

**For discussion
on 14 April 2014**

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

Proposal to Establish the Innovation and Technology Bureau

PURPOSE

This paper seeks Members' support to establish the Innovation and Technology Bureau (ITB) and the related arrangements to implement the proposal.

PROPOSAL

**Dedicated Bureau Responsible for Innovation and
Technology-related Matters**

2. The Government is proposing to establish the ITB which will be led by the future Secretary for Innovation and Technology (S for IT). The new bureau will be responsible for formulating policies and promoting the development of innovation and technology as well as information technology (the portfolio is hereafter referred to as innovation and technology) in Hong Kong, and coordinating relevant efforts within the Government.

3. The new bureau will take up the policy responsibilities in innovation and technology from the existing Commerce and Economic Development Bureau (CEDB). The two government departments that are responsible for innovation and technology matters, namely the Innovation and Technology Commission (ITC) and the Office of the Government Chief Information Officer (OGCIO), will report to the ITB upon its establishment.

4. Upon the establishment of ITB, CEDB will continue to be organised into two branches and will be relieved to provide more

dedicated high level leadership in developing Hong Kong's trade and key service industries. The work and organisational structure of the existing Commerce, Industry and Tourism Branch would remain unchanged. The existing Communications and Technology Branch (CTB) will be re-structured and re-named as Communications and Creative Industries Branch (CCIB). CCIB will focus on policy matters in respect of telecommunications, broadcasting and creative industries.

5. The existing organisation charts of CEDB and its two branches are at Annexes A - C. The organisation charts of the proposed restructured CEDB and CCIB are at Annexes D - E. The organisation chart of the proposed new ITB is at Annex F.

Significance of Innovation and Technology in Hong Kong

6. Innovation involves the development of new technologies, processes, products and the know-how that begets them. It is often associated with the scientific discoverer, technological inventor, risk-taking investor or funding from Government or quasi-Government organisation, entrepreneurial producer, and the adventurous consumer. It is a whole chain of events and pursuits that leverage on scientific discoveries and technological inventions to produce new goods and services.

7. Economists in recent years have put the discovery of ideas leading to innovation and technology as the central driver of economic growth. New technologies and ideas could create values and therefore propel growth and affect every sector of the economy, from agriculture, elderly service and financial services, to logistics, manufacturing and retail, to name a few. While resources are limited due to the law of the scarcity of supply, 'ideas' are nearly limitless. For example, the pioneering ideas of Professor Charles K. Kao and other scientists had led to the realisation of fibre optics as a communication medium, which ultimately facilitated the success of the internet and now brings unlimited new business opportunities to the world. Such concept is very different to the traditional theories which concern allocating resources efficiently to maximise utility.

8. The enhancement to efficiency and cost reduction stemming from innovation and technology have greatly benefited everyone. Hong Kong possesses the right infrastructure of a sound legal system, open economy, market friendly regulatory regime, simple tax system, and respect for intellectual property rights, which provides an environment conducive to the nurturing of ideas. The Government has an important role to play and the future ITB can help to cement all the ingredients together and turn innovation and technology into our advantage. It is only by doing so that we can maintain an ecology that leads to growth not only in the scientific but other sectors of the community and ensure the sustainable growth of Hong Kong's economy.

The Future ITB

9. The proposed new ITB is expected to fully capture the opportunities provided by advancements in technology and the commercial potential they offer through a dedicated high level leadership, and stronger policy coordination across the innovation and technology industries. It signifies the Government's commitment and determination to stay ahead in the global race.

10. Specifically, the new ITB is to strengthen, both in depth and breadth, policy support for the development of innovation and technology. S for IT will provide the devoted strategic leadership of this new bureau and lead the ITB in the formulation of holistic policies, oversee execution, and monitor the outcome. The ITC and OGCIIO will be the implementation agents and provide support to ITB in policy research and formulation. The two departments will continue their existing duties as well as undertaking tasks as assigned by ITB.

11. Indicative tasks of the ITB include the following possible areas which are relevant to the two departments at present -

- (i) developing policies to strengthen the support for the innovation and technology sector, including strategies of improving the ecological environment to facilitate the realisation of research and development results. The future bureau will build on the foundation laid down over the years (e.g. the establishment of the

Research and Development (R&D) Centres, extra effort that led to the increased application of information technology in the public sector, etc.);

- (ii) strengthening the linkages among stakeholders, including Government, industry, academic and research sectors, and creating greater synergy among ITC and OGCIO, the R&D Centres, Hong Kong Productivity Council, Cyberport and Hong Kong Science Park and other organisations/ agencies under the future S for IT, through alignment or collaboration in R&D directions or programmes, exchange of information and experience, as well as promotional activities both locally and overseas. This can be done in a more systematic and organised manner;
- (iii) encouraging private sector participation. We are mindful that with a relatively small manufacturing base, R&D expenditure in Hong Kong is relatively low. In terms of the ratio between public and private investments in R&D, the level of private investment here falls behind the usual ratio of about 30-70 in most developed economies. With a more focused purview, the future bureau would be best placed to explore possible improvement measures;
- (iv) motivating the commercialisation of R&D results. On various occasions, Members have stressed the importance of commercialisation to the success of scientific development in the long term. The future ITB will devise further measures to achieve this;
- (v) coordinating inter-bureau policy efforts of areas such as working with the Food and Health Bureau and Department of Health in Chinese medicines research and development; the Environment Bureau and Environmental Protection Department on renewable energy and waste management technologies; and amongst bureau and departments on e-initiatives for example, paperless government;

- (vi) identifying measures to strengthen policy research and collaboration with different places to promote bilateral scientific and technology exchanges. With increased investment in science and technology on the Mainland by both the public and private sectors, there would be new collaboration opportunities in future. To keep tabs of evolving world technology trends, the future ITB would continue to explore opportunities with other advanced economies;
- (vii) spearheading the development of strategies to take forward the various smart initiatives enshrined in the Digital 21 Strategy, for example, the wider use of Internet of Things, big data, e-Identity and to coordinate the efforts of stakeholders both within and outside Government in this regard; and
- (viii) developing and driving forward looking measures to nurture innovation and technology talents.

Future Work of CCIB of CEDB

12. With the transfer of ITC and OGCIO to the new ITB, the proposed CCIB will continue to take policy carriage in respect of telecommunications, broadcasting, control of obscene and indecent articles, film censorship and creative industries matters. The CCIB would also be able to focus its attention on policy development issues.

13. Specifically, CCIB will lead an extensive policy and legislative exercise to review the existing Broadcasting Ordinance and Telecommunications Ordinance. This undertaking made by the Government in the passage of the Communications Authority Bill in 2011 seeks, amongst other matters, to develop a legislative regime in response to technological development and keep pace with new trends in the broadcasting and telecommunications arena. We envisage that additional manpower would be needed for this specific task and the ITB Panel would be consulted separately.

14. On the on-going duties and responsibilities, CCIB will continue to ensure that the broadcasting and telecommunications policies and associated measures are kept abreast of the times. It would help process the applications for renewal of various television and sound broadcasting licences and handle the associated matters, as well as the arrangements for the analogue television switchover.

15. Furthermore, CCIB will have the capacity to devote more attention on the development of creative industries (e.g. review of the Film Development Fund and the CreateSmart Initiative), and to develop policies and measures to dovetail the recommendations of the Economic Development Commission, the work of which is underway.

Organisation of the proposed ITB

16. In line with the set-up of other bureaux in the Government Secretariat, the new ITB will be headed by a non-civil service Director of Bureau (DoB) to be titled as S for IT. The S for IT will be underpinned by two politically appointed officials (PAOs), namely the Under Secretary for Innovation and Technology and the Political Assistant to the S for IT. S for IT's office would be supported by one Administrative Assistant at the rank of Administrative Officer Staff Grade C (AOSGC) (D2), one Press Secretary at the rank of Chief Information Officer, and four non-directorate civil service staff of secretarial and chauffeur grades.

17. A new Permanent Secretary post at the rank of Administrative Officer Staff Grade A1 (AOSGA1) (D8) is proposed to be created as the Controlling Officer and the head of the civil servants and other staff in the ITB as well as the current ITC and OGCIO. In addition, an Innovation and Technology Branch headed by a Deputy Secretary will provide policy and administrative support to the Permanent Secretary.

18. ITB would have staff from different grades and ranks and the job descriptions for the three PAOs and the four¹ new directorate posts in ITB are given in Annexes G(i) to G(vii).

¹ Including the Administrative Assistant to S for IT at the rank of AOSGC (D2)

Organisation of the proposed CCIB of CEDB

19. After the re-organisation, the existing CTB will be retitled as CCIB. It will continue to be headed by a Permanent Secretary to be retitled as the Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries) (PSCCI) who will mainly focus on the work elaborated in paragraphs 12-15. The existing job description of the Permanent Secretary for Commerce and Economic Development (Communications and Technology) (PSCT) and the proposed job descriptions of the PSCCI are at Annexes H(i) and H(ii) respectively. The duties of the remaining directorate officers in CTB will remain unchanged but their post titles will be suitably revised.

Non-directorate Support

20. In view of the operational needs and to cope with the expected increase in workload, the new bureau will comprise a total of 27 non-directorate permanent civil service posts (19 new posts and eight posts redeployed from the existing CTB, ITC and OGCIO).

ALTERNATIVES CONSIDERED

21. We have critically examined other ways of setting up the ITB and the possibility of re-deploying other permanent directorate officers at D2 and above at CEDB, ITC and OGCIO for the purpose.

Merging of functions of ITC and OGCIO with ITB

22. We consider the option of merging ITC and OGCIO to constitute a new ITB to be headed by a new DoB not feasible. Such arrangement does not fit the purpose of strengthening, in terms of depth and breadth, the policy support for innovation and technology. Although the two agencies are also responsible for formulating policies of their respective areas, they are at present heavily committed to various daily operational and technical functions. The Commissioner of Innovation and Technology (CIT) and the Government Chief Information Officer (GCIO) are already fully loaded with overseeing and leading the work of the two agencies under their respective portfolios without spare

capacities to head a dedicated new policy team to take up new policy responsibilities of the new bureau. Current workload of ITC and OGCIIO are set out at Annex I and Annex J respectively.

23. Under our proposal, the PAOs and dedicated directorate officers in the ITB would take on high-level formulation of policies with ITC and OGCIIO as the technical agencies, providing recommendations and other necessary input and serving as a direct link to different stakeholders. There would neither be any overlapping of nor reduction in the functions of ITC and OGCIIO as a result of the establishment of the ITB.

Re-deployment of resources

24. As shown at Annexes I and J, the current workload of ITC and OGCIIO are already at full capacity. All the existing permanent directorate officers are already fully engaged in their respective portfolios in promoting the development of innovation and technology with no room for redeployment.

25. Re-deployment from CEDB, in particular CTB, is also not feasible. At present, CIT and GCIO report directly to PSCT on policy and operational matters. They handle practically all of their administrative matters. The sides under the Deputy Secretary for Commerce and Economic Development (Communications and Technology) and Head of CreateHK are already fully engaged in work concerning telecommunications, broadcasting and creative industries. There is no room for re-deployment from them.

LEGISLATIVE PROCEDURES AND TIMETABLE

26. In order to establish the ITB, the Administration needs to move a resolution to give effect to the transfer of relevant statutory functions to the new S for IT and Permanent Secretary for Innovation and Technology (PSIT). Pursuant to section 54A of the Interpretation and General Clauses Ordinance (Cap. 1), the Legislative Council (LegCo) may by resolution provide for the transfer of statutory functions vested in one public officer to another. The resolution will provide that, with

effect from a certain date, the relevant functions under the Electronic Transactions Ordinance (Cap. 553) currently exercisable by the Secretary for Commerce and Economic Development and PSCT be transferred to the S for IT and PSIT respectively. The Administration also needs to amend, by an order of the Chief Executive in Council under section 62(3) of Cap. 1, the list of public officers set out in Schedule 6 to Cap. 1 so that the S for IT may signify the exercise of power or performance by the Chief Executive.

27. The resolution needs to undergo the positive vetting procedure by the LegCo. We will serve notice as soon as possible for moving the resolution after completing necessary consultation with the relevant LegCo Panels and the approval by the Finance Committee (FC). The order is subject to the negative vetting procedure by LegCo and should be made after the resolution has been passed.

28. With the support of the Panel on the proposal, we will seek support from the Establishment Sub-Committee of the FC on the proposed staffing proposal and approval from the FC on the creation of posts and a new Head of Expenditure under the General Revenue Account for the new ITB with the allocation of supplementary provisions upon the transfer of relevant provisions from the relevant Heads of Expenditure of CTB, OCGIO and ITC to the new Head of ITB as appropriate.

FINANCIAL IMPLICATIONS

29. The additional staff costs arising from the establishment of the ITB are as follows –

	<u>Full annual average staff cost</u>
Creation of three PAOs	\$7,242,000 to \$8,316,000
Creation of four directorate civil service posts	\$12,475,000 (The additional notional annual salary cost at mid-point amounts to \$8,276,400 per annum)

Creation of 19 new non-directorate civil service posts	\$14,314,000 (The additional notional annual salary cost at mid-point amounts to \$10,122,660 per annum)
Total Staff Cost	\$34,031,000 to \$35,105,000

30. Subject to the completion of legislative procedures and approval of the FC to provide the necessary funds for the additional PAOs and the new ITB, a total supplementary provision of \$32,452,000 for the full year 2014-15 will be required under the new Head of Expenditure to be created for ITB. This would be partly offset by a total decrease of \$2,688,000 arising from the net transfer out of provision from the Heads of Expenditure under CTB, ITC and OGCI. The net increase of \$29,764,000 represents the additional salary provision and the necessary operational costs for the new ITB for a twelve-month period in 2014-15. Actual provision to be allocated will be subject to adjustment as appropriate depending on the effective date when the new ITB will be established.

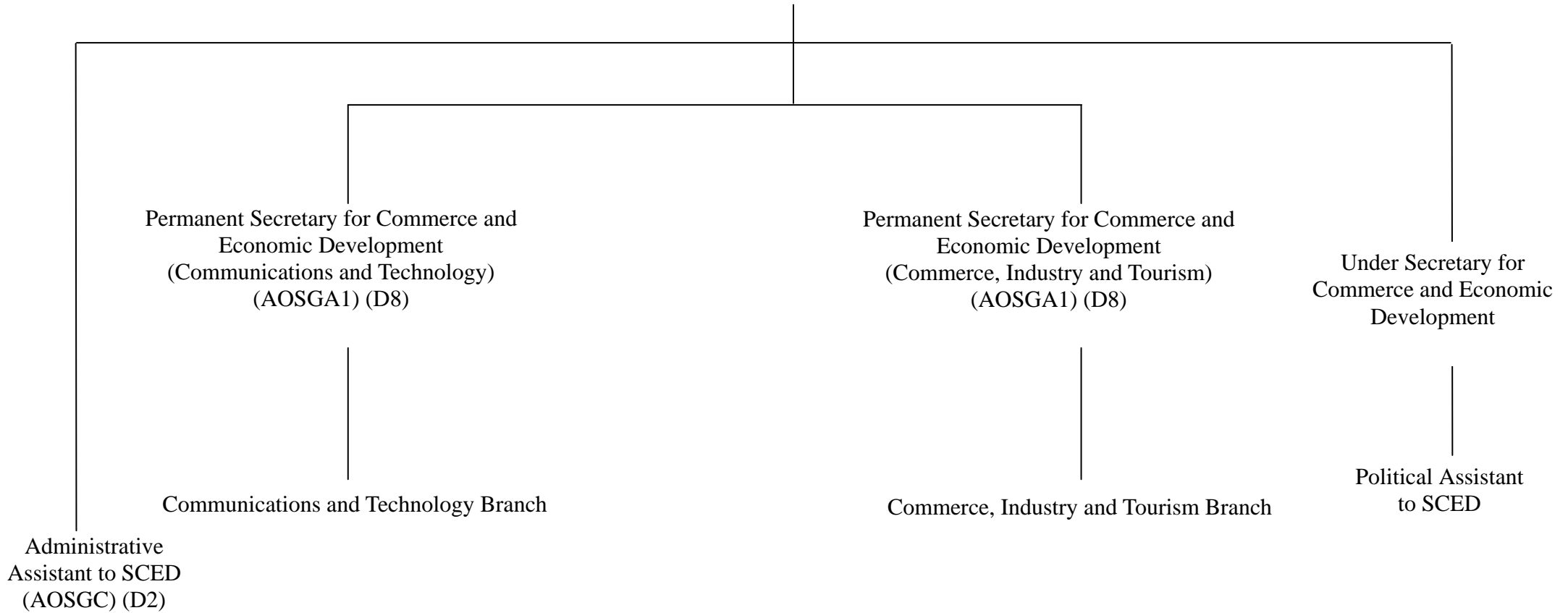
ADVICE SOUGHT

31. Members are invited to support the establishment of the proposed ITB, the associated staffing proposal mentioned above and the consequential changes to be made to the Annual Estimates of the relevant financial years to meet the cost of the proposal. They are also invited to express their views on the proposal as set out in the paper.

Commerce and Economic Development Bureau
April 2014

Existing Organisation Chart of the Commerce and Economic Development Bureau

Secretary for Commerce and Economic Development (SCED)

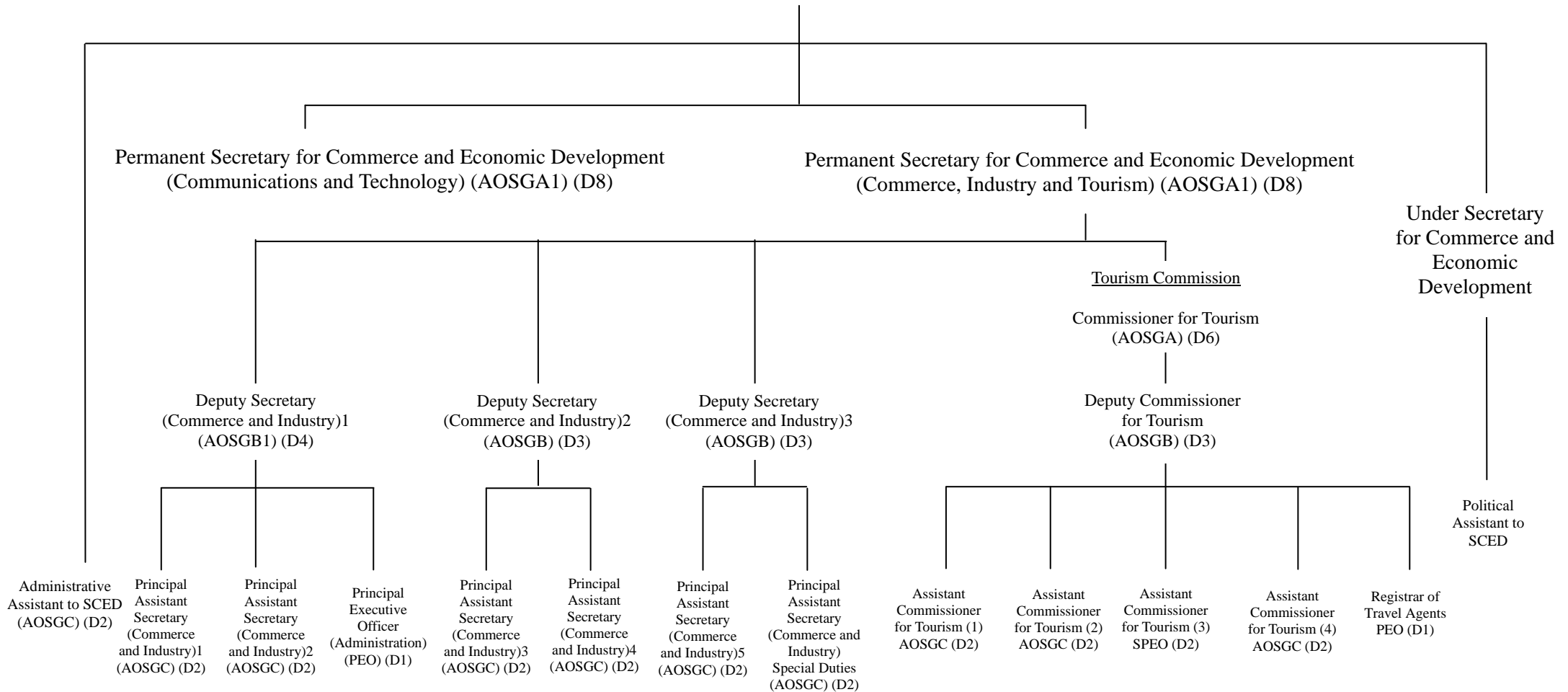


Legend

- AOSGA1 Administrative Officer Staff Grade A1
- AOSGB1 Administrative Officer Staff Grade B1
- AOSGC Administrative Officer Staff Grade C

Existing Organisation Chart of the Commerce, Industry and Tourism Branch of the Commerce and Economic Development Bureau

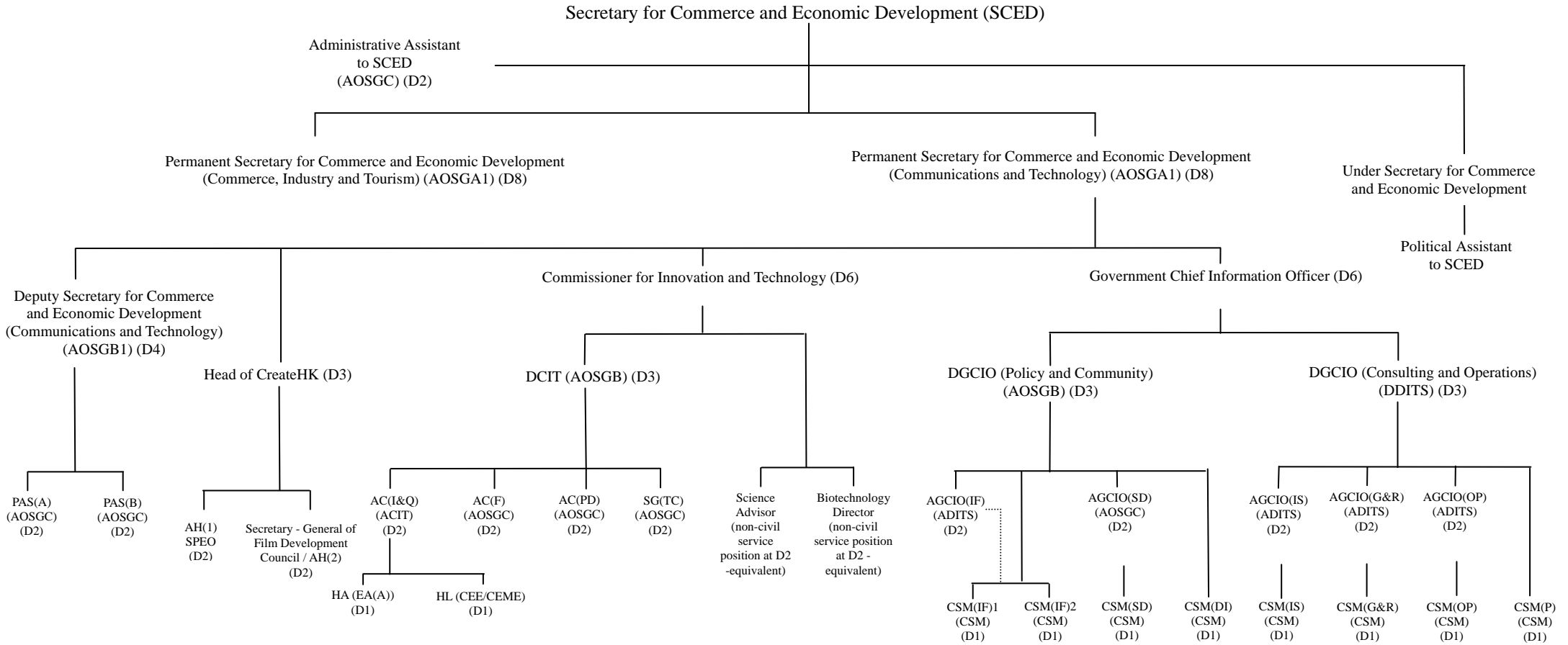
Secretary for Commerce and Economic Development (SCED)



Legend

AOSGA1	Administrative Officer Staff Grade A1	AOSGB	Administrative Officer Staff Grade B	PEO	Principal Executive Officer
AOSGA	Administrative Officer Staff Grade A	AOSGC	Administrative Officer Staff Grade C		
AOSGB1	Administrative Officer Staff Grade B1	SPEO	Senior Principal Executive Officer		

Existing Organisation Chart of the Communications and Technology Branch of the Commerce and Economic Development Bureau

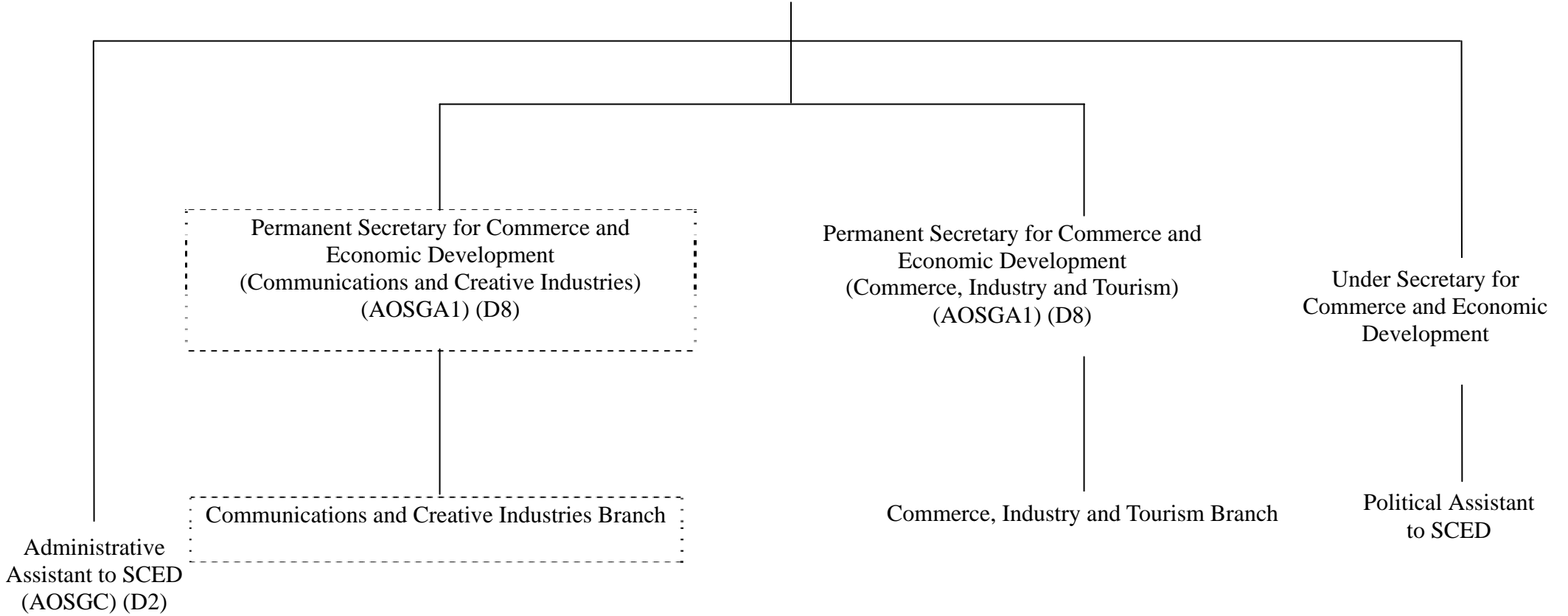


Legend

AOSGA1	Administrative Officer Staff Grade A1	DCIT	Deputy Commissioner for Innovation and Technology	AGCIO(IF)	AGCIO (Industry Facilitation)
AOSGB1	Administrative Officer Staff Grade B1	ACIT	Assistant Commissioner for Innovation and Technology	AGCIO(SD)	AGCIO (Strategy Development)
AOSGB	Administrative Officer Staff Grade B	AC(F)	Assistant Commissioner (Funding Schemes)	AGCIO(IS)	AGCIO (IT Strategy)
AOSGC	Administrative Officer Staff Grade C	AC(I&Q)	Assistant Commissioner (Infrastructure & Quality Services)	AGCIO(G&R)	AGCIO (Governance and Resources)
DGCIO	Deputy Government Chief Information Officer	AC(PD)	Assistant Commissioner (Policy and Development)	AGCIO(OP)	AGCIO (IT Operations)
AGCIO	Assistant Government Chief Information Officer	SG(TC)	Secretary-General (Testing and Certification)	CSM(DI)	CSM (Digital Inclusion)
DDITS	Deputy Director of Information Technology Services	HA	Head, Accreditation Service	CSM(P)	CSM (Projects)
ADITS	Assistant Director of Information Technology Services	HL	Head, Standards and Calibration Laboratory	CSM	Chief Systems Manager
CEME	Chief Electrical and Mechanical Engineer	EA(A)	Executive Administrator (Accreditation)	CEE	Chief Electronics Engineer
PAS	Principal Assistant Secretary				


Proposed Organisation Chart of the Commerce and Economic Development Bureau

Secretary for Commerce and Economic Development (SCED)



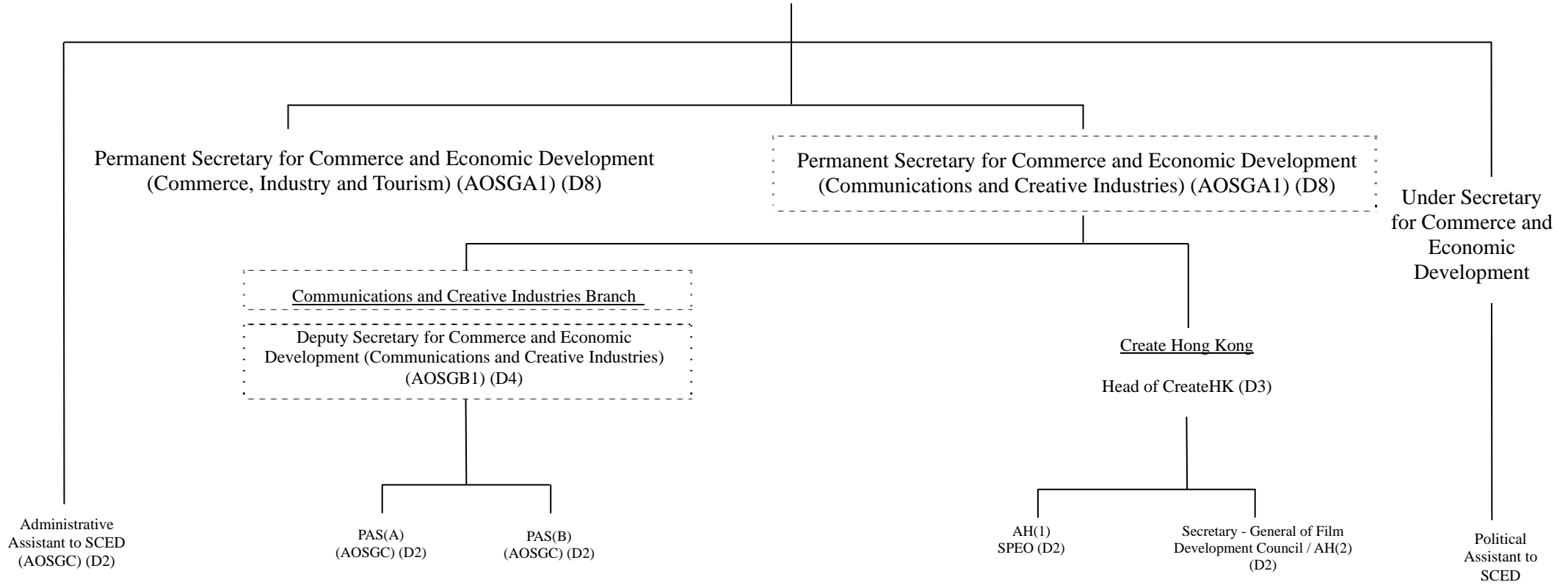
Legend

AOSGA1 Administrative Officer Staff Grade A1 AOSGC Administrative Officer Staff Grade C

 Post and branch to be retitled

**Proposed Organisation Chart of the Communications and Creative Industries Branch
of the Commerce and Economic Development Bureau**

Secretary for Commerce and Economic Development (SCED)

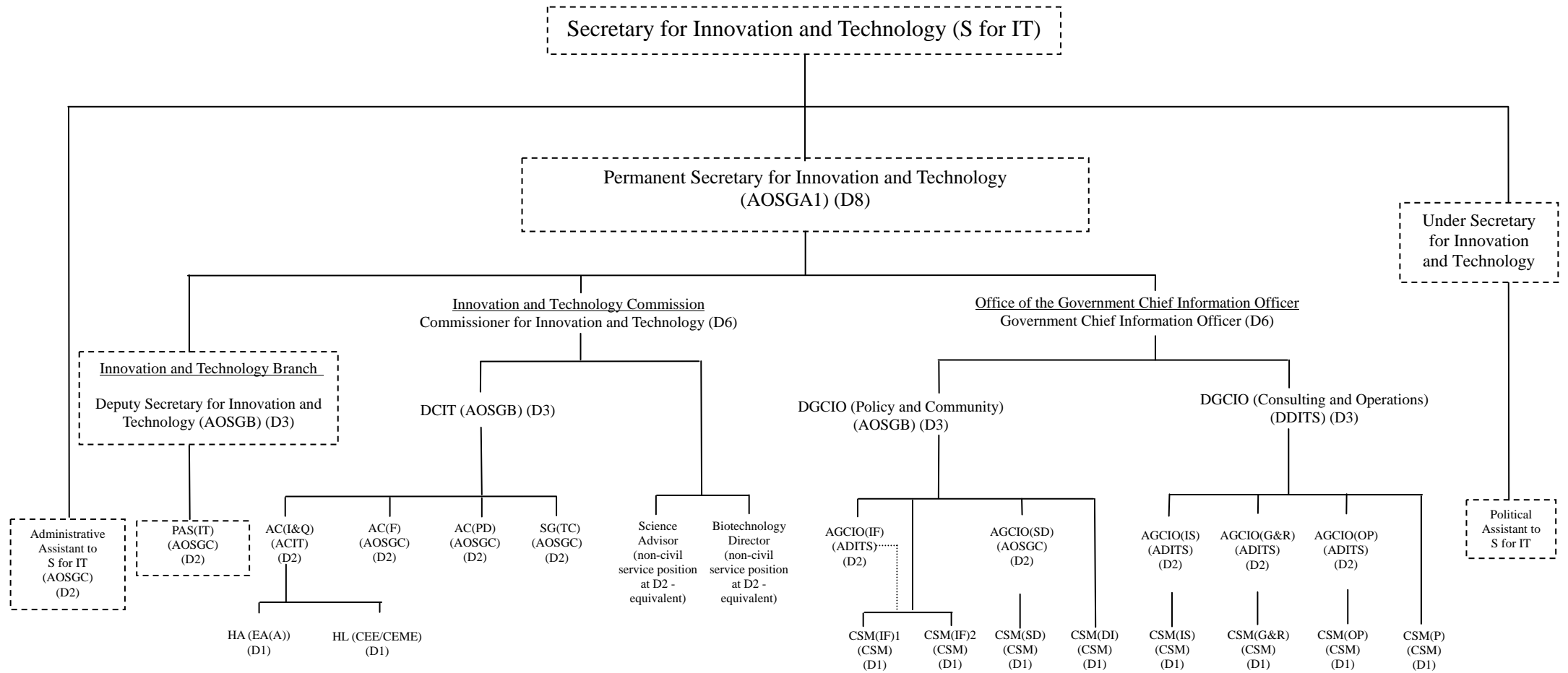


Legend

AOSGA1	Administrative Officer Staff Grade A1	AOSGC	Administrative Officer Staff Grade C	AH	Assistant Head
AOSGB1	Administrative Officer Staff Grade B1	SPEO	Senior Principal Executive Officer	PAS	Principal Assistant Secretary

Post and branch to be retitled

Proposed Organisation Chart of the Innovation and Technology Bureau



Legend

AOSGA1	Administrative Officer Staff Grade A1	DCIT	Deputy Commissioner for Innovation and Technology	AGCIO(IF)	AGCIO (Industry Facilitation)
AOSGB	Administrative Officer Staff Grade B	ACIT	Assistant Commissioner for Innovation and Technology	AGCIO(SD)	AGCIO (Strategy Development)
AOSGC	Administrative Officer Staff Grade C	AC(F)	Assistant Commissioner (Funding Schemes)	AGCIO(IS)	AGCIO (IT Strategy)
DGCIO	Deputy Government Chief Information Officer	AC(I&Q)	Assistant Commissioner (Infrastructure & Quality Services)	AGCIO(G&R)	AGCIO (Governance and Resources)
AGCIO	Assistant Government Chief Information Officer	AC(PD)	Assistant Commissioner (Policy and Development)	AGCIO(OP)	AGCIO (IT Operations)
DDITS	Deputy Director of Information Technology Services	SG(TC)	Secretary-General (Testing and Certification)	CSM(DI)	CSM (Digital Inclusion)
ADITS	Assistant Director of Information Technology Services	HA	Head, Accreditation Service	CSM(P)	CSM (Projects)
CEME	Chief Electrical and Mechanical Engineer	HL	Head, Standards and Calibration Laboratory	CSM	Chief Systems Manager
PAS	Principal Assistant Secretary	EA(A)	Executive Administrator (Accreditation)	CEE	Chief Electronics Engineer

 New posts/positions proposed to be created

Job Description
Secretary for Innovation and Technology

1. To gauge public opinion and respond to the needs of the community.
2. To set policy objective and goals, and develop, formulate and shape policies.
3. To assist the Chief Executive in policy making as Members of the Executive Council.
4. To secure the support of the community and the Legislative Council (LegCo) for his/her policy and legislative initiatives as well as proposals relating to fees and charges and public expenditure.
5. To attend full sessions of LegCo to initiate bills or motions, respond to motions and answer questions from LegCo Members.
6. To attend LegCo committee, subcommittee and panel meetings where major policy issues are involved.
7. To exercise the statutory functions vested in him/her by law.
8. To oversee the delivery of services by the executive departments under his/her purview and ensure the effective implementation and successful outcome of policies.

Job Description
Under Secretary for Innovation and Technology

- Title of Position** : Under Secretary for Innovation and Technology
- Rank** : Deputy Director of Bureau (non-civil service rank)
- Responsible to** : Secretary for Innovation and Technology (S for IT)

Main Duties and Responsibilities

Assisting S for IT in –

Leadership and Strategies

1. setting policy objectives and priorities, formulating policy and legislative initiatives to achieve agreed objective and priorities, scheduling the roll-out of these policies and legislation, and mapping out overall strategies to secure public support for these initiatives.
2. coordinating with other bureaux/departments on cross-bureau issues requiring political input to ensure that the objective and priorities of the Government are achieved.

Legislative Council (LegCo) Business and Political Liaison

3. handling LegCo business and strengthening the working relationship with LegCo by –
 - (a) deputising for S for IT in his/her absence;
 - (b) attending the main meetings of LegCo as assigned by S for IT to respond to motion debates and LegCo questions, and handling legislative work;
 - (c) attending committee, subcommittee and panel meetings of LegCo as assigned by S for IT to explain and defend the Government's policy decisions and exchange views with Members;
 - (d) maintaining regular liaison with LegCo Members to ensure that the process of policy formulation and implementation benefits from Members' ideas and input, and that Members acquire a fuller

understanding of the position taken by the Government; and

- (e) scheduling and securing the passage of bills, motions and subsidiary legislation as well as public expenditure proposals through LegCo, and delivering the Government's legislative and budgetary programme.
- 4. attending public forums and other functions to explain and defend proposals and decisions made by the political team and to answer questions from LegCo Members, stakeholders and the public.
- 5. maintaining close contact with the media for the purpose of enabling the media to be aware of the policy thinking of the Government.
- 6. maintaining close contact with other stakeholders, such as District Councils, political parties/groups, community organisations as well as business, professional and other bodies, and gauging public sentiment and establishing community-wide rapport on government policies and decisions.

Job description
Political Assistant to Secretary for Innovation and Technology

- Title of Position** : Political Assistant to Secretary for Innovation and Technology
- Rank** : Political Assistant to Director of Bureau (non-civil service rank)
- Responsible to** : The Secretary for Innovation and Technology (S for IT) and Under Secretary for Innovation and Technology (USIT)

Main Duties and Responsibilities

Rendering support to S for IT and USIT by –

Strategies and Political Advice

1. providing advice from the political perspective for consideration by S for IT and USIT.
2. contributing to formulation of policy and legislative initiatives, as well as assisting in mapping out overall strategies by giving inputs with a political viewpoint.
3. advising on submissions to the Legislative Council (LegCo) and other publications, highlighting any aspect which he/she considers has political implications, and handling sensitive political points according to the direction of S for IT and USIT.
4. drafting speeches, media statements and other articles, as directed by S for IT and USIT.

Political Liaison

5. providing advice on the handling of invitations and correspondence from political parties/groups to S for IT and USIT
6. assessing from time to time the need for lobbying political parties/groups in dealing with LegCo business and providing advice to S for IT and USIT

accordingly.

7. liaising with members of political parties/groups, District Councils, community organisations as well as business, professional and other bodies at the instruction of S for IT and USIT to brief them on issues under the purview of the S for IT, listen to their views on issues of concern, and solicit their support for the Government policies concerned.
8. liaising with the media according to the direction of the S for IT and USIT to convey the Government's position on issues and policies concerned.
9. monitoring views from interest groups and the general public on policy issues concerned and assessing the political implications.

Job Description
Administrative Assistant to the
Secretary for Innovation and Technology

Rank : Administrative Officer Staff Grade C (D2)

Responsible to : Secretary for Innovation and Technology (S for IT)

Main Duties and Responsibilities –

1. To provide general administrative support to S for IT.
 2. To co-ordinate submissions to S for IT.
 3. To co-ordinate and handle replies to correspondence, including complaints, addressed to S for IT.
 4. To prepare speeches and statements to be delivered by S for IT, in co-ordination with the Press Secretary to S for IT.
 5. To plan S for IT's programme of official visits and duty trips, both locally and overseas, and co-ordinate the preparation of briefs for such visits and follow-up action as required.
 6. To plan meetings on various subjects, prepare briefs, and service meetings chaired by S for IT.
 7. To undertake special policy assignments including special policy review and other administrative duties as S for IT may from time to time direct.
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Job Description
Permanent Secretary for Innovation and Technology

Rank : Administrative Officer Staff Grade A1 (D8)

Responsible to : Secretary for Innovation and Technology (S for IT)

Main Duties and Responsibilities –

1. To assist S for IT in reviewing and formulating government policies, legislative proposals and implementation programmes in areas of information technology and innovation and technology.
2. To assist S for IT in acquiring resources and deploying measures to support the implementation of policies and delivery of services.
3. To assist S for IT in explaining and defending policies in Legislative Council (LegCo) Panels and Committees, in securing support of the public and LegCo, and in dealing with LegCo business.
4. To steer and coordinate with the executive departments to achieve smooth, timely and effective implementation of policies and programmes.
5. To uphold the reliability and professional standards in the delivery of services by executive departments.
6. To serve as the Controlling Officer for the expenditure head of the Innovation and Technology Bureau (ITB) and to ensure the proper use of financial resources within the bureau.
7. To assume the housekeeping role in respect of the Innovation and Technology Commission and the Office of the Government Chief Information Officer.
8. To manage staff resources in ITB.

Job Description
Deputy Secretary for Innovation and Technology

Rank : Administrative Officer Staff Grade B (D3)
Responsible to : Permanent Secretary for Innovation and Technology (PSIT)

Main Duties and Responsibilities –

1. To assist PSIT in reviewing, formulating, evaluating and monitoring government policies, legislative proposals and implementation programmes in areas of information technology, innovation and technology.
2. To devise strategic plans for the promotion of the development of information technology, innovation and technology in Hong Kong.
3. To assist PSIT in steering and coordinating with the Office of the Government Chief Information Officer and Innovation and Technology Commission to achieve smooth, timely and effective implementation of policies and programmes.
4. To represent PSIT on such committees and boards as may be required.
5. To assist PSIT in managing staffing resources in the Innovation and Technology Bureau, and in ensuring proper use of financial resources.

Job Description
Principal Assistant Secretary for
Innovation and Technology

Rank : Administrative Officer Staff Grade C (D2)

Responsible to : Deputy Secretary for Innovation and Technology
(DSIT)

Main Duties and Responsibilities –

1. To provide support to DSIT in revising, evaluating, formulating and monitoring government policies, legislative proposals and implementation programmes in areas of information technology, innovation and technology.
2. To provide support to DSIT in devising strategic plans for the promotion of the development of information technology, innovation and technology in Hong Kong.
3. To provide support to DSIT in steering and coordinating with the Office of the Government Chief Information Officer and Innovation and Technology Commission to achieve smooth, timely and effective implementation of policies and programmes.

Job Description
Permanent Secretary for Commerce and Economic Development
(Communications and Technology)

Post title : Permanent Secretary for Commerce and Economic Development (Communications and Technology)
Rank : Administrative Officer Staff Grade A1 (D8)
Responsible to : Secretary for Commerce and Economic Development (SCED)

Main Duties and Responsibilities –

1. To assist SCED in reviewing and formulating government policies, legislative proposals and implementation programmes in areas of broadcasting, creative industries, telecommunications, information technology, innovation and technology.
2. To assist SCED in acquiring and deploying measures to support the implementation of policies and delivery of services.
3. To assist SCED in explaining and defending policies in Legislative Council (LegCo) Panels and Committees, in securing support of the public and LegCo, and in dealing with LegCo business.
4. To steer and coordinate with the executive departments to achieve smooth, timely and effective implementation of policies and programmes.
5. To uphold the reliability and professional standards in the delivery of services by executive departments.
6. To act as the Controlling Officer for the expenditure head of the Communications and Technology Branch (CTB) and to ensure proper use of financial resources.
7. To assume the housekeeping role in respect of the Radio Television Hong Kong, the Office of the Communications Authority and the Office for Film, Newspaper and Article Administration.
8. To manage staff resources in CTB.

Job Description
Permanent Secretary for Commerce and Economic Development
(Communications and Creative Industries)

Post title : Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries)

Rank : Administrative Officer Staff Grade A1 (D8)

Responsible to : Secretary for Commerce and Economic Development (SCED)

Main Duties and Responsibilities –

1. To assist SCED in reviewing and formulating government policies, legislative proposals and implementation programmes in areas of broadcasting, creative industries and telecommunications.
2. To assist SCED in acquiring resources and deploying measures to support the implementation of policies and delivery of services.
3. To assist SCED in explaining and defending policies in Legislative Council (LegCo) Panels and Committees, in securing support of the public and LegCo, and in dealing with LegCo business.
4. To steer and coordinate with the executive departments to achieve smooth, timely and effective implementation of policies and programmes.
5. To uphold the reliability and professional standards in the delivery of services by executive departments.
6. To act as the Controlling Officer for the expenditure head of the Communications and Creative Industries branch (CCIB) and to ensure proper use of financial resources.
7. To assume the housekeeping role in respect of the Radio Television Hong Kong, the Office of the Communications Authority and the Office for Film, Newspaper and Article Administration.
8. To manage staff resources in CCIB.

Current Workload of the Innovation and Technology Commission (ITC)

At present, ITC is fully occupied with various duties. Some major ones are set out below –

- (a) daily management of the Innovation and Technology Fund (ITF) where the Commissioner for Innovation and Technology (CIT) is the vote controller;
- (b) house-keeping and overseeing the operation of five Research and Development (R&D) Centres under the ITC as well as the Hong Kong Science and Technology Parks Corporation (HKSTPC) and the Hong Kong Productivity Council (HKPC);
- (c) providing infrastructural support to the innovation and technology sector;
- (d) formulation, development and implementation of the Government's policies, programmes and measures to promote innovation and technology in Hong Kong; and
- (e) promoting the local testing and certification industry.

Further explanation is set out in paragraphs 2-10 below. The current establishment of ITC is set out in paragraph 11.

Funding Support

2. CIT indeed plays a role akin to an angel investor in the science and technology sector. Specially, CIT plays an instrumental role in the management of the ITF as its vote controller. The ITF is an important public resource in providing financial support for applied R&D and upgrading the technology level of the industry. As at end-February 2014, ITF has approved over 3 700 projects involving \$8.2 billion of funding since its establishment in 1999. Every year, the ITF is disbursing around \$700 million of funding through its four funding programmes, namely the Innovation and Technology Support Programme (ITSP), University-Industry Collaboration Programme (UICP), Small Entrepreneur Research Assistance Programme (SERAP) and General Support Programme (GSP). ITC is heavily involved in the management of the ITF, including the work relating to project vetting, monitoring and evaluation.

3. At present, ITC is conducting a comprehensive review of the operation and effectiveness of the ITF to explore areas of improvements. As mentioned

by the Financial Secretary in his Speech on the 2014-15 Budget, ITC will introduce two more proactive measures to promote private sector investment in R&D and render stronger support to downstream R&D and commercialisation activities. These include the establishment of a new Enterprise Support Scheme to overcome the various constraints under the existing SERAP (e.g. amount of funding and company size); and extending the existing funding scope of ITF to cover development work and system integration, industrial design, compliance testing and clinical trials, etc.

4. Apart from the ITF, the ITC is also administering the R&D Cash Rebate Scheme since April 2010 where cash rebate is provided to eligible private companies on their R&D investment. So far, companies have responded positively towards the Scheme, particularly after the increase of the cash rebate level from 10% to 30% in February 2012.

R&D Centres, HKSTPC and HKPC

5. In April 2006, the Government set up five R&D Centres as focal points to drive and co-ordinate applied R&D and to promote commercialisation in five focus areas, namely nanotechnology and advanced materials, textile and clothing, automotive parts and accessory systems, logistics and supply chain management enabling technologies, and information and communications technologies. CIT or her representative sits on the Boards of Directors of the R&D Centres to provide input from the Government's perspective. We are delighted to report that after some eight years of operation, the R&D centres have gradually become more mature. They have recently begun to generate some commercialisation results.

6. Apart from the R&D Centres, CIT or her representative is also a member of the Board of Director of the HKSTPC and the Council of HKPC, and provide substantial input to and maintain close ties with the two organisations.

Realisation of R&D Results

7. The ITC has been promoting collaboration among the Government, industry, academia and research sectors to promote R&D as well as transferring the R&D results to the industry. In order to promote real world application of R&D results, ITC launched the Public Sector Trial Scheme in 2011, where additional funding is provided to completed R&D projects funded by the ITF for the production of tools/prototypes/samples and the conducting of trials in the

public sector. Examples include the collaboration of the R&D Centre for Logistics and Supply Chain Management Enabling Technologies with the Hong Kong Customs and Excise Department to apply the 'E-Lock-Based Enabling Technology' at the boundary control points in order to reduce repeated customs inspection for cargo containers at the control points and facilitate quicker and more efficient logistics flow between Hong Kong and the Mainland.

Mainland and International Collaboration

8. The ITC is working with stakeholders to enhance collaboration with the Mainland on science and technology so as to capitalise on the opportunities presented by the National 12th Five-Year Plan. The ITC is also collaborating with the Consulate General (CG) of various overseas governments to promote bilateral scientific and technology exchanges, including signing Memoranda of Understanding with other economies on science and technology collaboration.

Infrastructural Support

9. With a view to developing world-class support infrastructure to facilitate technological upgrading and development of the industry and to promote innovation and technology, the ITC supports and closely work with organisations such as the HKSTPC and the HKPC. In particular, the ITC is working closely with HKSTPC on the development of the Hong Kong Science Park Phase Three, revitalisation of the Industrial Estates and the feasibility study on expanding the Yuen Long Industrial Estate. The ITC is also closely monitoring the delivery of value-added support services to the manufacturing and related service industries by the HKPC.

Testing and Certification

10. The ITC is also providing support to the Hong Kong Council for Testing and Certification (HKCTC). The HKCTC was established in 2009 as an advisory body to spearhead the development of Hong Kong's testing and certification industry, a sector with good potentials and where Hong Kong enjoys clear advantages. CIT or her representative is a member of the council, and a dedicated team from ITC is serving as its secretariat. Since its set up, the HKCTC has formulated strategies and implemented measures to enhance the factors of production relevant to the testing and certification industry, and promoting the industry locally and outside Hong Kong.

11. The directorate establishment of the ITC was seven since April 2004, and eight since April 2010 with the addition of one supernumerary AOSGC to take up responsibility as Secretary-General (SG) of the then newly established HKCTC (the SG post has been converted to a permanent AOSGC position with effect from 1 April 2014). The non-directorate establishment of the ITC was 177 in April 2004; 164 in April 2006 notwithstanding the setting up of the five research and development centres in the same year; and 190 in April 2014 (the latter figure already included 10 newly approved civil service posts under the HKCTC and 16 civil service posts which were converted from non-civil service contract positions in the Quality Services Division for promoting the development of the testing and certification industry).

Current Workload of
Office of the Government Chief Information Officer (OGCIO)

OGCIO provides leadership for the development of information technology within and outside the Government. Headed by the Government Chief Information Officer, OGCIO provides a single focal point with responsibility for IT policies, strategies, programmes and measures under the Government's Digital 21 Strategy. OGCIO seeks to —

- (a) ensure that the Government provides the public with information and services they need in an efficient and convenient manner by using IT appropriately, and supporting bureaux and department to make best use of IT to achieve their policy objectives;
- (b) support the development of community-wide information technology infrastructure and setting of technical and professional standards to strengthen Hong Kong's position as a world digital city; and
- (c) promote and facilitate the wider use of IT in the business sector and the community, and building a digitally inclusive society in Hong Kong.

2. In seeking to achieve the above objectives, OGCIO is guided by the current version of the Digital 21 Strategy (the Strategy) which sets out the blueprint for Hong Kong's overall development in Information and Communications Technology (ICT). The Strategy is being updated. The current focus of OGCIO is set out in paragraphs 3 to 7 below.

(a) Supporting Bureaux and Departments

3. OGCIO formulates government-wide IT strategy and advises government bureaux and departments in their formulation of departmental IT strategy addressing the policy objectives. Under the Pan-Government IT Strategy promulgated in June 2011, OGCIO works to facilitate the 12 government bureaux and around 70 departments and related organisations to plan and execute their IT-enabled change initiatives in a more agile, cost effective and joined-up manner by adopting cloud computing technology. OGCIO also establishes and maintains an advanced and secure electronic

communications infrastructure for effective and efficient communications and collaboration in government operations and delivery of public services.

4. OGCIO facilitates service transformation in the public sector through providing the one-stop portal of government information and e-services (i.e. GovHK and MyGovHK), and developing common shared services such as electronic recordkeeping, collaborative workspace, electronic procurement, Government Human Resources Management Services (GovHRMS). It also facilitates the implementation of mobile e-government services through providing support to Government departments and developing mobile applications commonly used by them for public services.

5. OGCIO also provides common facilities for the reliable, agile, stable and cost-effective delivery of e-government services, such as E-Government Infrastructure Service, Government Cloud Platform and Government Data Centre Service. It keeps the government IT security policy and requirements in pace with technology advancement and international best practices, and enforces compliance by government bureaux and departments.

(b) Community wide Information Technical Infrastructure

6. OGCIO seeks to ensure that a sound legal framework under the Electronic Transactions Ordinance (Cap. 553) is in place for the conduct of secure electronic transactions in Hong Kong. It also works to facilitate cross-boundary e-commerce by instituting and enhancing the mechanism for the mutual recognition of electronic signature certificates issued by Hong Kong and Guangdong. At the same time, OGCIO collaborates with relevant organisations to raise the awareness of cyber security in the public and private sectors in tackling cyber threats. In terms of manpower, OGCIO devotes a lot of resources to facilitate the continuous upgrading of the IT workforce

(c) Wider use of IT in the business sector and the community

7. OGCIO is implementing the following programmes to promote a knowledge-based society and narrow the digital divide —

- Internet Learning Support Programme — The five-year Internet Learning Support Programme “I learn at home”, launched in July 2011 to help students from low-income families to undertake web-based learning at home, was last reviewed in 2013 and OGCIO is

working with the scheme implementators to ensure the programme's effective operation.

- City-wide WiFi — OGCIIO launched the GovWiFi Programme in 2008, and continues to extend service coverage to more premises including leisure locations and popular focal points such as beaches, major district parks and harbourfront promenades. With a view to enhancing the programme, OGCIIO is liaising with other government-related organisations to facilitate them to provide Wi-Fi services at their premises (such as public hospitals) through partnership with Wi-Fi operators.
- Digital Inclusion Applications and Web Accessibility Campaign— OGCIIO supports the development of applications with contents or services that cater for the needs of elderly and under-privileged groups. It has also dedicated resources to implement a Web Accessibility Campaign since October 2011 to promote web accessibility through a multi-pronged strategy.
- Encouraging ICT Adoption among the Elderly — OGCIIO has been organising territory-wide recognition scheme to show appreciation to the elderly who make good use of ICT in their daily lives to narrow inter-generational gap, promote social inclusion, broaden knowledge, and enhance quality of life.

In the context of the business community, OGCIIO –

- champions initiatives and measures to develop Hong Kong as a prime location for high-tier data centres in the region by working through the Data Centre Facilitation Unit to provide information and one-stop support to assist interested organisations in setting up data centres in Hong Kong;
- maintains and identifies opportunities for collaboration with the Mainland through the Closer Economic Partnership Arrangement (CEPA) to facilitate Hong Kong companies to tap into the Mainland market; and
- hosts signature events to showcase Hong Kong's ICT achievements and reinforce Hong Kong's position as a regional ICT hub.

8. The coming few years would be particularly important to the work of OGCIO as the Department embarks on implementing the initiatives in the new Digital 21 Strategy. High level co-ordination and focused attention are crucial in the successful implementation of the New Strategy, in particular in driving the smart city development, the e-ID initiative, paperless and collaborative government, and more integrated and joined-up e-Government services

9. OGCIO is headed by Government Chief Information Officer (D6), with two Deputy Government Chief Information Officers (DGCIOs) (D3) who are responsible respectively for Policy & Community and Consulting & Operations. The two DGCIOs are underpinned by five Assistant Government Chief Information Officers (four D2 Departmental Officers and one AOSGC) and eight Chief Systems Managers (D1).