For discussion **EC(2007-08)13**
on 12 December 2007

ITEM FOR ESTABLISHMENT SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 42 – ELECTRICAL AND MECHANICAL SERVICES DEPARTMENT

HEAD 158 – GOVERNMENT SECRETARIAT : TRANSPORT AND HOUSING BUREAU (TRANSPORT BRANCH)

Subhead 000 Operational expenses

Members are invited to recommend to Finance Committee the following proposals with effect from 1 February 2008 –

(a) the creation of the following permanent post in the Electrical and Mechanical Services Department –

1 Government Electrical and Mechanical Engineer (D2) ($115,450 - $122,600)

to be offset by the deletion of the following permanent post in the Transport Branch of the Transport and Housing Bureau –

1 Chief Electrical and Mechanical Engineer (D1) ($97,250 - $103,200); and

(b) adjustment to the ceiling placed on the total notional annual mid-point salary value of all non-directorate posts in the permanent establishment of the following Heads of Expenditure in 2007-08 –

/Head .....

Head 42

an increase from $125,840,000 by $4,459,440 to $130,299,440

Head 158

a decrease from $53,889,000 by $4,459,440 to $49,429,560

PROBLEM

In the light of the increasing number of new railway projects under planning and to be completed, and the increasing complexity in railway operation, we need to enhance our monitoring of railway safety, and strengthen the technical and professional support to the Hong Kong Railway Inspectorate (HKRI) in order to continuously ensure the safe operation of the railways.

PROPOSAL

2. We propose that with effect from 1 February 2008 –

(a) one permanent Government Electrical and Mechanical Engineer (GEME) (D2) post be created in the Electrical and Mechanical Services Department (EMSD), to be offset by the deletion of one Chief Electrical and Mechanical Engineer (CEME) (D1) post in the Transport Branch (TB) of the Transport and Housing Bureau (THB);

(b) the HKRI currently in TB of THB be transferred to EMSD; and

(c) adjustment to the establishment ceiling placed on the total notional annual mid-point salary (NAMS) value of all non-directorate posts in the permanent establishment under Head 42 and Head 158 in 2007-08 be made to facilitate the cost-neutral transfer of non-directorate posts as a result of (b).

JUSTIFICATION

Background

3. The HKRI was established in 1990 and was attached to the then Transport Branch of the Government Secretariat which is now THB. The current HKRI is headed by the Chief Inspecting Officer/Railways (ranked at CEME) (D1), with the support of three teams comprising six professional and two secretarial staff. The existing organisation chart of the HKRI is at Enclosure 1.

Encl. 1

4. The HKRI is the regulatory body of the railway lines operated by the MTR Corporation Limited and Kowloon-Canton Railway Corporation, and the automated people mover operated by the Airport Authority in the terminal building of the Hong Kong International Airport. The role of the HKRI is to oversee the safe operation of all the above railways. The main functions of HKRI can be categorised into the following main areas –

(a) investigating into railway incidents;

(b) ensuring the adoption of appropriate safety practices by the railway corporations;

(c) assessing and approving new railways and major modifications; and

(d) assessing and following up the railway corporations' improvement measures.

Need to strengthen the manpower of HKRI

5. When the HKRI was established in 1990, it was responsible for the safety of a railway network of only about 110 kilometer (km) in length which included Master Transit Railway (MTR) Tsuen Wan Line, Kwun Tong Line and Island Line, as well as Kowloon-Canton Railway (KCR) East Rail from Lo Wu to Hung Hom and Light Rail from Tuen Mun to Yuen Long. With the extensive infrastructural development in the past 15 years, the length of the railway network has increased to more than 210 km. New lines commissioned include MTR Tung Chung Line, Airport Express, Tseung Kwan O Line, KCR West Rail, East Rail extensions to East Tsim Sha Tsui, Ma On Shan and Lok Ma Chau, Light Rail Extension to Tin Shui Wai and the Automated People Mover in the Airport. Looking into the future, Government is pursuing a number of new railway projects including the West Island Line, South Island Line, Shatin to Central Link and the Express Rail Link to the Mainland. Moreover, the Kowloon Southern Link is expected to be completed in 2009.

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6. In the light of the increasing number of new railway projects, the advancement in railway technology, the changes brought about by the merger of the MTR and KCR systems, and increasing public expectation on continuous improvement in railway safety, we have reviewed with railway experts on how the role and functions of the HKRI could be further enhanced taking into account overseas experience and practices.

7. We have identified the following areas in HKRI's regulatory functions for further enhancement –

(a) Adopting more measures for the monitoring of railway safety

At present, HKRI examines the regular submissions of railway corporations to monitor their safety performance trends. This can enable HKRI to monitor any unfavourable safety trends for follow-up with railway corporations. We consider that the monitoring by HKRI can be made more comprehensive and strategic by taking into account the potential safety risk areas during different phases of a life cycle of each railway.

In other words, in addition to the present arrangement, HKRI will adopt the "risk-based" approach to monitor the safety-critical areas and their potential associated risks under different scenarios throughout the life cycle of a railway. HKRI will also review the priority of these risks regularly to ensure the safe operation throughout different phases of a life cycle of a railway.

(b) Steering the railway corporation to enhance adoption of safety preventive measures

While HKRI will continue to follow up with the railway corporation on railway incidents and monitor the implementation of remedial measures, HKRI also plans to strengthen its function in pursuing with the railway corporation the adoption of early preventive measures with a view to further minimising the occurrence of incidents.

To achieve this, apart from the risk-based monitoring approach mentioned above, HKRI will also conduct special topic audits. This would enable the railway corporation to implement enhancement measures early for problems that may be identified through these audits to minimise occurrence of incidents. This approach is particularly useful in the time of rail merger to ensure that changes in relation to merger will not affect the corporation's safety performance.

/(c) .....

(c) Ensuring the adoption of the best international safety practices by the railway corporation

Railway is the backbone of Hong Kong's public transport system. HKRI considers that the railway corporations should be persistently vigilant in adopting the best international safety practices in railway operations. On this, HKRI needs to enhance its networking with overseas railway regulators for the purpose of experience sharing and keeping track of the latest technology developments and trend of regulatory practices overseas, so as to equip itself with strengthened support and knowledge in this area, with a view to enhancing its monitoring and ensuring that the railway corporation is continuously adopting the most appropriate international standards and practices to safeguard the safety of the travelling public.

(d) Assessing and approving new railway projects

As mentioned above, various new railway projects are being planned by the Government and many complicated technical issues are involved. For example, underground stations of the West Island Line will be located much deeper than existing stations, and Express Rail Link will be operating in a tunnel longer than any of the existing lines. Starting from the design stage, HKRI needs to ensure that the infrastructure and equipment designs can address potential safety issues, before they can be opened for public use. HKRI assumes a coordinating and leading role in the approval process. In this regard, the manpower of HKRI would need to be strengthened so that it could enhance its effectiveness in coordinating with various stakeholders and its efficiency in examining the proposals with a view to facilitating the implementation of railway projects in a safe and timely manner.

8. Taking into consideration the level of resources and expertise required for HKRI to effectively perform its proposed enhanced role and functions, we propose to –

(a) strengthen the professional manpower of HKRI by upgrading its existing head from a CEME (D1) to a GEME (D2) post, and creating two non-directorate engineering posts; and

(b) integrate HKRI into EMSD.

Need to upgrade the head of HKRI from a CEME (D1) to a GEME (D2) Post

9. We consider that the head of HKRI should be pitched at the rank of GEME (D2) so that the incumbent can, at a commensurate rank, efficiently and effectively lead the team to carry out the proposed enhanced regulatory functions of HKRI.

10. To enable HKRI to carry out its monitoring function through the risk-based approach mentioned in paragraph 7(a), it is necessary for the head of HKRI to be a seasoned professional who is equipped with the necessary management perception to monitor railway safety in a more strategic manner. He also needs to be well versed with the engineering and safe operation of the railway systems to enable early identification of potential risk areas that require special topic audits as mentioned in paragraph 7(b) above, pursue with the railway corporation the adoption of early preventative measures and follow up with the senior management of the railway corporation to deal with the audit outcome in a timely manner. Since the head of HKRI is required to carry out these strategic tasks which require thorough analysis, we consider it necessary for the head to be a D2 officer.

11. Similarly, in paragraph 7(c) we point out the need and importance for HKRI to keep abreast of best international safety practices. The head of HKRI must therefore be of sufficiently senior ranking in order to build up connections with overseas railway regulators more systematically, equip the HKRI with up-to-date insight and experience in railway safety monitoring, effectively monitor the railway corporation in adopting safety standards commensurate with overseas practices, and ensure the leading position of Hong Kong's railways in terms of safety.

12. For approval of new works and major modifications at existing railways, the head of HKRI is required to chair cross-departmental committees to ensure compliance by the railway corporations in these areas. Taking into account the increasing number and complexity of new railway projects set out in paragraph 7(d) above, it is necessary to upgrade the head of HKRI to D2 level with the required experience and expertise for enhancing the effectiveness in coordinating among various stakeholders and the efficiency in the approval process.

13. Apart from the above, the head of HKRI is required to oversee the safety issues in relation to the rail merger. The merger involves a lot of changes and integration on both infrastructure and safety management sides which will take place in the coming years. On the infrastructure side, there would be modification of the interchange stations to facilitate seamless interchange, integration of control

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centres to allow central control of all railway lines, etc. On the management side, there would be changes and integration of the safety management systems, maintenance management systems, rules and procedures, etc. It would be necessary for HKRI to ensure all such merger-related safety issues are seamlessly carried out throughout the integration process. A D2 officer will be required to lead the team to follow through all these tasks given their complexity. In fact, in view of the importance of railway safety and the imminent need to address the merger issue, a supernumerary post of GEME (D2) has been created from 1 August 2007 to 31 January 2008 to deal with the preparatory work of safety compliance in relation to the merger.

14. In view of the additional measures to be adopted in safety monitoring; the expansion of the railway network at the same time which will lead to an increase in HKRI's workload; and the implementation of merger-related safety issues in the coming years, we expect that the head of HKRI will need to demonstrate good leadership, professionalism and management skills to develop strategic safety plans to monitor the safety compliance of the railway corporation. It is therefore essential to upgrade the head of HKRI from a CEME (D1) to a GEME (D2) post to take up these elevated responsibilities. The job descriptions of the existing CEME post and proposed GEME post are at Enclosures 2 and 3 respectively. The proposed organisation chart of HKRI after the transfer from THB to EMSD is at Enclosure 4.

Encls. 2&3

Encl. 4

Integrating HKRI into EMSD

15. HKRI is currently administratively attached to the Bureau and is operating independently. Most of the engineers in HKRI are seconded from EMSD given the relatively high relevance of electrical and mechanical engineering in railway engineering systems such as signalling, trains, power supply and fire services. Indeed, EMSD has been providing technical support and advice to the Bureau when major railway incidents occur. We have assessed and considered that housing HKRI under EMSD would be the most appropriate arrangement. Under this arrangement, the head of HKRI and his team in EMSD will still be the first line staff to handle railway incidents in accordance with the law. This also provides EMSD with the flexibility in deploying relevant expertise for the purpose of overseeing railway safety, facilitates the nurturing of expertise and experience of HKRI and renders in-house professional support to HKRI, as well as allowing HKRI's work to be monitored and supervised by senior officers of the professional grade of the department. Moreover, transferring HKRI to EMSD would have an added advantage of putting the regulatory control of all railways including Hong Kong Tramway and Peak Tram currently under the jurisdiction of EMSD into a single team with extensive experience in regulatory functions. We do not expect the transfer would introduce any changes to the portfolio of officers in THB since the policy on railway safety will still be owned by the Bureau.

/Non-directorate .....

Non-directorate support

16. At present, there are eight non-directorate grade staff including six professional and two secretarial staff supporting HKRI. In order to achieve the enhancement outlined in paragraph 7 above, a new team consisting of one senior professional engineer, ranked at Senior Electrical and Mechanical Engineer/Senior Electronics Engineer (SEME/SEE), and one professional engineer, ranked at Electrical and Mechanical Engineer/Assistant Electrical and Mechanical Engineer/Electronics Engineer/Assistant Electronics Engineer (EME/AEME/EE/AEE) will be set up. The major role of this new team is to assist the GEME in developing and implementing additional safety monitoring measures, to enhance communication with the public, to strengthen networking with overseas railway regulators and railway organisations, and to monitor and conduct audits in relation to the safety-related merger activities.

17. In addition to the above two professional posts, two clerical and one secretarial posts (offset by two existing secretarial posts) will be created to strengthen the logistical support to HKRI. The two staff currently taking up duties on safety regulation of tramway and peak tram (i.e. one EME and one Electrical Inspector (EI)) will also be grouped under the supervision of the GEME.

Timing for implementation

18. We propose to integrate HKRI into EMSD in two phases. The current supernumerary GEME post reviewing the safety issues on merger of the MTR and KCR systems will lapse on 1 February 2008. We consider it most appropriate to upgrade the CEME (D1) post to a GEME (D2) post with effect from 1 February 2008 so that the merger-related safety issues will be followed through without a break. The existing non-directorate staff in HKRI will be permanently redeployed to EMSD and put under the supervision of the GEME post with the creation of the secretarial and clerical support staff on the same date. The creation of the two non-directorate professional engineer grade posts (i.e. one SEME/SEE and one EME/AEME/EE/AEE) will take effect on 1 April 2008.

Adjustment to the establishment ceiling for Head 42 and Head 158

19. With the transfer of HKRI from TB of THB to EMSD on 1 February 2008, the eight non-directorate posts in TB of THB will be transferred to EMSD on the same date. We will process the changes in the non-directorate establishment through the Departmental Establishment Committee. The ceiling placed on the total NAMS value of non-directorate posts in the permanent establishment under Head 42 in 2007-08 would be increased from $125,840,000 by $4,459,440 to $130,299,440, to be offset by a corresponding reduction under Head 158.

/**Alternatives** .....

Alternatives considered

20. The total daily patronage of all railways in Hong Kong is about four million. Railway safety is a very important issue. While engaging consultants to carry out part of HKRI's regulatory functions could be an alternative, we consider it inappropriate to do so taking into account the need to ensure the integrity and impartiality of safety regulation. A comprehensive review has been done and it is observed that existing resources in HKRI are fully stretched to monitor the safe operation of existing railway lines. Existing staff are already heavily loaded and it is not possible for them to take on additional duties relating to railway safety.

FINANCIAL IMPLICATIONS

21. The proposed changes in directorate establishment will bring about an additional notional annual salary cost at mid-point of $226,800 as follows –

	Rank	Notional annual salary cost at mid-point $	No. of post
	New permanent post		
	Head 42		
	GEME (D2)	1,428,000	1
	Sub-total (a):	1,428,000	1
Less:	**Deletion of post**		
	Head 158		
	CEME (D1)	1,201,200	1
	Sub-total (b):	1,201,200	1
	Net Total (a) – (b):	**226,800**	**0**

The additional full annual average staff cost, including salaries and staff on-cost is $354,000. The proposal has been covered in ECI(2007-08)8 on "Update on Overall Directorate Establishment Position" issued by the Administration on 9 November 2007.

22. The proposal will require the permanent redeployment of eight non-directorate posts from TB of THB to EMSD which is cost-neutral. Subject to Finance Committee's endorsement of the proposal, a supplementary provision for the remainder of 2007-08 will be provided to Head 42 under delegated authority, to be offset by the same amount under Head 158. The cost for the additional non-directorate posts mentioned in paragraphs 16 and 17 will be met from within EMSD's approved allocations.

PUBLIC CONSULTATION

23. We consulted the Legislative Council Panel on Transport at its meeting on 23 November 2007. Members in general supported the proposal of upgrading the head of HKRI from a CEME post to a GEME post and the integration of HKRI into EMSD.

ESTABLISHMENT CHANGES

24. The establishment changes under Head 158 and Head 42 in the past two years are as follows –

Establishment (Note)	Number of Posts		
	Existing (as at 1 October 2007)	**As at 1 April 2007**	**As at 1 April 2006**
Head 42			
A	12^	12	12
B	114	114	114
C	203	202	198
Total	**329**	**328**	**324**
Head 158			
A	21+(2)^	14+(2)	14+(2)
B	44	32	32
C	90	63	64
Total	**155#+(2)**	**109+(2)**	**110+(2)**

Note:
A – ranks in the directorate pay scale or equivalent
B – non-directorate ranks the maximum pay point of which is above MPS Point 33 or equivalent
C – non-directorate ranks the maximum pay point of which is at or below MPS Point 33 or equivalent
( ) – number of supernumerary directorate posts
^ – as at 1 October 2007, there was no unfilled directorate post in TB and EMSD.
# – the increase of 46 posts in TB as at 1 October 2007 was due to the transfer of posts from the former Economic Development and Labour Bureau and the Works Branch of the former Environment, Transport and Works Bureau upon re-organisation of the policy bureaux of the Government Secretariat with effect from 1 July 2007.

CIVIL SERVICE BUREAU COMMENTS

25. The Civil Service Bureau supports the proposed upgrading of the existing head of HKRI from a CEME post to GEME post and transfer of HKRI from THB to EMSD to strengthen the capability of HKRI in undertaking its enhanced regulatory control role/functions to ensure railway safety. The grading and ranking of the proposed GEME post are appropriate having regard to the level and scope of the responsibilities and the professional input required.

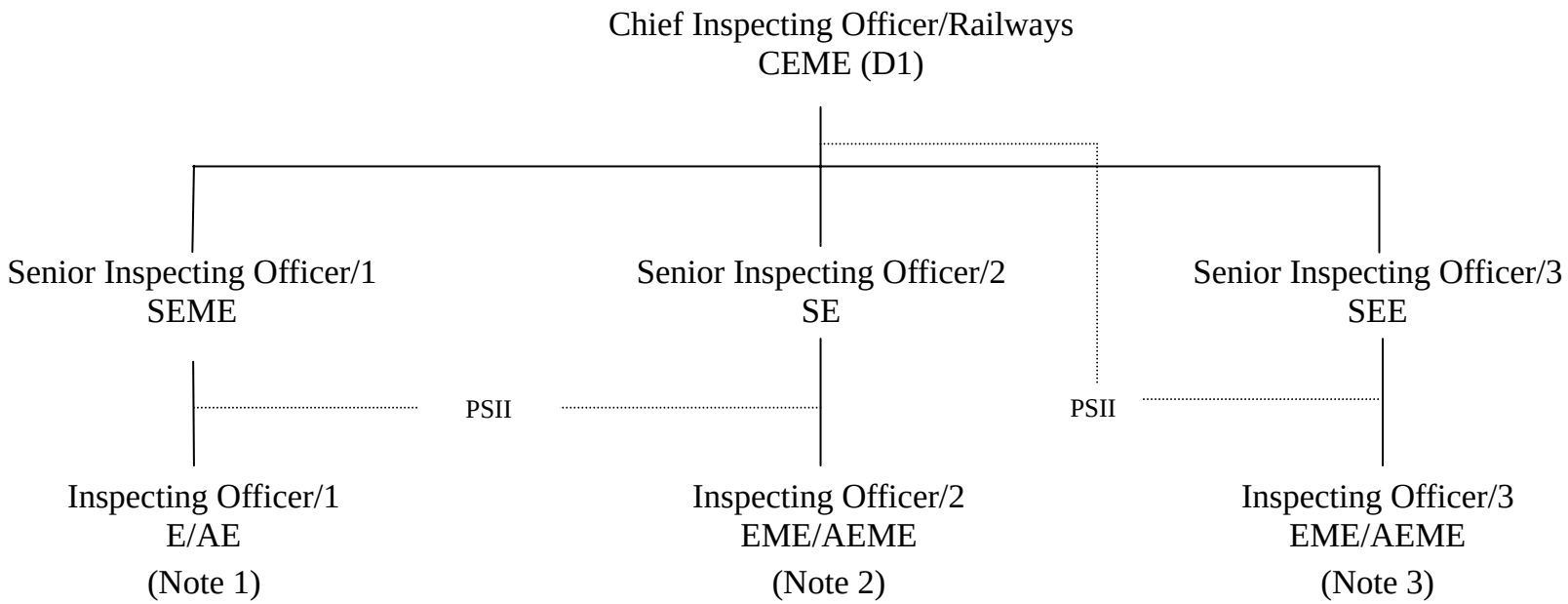
ADVICE OF THE STANDING COMMITTEE ON DIRECTORATE SALARIES AND CONDITIONS OF SERVICE

26. The Standing Committee on Directorate Salaries and Conditions of Service has advised that the grading proposed for the post would be appropriate if the proposals were to be implemented.

Transport and Housing Bureau
December 2007

Enclosure 1 to EC(2007-08)13

Existing Organisation Chart of Hong Kong Railway Inspectorate



Legend:

CEME	-	Chief Electrical and Mechanical Engineer
SE	-	Senior Engineer
SEME	-	Senior Electrical and Mechanical Engineer
SEE	-	Senior Electronics Engineer
E/AE	-	Engineer/Assistant Engineer
EME/AEME	-	Electrical and Mechanical Engineer/Assistant Electrical and Mechanical Engineer
PS II	-	Personal Secretary II

Note 1 Responsible for the regulatory control of Mass Transit Railway Lines, Airport Automated People Mover and their Extensions
Note 2 Responsible for the regulatory control of West Rail, Light Rail, Kowloon Southern Link and their Extensions
Note 3 Responsible for the regulatory control of East Rail, Ma On Shan Rail, Sheung Shui to Lok Ma Chau Spur Line and their Extensions

Enclosure 2 to EC(2007-08)13

Job Description

Post Title **:** Chief Inspecting Officer (Railways)

Rank **:** Chief Electrical and Mechanical Engineer (D1)

Responsible to **:** Principal Assistant Secretary for Transport and Housing

Duties and Responsibilities -

1. To lead the Hong Kong Railway Inspectorate in enforcing regulatory functions and introducing new requirements as necessary in accordance with the relevant Ordinances, Regulations and Operating Agreements;

2. to develop strategy in ensuring railway safety;

3. to liaise with senior management of the railway corporation through regular and ad-hoc meetings to give guidance and recommendation on railway safety matters, and to steer and monitor the railway corporation to take positive actions in ensuring safety;

4. to chair cross-departmental safety committees and coordinate with other government departments at senior management level including but not limited to the Buildings Department, Fire Services Department, Highways Department, Hong Kong Police Force and Transport Department in reviewing design, construction, commissioning, operation and modifications of railways and other railway safety matters;

5. to attend project implementation steering committees to give professional advice on railway safety and suitability of opening of new railways, and to provide professional advice to the Transport and Housing Bureau on railway safety matters; and

6. to assist the Transport and Housing Bureau in preparing submissions to Legislative Council (LegCo) on railway safety matters and to attend LegCo meetings as required.

Job Description

Post Title : Assistant Director/Railways

Rank : Government Electrical and Mechanical Engineer (D2)

Responsible to : Deputy Director of Electrical and Mechanical Services/Regulatory Services

Duties and Responsibilities –

1. To lead the Hong Kong Railway Inspectorate in enforcing regulatory functions and introducing new requirements as necessary in accordance with the relevant Ordinances, Regulations and Operating Agreements;

2. to develop strategy in ensuring railway safety, which includes but not limited to the adoption of a risk-based approach in monitoring and conduct of special topic audits;

3. to liaise with senior management of the railway corporation through regular and ad-hoc meetings to give guidance and recommendation on railway safety matters, and to steer and monitor the railway corporation to take positive actions in ensuring safety;

4. to chair cross-departmental safety committees and coordinate with other government departments at senior management level including but not limited to the Buildings Department, Fire Services Department, Highways Department, Hong Kong Police Force and Transport Department in reviewing design, construction, commissioning, operation and modifications of railways and other railway safety matters;

5. to attend project implementation steering committees to give professional advice on railway safety and suitability of opening of new railways, and to provide professional advice to the Transport and Housing Bureau on railway safety matters;

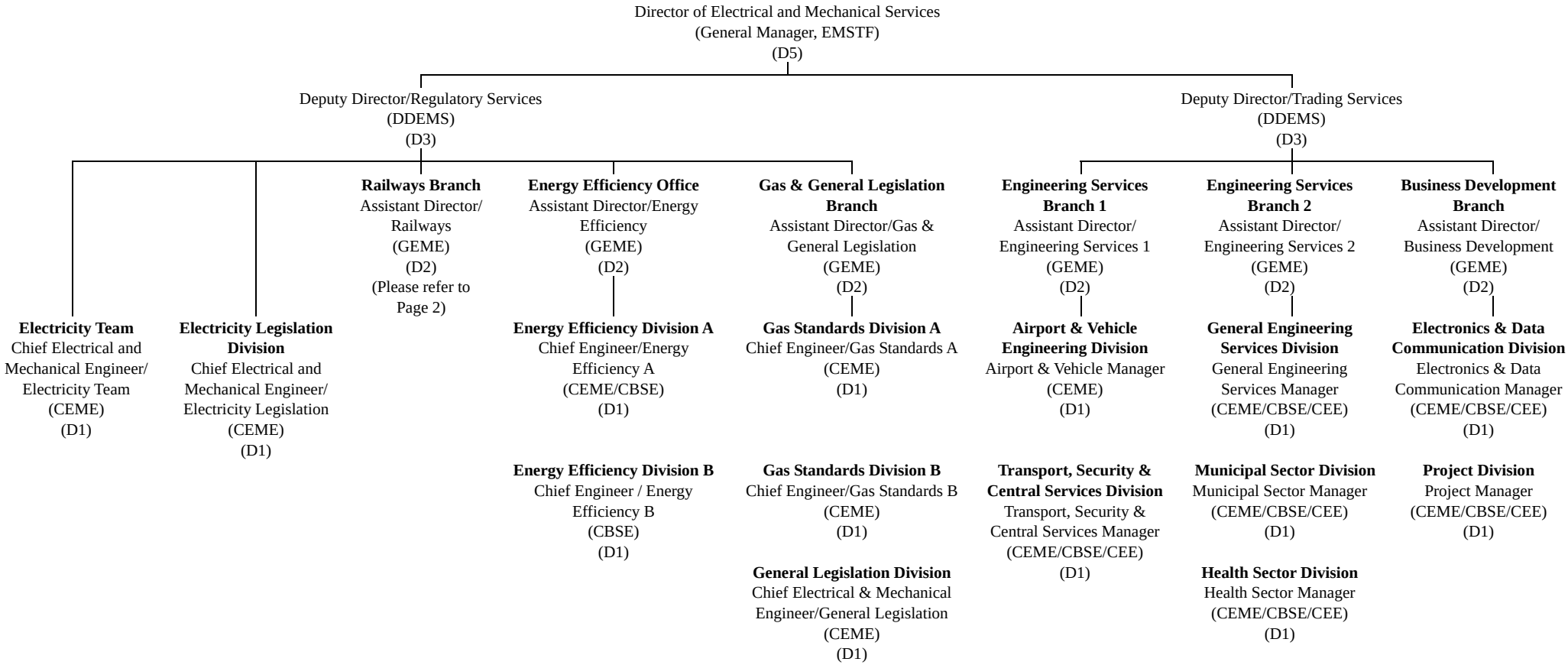
6. to network with overseas railway regulators and relevant organisations for the development of strategy and policy to ensure that the safety standards in Hong Kong are kept in pace with overseas practices and safety of local railways are commensurate with international levels;

/7. .....

7. to develop strategy to interface with the public through the implementation of public education programmes by the department or jointly implemented with the railway corporation in enhancing safety and to explain the investigation result of railway incidents; and

8. to assist the Transport and Housing Bureau in preparing submissions to Legislative Council (LegCo) on railway safety matters and to attend LegCo meetings as required.

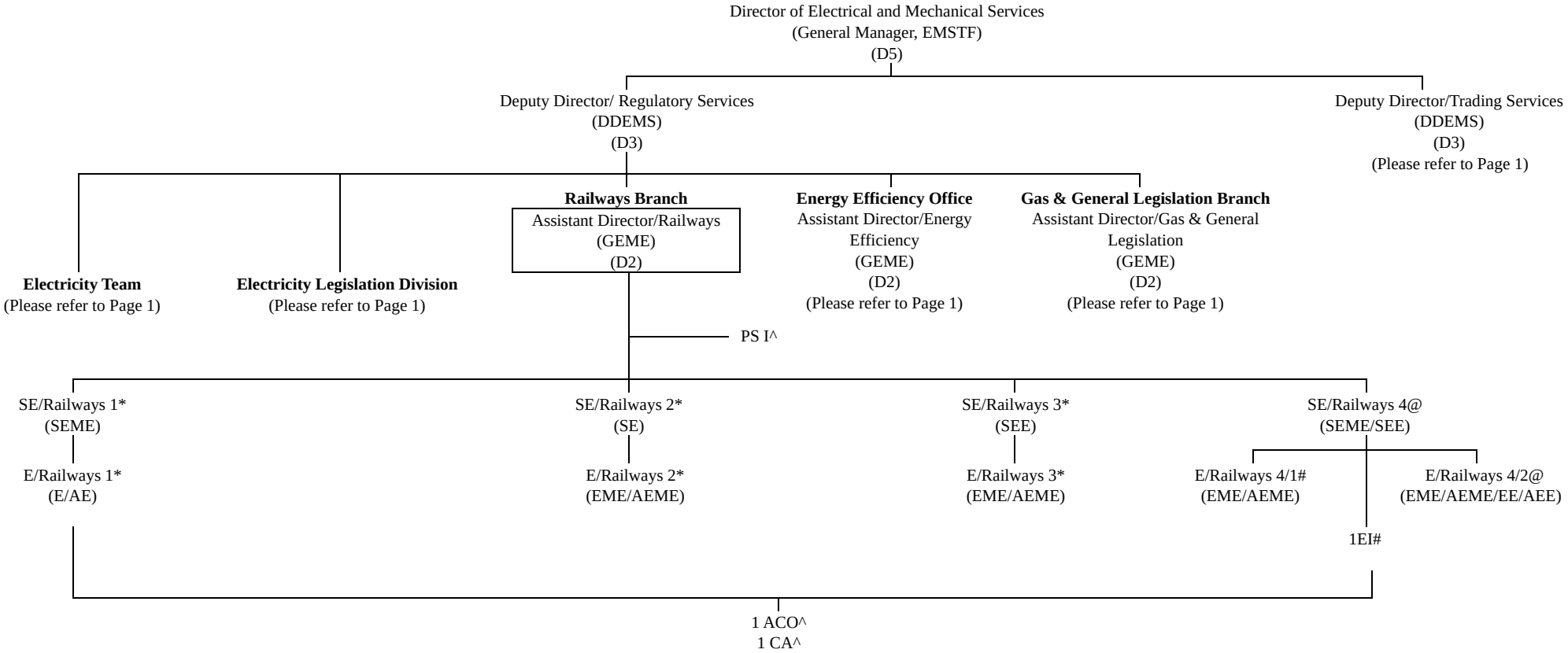
Proposed Organisation Chart of Electrical and Mechanical Services Department



Legend:

DDEMS	Deputy Director of Electrical and Mechanical Services
GEME	Government Electrical and Mechanical Engineer
CEME	Chief Electrical and Mechanical Engineer
CBSE	Chief Building Services Engineer
CEE	Chief Electronics Engineer
EMSTF	Electrical and Mechanical Services Trading Fund

Proposed Organisation Chart of Electrical and Mechanical Services Department



Legend:

▭	Directorate post proposed to be upgraded from CEME (D1) to GEME (D2) on 1.2.2008
^	Posts proposed to be created on 1.2.2008
*	Posts proposed to be transferred from the Transport Branch of the Transport and Housing Bureau to the Electrical and Mechanical Services Department (EMSD) on 1.2.2008 (excluding two PSII posts to be deleted on 1.2.2008 to offset creation of three new clerical/secretarial posts)
@	Posts proposed to be created on 1.4.2008
#	Existing posts redeployed from other sections of EMSD on 1.4.2008
DDEMS	Deputy Director of Electrical and Mechanical Services
GEME	Government Electrical and Mechanical Engineer
SE	Senior Engineer
SEME	Senior Electrical and Mechanical Engineer
SEE	Senior Electronics Engineer
E/AE	Engineer/Assistant Engineer
EME/AEME	Electrical and Mechanical Engineer/Assistant Electrical and Mechanical Engineer
EE/AEE	Electronics Engineer/Assistant Electronics Engineer
EI	Electrical Inspector
PS I	Personal Secretary I
ACO	Assistant Clerical Officer
CA	Clerical Assistant
EMSTF	Electrical and Mechanical Services Trading Fund