

**For discussion
on 8 July 2013**

**Legislative Council
Panel on Information Technology and Broadcasting**

**Review of the Telecommunications Engineer Grade
Office of the Communications Authority**

Purpose

The Office of the Communications Authority (OFCA) commissioned in late 2012 an external consultant to assist it in undertaking a review of the functions of the Telecommunications Engineer (TE) grade (the Review). The consultant completed its work in June 2013. This paper briefs Members on the outcome of the Review and the decision of the Administration to maintain a cadre of 25 posts in the TE grade to assume in OFCA such technical regulatory duties that require in-depth engineering knowledge.

Background

2. In order to enable OFCA (formerly the Office of the Telecommunications Authority) to handle the increasingly diverse and complicated telecommunications regulatory affairs intertwined with economic and technical issues, the Administration proposed to create the Regulatory Affairs Manager (RAM) grade which would embrace talents in the relevant disciplines such as law, economics, accounting, business administration, information technology and engineering etc. The proposal was approved by the Finance Committee (FC) of the Legislative Council (LegCo) in November 2011. Prior to that, the TE grade is the main civil service grade responsible for regulatory work in OFCA, in providing technical telecommunications engineering support and taking charge of such technical regulatory work as planning and assignment of radio spectrum, setting of technical standards etc.

3. The newly created RAM grade performs both the technical and economic regulatory work in OFCA. To enable an optimal deployment of staff resources on a sustainable basis, the original plan of the Administration upon creation of the new grade was to gradually subsume the functions of the TE grade under the new grade. During

discussion of the Administration's proposal to create the RAM grade at the Establishment Subcommittee (ESC) meeting of the FC in October 2012, the Administration, taking into account the request from the TE grade members and the views of ESC Members, undertook to conduct the Review to consider whether the functions of the TE grade should be subsumed under the RAM grade. The Administration also acceded to the TE grade's request to advance the timetable of the Review, and undertook to commission an external consultant to conduct the Review in 2012 for completion in 2013.

4. The external consultant (the Consultant) appointed for the Review started its work in late 2012. The Consultant was tasked to conduct a detailed job analysis of all the posts in the TE grade and estimate the workload of pure engineering and technical regulatory functions of the TE grade having regard to technological and market development in the coming 10 years. Based on its assessment, the Consultant is to advise on whether or not the functions of the TE grade should be subsumed under the RAM grade and if so, the proposed subsuming arrangements, and if not, the number, rank and job responsibilities of posts to be retained in the TE grade. The Consultant is also to advise on the transitional arrangements for both options. A progress update on the Review was provided to the Panel in March 2013 in response to the enquiries from two Members (LC Paper No. CB(4)459/12-13(01)). Now that the Review is completed, as per the Administration's undertaking to the FC in November 2011, we are reporting to the Panel the outcome of the review and the Administration's decision on way forward with the TE grade in OFCA.

Findings and Recommendations of the Consultant and the Responses of 25 TE Grade Members

5. The Consultant completed the Review and submitted a consultancy report to OFCA in June 2013. It classified the duties of 39 posts in the TE grade (TE grade posts) into four categories¹ based on their technical competence requirement. According to the job analysis conducted by the Consultant, in aggregate, about 50% of the duties of the TE grade posts require in-depth engineering knowledge² while the

¹ The four categories are: Category A duties that must be performed by chartered engineers, Category B duties that are pure engineering duties requiring in-depth engineering knowledge, Category C duties that are multifarious regulatory duties, and Category D duties that are other duties.

² They are Category A and B duties.

remaining duties are multifarious regulatory duties or other duties³ which call for knowledge in multi-disciplinary fields. There is no duty⁴ of any of the TE grade posts in OFCA which strictly require a chartered engineer⁵ to perform.

6. Regarding the future arrangement for the TE grade, the Consultant suggested two possible options -

(a) the Subsuming Option

Under this option, the functions of the TE grade would be gradually subsumed under the RAM grade. In other words, all TE grade posts would be ultimately re-graded to RAM posts. The process is expected to take 18 years to complete, upon the retirement of the last TE grade member from the civil service; and

(b) the Non-subsuming Option

Under this option, the TE grade posts with at least 50% of duties requiring in-depth engineering knowledge would be retained. As derived from the job analysis, a cadre of 25 TE grade posts⁶ out of the existing establishment of 39 posts would be retained in OFCA's establishment in the long run. The TE grade posts in excess of the target establishment will be re-graded to posts of equivalent ranks in the RAM grade upon retirement of the TE grade member post holders.

As OFCA will continuously require the support of officers with engineering knowledge and experience for its technical regulatory functions, there will be posts suitable for the serving TE grade members to fill before their retirement from the civil service. This obviates the need for OFCA to consider need for voluntary redundancy for the TE grade or any specific rank of the grade in either option.

7. The preliminary findings of the Consultant, including the two possible options, were presented to the TE grade members and

³ They are Category C and D duties.

⁴ Some TE grade members are occasionally required to serve as expert witness in court on engineering issues. They may quote their professional qualification as a chartered engineer on top of their post titles in OFCA and the years of relevant experience in the industry for reference by the judge. It may be more credible to have chartered engineer to undertake such duties, albeit that is not a must.

⁵ A chartered engineer refers to a Corporate Member in Electronics, Electrical or Information Discipline of the Hong Kong Institution of Engineers elected after 5 December 1975, or equivalent.

⁶They include the posts of 3 Chief TEs, 6 Senior TEs and 16 TEs.

OFCA management in April 2013. 25 TE grade members gave their comments in their letter of 15 May 2013 to the Director-General of Communications (DG Com) copied to several Members of this Panel (**Annex A**, in Chinese only). In gist, they did not accept the findings of the Consultant and reiterated their request that the TE grade with the existing establishment should be retained and the TE recruitment should be immediately resumed. In response to the comments and request of the TE grade members, DG Com gave her reply in the letter of 23 May 2013 (**Annex B**, in Chinese only).

8. In coming up with the final recommendation on way forward, the Consultant took into account the comments of the TE grade members in further assessing the pros and cons of the two possible options. It concludes that the Subsuming Option should be the optimal solution for OFCA to discharge its multifarious regulatory functions for the constantly evolving telecommunications market. Having said that, the Consultant appreciates that there has been, all along, strong objection of the TE grade members to the subsuming arrangement. As such, it suggests that OFCA management should, taking into account practical considerations, opt for an option which strikes a proper balance between meeting the operational need of the department on the one hand, and better addressing the sentiments of the TE grade members on the other. A brief report of the Consultant summarising its work, findings and recommendations of the Review is at **Annex C**.

The Administration's Decision

9. The Review aims to identify an option which best meets the operational need of OFCA in the long run, which improves staff deployment flexibility, while giving due regard to staff morale and feasibility for implementation. Taking into account the findings of the Consultant and with due respect for the sentiments of TE grade members against the subsuming arrangement, the Administration is minded to adopt the Non-Subsuming Option by maintaining a cadre of TE grade posts (as given in paragraph 6(b)) to assume in OFCA the technical regulatory duties which require in-depth engineering knowledge. DG Com has informed TE grade members of the decision of the Administration vide her letter of 26 June 2013.

Way Forward

10. As in June 2013, there are 30 officers serving in the TE grade. Assuming that all grade members will retire upon reaching their normal retirement age, the Non-subsuming Option will be fully implemented in four years' time. By then, the excessive TE grade posts would have been re-graded to the RAM grade of equivalent ranks. It is the Administration's intention to resume the TE recruitment timely when the number of TE grade members fall close to the target establishment.

**Communications and Technology Branch
Commerce and Economic Development Bureau
Office of the Communications Authority
2 July 2013**

通訊事務總監：

審視電訊工程師崗位的顧問報告初稿

我們過往對永久凍結招聘電訊工程師專業職系等建議已經多次提出意見（見附件一至五）。就審視電訊工程師崗位的顧問報告初稿所見，我們認為該顧問不能就部門及業界，對電訊工程師職系的持續需求，提供有用的意見，他們的「所謂」顧問報告更不能接受。

2. 該顧問將工程師崗位的職能，以技工機械性工種的角度進行分析，漠視專業資格的相關操守要求，是非常荒謬的。根據該顧問的分析方法，政府內大部分專業職系的崗位，除法例訂明外，都不一定需要專業資格。如該顧問的分析方法被採納，我們相信將影響整個公務員系統所有專業職系的穩定性。

3. 在過去數年，針對電訊市場服務混亂的情況，部門工作偏重於處理議員、業界和市民的投訴，但忽略技術規管的持續發展，引致技術規管停滯不前。在市場和技術發展的衝擊下，我們看見廣播技術，網絡質素，頻譜規劃，號碼資源，下一代網路，輻射安全等技術範疇，都出現極需與時並進的發展。因著多項技術規管政策的回顧與更新，

以及通訊科技的急速發展，部門極需一個強大而有延續性的專業技術團隊去處理，工程師職系正好能為部門提供貢獻。

4. 可惜，過去十多年，電訊工程師的崗位不斷被部門「陰乾」，數以十計的工程師空缺，在沒有任何諮詢和解釋的情況下被凍結。在人手缺乏下，工作時間拉長，申請長假期亦倍增困難，合理的休假權利受到剝削，嚴重打擊工程師職系的士氣。隨著科技發展和電訊牌照數目的增加，我們的工作量和複雜性有增無減，在部門不提供足夠人手，不提供足夠培訓的情況下，我們都本著專業操守和道德盡力工作，但工作效率無可避免地下降。但考慮到技術規管面臨的挑戰，部門應採取積極行動，改善電訊工程師職系的現況，為業界提供更好的服務。

5. 除了規管電訊市場，部門另一重要職能是作為特區政府的電訊顧問。取消電訊工程師職系，或取消職系對專業資格的要求，都是倒退的做法，必然會影響部門提供專業意見的質素及權威性。部門亦需要注意工程專業經驗的累積及中斷後不能彌補的後果。

6. 我們的立場非常明確和簡單；

- 不接受一份沒有理據的荒謬顧問報告
- 完整地保留電訊工程師職系，包括專業資格的人職要求和

工程師職系的現有編制，跟政府內所有工程師職系一致

- 立刻招聘電訊工程師，填補空缺以應付電訊工程師退休高峰期

一群關心職系發展的總電訊工程師、高級電訊工程師及電訊工程師

關順明

馮步豪

陳子儀 (代署)

李志成

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陳偉明

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程啟生

洪國基

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鄧啟濂

羅秀雅

張瑞麟

陳志雄

梁榮基

何貴海

李純

黃家強

二零一三年五月十五日

副本抄送：立法會資訊科技及廣播事務委員會主席黃毓民議員

立法會莫乃光議員

立法會盧偉國議員

公務員事務局局長

商務及經濟發展局局長

→ 通訊事務管理局主席何沛謙先生

附件：

附件	日期	題目
附件一	30/8/2010	Letter to DG Com “Objection to Creation of a New Civil Service Grade”
附件二	15/3/2011	Letter to DDG “Creation of a New Civil Service Grade”
附件三	6/5/2011	致立法會信件「電訊管理局工程師職系對立法會 CB(1)2065/10-11(05)號文件的意見」
附件四	16/11/2011	致立法會信件「就財務委員會2011年11月18日會議電訊管理局工程師職系提出訴求」
附件五	24/10/2012	Email to DS “Comments of Members of TE Grade on the Approaches used in the Consultancy Brief”

30 August 2010

Miss Elisa Lee
Director General
Office of the Telecommunications Authority

Dear Miss Lee,

Objection to Creation of a New Civil Service Grade

With reference to the consultation paper on Creation of a New Civil Service Grade in the Office of the Telecommunications Authority (OFTA) (the Paper) issued in July 2010, Senior Telecommunications Engineers (STE) and Telecommunications Engineers (TE) express strong objection to creation of a new civil service grade. Our views and comments are given in the following paragraphs.

Background of Existing Non-Civil Service Staff Establishment

2. It is beyond doubt that OFTA staff members performing regulatory functions are required to be sourced from different disciplines. As a matter of fact, in the early nineties there were qualified accountants, economists and lawyers on civil service terms seconded from other departments to serve different roles in OFTA. It was the introduction of non-civil service terms by the Government as a whole after 1997 that triggered the corresponding move of OFTA in recruiting new staff on non-civil service terms to take up the roles of seconded staff progressively from 1999.

3. The existence of 30 non-civil service positions in OFTA for performing regulatory functions is therefore a result of the introduction of non-civil service terms, and a decision by the management to serve all new posts by non-civil service staff members with accounting, law and engineering background in recent years, rather than evidence justifying the need for a new civil service grade, as reflected in the consultation paper.

Objection to Creation of a New Civil Service Grade

4. Under the current organisation structure of the Regulatory Affairs Branch (RAB), Senior Telecommunications Engineer may manage Regulatory Affairs Manager (RAM) in a section, while Chief Telecommunications Engineer heads each of the divisions in RAB. Given the current staff reporting arrangement, it is hardly convincible that the established TE grade shall be subsumed in the new grade. If the existing non-civil service RAM grade staff in RAB is to be replaced by staff on civil service terms in the long run, their posts could be arranged under existing TE and Controller (CT) grade (i.e. including Inspectorate grade) staff of OFTA, plus new recruits in these grades as required, coupled with seconded professional staff from other departments as in the case of the early nineties. Actually, the practice of engaging Senior Economist seconded from other department is still in force.

5. The work in RAB currently undertaken by RAM staff is largely handled by CT grade staff in the past. There were precedents of directly recruiting professionals of relevant disciplines to fill CT grade posts. There is no reason why CT grade cannot accommodate specialists in fields like economics or accounting.

6. Through recruitment of new staff in the existing TE and CT grades, rather than a new civil service grade, the department may perform regulatory roles equally well, so long as the new recruits and existing TE / CT staff serving such roles are of the right calibre.

Objection to Subsuming TE Grade in the New Civil Service Grade

7. The repeal of a professional TE grade not only jeopardizes the interest of in-service TEs within OFTA, but also affects those who wish to join OFTA as a professional engineer, in particular graduates major in the relevant engineering disciplines. Specifically, the management's intention to permanently freeze the recruitment of TE will have direct impact on these graduates. Furthermore, the professional bodies to which the in-service TEs attach may have concerns and views on the degrading of professional engineers as proposed by a telecommunications regulator. The proposal effectively conveys a negative message to the society that the Government is playing down the role of professional engineer.

8. OFTA is required to discharge the duties stipulated in the Telecommunications Ordinance such as setting standards, control of interference and spectrum management. At present, such duties are discharged by professional TEs. There is no doubt that professional TEs are the most proper staff members to take up these duties. Moreover, TEs are the professionals to serve as qualified expert in the telecommunications field for various functions. Indeed, some of our TEs have been summoned as expert witnesses in court cases; the professional qualification of TE is indispensable for OFTA to discharge its roles stipulated in the Telecommunications Ordinance.

9. Having considered the unique nature of engineering work in OFTA as mentioned above, subsuming a professional grade in a non-professional grade is not appropriate and such arrangement could easily create management problem. There is a genuine need to maintain the TE grade staff members both in the immediate and long terms. The argument put forward in the paragraph 12 of the Paper to gradually subsume all TEs in the new grade is not sound.

Recruiting New TEs

10. TEs are professional engineers who are well trained in relevant engineering fields and attain the recognition from a number of professional bodies such as Hong Kong Institution of Engineers (HKIE) and Institution of Engineering and Technology (IET).

11. The Government has announced that the recruitment of civil service grade staff is no longer frozen. As such, new civil service staff can be recruited to refill the vacant posts in any Government Departments. It is noted that many Departments such as Electrical and Mechanical Services Department (EMSD), Civil Aviation Department, Hong Kong Police Force, Water Supplies Department, Housing Authority, etc. have recruited new engineers to meet their operational needs. Since OFTA has not recruited any new civil service TEs/CTs for more than 10 years and there exists some vacancies, the management should follow the practice of other departments to reopen the recruitment of civil service term staff, including TEs.

12. During the frozen period of civil servant recruitment, a number of RAMs with engineering background were recruited to provide technical support in RAB. Some of them were indeed successors to TEs in RAB. In considering the fact that the job scope of these RAMs and TEs is more or less the same, the management should stop recruiting RAMs with

engineering background but rather reopen the recruitment of civil service term TEs in the immediate future. If the management keeps on not recruiting TEs, the pool of TE grade staff members will diminish rapidly in the future since most TEs will retire in coming 10-15 years. As professional engineers are indispensable to the department, the management should seriously reconsider the recruitment of professional TEs. Employing staff members with the relevant background only, but not the professional qualification, may not maintain the professionalism as given in OFTA's "Vision, Mission & Values".

Lack of Solid Justifications

13. The proposal to create a single civil service grade as a long term restructure of the core staff for OFTA should be deliberately considered based on in-depth study of the operational requirement in the next 5 to 10 years, including the projection of staff strength in different disciplines, say whether there is a need to maintain a task force with sufficient professional engineers to take up the challenges in view of the rapid technological changes.

14. The Paper should also make references to our counterparts in other administrations like FCC, OFCOM and MIIT on the role and grading of their professional engineers in their organisation structures. In addition, it should consider whether the creation of a multi-discipline work force under a single civil service grade has been implemented in other departments like EMSD (say its Regulatory Services Branch) or other government institutions, and the benefits brought by such change.

15. It appears that the argument for the proposed restructure given in the Paper hinges merely on one point which is the convergence of the information and communications technologies and market liberalisation, and therefore the requirement for the regulatory staff to perform both technical and economic regulation. The Paper then jumps, without considering any need to conduct study like pros and cons analysis on retaining or expanding existing TE/CT grades, to the decision to create a single new civil service grade combining all multi-discipline staff in law, economics, accounting/finance as well as engineering.

16. If the management has made reference to the successful experience of some local or overseas government departments/agencies when formulating the proposal, we request the management to share with us their success and experience, particularly how they maintain the morale of

affected staff members. In lack of a well-proven and successful precedent, the effectiveness of the proposal for subsuming staff of multi-discipline into a single grade is doubtful.

17. Last but not the least, the management should respect the specialised expertise of all professional grades, including TE grade, and not to subsume a professional TE grade in a non-professional multi-discipline grade.

Way Forward

18. We request the management to truly reflect the views expressed by TEs and other stakeholders to the Standing Commission on Civil Service Salaries and Conditions of Service and Standing Committee on Directorate Salaries and Condition of Service for their consideration as well as to Commerce and Economic Development Bureau and Civil Services Bureau for their information. The management should ensure that the whole consultation exercise and the subsequent advisory processes are made transparent to all staff members concerned. Staff should be kept informed of the latest progress from time to time.

19. We hope the management would duly take note of our views and comments above in formulating any organisation change. If the management insists on creation of a new service grade and subsuming the professional TE grade in the new non-professional multi-discipline grade, we will consider the next move of blowing the whistles and seek external views as required.

Yours sincerely,



(WK Leung)

Representative of TE and STE
in Departmental Consultative Committee

15 March 2011

Mr. Y. K. Ha
Deputy Director General
Office of the Telecommunications Authority

Dear Mr. Ha,

Creation of a New Civil Service Grade

Further to our meeting held on 10 March 2011, we still consider that the Management fails to fully and duly address our concerns as expressed in our submission of 30 August 2010. We would like to reiterate the following consolidated views from TE/STE members:

- we strongly oppose the employment of non-professional technical staff to replace professional engineer since professional qualification is a mandatory requirement for Engineer Grade across the board in different departments of the Government, and such engineering expertise is of particular importance to a technical regulatory body like OFTA;
- we strongly oppose the subsuming of the professional TE grade into the new non-professional grade. The proposed subsuming of TE grade has no supportive and solid grounds provided and our views have been clearly expressed in the letter to the management on 30 August 2010. However, the management reply on 8 February 2011 is not comprehensive and has not addressed our concerns;
- TE grade shall be maintained as a professional grade in OFTA;
- manpower of TE grade shall be maintained and recruitment of the TE staff shall be re-opened so as to fill the vacant posts in different sections; and

- the management shall conduct the SWOT analysis of subsuming TE grade into the proposed new grade and advise us the study results. We press for transparency in the creation of such a new grade in OFTA.

Yours sincerely,



(WK Leung)
Representative of TE and STE
in Departmental Consultative Committee

cc:

CSB (Attn: Miss YAM Mei King)
with TE/STE's submission of 30 August 2010

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立法會
黃毓民議員

黃議員：

電訊管理局工程師職系對立法會 CB(1)2065/10-11(05)號文件的意見

就立法會 CB(1)2065/10-11(05)號文件（該文件），電訊管理局（電訊局）工程師職系有不同意見（有關理據見附件對該文件第 25 段的分析和回應）：

該文件第21段有關電訊局管理層把電訊工程師職系的職能納入建議的規營事務經理的新職系

第21段提出「電訊局管理層認為應把電訊工程師職系的職能逐步納入新職系。電訊局管理層會進行適當的程序，於二零一三年就詳細的吸納安排進行研究，並於二零一五年七月或之前完成有關工作」。

電管局工程師職系曾於2010年8月30日及2011年3月15日去信電訊局管理層，清晰表達反對把工程師職系的職能納入新職系；於2011年3月15日的信件更要求管理層就該納入建議進行強弱機危綜合分析（SWOT）並知會工程師職系，才決定是否實行納入方案。

現在管理層尚未進行有關研究便決定採納這影響深遠的「納入」方案，缺乏數據和理論支持，我們認為管理層應該重新審視第21段，避免倉促行事。

該文件第22段提出凍結工程師職系的結論

既然管理層並沒有進行SWOT分析，就不應作出永久凍結招聘工程師職系的決定。我們認為管理層應該重新審視第22段，對電訊局工程師職系的人手規劃作出長遠妥善的安排。

事實上，在凍結招聘工程師職系的12年內，電訊局已招聘了約10名非公務員處理技術規管的工作，當中包括合約制工程師及負責處理技術規管工作的規管事務經理。可見技術規管工作在電訊局內並非日漸減退，反因電訊市場持續開放，電訊局所發的牌照日益增加而增多。

.../訴求

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訴求

我們要求：

- (一) 尊重工程師職系在政府部門的獨立性，取消將工程師納入新職系；及
- (二) 立即恢復工程師職系的招聘，以保持工程師專業在政府部門的延續性。

梁榮基

(梁榮基)

電訊管理局工程師職系代表

二零一一年五月六日

對該文件第 25 段的分析和回應

該文件第25段 (a)

管理層聲稱該規管事務經理公務員職系將會包攬工程、資訊及通訊科技等人才。事實上管理層目前已經把專業工程師的部分工作分發給現職的合約制規管事務經理。

我們認為，「納入」方案和凍結工程師職系的建議等同拆毀現時的工程師專業職系，恐怕對公眾服務有所影響，工程師職系對此表示憂慮。我們要求管理層把具有工程學位的入職要求從建議的新職系中刪除。

該文件第25段 (b)

長久以來，政府部門聘請專業職系人員負責專業工作，例如：機電工程署、民航處、消防處和警務處通訊科。該等部門也聘請專業工程師，而該等工程師在日常工作中，也無須以認可人士（authorised person）身份簽署文件。

至於電訊局的工作，工程師職系同事一向以專家證人身份在法庭作供、出席國際電信聯盟的世界無線電大會、制訂無線電器材的技術標準、制訂非電離輻射的限值、根據電訊條例控制無線電干擾並與內地進行無線電頻率協調等。這些專業工作和該文件所提及的技術規管如果交由非專業人員負責，實在與政府部門以專業職系服務市民的傳統背道而馳。

該文件第25段 (c)

現在管理層尚未進行有關研究便決定採納「納入」方案，缺乏數據和理論支持。

該文件第25段 (d)

事實上，在凍結招聘工程師職系的12年內，電訊局已招聘了約10名非公務員處理技術規管的工作，當中包括合約制工程師及負責處理技術規管工作的規管事務經理。可見技術規管工作在電訊局內並非日漸減退，反因電訊市場持續開放，技術急促發展，電訊局所發的牌照及工作量日益增多。再者，諸如該文件第6段所列舉的規管工作一直都有專業工程師職系參與。

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致立法會財務委員會主席

就財務委員會2011年11月18日會議
電訊管理局工程師職系提出訴求

劉慧卿議員：

商務及經濟發展局在今年10月26日向立法會人事編制小組委員會建議在電訊管理局（電訊局）開設新的規管事務經理職系，並且提出永久凍結招聘電訊工程師專業職系。但上述新職系的人職條件無須具備專業資格，即將來負責處理有關電訊工程及技術規管專門工作（包括發牌和執法、頻譜管理、無線電干擾、衛星協調、無線電發射站、無線電輻射、技術標準等）的規管事務經理不必是專業人士。

我們必須嚴正地向議員們指出，永久凍結招聘電訊工程師專業職系將會對社會及電訊業的規管和發展帶來負面影響（見我們在10月24日所發出的信件）。我們亦認為這與香港特區政府一直以來奉行以專業公務員團隊服務市民的理念背道而馳！

電訊局的電訊工程師專業職系正面臨人手短缺問題！由2011至2012年初，該職系共有四位工程師先後退休，人手短時間內減少了百分之十五，而且不少工程師也會在數年後相繼退休。為免電訊局內專業人員短缺的問題更趨嚴重而影響服務質素及公眾利益，電訊工程師職系人員要求當局立刻重新招聘專業電訊工程師。

當局因應人事編制小組委員會的意見，向人事編制小組委員會提交一份跟進文件 ESC12/11-12(01)，確認當局會提前一年（即於2012年開始）進行一項檢討工作，並將檢討工作的目的由原先的“如何”落實將電訊工程師納入規管事務經理職系修訂為“應否”把電訊工程師的職能納入新的規管事務經理職系。

但在未有檢討結果之前，我們反對管方永久凍結招聘專業電訊工程師並表達以下訴求：

- 1) 新的規管事務經理職系不應包括工程及技術人員；及
- 2) 應立即恢復招聘專業電訊工程師。

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梁榮基

(梁榮基)

電訊管理局工程師職系代表

二零一一年十一月十六日

副本抄送：財務委員會各委員

立法會
吳靄儀議員

就人事編制小組委員會2011年10月26日會議
電訊管理局工程師職系提出的反對及訴求

吳議員：

電訊管理局（電訊局）將於10月26日向立法會人事編制小組委員會要求開設規管事務經理新職系。電訊局已於5月9日向立法會資訊科技及廣播事務委員會解釋有關安排，並在有關文件中同時提出將工程師納入規管事務經理職系及永久停止招聘電訊工程師。就有關對電訊工程師專業職系的安排，電訊局的工程師同事提出強烈反對，並且香港工程師學會也認為「電訊工程師職系有著不可取締的專業角色」（見附件一）。

現時除了總監是空降的政務官外，電訊局的首長級職位全部都是由一班擁有專業工程師資歷的官員出任。除此之外，很多日常的技術規管工作，都是由專業工程師負責。可見電訊局的日常運作是極需要他們的專業意見及技術支援。

就文件EC(2011-12)7第24段提出凍結電訊工程師職系，我們認為這會對香港社會造成嚴重影響（具體情況見附件二）：

- (a) 干擾流動通訊服務及廣播服務；
- (b) 干擾政府部門(如消防處、警務處和民航處)的通訊網絡；
- (c) 難以制訂技術及安全標準；
- (d) 難以執行部份電訊/貿易法例；
- (e) 影響香港未來廣播/電訊業務的發展；
- (f) 影響無線電基站輻射安全。

另外附上信報論壇“沒有電訊工程師的電訊管理局”（附件三）作參考。

為確保電訊局內有足夠的專業技能來維護公眾利益，及支援部門執行規管電訊業界的使命，我們強烈要求在電訊局保留獨立的電訊工程師職系，恢復專業工程師的招聘，並電訊管理局須就文件EC(2011-12)7第23段提及的「納入安排」的研究結果向立法會匯報。

梁榮基

（梁榮基）

電訊管理局工程師職系代表

二零一一年十月二十四日



香港工程師學會

THE HONG KONG INSTITUTION OF ENGINEERS

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立法會
資訊科技及廣播事務委員會
余天寶秘書

余秘書：

香港工程師學會對立法會 CB(1)2065/10-11(05)號文件的意見

學會得悉立法會在二零一一年五月九日的會議上已初步討論上述文件。學會認為此文件對社會有廣泛而深遠的影響，因此必須表達其專業的意見。

從宏觀的層面看，電訊工程師職系有着不可取締之專業角色；當中涵蓋電訊管理、頻譜管理、通訊及電子等廣泛的工程專業技術，因此此職系承擔不可或缺的職能，如此職系在香港特別行政區政府裏消失，則未來政府的宏觀電訊政策將毫無專業技術的考量，亦不能和國際標準相容。

學會並不反對成立其他綜合性職系，但情況就如一所醫院，醫院的院長可以不是醫生，但負責行醫的則不可能不是醫生。因此學會強烈要求保留電訊工程師職系，而政府更應尊重其專業，予以適當的管理培訓，以使他們可以成為高層管理人員，令高層管理人員有專業背景支持。

敬祝台安！

香港工程師學會會長

朱沛坤

朱沛坤教授、工程師
二零一一年六月二十一日

抄送：電訊管理局工程師職系代表梁榮基先生

RPKC/MY/AC/el

永久停止招聘及逐步取締工程師職系對香港社會的嚴重影響

(a) 干擾流動通訊及廣播服務

流動電話/寬頻服務要使用頻譜，頻譜必須與內地協調，避免干擾。缺乏專業工程師的服務難以應付日益複雜的頻譜應用，達致滿意協調效果，甚至導致干擾通訊服務及錯誤的漫遊收費。同樣，廣播服務也必須與內地協調，避免干擾。缺乏專業工程師的規劃和協調，廣播服務難以順利推行。

(b) 干擾政府部門(如消防處、警務處和民航處)的通訊網絡

若沒有專業工程師透過技術分析，負責指配各政府部門通訊網絡使用的頻率，難以確保有關係統不會受到干擾，影響政府向市民提供的各種服務，甚至危害消防員及警務人員的生命安全。

(c) 難以制訂技術及安全標準

電訊局有責任制訂各種電訊設備的技術及安全標準。沒有專業工程師的參與，市民及通訊營辦商有可能購買、使用或安裝不符合國際標準的產品或設備。這會導致網絡與網絡之間難以互通、設備與設備或服務與服務之間互相干擾等。

(d) 難以執行部份電訊/貿易法例

(1)電訊法例

- 沒有專業工程師的專業支援，很多現時的電訊條例都難以執行；如第 106A 章 11 條(干擾)、第 106B 章電訊(管制干擾)規例及第 106Z 章電訊(電訊器具)(豁免領牌)令等。

(2)貿易法例

- 沒有專業資格，工程人員不能在法庭上以專家證人身份協助海關檢控非法進口/出口高科技產品的有關人士；
- 沒有專業工程師，未能有效地協助工業貿易署分類高科技產品；
- 沒有專業工程師，未能有效地協助工業貿易署修改「進出口戰略物品規例」的附表。

上述情況會導致其他國家，例如美國、英國和歐盟等，對香港特別行政區執行進出口戰略物品管制的質疑，因而限制香港特別行政區進口和出口高科技產品，將會嚴重影響香港作為國際

運輸中心。

(e) 影響香港未來廣播/電訊業務的發展

電訊局若取締專業工程師職系，在可見的未來，難以應付數碼化年代對電訊業在技術規管及頻譜管理上的急速發展的要求。在國際事務上，如衛星業務的技術協調和與內地專家商討國際電信聯盟(ITU)的議題上，若沒有專業工程師的參與，必定嚴重影響香港未來廣播/電訊業務的發展。

(f) 影響無線電基站輻射安全

電訊局有責任確保無線電基站（包括山頂無線電站和屋頂站）的非電離輻射符合國際的安全標準。現時的工作由專業工程師訂定標準和覆檢無線電台的設計以確保公眾安全。缺乏專業工程師的分析及意見，會影響無線電基站輻射安全，將使市民暴露於超出安全標準輻射的範圍。

摘錄

信報論壇¹ 2011年05月17日 01:02 莫乃光

沒有電訊工程師的電訊管理局

在五月九日的立法會資訊科技及廣播事務委員會的會議上，其中一項議程為「建議在電訊管理局開始規管事務經理職系和一個總規管事務經理常額職位」，表面看似一項普通政府部門希望擴大職能，和從合約員工轉聘常額職位的正常要求，不過，看深一層，卻可能反映政府對技術專業包括工程師的漠視，長遠影響絕不止於對電訊管理局（和將來與廣播事務管理局合併後的通訊管理局）的工作。

政府指出，基於電訊規管隨著市場開放和技術融合，電訊局變得須要「處理日益相互緊扣的技術與經濟方面的規管事宜，這些事宜已變得更加多元化和複雜，超越了傳統的電訊和電子專業範疇」，反而，局方須要更多經濟、管理、財務、會計、法律、資訊科技等專業領域的專才，處理關於競爭、市民投訴、調解等事宜，特別是屬於經濟方面的規管職能；現時，電訊局設有約三十個非公務員職位負責規管工作，然而，這些規管員工的流失率在過去五年高達七成。

於是，政府建議開設一個新的規管事務經理公務員職系，讓電訊局可以招聘擁有相關工程、資訊科技、經濟、統計、財務、會計、法律或工商管理學位和畢業後四年以上相關經驗的專才。

陰乾盡，終極殺系

另一方面，政府指電訊局的傳統工程支援角色日漸減退，電訊局管理層認為應把電訊工程師職系的職能逐步納入新職系。事實上，電訊局內的電訊工程師職系的招聘，由一九九八年至今已凍結超過十二年；而現職電訊工程師「僅餘」四十多人，電訊局指，現職人員約在二十年內全部退休。這樣說法，變相是永久凍結招聘，甚至等於筆者的電訊工程師朋友所言的「慘遭滅門」。

對於電訊局「殺系」，電訊工程師的反映為何？政府給立法會文件指，電訊工程師並不反對開設新的規管事務經理公務員職系，「但他們對把電訊工程師職系的職能納入新公務員職系，以及永久凍結招聘電訊工程師的事宜表達關注」。然而，電訊局工程師職系代表亦向立法會委員會提交了意見，明確表示曾於去年及今兩度去信局方反對把工程師職系納入新職系，並指局方的「納入」方案「缺乏數據和理論支持」。

¹ 可在http://www.hkej.com/template/forum/php/forum_details.php?blog_posts_id=67572下載。

表面看來，會否只不過是電訊工程師們恐怕晉升機會和個人發展受到限制，因而反對？不過，只要細心一看，他們的意見不只是為了他們的個人利益 -- 畢竟，他們的公務員職位無論如何都可以「安全」地做到退休 -- 也有理由相信他們的意見，根本就是基於他們對專業的了解，和對技術發展的尊重，而筆者恐怕，這正正就是近年轉為由政務官領導的電訊局管理層，不了解或不接受的。

電訊局管理層指，電訊工程師的技術監管工作，隨著電訊業包含的範圍擴展至話音以外，需求已愈來愈少，電訊總監在上週一立法會事務委員會會議上直指，即使聘請工程師，「俾咩佢做」？

去專業，漠視科技

然而，在工程師職系代表致立法會事務委員會的文件指出：「在凍結招聘工程師職系的十二年內，電訊局已招聘了約十名非公務員處理技術規管的工作，當中包括合約制工程師及負責處理技術規管工作的規管事務經理。可見技術規管工作在電訊局內並非日漸減退，反因電訊市場持續開放，電訊局所發的牌照日益增加而增多。」可惜，當天委員會上，沒有議員就此向政府追問解釋。

筆者恐怕，問題可能源於今天我們政府對技術職能的誤會和漠視。誤會，是政府普遍認為技術工作是一種支援功能，缺乏發展觀，以致文官往往以為這些他們不了解的技術工作屬於單純支援性質，任由他們可選擇外判、「納入」或甚至「消滅」。政府的去專業化傾向，已經成為一種執迷不悟，才會出現「專業人員」取代「專業技術人員」的怪論。

一個電訊管理局會沒有電訊工程師的一天，實在匪夷所思。電訊業變化日新月異，電訊和互聯網科技範疇轉變特別迅速，如果管理層認為現在的工程師「無嘢做」，問題可能在於其職責範圍未能與時並進，而非不再需要專業資格的電訊工程師。例如，香港政府一直少有參與國際和國家的技術標準制定和推廣工作，電訊工程師未來是否應該參與更多發展工作，而非只停留於傳統話音服務的監管工作？即使在監管工作上，沒有工程師只有經濟師和律師的電訊局，是否真的能夠與各大電訊商的技術人員周旋，而保持不「蝕底」，並能有力保障公眾利益？

不發展，不可持續

雖然局方管理層也表示贊成電訊工程專業的重要，將來在新的規管事務經理公務員職系也會招聘電子工程、機電工程和資訊科技相關的專業人才，局方卻沒有提供究竟在將來新職系中，技術人員佔多少人數或比例的數據，令人覺得「殺系」理據薄弱。亦有電訊工程師向筆者表示，如果管理層認為他們數目過剩，可有估計所需工程師的最低人數，和未來的預算增減？

電訊局管理層只看短期甚至即時所須人手，漠視了機構內人力資源的持續發展需要。十二年

不聘請工程師，卻招聘了約十名非公務員處理技術規管工作，又說二十年後現職工程師公務員將全部退休，政策紊亂而完全置工程師職能極可能已經出現的斷層於不理。其實，這斷層情況已經在不少政府的工程和資訊科技部門出現，影響到不單員工的晉升和士氣，更令人對這些部門未來的穩定和提供優質服務的能力，不禁擔憂。

再從更宏觀角度看，政府是有必要和責任繼續招聘工程師和資訊科技專業人員，進入其相關職系，以保持這些香港的專業人才的基本就業出路。筆者最近與一為大學學者分享對香港產業和人才供應的意見，學者最擔心的問題，是由大學學成出來的專業技術人才，在香港根本無用武之地，結果不是轉行就離開香港，找尋他們理想的科技工作。看到政府帶頭廢除工程職能，實在令人對政府的短視感到痛心和憤怒。

筆者希望，政府可以正視工程師和資訊科技人員在政府職系內日漸不受重視的實況，真正地聆聽他們的聲音和訴求；就著電訊管理局的電訊工程師的未來，政府應重新審視凍結工程師職系的決定，在不預設立場下重新諮詢員工。

Comments of Members of TE Grade on the Approaches used in the Consultancy Brief

Members of the TE grade would like to register their disagreement over the approaches used in the Consultancy Brief as detailed below:

- (a) The Management should conduct a review on the continued need for the expertise of the TE grade (“the Need”) before taking a decision on the subsuming arrangements. In this connection, the Need and the subsuming arrangement should be treated as two independent issues at this stage. Studying the Need in tandem with the subsuming arrangement in the Consultancy Brief will inevitably make the two issues no longer independent but intertwined, and tend to restrain study from exploring possible alternatives other than the subsuming arrangement (e.g. voluntary retirement or recruitment of new TEs) that may attain maximum benefits to the community as a whole.

- (b) The Consultancy Brief proposes a bottom-up approach to TE job analysis by reviewing the job nature and workload of each post of TE grade. Members of the TE grade oppose such an approach as the current job nature and workload are simply the outcome of the management administrative decisions on freezing the TE recruitment. This will call into question the accuracy and credibility of the outcome. To better reflect the genuine demand, the Management shall adopt a top-down approach by studying the Need in supporting the telecommunications and broadcasting development of Hong Kong arising from:
 - (i) emerging new technologies and standards;
 - (ii) the fast evolving and rapid expansions of the telecommunications and broadcasting services; and
 - (iii) the greater complexity and diversities as a result of increasing intertwining technical and other regulatory issues.

2. Against a backdrop of telecommunications development at a phenomenal rate over the past decade, the Management has expressed its position in various occasions that the required engineering support in OFCA has been diminishing (“the Position”). Sadly, neither potent agreements nor sufficient evidence is presented to support the Position alleged by the Management. In fact, lack of sufficient professional engineering manpower has led to ineffective functioning of the department as evidenced in a number of areas or cases including frequent large-scale telecommunications network failures, poor digital broadcast coverage to serve the public, compromised evaluation procedures for radiation hazard caused by radiocommunications installations etc.

3. The Position forms the basis for the need for the review. Members of the TE grade take this opportunity to register their disappointment with the Position because the Management has formed the Position first and now subsequently seeks a consultant to review the TE grade prompted by the Position. This arrangement deviated from the normal process of logical sequence in addressing issues in a non-partial manner.

4. As the Consultancy Brief is not agreeable to members of TE grade, we find it difficult to be involved in the work of the Steering Committee.

各位電訊工程師同事：

關於電訊工程師職系檢討的初步顧問報告

感謝你們於 2013 年 5 月 15 日的來函，就電訊工程師職系的檢討（“檢討”）工作及一些相關事宜提出意見。首先讓我們扼要重述通訊事務管理局辦公室（“通訊辦”）進行檢討的背景。

背景

2. 商務及經濟發展局於 2011 年 10 月向立法會人事編制小組委員會提出，於前電訊管理局（現為通訊辦，下稱「部門」）開設一個新的規管事務經理職系以應付日趨複雜並涉及多個範疇（包括電子工程、經濟、法律、會計、資訊科技等）的規管工作。

3. 在有關的人事編制小組委員會文件中，我們告知委員我們當時的想法，即電訊工程師職系的職能應逐步納入規管事務經理這個新職系，以期在部門維持一個單一的跨專業範疇的公務員職系，從而更有效及更具彈性地履行經濟及技術事宜互相緊扣的多元化電訊規管職能。我們亦告知委員，我們計劃在 2013 年就詳細的納入安排進行研究，並在 2015 年 7 月或之前完成檢討工作。

4. 為回應電訊工程師職系在諮詢中提出的要求及因應委員在會議上表達的意見，部門再行探討檢討工作的目的及時間表。商務及經濟發展局於 2011 年 11 月向人事編制小組委員會確定 —

（一）把檢討工作的目的，修訂為考慮應否把電訊工程師職系的職能納入規管事務經理職系；以及

- (二) 提前展開並加快檢討工作，即在 2012 年開始檢討，用大約 1 年時間，在 2013 年完成檢討，而非原訂 2 年才完成。

委員亦知悉我們會外聘顧問公司協助進行檢討。

5. 部門於 2012 年中經諮詢電訊工程師職系人員後制訂了顧問工作簡介 (consultancy brief)，並按照政府既定程序，透過公開、公平和公正的方式外聘顧問公司進行檢討。有關檢討工作如期於 2012 年內展開，根據工作簡介的要求，顧問需要透過不同途徑，詳細分析電訊工程師職系、各職級每個崗位的工作性質和工作量。此外，顧問亦須考慮因應科技進展、電訊市場發展及持份者期望等因素而引致純技術規管工作的轉變。期間，顧問審視電訊工程師職系人員每年釐定的工作大綱、約見電訊工程師職系及部分規管事務經理職系的人員、並與所有分部主管覆核其轄下電訊工程師職系人員的工作性質及要求。顧問已於 2013 年 4 月完成資料搜集及分析工作，向部門及電訊工程師職系人員發表其初步顧問報告，並邀請電訊工程師職系人員於 2013 年 5 月 8 日或以前就該報告提出意見。顧問至今仍未收到同事提交的意見。

6. 就此，我們已將你們 5 月 15 日致部門的來函轉交顧問，敦促其充分考慮你們就檢討工作所提出的意見。

7. 另外，來函同時提出一些與部門有關的意見及要求，我們謹此回覆如下：

電訊市場、技術的發展及部門規管工作的轉變

8. 來函認為部門偏重於處理議員、業界和市民的投訴，因而忽略技術規管的持續發展，引致技術規管停滯不前，對此聲稱我們並不認同。

9. 作為政府部門，我們有責任盡力及適時處理來自議

員、業界和市民的投訴。與此同時，隨著電訊市場在十年前全面開放，部門一直致力提供和維持有利於投資、創新的公平營商環境，十年間，香港的電訊服務發展蓬勃，在最近多個地區或國際報告中持續名列前茅。在電訊技術方面，香港市民享用的最高寬頻速度平均達每秒六千萬比特(60Mbps)，在世界百多個國家及地區中排名第一；光纖到樓的百分率位列世界第三；流動電話服務滲透率超過百分之二百三十；香港更是全世界其中一個最先推出第四代(LTE)流動寬頻網絡的城市，由此可見，部門一直以來對技術及其他方面的規管範疇同樣重視。

10. 此外，部門亦致力培訓工作，以確保員工的知識與時並進。部門除了安排不同職級的同事參加本地及海外的訓練課程和研討會，亦不時邀請海外機構，為部門度身制訂一些課程，以裝備同事應付不斷演變的規管工作。不過，有鑑於部門負責規管全球其中一個最成功和最具競爭力的電訊市場，須處理的規管事宜日益複雜，超越了傳統的電訊和電子工程專業範疇，故部門必須擁有一支具備足夠技術(如電子工程、資訊科技)和其他方面(如經濟、法律、會計)人員的規管團隊，在高速發展的電訊市場履行其規管職責。

關於電訊工程師的長假期申請

11. 你們於來函表示電訊工程師職系人員申請長假期出現困難，令合理休假權利受到剝削。

12. 按現行規例，在公務不受影響的情況下，公務員才會獲准放取假期。經翻查人事組過去兩年的假期申請記錄，我們發現只有一宗個案涉及一位電訊工程師在申請合共十個月的有薪例假及無薪假期時因應公務需要被要求縮短休假。除該宗個案外，人事組並沒有其他電訊工程師職系同事申請長假期被拒絕或縮短的紀錄。

立刻恢復招聘電訊工程師的要求

13. 另外，就你們於來函提出保留工程師職系和立刻

招聘電訊工程師的要求，我們必須指出，作為負責任的政府部門，我們有必要妥善運用公共資源，按實際需要增減不同職系的人手編制以切合工作需求。由於部門新增的工作主要在於執行經修訂的《商品說明條例》和新訂立的《競爭條例》，部門需要增聘規管事務經理職系的人員以應付有關工作。反之，因工作量的關係，在職的電訊工程師職系人員已有部分被委派處理非技術性的工作，包括對外事務和處理反競爭投訴等。有鑒及此，部門實在難以同意恢復招聘電訊工程師。

14. 長遠而言，會否恢復招聘電訊工程師取決於電訊工程師職系的職能會否納入規管事務經理職系。顧問在其初步報告中提出兩個方案，分別為：

- (一) 逐步將電訊工程師職系的職能納入規管事務經理職系；或
- (二) 保留電訊工程師職系，編制維持在二十五人的水平以執行純技術規管工作。

按照現時的進度，顧問將於 2013 年 6 月完成最終報告並舉行簡介會，向電訊工程師職系人員講解其檢討結果及建議。

未來路向

15. 商務及經濟發展局聯同部門會按 2013 年 3 月提交立法會資訊科技及廣播事務委員會的進度報告，待收到顧問的最終報告後，詳細審視檢討結果及建議，從而決定是否將電訊工程師職系的職能納入規管事務經理職系，並於 2013 年 7 月向事務委員會匯報檢討結果和部門經考慮顧問建議後的決定。

通訊事務總監
(張淑冰 代行)



2013 年 5 月 23 日

致函名單：

關順明先生	馬步豪先生
陳子儀先生	李志成先生
丁立興先生	趙子勝先生
葉偉文先生	陸偉堅先生
姚紹強先生	郭榮興先生
馮志雄先生	陳偉明先生 (Mr. Francis Chan)
余偉明先生	陳偉明先生 (Mr. Thomas Chan)
程啟生先生	冼國基先生
容兆宜先生	鄧啟濂先生
羅秀雅女士	張瑞麟先生
陳志雄先生	梁榮基先生
何貴深先生	李 純先生
黃家強先生	

副本抄送： 立法會資訊科技及廣播事務委員會主席黃毓民議員
 立法會莫乃光議員
 立法會盧偉國議員
 公務員事務局局長
 商務及經濟發展局局長
 通訊事務管理局主席何沛謙先生

**Review of the Posts in the Telecommunications
Engineer Grade within the purview of the Office of
the Communications Authority**

Brief Report

**Tricor Consulting Limited
June 2013**

I. INTRODUCTION

In December 2012, the Office of the Communications Authority (OFCA) engaged Tricor Consulting Limited (the Consultant) to conduct an independent review of the continual need of the Telecommunications Engineer (TE) grade after the creation of the Regulatory Affairs Manager (RAM) grade (the Review).

The Review consisted of the Consultant's comprehensive analysis of all posts in the ranks of Telecommunications Engineer (TE) / Senior TE (STE) / Chief TE (CTE) and a sample of the posts of the RAM grade carried out through information directly collected from the jobholders as well as data from OFCA management, research on the posts of the TE grade in other government departments and manpower structure of relevant overseas regulators, and other tasks required for the formulation of recommendations on the continual need of the TE grade in OFCA after the creation of the RAM grade and the transitional arrangement.

II. CONSULTING TEAM

The Consultant has put together a consulting team of experienced management professionals and an Expert Panel to conduct the Review. The Expert Panel, which comprises an Associate Professor of the Department of Electronic Engineering of a local university, a former senior executive of a leading telecommunications company and a retired senior government officer, is engaged to provide input and objective advice for the Review

III. JOB ANALYSIS

The findings from the completion of the Review work are summarized below.

1. Implications of the changes in technologies and the telecommunications industry on the regulatory work of OFCA

Since the liberalisation of the Hong Kong telecommunications market, the roles of OFCA for regulating the economic aspects of the market have grown substantially and have shifted away from purely engineering considerations. There are different aspects to regulatory requirements and changes, from telecommunications infrastructure to information communication technologies, merging of telecommunications and applications, Internet, social media, digital applications, consumerism, and heightening demand for level playing field that have implications for the regulatory work of OFCA. To cope with the changes, new forms of regulatory framework have been introduced including deregulation, emphasizing fair competition, determination of industry disputes and measures to safeguard the interests of telecommunications user. OFCA needs staff members that understand the relevant legislation and the industry, and are well-versed in the development of local telecommunications market. They must be able to cope with the rapid change in market landscape, consumer behaviours and service convergence. They should

apart from possessing engineering knowledge, possess knowledge of other disciplines such as legal, accounting, economics and information technology.

2. Staffing strategy in support of OFCA to deal with the strategic challenges

To support its multifarious regulatory role, OFCA needs to adopt a dynamic and integrated human resource management approach to build a committed, professional and versatile workforce. The establishment of the multi-disciplinary RAM grade has provided a variety of skill sets for OFCA to fulfil its roles and responsibilities.

3. Detailed analysis

The consulting team and Expert Panel have undertaken detailed analyses of each and every post in the three ranks. Results of the job analysis are summarized below.

a. Categorisation of Duties

In analysing the job duties of TE posts, the Consultant classified the duty items into one of the following categories:

Category	Grade in OFCA that can fit the requirement
A – Duties must be performed by chartered engineers	TE
B – Pure engineering duties that require in-depth engineering knowledge	TE and RAM (Engineering discipline)
C – Multifarious regulatory duties	RAM
D – Other duties	RAM

b. Analysis of all TE posts

In assessing the technical competence requirement and classification of TE functions, duties of similar nature were grouped (i.e. function groups) and the percentages of jobholders' time spent on performing the duties were added together to form the full-time equivalents (FTEs) for the function groups. The FTEs under each Category by rank are summarized below. The analysis indicated that no duty of the TE/RAM posts fall within Category A.

Category	Category B				Category C				Category D			
	CTE	STE	TE	Total	CTE	STE	TE	Total	CTE	STE	TE	Total
Total	2.55	4.94	11.55	19.04	1.05	3.27	10.40	14.72	0.40	0.79	4.05	5.24

It was found that OFCA could satisfactorily meet its performance pledges and technical regulatory functions with its current TE grade manpower. The overtime hours of the TE grade members were around half to one hour per day indicating that while they were occupied during the office hours, their workload was not excessive. The finding was consistent with the observations of the heads of branch.

c. Review of a sample of RAM posts

There is overlapping of functions between RAM and TE posts especially in the RAM posts held by members with engineering backgrounds and RAM posts “converted” from TE posts. The RAM grade members possessed qualifications / skills requisite to discharge their duties effectively.

4. Relevant practices of overseas regulators

The overseas regulators in Australia (Australian Communications and Media Authority [ACMA]), the United Kingdom (Office of Communications [Ofcom]) and Singapore (Infocomm Development Authority [IDA]) play a regulatory role similar to that of OFCA in a liberalised and fast changing telecommunications market; emphasizing market competition, level playing field, consumer rights and economic development. They are adopting a multi-disciplinary staffing approach; allowing them to build a team with different backgrounds and broad perspectives to deal with changes. Professional qualifications are not required for their employees. Specifically, **ACMA** have a Job Family Framework that groups job roles at functional level; providing a clear description of work, competencies required and measures of performance for different job roles. There are 14 job families, including the Engineering and Technical job family. **Ofcom**'s staffing approach enables them to build a workforce with broad knowledge, balanced development on technical and economic aspects, and exposure to a wide range of issues in the fast-moving telecommunications sector. **IDA**'s staffing structure allows them the freedom to create posts with broader responsibilities and requirements to meet their changing needs. The incumbents can be more easily deployed to other roles when the need for the posts changes.

5. TE grade in other Government departments

The main functions of the TE grade posts in Hong Kong Police Force (HKPF) and Radio Television Hong Kong (RTHK) are the provision of services to internal users and operational in nature. The 20 TE grade members in HKPF are mainly responsible for planning, installation, and maintenance of telecommunications and electronic equipment and systems as well as setting standards and specifications for these equipment and systems. The STE post in RTHK is responsible for overseeing the department's radio, television and other media services to ensure compliance with technical requirements, undertaking technological planning and development, and budget planning and control, and providing engineering support.

6. Views of professional bodies and Legislative Councillor representing the Information Technology functional constituency

HKIE restated their views submitted to the Legislative Council that the work of professional engineers could not be replaced. If professional engineering background is required; the stipulation should be for a member of the HKIE.

The Legislative Councillor representing the Information Technology Functional Constituency did not agree that the TE grade functions should be subsumed into the RAM grade. He opined that the intention of subsuming reflected the Government's lack of understanding of the importance of the technical expertise of the professional engineers to OFCA. This would inevitably result in losing the necessary technical expertise for OFCA to competently play its regulatory role. By doing this, the Government was taking the lead to disregard professional qualifications; discouraging young people entering the engineering profession. If the subsuming arrangement was to be adopted, OFCA should maintain a sufficient number of technically competent staff to ensure that OFCA can fulfil its role, and allow the serving TE grade members to keep their "engineer" titles.

IV. POSSIBLE OPTIONS

With the relatively narrowly defined job specifications focusing on the engineering aspects of the regulatory work, the flexibility for deploying TE grade members to duties requiring non-engineering skills is limited. While engineering skills are needed to perform their duties, professional engineering qualifications are not a must. ACMA, Ofcom and IDA also do not require such qualifications for their employees.

To increase the flexibility in the deployment of TE grade members and provide wider exposure for them, one option is to expand the TE grade's job specifications. However, the previous staff consultation indicated that the TE grade members did not support it.

As to whether the functions of the TE grade should be subsumed under the RAM grade, the following options were explored.

1. Subsuming the functions of the TE grade into the RAM grade (Subsuming Option)

Under this option, the functions of the TE grade would be subsumed into the RAM grade. All posts currently filled by TE grade members would eventually be regraded to RAM posts.

The TE grade members could be made eligible for advancement to senior ranks in the RAM grade after consultation with grade members concerned and seeking approval for cross-grade promotion. OFCA would need to provide opportunity for them to take on a wider perspective; enabling them to broaden their competencies and improve their career prospects.

There will be no redundancy issue for the TE grade members as the department requires officers with technical knowledge and experience and there will be posts suitable for serving TEs before their retirement. Current TE posts would be converted into RAM posts upon departure of the TE grade members or promotion of TE grade members to higher ranks of RAM posts. The conversion would be completed in around 18 years upon retirement of all serving TE grade members.

The Pros and Cons of the Subsuming Option are as follows.

Pros

- Meeting the strategic needs of OFCA
- Improving operational effectiveness
- Facilitating human resource management and staff deployment
- Enabling human resource development
- Broadening career opportunity for the TE grade members
- Straightforward

Cons

- TE grade members' objection
- Long implementation timeframe
- Perception of losing technical expertise in engineering

Transitional arrangement

The department would need to take into account succession planning and long-term development of the RAM grade in working out the plan and timing for conversion of the TE grade posts to RAM grade posts.

For smooth transition, drastic reshuffling of duties in the short term was not recommended. As the number of TE posts gradually reduced, OFCA would need to consider suitable reshuffling of duties so that the more technical duties of the TE posts can be pooled together and their expertise can be put to the best use.

The more challenging aspect is to deal with staff sentiment. The management would need to put due importance on dialogue with the TE grade members, enabling all views to be heard and concerns to be addressed, and demonstrating understanding of the anxiety that staff will feel in the course of implementation of changes.

The management would need to emphasize the benefits of subsuming to OFCA, the stakeholders, and the TE grade members as they would have opportunities to gain wider exposure and advance to senior RAM posts if cross-grade promotion can be implemented. The management would need to continuously provide opportunities to help TE grade members make the transition, encourage them to broaden their horizon, and develop their engineering, leadership and management competencies.

The department would need to set up a mechanism to oversee the deployment of TE and RAM grade members to optimise the use of human resources and take care of the career development of members of the two grades.

2. Maintaining the TE grade for the provision of purely technical work (Non-subsuming Option)

A viable alternative is to maintain the TE grade and retain posts with higher proportion of Category B duties. The TE grade would then become a small cadre of civil servants performing mainly specialized engineering functions. The Review has identified the following posts that have at least 50% Category B functions:

Function group	CTE	STE	TE	Total
▪ Spectrum Planning	1	2	6	9
▪ Advisory & Support	0	1	1	2
▪ Standards	0	1	2	3
▪ Trade	0	0	1	1
▪ Regulatory Affairs	1	1	1	3
▪ Broadcasting Support and External Affairs	1	1	5	7
Total	3	6	16	25

The analysis shows that there would not be a material change in the workload of these functions in the foreseeable future. As such, 25 TE posts could be retained. Assuming that all the elder TE grade members in excess of the target establishment will retire upon reaching their normal retirement age, this option could be fully implemented within four years.

The Pros and Cons of this option are summarized as follows:

Pros

- Easier implementation due to less objection
- Perception of maintaining engineering expertise in OFCA
- Reduction of implementation time to within four years

Cons

- TE grade members' resistance
- Less flexibility on staff deployment as compared to the Subsuming Option
- Impact on the promotion prospects of TE grade members

Transitional arrangement

OFCA would need to assess the number of vacant/frozen posts to be retained, frozen and converted into SRAM/RAM posts. Upon the retirement of serving TE grade staff in the next four years, further TE grade posts would be converted into RAM grade posts of corresponding levels until the number of TE grade posts reaches the target establishment of 25. Taking into account the operational needs, OFCA would then need to consider resuming recruitment of TE when the number of TE grade members falls close to 25.

The number of RAM grade posts to be created would be 14 or less. Similar to the Subsuming Option, OFCA would need to take into account succession planning and long-term development of the RAM grade in working out the plan and timing for conversion of the posts, and while drastic reshuffling of duties in the short term was not recommended, suitable reshuffling to pool together more technical duties for better utilization of the TE grade members' technical expertise would need to take place with the reduction of TE posts.

Again, OFCA would need to put due importance on dialogue with the TE grade members. The focus of development for the TE grade would be to build their specialty in technical knowledge that is pivotal to the strategic need of OFCA. The

department would need to set up a mechanism to oversee the deployment of TE and RAM grade members and take care of the career development of them.

V. FEEDBACK ON INITIAL REPORT

Comments on the Initial Report that documented the results, options and other relevant information have been received from the TE grade members and OFCA management.

Feedback from TE grade members They did not accept the Initial Report. Previous experience on consultancy projects presupposes that consultants' work will result in supporting the management's intentions. They could not agree to the Consultant's approach in conducting the job analysis, and perceived it as an ignorance of ethics of the professional qualifications. OFCA's work has been shifting towards handling stakeholders' complaints and has neglected the continual development of technical regulatory aspects. OFCA has been squeezing the TE grade. The morale has been severely affected by increased burden and complexity of work, longer work hours and difficulty in taking leave. Eliminating the TE grade or the requirement for professional qualifications will also undermine the quality and authority of OFCA's advice to the government on telecommunications matters.

Consultant's response: The Consultant is independent from the OFCA management. In addition to the consulting team's rich consultancy experience and expertise, an Expert Panel that consists of academia and industry experts has been set up to provide objective advice. The approach adopted for the job analysis had been communicated to all members of the TE grade upon commencement of the Review and the Consultant did not receive any adverse feedback from the grade members at the material time. It is the Consultant's plan to obtain first-hand information from all TE grade members on the actual duties performed by them. It is a pity that 25 out of 30 serving TE grade members did not accept the Consultant's invitation for interview / did not provide information in the interview despite the Consultant's repeated appeals. OFCA has been capable of meeting its performance pledges and technical regulatory functions with its current TE grade manpower and the interviews with staff members and OFCA management indicated that the workload of the TE grade members was not excessive. For the requirement of professional qualifications, based on the analysis of the Expert Panel, the fundamental skills of a Chartered Engineer are not a must to performing the duties of the TE and RAM posts. OFCA is dealing with intertwining technical and economic regulatory issues in association with the rapid change in the telecommunications market. The department cannot merely focus on the technical aspect. In order to meet its challenges, OFCA needs to increase its staffing flexibility and nurture a multi-disciplinary team. A multi-disciplinary team with a wider perspective can enable the provision of holistic advices and support in different dimensions.

Feedback from OFCA management The OFCA management has no pre-determined position of the Review. To perform its multifarious regulatory role, OFCA requires the support of staff members to conduct analysis on regulatory issues from a much wider and more holistic perspective covering the legal, economic, financial, accounting, information technology and engineering aspects. OFCA management

would consider any option which meets the strategic need, improve staff deployment flexibility, enhance operational effectiveness and development of OFCA and is feasible for implementation. OFCA management also regards the TE grade members as an important asset of the department and treasures the relation with the TE grade. OFCA management would take into account TE grade members' views and the Consultant's recommendations in the Final Report before making the final decision.

VI. RECOMMENDATIONS

Taking into account the feedback of TE grade members and OFCA management and further assessment of the Pros and Cons of the two options, the Consultant recommended the Subsuming Option due to the following reasons:

- Optimal option to fulfil the strategic and operational needs of OFCA

The establishment of a single multi-disciplinary RAM grade by subsuming the functions of the TE grade into the RAM grade can enable OFCA to better meet the strategic needs of the department and improve operational effectiveness, and HR management and development. Many regulators in advanced economies are adopting a multi-disciplinary approach towards staffing; allowing them to build a team with different backgrounds and broad perspectives to deal with changes. OFCA should not lag behind and sacrifice long-term benefit for less resistance in the short-term. The benefits of non-subsuming would be less. Of the total establishment of the TE and RAM grade of 89, 25 would be in the TE grade focusing on a narrow range of specialized engineering functions. The staffing flexibility would be reduced. The flexibility in changing staff mix and deployment of human resources across functions to meet the changing strategic and operational needs would be restricted.

- Career Prospect for TE grade members

Both options are subject to The TE grade members' objection. Although it appears that the Non-subsuming Option could better address TE grade members' concern, they still have concerns on reduction of TE establishment and possible impact on promotion prospects. The Consultant would consider appealing to the TE grade members the potential benefit of wider exposure and promotion opportunity to senior ranks in the RAM grades if cross-grade promotion can be adopted under the Subsuming Option. The challenge for implementation is to enable the staff members to understand the benefits and better development opportunity in the department under this option.

Comparing the benefits to the strategic and operational needs of the department between the two options and taking into account the career development of TE grade members, the Consultant recommended that the functions of the TE grade should be subsumed in the RAM grade.

However, the Consultant is aware of the strong objection of the TE grade members to the proposed subsuming arrangement. Given the Consultant suggested two feasible options in this report, OFCA management may, taking into account the practical

considerations, opt for an option which strikes a balance between the operational need of the department and better addressing the sentiment of TE grade members.