Hong Kong Council for Testing and Certification

Report for 2015-16

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香港檢測和認證局
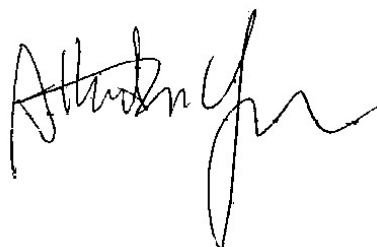The Hong Kong Council for
Testing and Certification

Foreword

I am honoured to be appointed as the Chairman of the Hong Kong Council for Testing and Certification (the Council) with effect from 1 January 2016.   I am also pleased to report the major work progress and achievements of the Council in the year of 2015-16.

2.   In October 2008, the Task Force on Economic Challenges identified testing and certification as one of the six economic areas that demonstrated good potential for further development.   To support the development of the industry, the Council was established in 2009 as an advisory body to advise the Government on the overall development strategy of the industry.

3.   Under the sterling leadership of my predecessor, Professor Ching Pak-chung, and with the contribution of all the Council Members as well as the support from the Innovation and Technology Commission and everyone from the testing and certification sector, the industry recorded growth during the past six years despite increasing competition from neighbouring economies and challenges arising from global economic fluctuation.   My heartfelt thanks to Professor Ching and former Council and Panel Members for their dedication and valuable insights during the past years.

4.   I look forward to joining hands with all the stakeholders in realising the Council's vision for Hong Kong to become a testing and certification hub in the region.

Professor Albert YU
Chairman,
Hong Kong Council for Testing and Certification
29 April 2016

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Abbreviations Used

APLAC	Asia Pacific Laboratory Accreditation Cooperation
CEPA	Mainland and Hong Kong Closer Economic Partnership Arrangement
CMM	Chinese Materia Medica
EnMS	Energy Management System
ESS	Enterprise Support Scheme
GAC	Gulf Accreditation Center
GAHK	The Gemmological Association of Hong Kong
GHG	Greenhouse Gas
HD	Higher Diploma
HKAS	Hong Kong Accreditation Service
HKCTC	Hong Kong Council for Testing and Certification
HKPC	Hong Kong Productivity Council
HKSP	Hong Kong Science Park
HKTDC	Hong Kong Trade Development Council
HKTIC	Hong Kong Association for Testing, Inspection and Certification
ICT	Information and Communications Technologies
IEC	International Electrotechnical Commission
ISMS	Information Security Management System
ISO	International Organization for Standardization
ITC	Innovation and Technology Commission
ITF	Innovation and Technology Fund
OUHK	The Open University of Hong Kong
PCCS	Product Conformity Certification Schemes
QF	Qualifications Framework
SEHK	The Stock Exchange of Hong Kong Limited
TC	Technical Committee (of ISO)
VTC	Vocational Training Council

I. HONG KONG COUNCIL FOR TESTING AND CERTIFICATION

The Hong Kong Council for Testing and Certification (HKCTC) was established in September 2009 to advise the Government on the overall development strategy for the testing and certification industry.   Its terms of reference and membership list are at *Annex 1* and *Annex 2* respectively. The Innovation and Technology Commission (ITC) provides secretariat support to HKCTC.   Professor Albert YU was appointed as Chairman on 1 January 2016 following the retirement of Professor CHING Pak-chung from the Council.

1.2   HKCTC has been working closely with the Government and the testing and certification industry in developing Hong Kong into a testing and certification hub for the region.   In March 2013, after reviewing the progress of the implementation of its three-year industry development plan formulated in 2010, HKCTC submitted a Review Report to the Chief Executive.   The recommendations therein were accepted by Government.

1.3   Since then, HKCTC has taken forward the recommendations in the Review Report in collaboration with various stakeholders.   This Annual Report presents the 2014 statistics of the industry (latest figures available) and summarises the work of HKCTC, relevant Government bureaux/ departments and public organisations in spearheading the development of the industry in the period from April 2015 to March 2016.

OUR VISION

To develop Hong Kong into a testing and certification hub in the region by reinforcing the branding of 'Tested in Hong Kong, Certified in Hong Kong'.

OUR ROLE

> - Act as a focal point of contact among all stakeholders, including the testing and certification industry itself, the related industries, providers of supporting services, etc.
>
> - Assist the industry to explore new business opportunities.
>
> - Coordinate effort by the industry to best dovetail Government policy objectives.
>
> - Promote acceptance of Hong Kong's testing/inspection reports and certificates by overseas/Mainland governments.
>
> - Enhance manpower development and professionalism in the industry.

OUR STRATEGY

Market-oriented dual approach to promote the development of the testing and certification industry –

Making general improvements to the accreditation and factors of production while focusing particular attention on specific trades with good potentials in using testing and certification services.

II. INDUSTRY PROFILE (2014 FIGURES[1])

Number of Establishments

In Hong Kong, according to a survey, there were about 715 establishments engaging in testing, inspection and certification activities in 2014, of which 610 were private independent establishments –

Category	Number
Private independent establishments engaging in testing, inspection and certification activities as their major economic activity	610
Manufacturers and exporters engaging 100 persons or more and with in-house laboratories for testing activities	50
Laboratories in government departments/public organisations (including those in the hospitals of the Hospital Authority and those accredited by Hong Kong Accreditation Service (HKAS) in local universities)	55

Sizes of Establishments

2.2   The vast majority (95%) of the private independent establishments were small and medium enterprises engaging fewer than 50 persons.   They accounted for 30% of the total persons engaged and 26% of the total business receipts in the industry.   Twenty-four establishments engaging 100 persons or above accounted for the majority of employment and business receipts – 63% of the persons engaged and 67% of the total business receipts in the industry.

Persons Engaged

2.3   The number of persons engaged in testing, inspection and certification activities was 17 510 in 2014, of which 13 520 persons were engaged by private independent establishments.   About 5 890 (43% of 13 520) were professionals and associate professionals whose main duties were to provide testing, inspection and certification services.

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[1]   Based on a survey conducted by the Census and Statistics Department in Hong Kong.

Business Receipts

2.4   The total business receipts of the private independent establishments in the industry were $13.0 billion in 2014.   The direct economic contribution to Hong Kong's Gross Domestic Product was $6.5 billion.   Breakdowns of the business receipts are shown below:
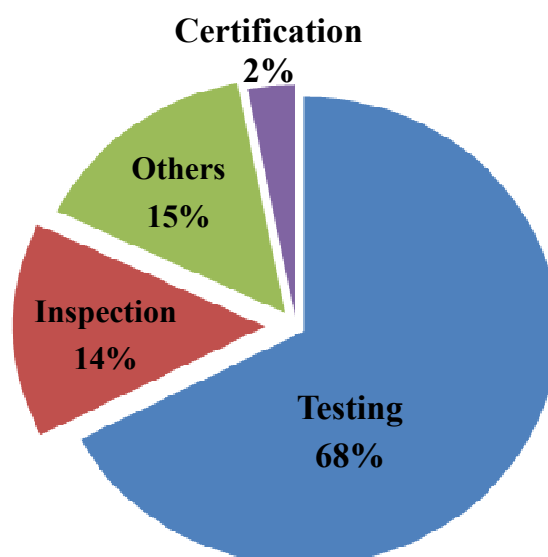
2014
Business receipts by type of services
(Note : Percentages add up to lower than 100% due to rounding.)
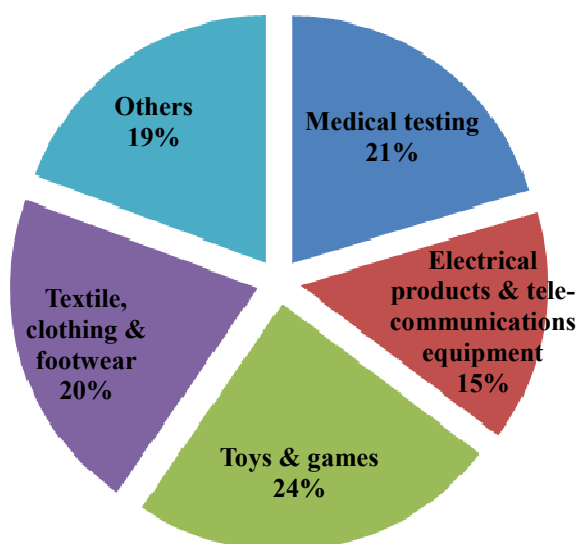
2014
Further breakdowns of business receipts from testing services
(Note : Percentages add up to lower than 100% due to rounding.)

III.   IMPROVEMENTS ON THE GENERAL FRONT

Efforts for improvements on the general front cover two major aspects – accreditation service and factors of production of the testing and certification industry.

Accreditation Service

3.2   The accreditation service provided by ITC's Hong Kong Accreditation Service (HKAS) is the cornerstone of the local testing and certification industry.   In 2015-16, HKAS has extended its accreditation service to conformity assessment bodies undertaking the following new activities –

(a) certifications of quality management system and environmental management system (EnMS) for recycling industry;

(b) performing testing under the Agreement between the Mainland and Hong Kong on Achieving Basic Liberalisation of Trade in Services in Guangdong (the Guangdong Agreement) and Supplement X[2] to the Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA); and

(c) testing of lead content in solder or filler metal used in soldering, brazing and welding construction methods.

3.3   To ensure the high professional standards in delivering accreditation service, HKAS arranged a number of training workshops and courses to its staff in 2015-16 to assist them in acquiring the necessary skills regarding the new accreditation services.   For example, HKAS officers attended a series of seminars on the new standard ISO 9001:2015 conducted in both Taiwan and Hong Kong in order to obtain first-hand information on the latest update of the quality management standard; a HKAS accreditation officer participated as an observer in an assessment of a radiology laboratory in Western Australia conducted by the Australian accreditation body, viz. National Association of Testing Authorities, to obtain experience in assessing medical imaging facilities using ISO/IEC 17025 'General requirements for the competence of testing and calibration laboratories' and to explore the feasibility of utilising ISO 15189 'Medical laboratories -- Requirements for quality and competence' in accrediting such facilities.

3.4   As at the end of March 2016, there were 256 organisations

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[2]   The Implementation Guide to CEPA X announced in June 2015

accredited by HKAS. The following table sets out the breakdown and changes from the year before –

	Number of Accredited Organisations		
Accreditation Scheme of HKAS	March 2015	March 2016	Change
Hong Kong Laboratory Accreditation Scheme	206	212	+6
Hong Kong Inspection Body Accreditation Scheme	20	20	0
Hong Kong Certification Body Accreditation Scheme	23	24	+1
Total	249	256	+7

3.5   HKAS also regularly reviews and updates accreditation criteria documents to assist accredited organisations to operate in accordance with new accreditation and technical standards.

Enhancement to Factors of Production

<u>Manpower</u>

3.6   Students and practitioners are the two main target groups of HKCTC's effort on the manpower front.

Students

3.7   HKCTC continued to assist the industry to attract talents through raising awareness and enhancing knowledge of the industry among students and young people.   In 2015-16 –

(a) with assistance from HKAS and industry practitioners, HKCTC organised six career talks for students of local universities, and set up promotional booths on five career days.   The Vocational Training Council (VTC) also organised three career talks and two visits to testing laboratories for its students in Higher Diploma programmes relevant to testing and certification;

Career Talk and Career Booth for students

(b) HKCTC invited accredited organisations to offer internship places and received more than 140 internship places for Summer 2015. The offers were relayed to VTC and local universities, as well as uploaded to HKCTC's website for students' information. Possibly due to our efforts in the past few years in linking educational institutions with accredited organisations, some testing and certification bodies and educational institutions are now in direct contact and have made their own internship arrangements which might adversely affect the number of internship opportunities co-ordinated by HKCTC.   This explains the drop in the number of places by 60 in the summer of 2015 as compared with 2014.

In January 2016, having considered that there is still a demand for internship places co-ordinated by HKCTC, HKCTC again invited accredited organisations to provide internship opportunities for Summer 2016;

(c) two visits to testing laboratories were lined up for teachers of chemistry at secondary schools in coordination with the Education Bureau;

(d) HKAS delivered four technical talks to introduce the concepts of accreditation, testing and certification and the career prospects in the industry to students of tertiary education institutions; and

(e) the Hong Kong Baptist University has been commissioned to develop a teaching kit for use by senior secondary Chemistry teachers. The purpose is to raise the awareness of testing and certification among secondary students through introducing basic chemical testing concepts in class. Trial runs on the teaching kit were completed in February 2016.   It is expected that the kit can be rolled out in 2016.

3.8   Local universities train over 10,000 graduates in disciplines relevant to testing and certification every year.   The Open University of Hong Kong (OUHK) offers a number of full-time and part-time/distance learning academic programmes relevant to testing and certification.   It launched Hong Kong's first full-time undergraduate programme dedicated to testing and certification in 2013.   During the 2015-16 academic year, 50 students received subsidy for this self-financing academic programme from the Government's Study Subsidy Scheme for Designated Professions/Sectors. We are expecting the first batch of graduates from this full-time programme in 2017.

3.9   As for VTC, nine Higher Diploma (HD) programmes in disciplines relevant to testing and certification are offered in 2015-16 academic year, with a total intake of 710 students.   More than 560 students of the HD programmes graduated in 2015.   VTC also launched the Earn & Learn Pilot Scheme for Testing and Certification Industry in 2015 in which a student in the relevant HD programme will be given an opportunity to receive on-the-job training in a local testing laboratory as an apprentice with income and allowance from the employer and Government.   The Scheme can address the learning and practical needs of the students and provide solid manpower support to the testing and certification industry.

Practitioners

3.10   Efforts made by HKCTC, HKAS and relevant Government departments and public bodies to enhance practitioners' skills and promote further development of professionalism are set out below –

   (a) HKCTC, HKAS, VTC and the Government Laboratory organised more than 50 seminars, workshops, short courses and other training events for practitioners in the testing and certification industry in 2015-16;

Seminars

(b) in addition to the Specification of Competency Standards for Testing, Inspection and Certification Industry completed in July 2014, the Qualifications Framework (QF) launched the Recognition of Prior Learning mechanism for the Testing, Inspection and Certification industry in November 2015. Practitioners can obtain QF-recognised qualifications based on experience and competency already acquired at the workplace. This initiative would facilitiate the professional development of the industry in Hong Kong. The School of Science and Technology of the OUHK is the Appointed Assessment Agency for the industry and began to receive application in mid-December 2015.

Capital and Technology

3.11   The Hong Kong Productivity Council (HKPC) and the Hong Kong Science Park (HKSP) jointly launched the 'Lab Test One' initiative in 2013. It let private testing laboratories use laboratory facilities and equipment at HKPC and HKSP for a fee. In 2015-16, 'Lab Test One' expanded its coverage to 37 laboratories, including ITC's Standards and Calibration Laboratory, and other local non-commercial laboratories in universities, non-government organisations, and Research and Development Centres set up by the Government. In May 2015, HKPC and HKSP launched a new digital promotion platform comprising a dedicated website and a mobile application to facilitate the local industry to access the full spectrum of services under 'Lab Test One' in one click. During 2015-16, about 51% of the operation time of HKPC's electromagnetic compatibility anechoic chamber was used by private laboratories. The chamber was set up in 2011 with funding from the Government. To further promote the shared facilities, HKPC and the HKSP jointly organised three seminars cum laboratory visits for the industry.

3.12   Proficiency testing is important to the upholding of technical capability of our laboratories. In 2015-16, the Government Laboratory continued to provide support and organised a food safety testing on propionic acid in flour confectionery, and collaborated another proficiency testing programme with Asia Pacific Laboratory Accreditation Cooperation (APLAC) on the testing of pesticides in fruit juice.

3.13   In April 2015, the ITC launched the new Enterprise Support Scheme (ESS) under the Innovation and Technology Fund (ITF). The ESS provides a dollar-for-dollar matching funding of up to $10 million for each project to

encourage the private sector to invest in research and development. Similar to other ITF funding schemes, 'testing and certification' is also featured as a technology area eligible under the ESS.

Land

3.14   Many testing laboratories in Hong Kong are located in industrial buildings. The leases of such buildings usually contain user restrictions. The uses permitted under such leases are typically specified as 'industrial and/or godown purposes'. However, testing laboratories not involving a primary manufacturing use are not considered as industrial use in the context of land leases. Owners of industrial buildings housing testing laboratories may apply to the Lands Department for a waiver to permit the use, subject to the payment of a waiver fee and an administrative fee. Normally a waiver fee is assessed on the basis of enhancement in rental value of the premises by virtue of the waiver.

3.15   We are pleased that the Government has taken heed of the views of the Council and the industry and decided to forgo the waiver fee that is normally chargeable. From 1 February 2016, owners of industrial premises can apply to Lands Department for the waiver in order to accommodate testing and calibration laboratories under the new measure and it would not be necessary for the successful applicants to pay the waiver fee[3]. We hope that the new measure would facilitate the operation of testing and certification bodies in industrial buildings, and make available more suitable premises in the market.

3.16   During the year, the Council has reflected its views on the 'Planning and Engineering Study for Tuen Mun Areas 40 & 46 and the Adjoining Areas' and 'Recommended Outline Development Plan of Hung Shui Kiu New Development Area'.

3.17   As at the end of 2014 (latest available figure), the vacant floor area in private properties that may accommodate testing and certification organisations was about 2.49 million square metres, representing about 6.3% of all industrial and commercial presmises in Hong Kong.

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[3]   Applications would only be accepted for processing if the premises concerned are located in an industrial building where testing laboratory use is permitted under the current land use zoning of the site on the statutory plan, or is granted planning permission by the Town Planning Board, or is considered as an existing use under the provisions of the statutory plan.

IV. SPECIFIC TRADES

The HKCTC has identified six specific trades for exploring potential demands and opportunities.   The six trades are –

(a) Chinese medicines;
(b) construction materials;
(c) food;
(d) jewellery;
(e) environmental protection; and
(f) information and communications technologies (ICT).

<u>Annex 3</u>

HKCTC formed a Panel for each trade and the membership lists of the Panels are at ***Annex 3***.

Chinese Medicines

4.2   The Chinese Medicines Panel organised the second inter-laboratory comparison exercise on assay of 12 Chinese Materia Medica (CMM)[4].   The exercise was implemented in two phases with six CMM in each phase. Through the exercise, participating testing laboratories are able to assess their own technical competence by comparing testing results with other laboratories.   The first phase was completed in October 2014 with participation of 13 local laboratories.   The second phase was conducted from January 2015 to June 2015.   Fourteen local laboratories participated.

4.3   With funding support from ITF, HKPC completed the development of a product certification scheme for CMM based on Hong Kong CMM Standards and launched it in November 2014.   The HKCTC and HKPC are working closely in promoting the scheme through various channels.   In October 2015, one local trader was awarded the certificate by a certification body for two batches of CMM based on this certification scheme.

4.4   To address the demand of testing laboratories, the Panel will continue to coordinate a new inter-laboratory comparison exercise and a part-time course on microscopic examination of CMM based on Hong Kong CMM Standards in Year 2015-16.

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[4]   CMM in the first phase: Astragali Radix, Chuanxiong Rhizoma, Eucommiae Cortex, Gentianae Radix et Rhizoma, Moutan Cortex, and Panacis Quinquefolii Radix; and CMM in the second phase: Paeoniae Alba Radix, Radix Bupleuri, Radix Codonopsis, Salviae Miltiorrhizae Radix, Polygoni Multiflori Radix, and Scutellariae Radix.

Construction Materials

4.5   The Hong Kong Housing Authority plays a leading role in taking forward the development of product conformity certification schemes (PCCS).   As at March 2016, the Authority required product certification for ten types of construction materials.[5]   By the end of Year 2015-16, HKAS has accredited six certification bodies for product certification of 12 types of construction materials.

4.6   The consultant engaged by the Standing Committee on Concrete Technology, which is an inter-office liaison platform on problems concerning concrete construction in the Government, has recommended to develop PCCS of steel reinforcing bars for use in construction works in Hong Kong. Four PCCS are now being developed to cover different stages of fabrication of steel reinforcing bars.

4.7   In late 2015, three new PCCS on paint products, aggregates for concrete and mechanical couplers were launched by the Hong Kong Association for Testing, Inspection and Certification (HKTIC), Hong Kong Concrete Institute and a private testing and certification body respectively.

Food

4.8   Government regulatory requirements have a great impact on food testing and certification business.   When regulatory requirements are introduced, testing and certification services would be needed to ensure compliance.

4.9   In summer 2015, the Government conducted a consultation on the legislative proposals related to edible fats and oils, as well as recycling of 'waste cooking oils'.   The HKCTC presented its views to the Food and Health Bureau and Food and Environmental Hygiene Department during the consultation period.   The Government is considering views collected during the consultation exercise and plans to put forward specific legislative proposals in due course.   The HKCTC will continue to monitor the development and comment on future proposals at appropriate junctures.

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[5]   The ten building products are timber doorsets (fire rated doors) & panel wall for partitions, concrete, cement products (for architectural uses), title adhesives, ceramic tiles (floor tiles and wall tiles), repair mortars, aluminum windows, uPVC drainage pipe and fitting, close-coupled water closet suites, as well as mesh reinforcement.

Jewellery

4.10   With the support from HKCTC, The Gemmological Association of Hong Kong (GAHK) has fine-tuned the new standard testing methods for *Fei Cui* (翡翠, or commonly referred to as 'jade') having regard to views expressed by gemstone testing laboratories.   The HKCTC has also arranged meetings with the trade with a view to resolving the differences among stakeholders.   On 4 March 2016, GAHK announced the soft launch of the new standard testing methods.

Environmental Protection

4.11   The Environmental Protection Panel has been focusing its efforts on promoting new services for ISO 50001 EnMS certification.   A visit to the HKSP was organised in June 2015, so as to understand more about the Park's experience in ISO 50001 EnMS certification.   Starting from January 2014, the Hong Kong Housing Authority has imposed ISO 50001 certification requirements for its contractors under specific lists.

4.12   We have also been promoting the validation and verification of greenhouse gas (GHG) assertions.   Regarding the Stock Exchange of Hong Kong Limited (SEHK)'s consultation on the review of the Environment, Social and Governance Reporting Guide in 2015, comments were relayed to the SEHK on the GHG emission disclosure requirement.   In mid-2014, the HKAS has introduced accreditation service for the verification of GHG assertions at product level, in accordance to ISO/TS 14067 which specifies principles, requirements and guidelines for the quantification and communication of the carbon footprint of a product.   The Panel has been working closely with HKAS on the promotion of this new accreditation service.   In mid-March 2016, we accepted the invitation from the Environmental Protection Department to be a supporting organisation for the department's Greenhouse Gas Measurement, Reporting and Verification Workshop.

Information and Communications Technologies

4.13   The ICT Panel has been promoting ISO 27001 information security management system (ISMS) certification services.   Since 2013, the Panel has been arranging speakers from the local testing and certification industry and HKAS to introduce the concepts and advantages of ISMS certification to potential users at relevant seminars.   The most recent one was held in June 2015.   The Panel also continues to approach targeted organisations in Hong

Kong to promote ISO 27001 certification services.

4.14   The Government has also been promoting independent third-party testing.   For example, the Office of the Government Chief Information Officer has started including 'information security and independent testing services' as a service category in Government's procurement.

V.   SEEKING WIDER RECOGNITION OF HONG KONG'S ASSESSMENT RESULTS

International Participation

HKAS has been participating actively in the international accreditation community so as to seek wider recognition of Hong Kong's conformity assessment results.   HKAS staff attended a number of meetings organised by international and regional accreditation cooperation organisations to exchange views with other accreditation bodies and to fulfill its obligation as members in various committees, work groups and task forces of these organisations.   In Year 2015-16, HKAS also contributed a number of articles to newsletters of these organisations.

5.2   Through the multilateral mutual recognition arrangements administered by international and regional accreditation cooperations, endorsed reports and accredited certificates issued by HKAS' accredited organisations are recognised by 90 accreditation bodies in 84 economies, including Hong Kong's major trading partners.   HKAS extended its Pacific Accreditation Cooperation Multilateral Recognition Arrangement to cover accreditation of GHG validation and verification bodies in June 2015, becoming the fifth signatory in this discipline.   In January 2016, the APLAC Board of Management appointed Executive Administrator, HKAS as its Vice-Chair.   This helps HKAS' continued promotion of wider recognition of conformity assessment results issued by accredited testing and certification bodies in Hong Kong.

5.3   Following the signing of the Memorandum of Understanding with the GCC[6] Accreditation Center (GAC) in January 2015, Mr Nabil A MOLLA, Director-General of the GAC, visited Hong Kong at the end of 2015 upon the invitation of HKAS to enhance his understanding of Hong Kong's testing and certification industry and strengthen ties between Hong Kong and the relevant Arab states.

5.4   The HKAS also fostered cooperation with Taiwan by entering into a Memorandum of Understanding with the accreditation body there in June 2015.

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[6] GCC stands for the Cooperation Council for the Arab States of the Gulf.

CEPA

5.5   Under CEPA, the Agreement on Trade in Services (the Agreement) was signed in November 2015 and will be implemented as from June 2016. The Agreement covers and consolidates commitments (relating to liberalisation of trade in services and the testing and certification sector) provided in CEPA and its Supplements and also the Agreement between the Mainland and Hong Kong on Achieving Basic Liberalisation of Trade in Services in Guangdong (the Guangdong Agreement).   The Agreement also introduces a new liberalisation measure of implementing, on a pilot basis, a mutual recognition arrangement of certification and relevant testing business among Guangdong, Hong Kong and Macao in the China (Guangdong) Pilot Free Trade Zone, with a view to carrying out 'certified once, tested once, and results accepted by three places'.

5.6   HKCTC is now working with relevant Mainland authorities on the implementation guide of the Agreement, and will promulgate it on the HKCTC website once available.   It is expected that the new measure would further open the Mainland market for Hong Kong's testing and certification industry.

5.7   In July 2015, the implementation details of Supplement X to CEPA in relation to the movement of natural persons under the scope of testing and certification were promulgated.   It allows Hong Kong certification bodies accredited by HKAS to send staff to the Mainland to provide certification service to Mainland export enterprises, and such service is restricted to certification that is required for export purpose and certification results are to be used outside the Mainland.

5.8   Upon our invitation, officials from the Certification and Accreditation Administration of the People's Republic of China visited Hong Kong last year and spoke at the Seminar on Mainland Opportunities for Hong Kong's Testing and Certification Industry.   The seminar gave the audience an opportunity to enhance their knowledge about the Mainland market as well as various measures under CEPA.

Seminar on CEPA

VI. PROMOTION

HKCTC has continued to promote 'Tested in Hong Kong, Certified in Hong Kong' to potential service users. In 2015-16, HKCTC set up booths in 15 trade fairs in Hong Kong, two in the Mainland and one in Indonesia. We will continue to invite testing and certification bodies to participate in trade fairs and enrich the content of our exhibits.

6.2   During the year, the Hong Kong Trade Development Council (HKTDC) has also helped the promotion of Hong Kong's testing and certification services by displaying promotional materials at 22 trade fairs outside Hong Kong. With the assistance of HKAS, HKTDC and HKTIC, HKCTC arranged 12 seminars and a laboratory visit to promote testing and certification services to buyers and manufacturers attending HKTDC's local trade fairs.

6.3   With the support from HKAS, HKTIC and many veteran industry practitioners, HKCTC produced the fourth booklet to promote Hong Kong's testing and certification services. This booklet is on the subject of food testing, certification and inspection. The booklets have been distributed to international buyers and traders in HKCTC's booths at trade fairs.

6.4   In November 2015, HKCTC set up a promotion booth in the InnoCarnival of the InnoTech Month held in the HKSP to introduce the testing and certification industry to students and the general public. The booth featured interactive games and displays, attracting around 10,000 visitors. To raise the industry profile, a series of 25 half-page advertorials were arranged in Chinese and English newspapers and magazines in 2015-16. Photos of the efforts on promotion of testing and certification services are at

Annex 4   *Annex 4*.

VII. HOSTING AN ISO MEETING

Hong Kong has been a correspondent member of the International Organization for Standardization (ISO) for more than four decades.

7.2   For the first time, ITC hosted the ISO/ Technical Committee (TC) 176 (ISO/TC 176) Plenary Meeting in Hong Kong from 21-28 November 2015.   HKCTC is a co-organiser of the meeting.   ISO/TC 176 is responsible for standardisation in the field of quality management, and also for quality management standardisation in specific sectors.

7.3   Close to 200 technical experts from about 45 economies and over 10 international and regional organisations, as well as other ISO TCs participated in over 80 meetings to work towards further development of the ISO 9000 family of standards on quality management.   ISO 9001 is widely used globally.   There are currently 14 certification bodies in Hong Kong which are accredited by HKAS to provide ISO 9001 certification services.

7.4   The event provided local experts an invaluable opportunity to learn about the latest developments of the relevant international standards by attending meetings as observers.   The events also enhanced their knowledge of the standardisation process and relevant accreditation and certification work.   In addition, overseas and Mainland experts received first hand knowledge of the local testing and certification industry.   Further details of the events can be found at HKCTC website[7].

Opening Ceremony of ISO/TC 176 Plenary Meeting

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[7] http://www.hkctc.gov.hk/en/iso_tc_176_meeting2015.html

VIII. SUPPORT TO HKCTC

Secretariat Support

      The Secretariat of the Hong Kong Council for Testing and Certification (the Secretariat) serves as the executive arm of HKCTC. It comprises 11 civil service establishments set up on a permanent basis under ITC. The organisation chart of the Secretariat is set out at ***Annex 5***.

<u>Annex 5</u>

Resources

8.2   The Government provides financial support to HKCTC in the implementation of its initiatives. In 2015-16, the expenditure was roughly $5,900,000 (excluding staff emoluments[8]). About 60% of the expenditure was spent on setting up booths in trade fairs, participating in InnoCarnival 2015 and placing advertorials on newspapers and other publications to promote Hong Kong's testing and certification services. As a co-organiser of the ISO/TC 176 Meeting, HKCTC provided funding of $482,000 (about 8% of the total expenditure for 2015-16). The remaining amount was related to organising seminars on various topics to enhance professional standard in the industry, e.g. certification of construction materials, quality management and quality assurance, CEPA , as well as other initiatives.

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[8]   All personal emoluments and personnel related expenses of the staff in the Secretariat are met by the ITC from its recurrent operating expenditures.

**Terms of Reference of
Hong Kong Council for Testing and Certification**

To advise the Chief Executive on –

(a)   the overall development strategy of the industry;

(b)   new business opportunities worth exploring for the industry, having regard to latest developments in the Mainland and overseas markets; and

(c)   measures needed to raise the professional standing and community awareness of the industry.

Membership List of
Hong Kong Council for Testing and Certification
(until 31 December 2015)

Chairman

Professor CHING Pak-chung

Members

Mr CHAN King-wa, Felix
Dr CHOY Wai-fun, Priscilla
Mr FUNG Lap-chung, Richard
Mr KO Kwok-on, Andy
Professor KWAN Hoi-shan
Mr LAM Chun-hong, Dominic
Dr LAM Po-hing, Michael
Mr LAU Man-wai, Joseph
Ms LAW Sau-mui, Christina
Mr LEE Wai-kwok, Michael
Mrs LEUNG YANG Shih-ti, Marianne
Ir Dr Hon LO Wai-kwok
Ms NARDI Kar-wai, Agnes
Mr NG Ha-wai, Howie
Dr SHUM Wan-lung, Aaron
Mr TING Wai-cheung, Bernie
Professor YAM Wing-wah, Vivian
Mr YEUNG King-chung, Spencer
Executive Director of Hong Kong Productivity Council or representative
Executive Director of Hong Kong Trade Development Council or representative
Executive Director of Vocational Training Council or representative
Director-General of Trade and Industry or representative
Commissioner for Innovation and Technology or representative

Membership List of
Hong Kong Council for Testing and Certification
(from 1 January 2016)

Chairman

Professor YU Cheung-hoi, Albert

Members

Mr CHAN King-wa, Felix
Ir CHAN Kin-sek, Raymond
Mr CHAN Wai-fung, Raymond
Dr CHOY Wai-fun, Priscilla
Ir HO Chi-shing
Professor HO Kin-chung
Mr HSU Tsun-fai, Marvin
Mr KO Kwok-on, Andy
Ms NARDI Kar-wai, Agnes
Dr SHUM Wan-lung, Aaron
Mr TONG Shing-jing, John
Professor YAM Wing-wah, Vivian
Mr YEUNG Chi-wah, Harry
Mr YU Kwok-wai, Mickey
Dr YUNG Wai-hung, Raymond
Executive Director of Hong Kong Productivity Council or representative
Executive Director of Hong Kong Trade Development Council or representative
Executive Director of Vocational Training Council or representative
Government Chemist or representative
Commissioner for Innovation and Technology or representative

Membership List of Panels on Specific Trades (2015)

(a) Panel on Promoting Testing and Certification Services in Chinese Medicines Trade

Convener

Dr LAI Fook-ming, Lawrence

Members

Mr CHAN Yiu-tong, Tony
Professor CHAU Foo-tim
Dr CHOY Wai-fun, Priscilla
Ms CHUAH Ah-poh, Anne
Mr KO Kwok-on, Andy
Professor Kwan Hoi-shan
Mr LAM Chun-hong, Dominic
Mr LAU Man-wai, Joseph
Mr LI Ying-sang, Tommy
Professor LIN Zhi-xiu
Mr TSANG Chiu-hing
Professor TSIM Wah-keung, Karl
Dr Albert WONG
Mr WONG Cho-hang, Stanley
Ms WONG Suet-ying, Alice
Professor ZHAO Zhong-zhen
Secretary-General of Hong Kong Council for Testing and Certification
Representative of Department of Health
Representative of Government Laboratory
Representative of Hospital Authority
Representative of Hong Kong Productivity Council
Representative of Vocational Training Council

(b) Panel on Promoting Testing and Certification Services in Construction Materials Trade

Convener

Mr LEE Shing-see

Members

Mr AU Yeung Chi-king, Artur
Mr CHAN King-wa, Felix
Mr Wilman CHAN
Mr CHOW Ying-shun
Professor CHUNG Kwok-fai
Mr HO Kin-fung, Samson
Mr HUANG Jianmin
Professor KWAN Kwok-hung, Albert
Mr LEE Wai-kwok, Michael
Mr LEUNG Hon-chuen, Willie
Dr LO Yiu, Tommy
Mr PONG Chong, Edward
Mr TAM Tin-fong, Martin
Mr TSIEH Chi-kong, Joseph
Mr WONG Tin-cheung, Conrad
Secretary-General of Hong Kong Council for Testing and Certification
Representative of Development Bureau
Representative of Architectural Services Department
Representative of Buildings Department
Representative of Housing Department
Representative of Hong Kong Productivity Council
Representative of Hong Kong Trade Development Council
Representative of MTR Corporation
Representative of Vocational Training Council

(c)   Panel on Promoting Testing and Certification Services in Food Trade

Convener

Mr LEUNG Wing-lup, Gregory

Members

Dr CHOY Wai-fun, Priscilla
Mr CHUNG Hung-hing, Ken
Dr HO Shiu-woon, Allen
Mr KO Kwok-on, Andy
Ms KWAN Ching-yi, Miranda
Professor KWAN Hoi-shan
Mr LAM Chun-hong, Dominic
Dr LAU Lok-ting, Terence
Mr LAU Man-wai, Joseph
Mr LO Tim-lun, Jacky
Professor MA Ching-yung
Mr Bryan PENG
Mr POON Kuen-fai, Richard
Mr WONG Ka-wo, Simon
Professor WONG Wing-tak
Professor WONG Woon-chung, Jonathan
Mr WU Tze-chiu, Edmond
Secretary-General of Hong Kong Council for Testing and Certification
Representative of Food and Environmental Hygiene Department
Representative of Government Laboratory
Representative of Hong Kong Consumer Council
Representative of Hong Kong Productivity Council
Representative of Hong Kong Trade Development Council
Representative of Vegetable Marketing Organisation
Representative of Vocational Training Council

(d) Panel on Promoting Testing and Certification Services in Jewellery Trade

Convener

Mr WONG Kam-fai, Alan

Members

Ms CHAN Sin-hung, Catherine
Ms CHAN Wai-ching, Joanne
Mr CHEUNG Tak-hay, Haywood
Mr KO Kwok-on, Andy
Mr LAU Hak-bun, Dennis
Ms LEE Carlon, Stella
Mr LO Yick-sun, Louis
Mr MA Yung-yi, Lawrence
Mr MOK Wai-kei, Dominic
Dr SHUM Wan-lung, Aaron
Mr TSUI Kin-wah, Tommy
Professor YAU Hon-ming, Oliver
Ms YIP Oy-ling, Esther
Secretary-General of Hong Kong Council for Testing and Certification
Representative of Hong Kong Consumer Council
Representative of Hong Kong Productivity Council
Representative of Hong Kong Trade Development Council
Representative of Travel Industry Council of Hong Kong
Representative of Vocational Training Council

(e) Panel on Promoting Testing and Certification Services in Environmental Protection Trade

Convener

Professor LAM Kwan-sing, Paul

Members

Dr Leonard CHOW
Dr CHOY Wai-fun, Priscilla
Dr CHU Ka-lok, Peter
Mr FUNG Lap-chung, Richard
Mr FUNG Lim-chee, Richard
Professor FUNG Tung
Ms HO Wai-ping, Linda
Mr LAU Yan-kin
Ms Lau Yuk-kuen, Joey
Mr LEE Wai-kwok, Michael
Professor LEUNG Yiu-cheong, Dennis
Ir Dr Hon LO Wai-kwok
Ms NARDI Kar-wai, Agnes
Ms Jorine TAM
Mr Christopher TUNG
Mr WONG Lok-tak, Luther
Mr WONG Ming-yam
Dr YIP Chung-yin, Daniel
Secretary-General of Hong Kong Council for Testing and Certification
Representative of Electrical & Mechanical Services Department
Representative of Environmental Protection Department
Representative of Hong Kong Productivity Council
Representative of Vocational Training Council

(f) Panel on Promoting Testing and Certification Services in Information and Communications Technologies Trade

Convener

Mr LEE Wai-kwong, Sunny

Members

Mr CHENG Siu-hong, Raymond
Professor CHEUNG Wai-lok, David
Mr CHIU Chi-yeung, John
Dr IP Ngai-sang, Johnny
Dr KWOK Lam-for
Dr LEUNG Kam-nang, Hareton
Mr MIAO Ching-wei, Peter
Ms Jorine TAM
Ms Beata TANG
Mr WONG Chi-keung, Reggie
Dr YAU Bun, Oliver
Mr YAU Kwok-keung, Daniel
Secretary-General of Hong Kong Council for Testing and Certification
Representative of the Office of the Government Chief Information Officer
Representative of Hong Kong Applied Science and Technology
    Research Institute Company Limited
Representative of Hong Kong Cyberport Management Company Limited
Representative of Hong Kong Productivity Council
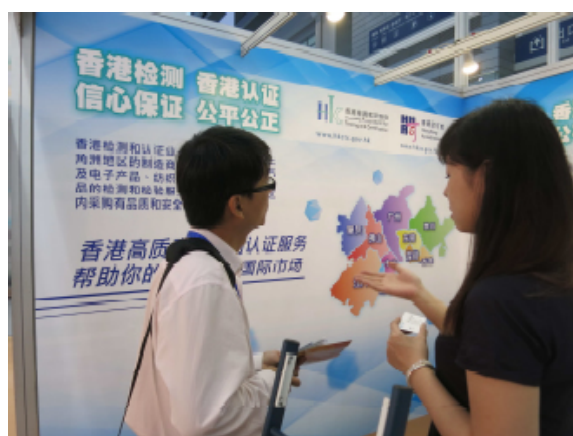Representative of Vocational Training Council

Efforts of Hong Kong Council for Testing and Certification to Promote Hong Kong's Testing and Certification Industry

InnoCarnival 2015

Trade Fairs in Hong Kong

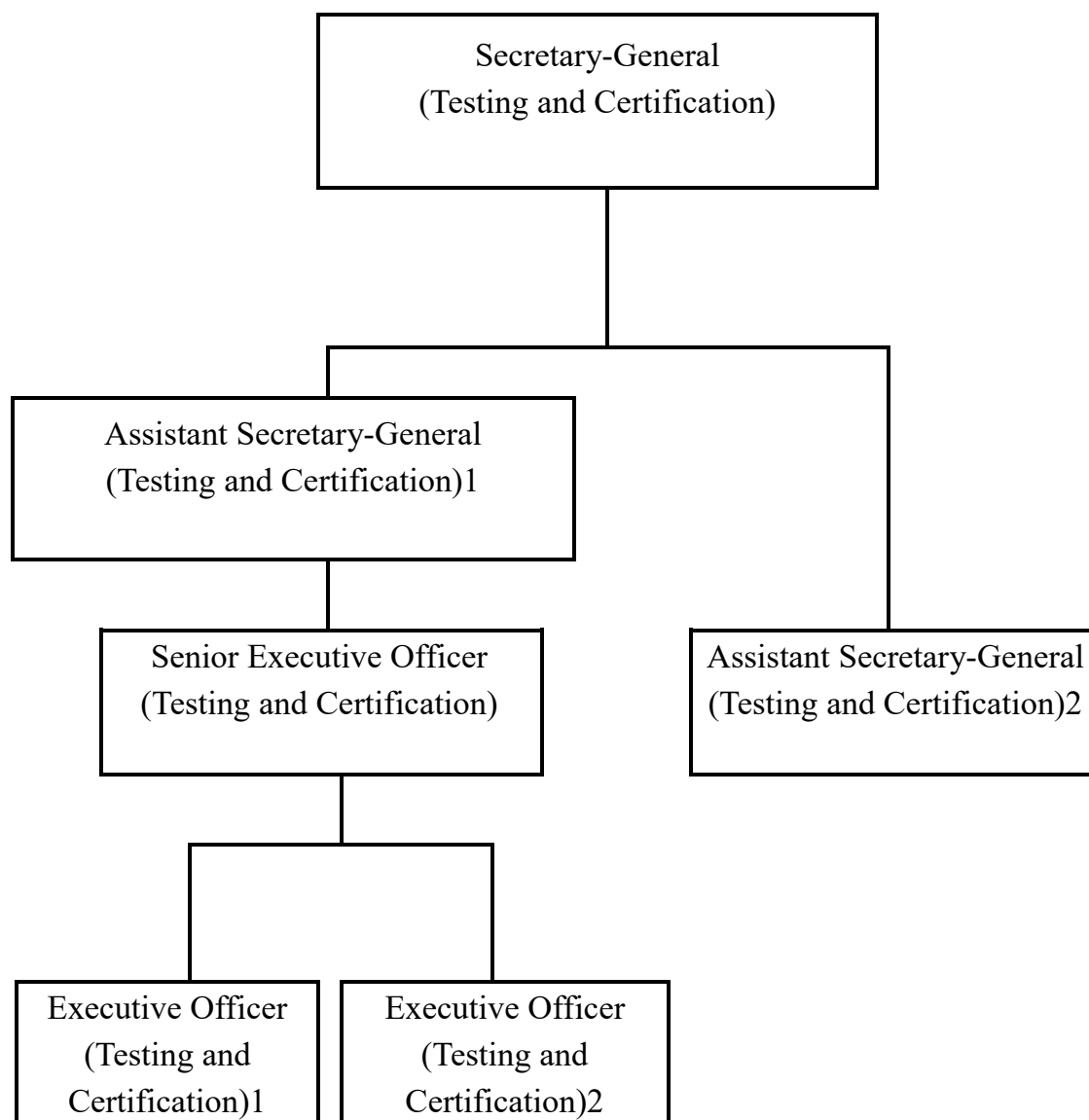China Hi-Tech Fair

Computex 2015, Taipei

In Style Hong Kong Expo, Jakarta

Booklets on Testing and Certification

Promotion of testing and certification on local newspapers and magazines

**Organisation Chart of
the Secretariat of the Hong Kong Council for Testing and Certification**
(as at 31 March 2016)

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┌─────────────────────────────┐
│      Secretary-General      │
│  (Testing and Certification)│
└─────────────────────────────┘
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┌─────────────────────────────┐
│ Assistant Secretary-General │
│ (Testing and Certification)1│
└─────────────────────────────┘
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┌─────────────────────────────┐     ┌─────────────────────────────┐
│   Senior Executive Officer  │     │ Assistant Secretary-General │
│  (Testing and Certification)│     │ (Testing and Certification)2│
└─────────────────────────────┘     └─────────────────────────────┘
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┌──────────────────┐   ┌──────────────────┐
│ Executive Officer│   │ Executive Officer│
│   (Testing and   │   │   (Testing and   │
│  Certification)1 │   │  Certification)2 │
└──────────────────┘   └──────────────────┘
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- In addition, there are five civil servants providing clerical and secretarial support.