:

To continue strengthening the RB's regulatory functions and steering role to ensure railway safety by –

(i) monitoring and providing guidance on the safety regulation matters of new railway projects in the pipeline under the "Railway Development Strategy 2014" and the "Hong Kong Major Transport Infrastructure Development Blueprint" 2023, including participating in leading the implementation of the "Project Safety Review";

(ii) assisting in the formulation of the new safety regulatory framework for Smart and Green Mass Transit Systems (SGMTS) and monitoring the safety assessment work, as well as formulating safety technical guidelines on the relevant new technologies;

(iii) supporting the formulation of the relevant policy, legislation and operating agreement to prepare for the regulation of new railway operator(s) of the SGMTS;

(iv) advising the project management team of the Highways Department and the works team on new railway projects from the railway safety and regulatory perspectives to monitor the implementation, completion and commissioning of new railway projects;

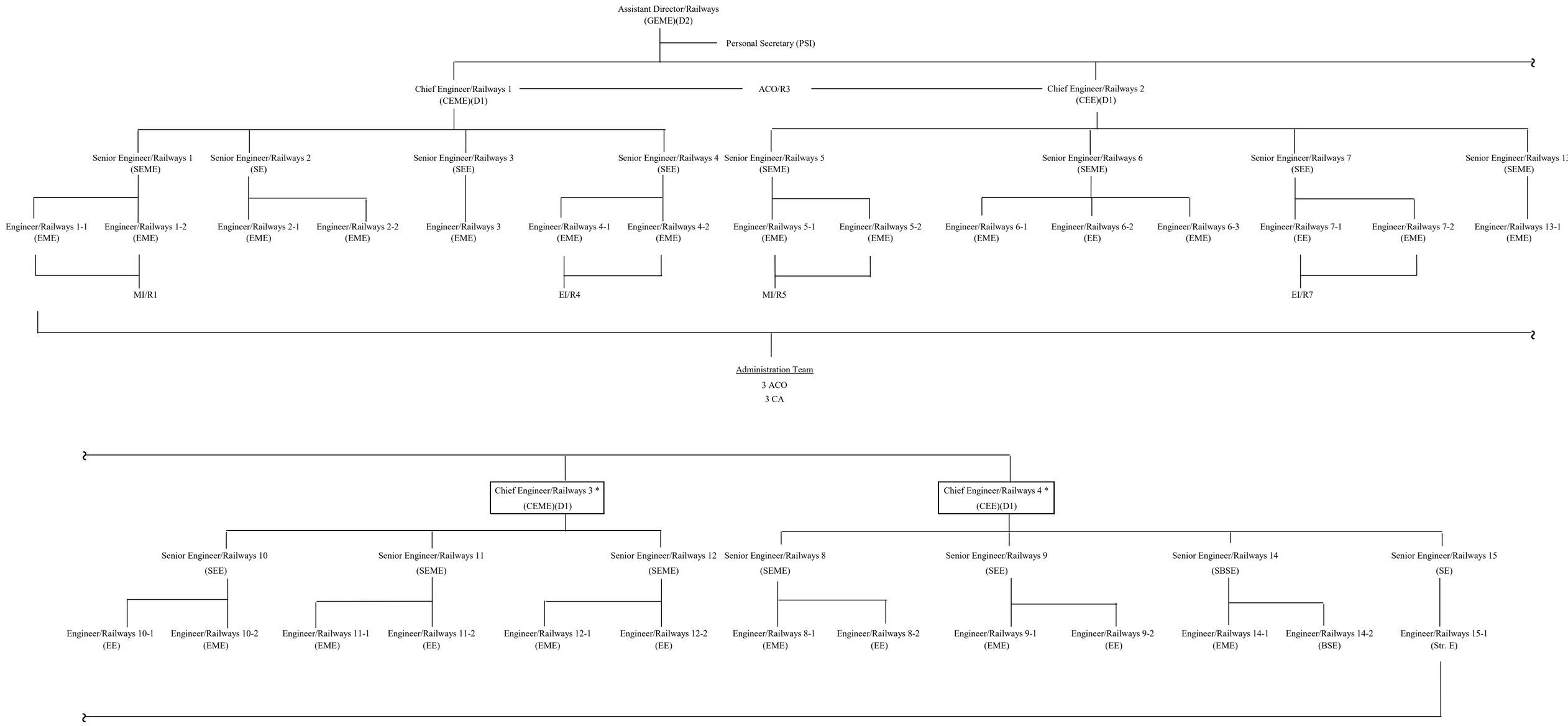
(v) monitoring and continuously reviewing the safety aspects of the MTR Corporation Limited (MTRCL)'s major asset renewal and upgrading projects, and driving the application of more innovative technologies by the MTRCL to enhance railway safety;

(vi) monitoring the safety aspects of the Automated People Mover (APM) system for the three-runway system and the subsequent operation and maintenance, asset management and replacement of the existing APM system; and

(vii) providing the Transport and Logistic Bureau with professional advice and technical support and attending meetings of the Legislative Council Panel on Transport and its Subcommittee on Matters Relating to Railways.

Current and Proposed Organisation Chart of the Railways Branch of the Electrical and Mechanical Services Department

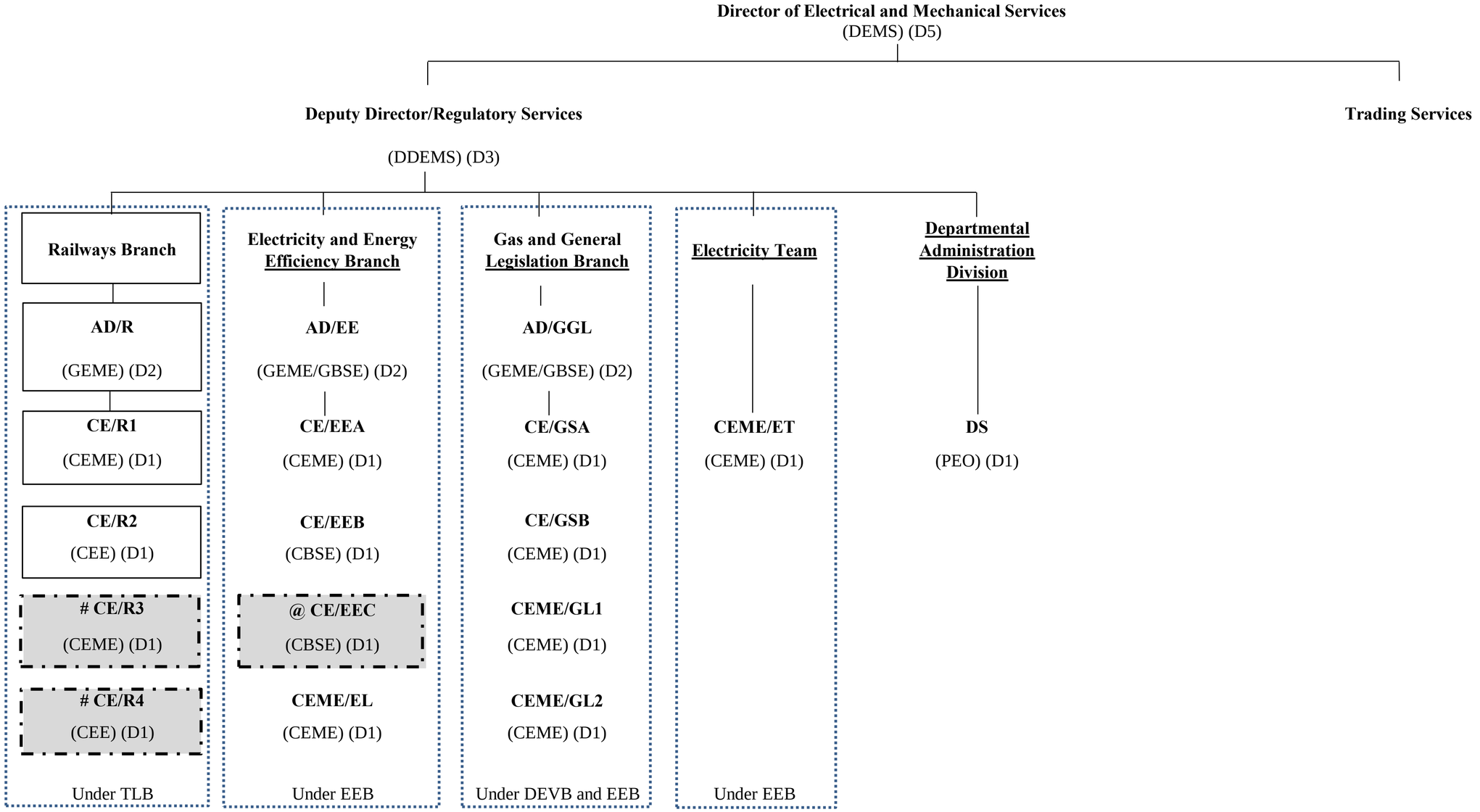
Annex 2



Legend : framed and marked by * - The two time-limited posts proposed for retention

ACO	-	Assistant Clerical Officer
BSE	-	Building Services Engineer
CA	-	Clerical Assistant
CEE	-	Chief Electronics Engineer
CEME	-	Chief Electrical and Mechanical Engineer
EE	-	Electronics Engineer
EI	-	Electrical Inspector
EME	-	Electrical and Mechanical Engineer
GEME	-	Government Electrical and Mechanical Engineer
MI	-	Mechanical Inspector
PSII	-	Personal Secretary II
SBSE	-	Senior Building Services Engineer
SE	-	Senior Engineer
SEE	-	Senior Electronics Engineer
SEME	-	Senior Electrical and Mechanical Engineer
Str. E	-	Structural Engineer

Existing Organisation Chart of the Regulatory Services of the Electrical and Mechanical Services Department



Notes

(a) ☐ Existing directorate posts in Railways Branch of EMSD

(b) # Existing supernumerary directorate posts in Railways Branch for up to 15 July 2025

(c) @ Existing supernumerary directorate post in Electricity and Energy Efficiency Branch for up to 12 August 2026

Legend

DEMS -	Director of Electrical and Mechanical Services	CEE -	Chief Electronics Engineer	CEME/ET -	Chief Engineer and Mechanical Engineer/ Electricity Team
DDEMS -	Deputy Director of Electrical and Mechanical Services	CBSE -	Chief Building Services Engineer		
GEME -	Government Electrical and Mechanical Engineer	CE/R -	Chief Engineer/Railways	TLB -	Transport and Logistics Bureau
GBSE -	Government Building Services Engineer	CE/EE -	Chief Engineer/Energy Efficiency	DS -	Departmental Secretary
AD/R -	Assistant Director/Railways	CEME/EL -	Chief Electricity and	PEO -	Principal Executive Officer
AD/EE -	Assistant Director/Electricity and Energy Efficiency	CE/GS -	Chief Engineer/Gas Standards	DEVB -	Development Bureau
AD/GGL -	Assistant Director/Gas and General Legislation	CEME/GL -	Chief Electricity and Mechanical Engineer/General Legislation	EEB -	Environment and Ecology Bureau
CEME -	Chief Electrical and Mechanical Engineer				

Annex 4

Areas of Responsibilities of the other Chief Engineers/ Chief Electrical and Mechanical Engineers in the Regulatory Services of the Electrical and Mechanical Services Department (EMSD)

Major duties and responsibilities of the Chief Engineers/Chief Electrical and Mechanical Engineers in the Regulatory Services of the EMSD are summarised as follows.

Under Assistant Director/Railways (AD/R)

Chief Engineer/Railways 1 (CE/R1)

2. 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. The officer regulates 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), tramway and the Peak Tram; leads the Railways Branch (RB) in executing the regulatory functions in accordance with the relevant ordinances and regulations (i.e. the Mass Transit Railway Ordinance (Cap. 556), Mass Transit Railway Regulations (Cap. 556A), Tramway Ordinance (Cap. 107), Peak Tramway Ordinance (Cap. 265) and Peak Tramway (Safety) Regulations (Cap. 265A)) and the Operating Agreement; monitors the safety preventive measures on railway operation by the MTR Corporation Limited (MTRCL) and the safety matters of some of the asset replacement projects and major enhancement works at railway premises; 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; assists in the inter-departmental coordination work with regard to railway safety and security; and provides the Transport and Logistics Bureau (TLB) with professional advice and technical support in respect of railway safety matters and attends meetings of the Legislative Council (LegCo) Panel on Transport (TP) and its Subcommittee on Matters Relating to Railways (RSC).

Chief Engineer/Railways 2 (CE/R2)

3. CE/R2 assists AD/R in monitoring safety related matters of existing railway lines and railway projects, and monitoring the safety performance of these railway projects after they commence operation. The officer regulates the safe operation of the existing railway lines (including Island Line, South Island Line, Tuen Ma Line and East Rail Line) in accordance with the Mass Transit Railway Ordinance (Cap. 556) and the Mass Transit Railway Regulations (Cap. 556A); and

the Automated People Mover at the Hong Kong International Airport in accordance with the Airport Authority (Automated People Mover) (Safety) Regulation (Cap. 483C). Besides, the officer is responsible for safety related matters of railway projects; monitors the interface between existing railway system and relevant railway projects, their safety inspections, tests and trial-runs, and monitors their safety performance after they commence operation; assists in the inter-departmental coordination work with regard to railway safety and security; and provides the TLB with professional advice and technical support in respect of railway safety matters and attends meetings of the LegCo TP and its RSC.

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

Chief Engineer/Energy Efficiency A (CE/EEA)

4. CE/EEA assists AD/EE in leading and monitoring the Energy Efficiency Division A in providing professional support and advice to the Environment and Ecology Bureau (EEB) on the formulation and implementation of policies, strategies and initiatives on energy efficiency and conservation (EE&C), the application of renewable energy (RE) and electric vehicle charging infrastructure facilities; developing the Voluntary and Mandatory Energy Efficiency Labelling Schemes for electrical and gas appliances, and promoting public awareness of the use of energy-efficient appliances; monitoring the administration and enforcement of the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598); promoting the adoption of energy-efficient technologies, RE, energy audits and the best practices in the public and private sectors as well as the application of innovative technologies on EE&C and RE; publicising the energy end-use data for Hong Kong; monitoring the energy consumption of government facilities, carrying out energy audits, assisting in setting energy saving targets and implement energy saving projects and coordinating with government bureaux and departments as well as public and private organisations for the promotion of energy programmes promulgated by international/regional/local energy organisations (e.g. the Asia-Pacific Economic Cooperation) and participate in their activities.

Chief Engineer/Energy Efficiency B (CE/EEB)

5. CE/EEB assists AD/EE in leading and monitoring the Energy Efficiency Division B in providing professional support and advice to the EEB on the formulation and implementation of policies, strategies and initiatives on buildings related EE&C and the application of RE; monitoring the administration and enforcement of the Buildings Energy Efficiency Ordinance (Cap. 610) covering new buildings and major retrofitting works, specifying regulations on the energy audit for prescribed buildings and registered energy assessors; implementing retro-commissioning ("RCx") programme for major government buildings in Hong Kong and promoting RCx and organising relevant activities/events in Hong Kong and at

regional level; administering the new Energy Efficiency Registration Scheme for Buildings (EERSB) (2018 Edition) and promoting buildings related EE&C and RE initiatives and implementing EE&C and RE initiatives / works for schools and welfare non-governmental organisations.

Chief Engineer/Energy Efficiency C (CE/EEC)

6. CE/EEC assists AD/EE in leading and monitoring the Energy Efficiency Division C in providing professional support and advice to the EEB on the planning, implementation and operations of district cooling systems (DCSs). Besides leading and monitoring the planning, design, construction and operation of DCS projects at the Kai Tak Development and in other new development areas (NDAs), CE/EEC is also responsible for the administration and enforcement of the District Cooling Services Ordinance (Cap. 624) covering the provision of and charging arrangements for district cooling services, as well as review on the charging arrangements for district cooling services at each NDA. Besides, the officer is responsible for steering and supervising the feasibility studies and advanced planning coordination on provision of DCSs in NDAs, and monitoring the coordination with relevant bureaux/departments and implementation of DCS project works. CE/EEC is also responsible for carrying out high-level coordination duties for DCS and managing the operation of the commissioned DCS projects for the provision of DCS services to their users. In addition, CE/EEC is responsible for promoting the wider use of water-cooled air conditioning system in Hong Kong and 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)

7. CEME/EL assists AD/EE in the management and administration of the regulatory functions related to electricity safety; and is responsible for the administration and enforcement of the Electricity Ordinance (Cap. 406) for ensuring the safety of electrical installations and household electrical products, as well as the safe and reliable supply of electricity. Besides, the officer is responsible for introducing and implementing 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. The officer 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. The officer is also responsible for maintaining liaison with external organisations/government departments for the promotion of electricity safety and various new/existing legislation.

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

Chief Engineer/Gas Standards A (CE/GSA)

8. CE/GSA assists AD/GGL in monitoring the performance of the Hong Kong and China Gas Co. Ltd. to ensure that its gas production plants and notifiable gas installations are operated to the highest standards, and in full compliance with the Gas Safety (Gas Supply) Regulations. Apart from being responsible for the operation of the registration schemes for gas works contractors and gas installation technicians, and the management of quality assurance of gas and cylinder LPG installation works in various market sectors, CE/GASA is also responsible for the management of the investigation, preparation and processing of cases for prosecution under the Gas Safety Ordinance (Cap. 51). The officer is also responsible for handling complaints from members of the public and relevant deputations on the safety of gas supply and usage; providing expert advice to professional organisations in both the public and private sectors on the supply and use of cylinder LPG and Towngas in premises; coordinating promotional activities relating to gas safety; and developing, introducing and monitoring, in conjunction with public and private training institutions, new training materials for the gas industry.

Chief Engineer/Gas Standards B (CE/GSB)

9. 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). Apart from monitoring 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 in full compliance with the Gas Safety (Gas Supply) Regulations, CE/GSB also assists AD/GGL in advising the Secretary for the Environment on aspects of gas supply on behalf of the Gas Authority. The officer is also responsible for monitoring 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; and representing 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, CE/GSB also assists AD/GGL in reinforcing the liaison and communication with stakeholders in the air-conditioning and refrigeration trade and relevant government departments, conducting surveillance inspections, and rolling out education and publicity activities to the trade and the public.

Chief Electrical and Mechanical Engineer/General Legislation 1 (CEME/GL1)

10. CEME/GL1 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). Apart from monitoring the enforcement work relating to the safety of lifts and escalators, aerial ropeways, amusement rides, construction site lifts and tower working platforms and other general mechanical installations, and ensuring that appropriate actions are taken against breaches and offenders, CEE/GL1 is responsible for the formulation and implementation of various new legislative proposals/legislative amendments and codes of practice/guidelines to raise the safety standards and enhance the protection of public safety. Besides, the officer is also responsible for the management of the various registration schemes for the vehicle maintenance trade, and managing the staffing management and financial control matters of the professional team set up for the development of the regulatory regime for the vehicle maintenance trade, as well as maintaining liaison with outside organisations and government departments in promoting mechanical safety and various new/existing legislation of a mechanical nature.

Chief Electrical and Mechanical Engineer/General Legislation 2 (CEME/GL2)

11. CEME/GL2 assists AD/GGL in administering the Lifts and Escalators Ordinance (Cap. 618) and ensure the effective implementation of the policy of enhancing the safety of aged lifts and escalators. Apart from overseeing the enhanced inspection work of registered contractors for periodic and special maintenance of aged lifts and implementation of other short-term measures to enhance the safety of old lifts for further protection of public safety, CEE/GL2 is also responsible for the planning and implementation of the "Lift Modernisation Subsidy Scheme" to facilitate building owners to carry out lift enhancement works to improve the safety of aged lifts in the community. CEE/GL2 manages the feasibility study of statutory lift modernization under the relevant legislation, and maintains close liaison and cooperation with the trade and other government departments to promote the safety of aged lifts and escalators.

<u>Under Deputy Secretary for the Environment and Ecology (DS(E&E)) and Deputy Director/Regulatory Services (DD/RS)</u>

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

12. CEME/ET is part of the EMSD's establishment and is attached to the EEB for assisting DS(E&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, as well as reviewing the SCAs and matters related to energy policy and electricity industry. In addition, the CEME/ET is responsible for formulating the future fuel mix for electricity generation, and review of development of the electricity market and related regulatory framework in Hong Kong. CEME/ET 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. The officer is also responsible for attending meetings of the LegCo 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 SCAs. The officer 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.

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