

ice | hong kong

ice
Institution of Civil Engineers

ICE Breaker

Newsletter of ICE Hong Kong
2017 Issue 1



Message from ICE Representative for Hong Kong



Our fellow civil engineers will be kept very busy in the years to come. To meet huge demand from the society, Hong Kong's annual expenditure on public works projects exceeds HK\$80 billion in 2016-17, and is expected to remain at similar level in the next few years. Mega infrastructure projects in the pipeline include the new development areas in the New Territories and Lantau, the Lam Tin and Tseung Kwan O road tunnel, the Central Kowloon Route, seven new railway lines, and also the Three-runway System project. Apart from local projects, the Belt and Road initiatives advocated by the Mainland will also offer opportunities to our civil engineers.

While we are occupied with the project work, we should also make a concerted effort to confront the challenges ahead for the sustainable development of our construction industry.

Escalating Construction Cost

One of the major hurdles is the escalating construction cost. According to a recent report, we have surpassed London and Geneva to become the second costliest city in the world in terms of construction cost. High construction cost not only undermines our long-term competitiveness, but also lowers the return of capital investment. The Government recognises the gravity of this matter and is taking actions in earnest. The dedicated Project Cost Management Office (PCMO) established in 2016 is pursuing measures to tackle the issue.

The PCMO is making efforts to streamline existing public works requirements. New initiatives on buildability, BIM and procurement strategy are also being devised with a view to driving down project costs. On project scrutiny, the PCMO has already vetted more than 60 public works projects. Out of a total estimate of HK\$170 billion, we managed to achieve a saving of HK\$13 billion up to now. For enhancing project management performance, the PCMO is exploring quantitative risk analysis approaches, such as the Reference Class Forecasting methods and Monte-Carlo analysis, in conjunction with the prevailing qualitative risk-based estimation methods.

The PCMO is formulating good practices so as to foster cost conscious culture in the public as well as private sector. To arouse attention to this hot topic, the ICE HKA already held a one-day seminar on project optimization with in-depth discussion on cost management in February this year. I trust the ICE HKA will continue working closely with the PCMO to promote the good practices to and collect feedback from our fellow civil engineers.

Sustainable Supply of Civil Engineers

Apart from cost control, sustainable supply of civil engineers is another hurdle we should tackle. As revealed from a study report of the Academy of Sciences of Hong Kong in December 2016, fewer students are taking science subjects in HKDSE which provide the necessary foundation knowledge for a civil engineering degree at universities. Coupled with that, we also see a 25% drop of Secondary 6 student population from 2016 to 2022 arising from the dwindling fertility rate in the late 1990s and early 2000s. After hitting the trough in 2022, the number of high school graduates is projected to revert to the level of 2017 by 2026. Against this backdrop, we must be mindful of a possible decline of the number of prospective engineers in the coming years. Amid the keen competition for talents with other disciplines, it is high time we set about building a good image for civil engineers.

On this front, I am pleased that the ICE HKA has taken certain good efforts. The ICE HKA has organized activities such as "Future Engineers Project" for secondary school students to arouse their interest in the field engineering and provide a platform for them to share views and innovative ideas. A special task force, Civil Engineering Outreach, also arranged seminars and workshop as part of the career orientation programme for teenagers. Over the next few years, I do see the need for the ICE HKA to step up publicity efforts in secondary schools to establish the professional image of civil engineers and promote the career prospect in this field. Nowadays, young people, also known as the millennial generation, are more tech-savvy and receptive to new ideas than their previous generations. If we can attract them to join the ranks of civil engineers, they will certainly add vitality and quality to our professional workforce.

Appeal for Actions

The above challenges cannot be overcome by just the efforts of the ICE HKA or any party alone. You can play an active part by embracing cost control culture in your day-to-day work and joining the ICE activities to promote the image of engineers to students. Helen Keller once said, "Alone we can do so little; together we can do so much." Let us join hands to put words into action without delay.

C K Hon JP

ICE Representative for Hong Kong

ICE 10,000 Steps Challenge

By Ms Cecilia LAW



President Tim Broyd (4th from right) presented awards to winners at Presidential Reception held on 14 January 2017.

ICE HKA has organized the ICE 10,000 Steps Challenge for 1 month from 14 January 2017 to 13 February 2017 to raise fund where all the donation will go to ICE Caring Engineering* projects after deducting all the essential expenses, and to foster a healthy life style by having 10,000 steps and 8 glasses of beverage per day. The ICE 10,000 Steps Challenge was officially kicked off during the presidential reception.

There were all together 243 participants from 18 different organizations who have raised HK\$172,227 for ICE Caring Engineering. Congratulations to Ms Eva KONG, Ms Cecilia LAW and Mr TSE Hoi-yin for winning the award of "Maximum Donation Raised - Individual"; and ARUP for winning the awards of "Maximum Donation Raised - Company" as well as "Maximum Number of Participants". Let's maintain the healthy life style.

* ICE Caring Engineering (also named ICare) was established by a group of young engineers in 2011 under ICE Hong Kong Association. Our vision is to contribute to the communities with our professional knowledge and improve the living conditions of needy around mainland China and South East Asia Region.

ICE Vice President from Hong Kong

Congratulations to Mr Mak Chai-kwong for being the new ICE Vice President starting from November 2017! This is great news to us as Mr Mak is the first ICE Vice President from Hong Kong.

Mr Mak together with another new ICE Vice President, Dr Jane Smallman, will join current Vice Presidents Kyle Clough, Ed McCann, Rachel Skinner, Andrew Wolstenholme and Andrew Wyllie to work with incoming President Lord Robert Mair for the 2017/18 presidential year from November.



Forum on Innovations and Digital Technology in Civil Engineering Organised by ICE HKA and CIC HK

By Prof Ken HO, Mr Jacky WU, Mr CF TAN

Organiser	: Institution of Civil Engineers, Hong Kong Association (ICE HKA) Construction Industry Council, Hong Kong (CIC)
Date	: 12 January 2017
Participants	: Mr Chan Ka Kui, Chairman, CIC (Forum Chairman) Ms Eva Kong, Chairman, ICE HKA (Forum Facilitator) Prof Tim Broyd, President, Institution of Civil Engineers Dr Patrick Chan, Regional Director - Hong Kong, ICE Mr Cheung Hau Wai, Executive Director, CIC Ms Ada Fung, Deputy Director, Hong Kong Housing Authority, HKSAR Government Prof Ken Ho, Deputy Head of GEO, HKSAR Government Mr Thomson Lai, Director, AECOM Mr CM Lee, Immediate Past Chairman, ICE HKA Mr CK Ng, Director, Build.IT Prof Thomas Ng, Executive Director, Centre for Innovation in Construction, HKU Mr Vitus Ng, Principal Assistant Secretary (Works), DEVB, HKSAR Government Mr Kevin Poole, Executive Director, Third Runway – Airport Authority Hong Kong Mr Ching Fai Tan, President Apprentice, ICE Dr Ricky Tsui, Director, Arup Mr Jacky Wu, Honorary Secretary, ICE HKA Mr Kevin Yip, Senior Design Management Engineer, MTRC

The current ICE President, Professor Tim Broyd, is an expert in Building Information Modelling (BIM) and digital engineering and actively promotes innovations. His key presidential theme is: 'Engineering a Digital Future'. During his Presidential visit to Hong Kong from 11 to 14 January 2017, Prof Broyd sought to add value to members' efforts in delivering ICE's strategy and provide an opportunity for the regions to showcase to him what they are doing.

ICE HKA invited CIC HK to jointly organise a forum on innovations and digital technology on 12 January 2017. This was intended to serve as a platform for high-level exchange and in-depth discussion by industry stakeholders on the application of innovative technology and digital engineering. It also provided an opportunity to benchmark Hong Kong's

expertise in the use of cutting-edge and emerging technology against that in the UK, and to tap the latest insights of the UK construction industry and thought leader.

The forum was chaired by Mr KK Chan of CIC HK. Ms Eva Kong, Chairman of ICE HKA, was the facilitator for the discussion. To promote focused discussion, attendance was by invitation only, with a total of 17 participants. The representation embraced experts of various backgrounds including consultants, academia, government and large semi-statutory organisations (Airport Authority Hong Kong and Hong Kong MTR Corporation Limited). A separate session was arranged for Prof Broyd to meet experts with a contracting background and discuss about the use of BIM, robotics, VR/AR, 3D printing technology and other innovations in Hong Kong.



To set the scene, Professor Broyd gave an overview of UK's perspective on digital technology and innovations in the construction industry. He highlighted that the use of level 2 BIM modelling tool is now a prerequisite for all UK construction projects procured by the central British government since 2016, pursuant to the recommendation given in the policy paper 'Construction 2025: strategy' published by the Department for Business, Innovation & Skills in 2013. UK is now one of the leaders in BIM.

Ms Ada Fung, Deputy Director of Hong Kong Housing Authority, gave a succinct summary of the evolution and current status of BIM development in Hong Kong. She highlighted the latest breakthroughs in terms of BIM roadmap and BIM standard, and acceptance by a number of government departments of the use of BIM software in selected applications. She also shared her experience in the novel application of BIM and GIS in planning and design by HA for housing projects.

Dr Ricky Tsui, Ove Arup's Director of R&D in Hong Kong, gave various examples of the application of BIM and other digital technology and advanced modelling tools to add value to smart building and infrastructure projects, including master planning and feasibility studies, detailed engineering design and analyses, 3D ground modelling tools, value engineering, buildability and site safety risk assessment, parametric modelling, enhanced asset management involving integration of BIM, FM (facility management) and BMS (building management system), exploitation of IoT and cloud based mobile solutions, additive manufacturing, etc. from a consulting engineering perspective.

Prof Thomas Ng, Executive Director of Centre for Innovation & Infrastructure Development of Hong Kong University, gave an overview of the opportunities and challenges for innovations and digital technology to tackle the many thorny issues posed by the development of future high-density cities, such as smarter, more resilient, greater reliability, lesser carbon emission and energy usage, etc. The need for smart construction using novel approaches and tools together with new materials was emphasized. He also highlighted that the key to the successful use of digital technology and big data analytics lied in a smart, sustainable and reliable data infrastructure system.

Prof Ken Ho, Deputy Head of Geotechnical Engineering Office of Hong Kong SAR Government, outlined the application of digital technology in geotechnical engineering practice since the late 1990s. The extensive use of GIS had been embedded in standard routine practice, both for information management and advanced geotechnical analyses. Spatial data are being shared with practitioners as well as the general public. Digital photogrammetry is used extensively in routine practice based on ortho-rectified images and pattern recognition tools are applied. Web-based, mobile applications are of the essence in field mapping and landslide emergency response. State of the art remote sensing techniques (e.g. airborne LiDAR) are applied routinely, as is the use of UAV for remote aerial survey and photogrammetric analysis.

Real-time health monitoring using the latest suite of sensor technology (such as fibre optics and MEMS sensors) is also routine practice where the situation warrants it.

Following the presentations, the participants exchanged views and sought Professor Broyd's elaboration on the insights and strategic direction of the UK construction industry's thought leaders. The discussion covered, inter alia, the status of the newly established UK BIM Alliance, implementation details of the BIM mandate in UK (at present it does not cover projects procured by the regional British government or private sector clients) and other pertinent issues that would call for attention in taking BIM forward for construction projects in Hong Kong.

All in all, the forum has proved highly fruitful in sharing experience and insight in the application of digital engineering in the construction industry, both in Hong Kong and the UK. In particular, the forum has drawn out three elements that could promote innovations and foster wider use of innovative technologies in the construction industry:

- a) Contributions by pioneers – If nobody tries, no one will ever know if an idea or tool works in practice or not. The speakers have shared their respective experiences in piloting various innovative technologies in different areas. Their pilot use has provided valuable insights in respect of the value added nature and constraints of different innovative technologies, and helped to foster their wider application in the industry. As mentioned by Ms Ada Fung, when there are more parties using BIM in real projects, the peer pressure would naturally build up and motivate other practitioners to invest and catch up.
- b) Cooperation and consensus amongst industry stakeholders – Cooperation amongst industry stakeholders is needed in establishing industry wide roadmap and standard, as demonstrated by the leadership and coordination of CIC HK in promoting BIM application in Hong Kong. Such consensus will facilitate wider use of innovative technology in the construction industry and help the practitioners to gear up and upskill themselves.
- c) Commitment and leadership by Government – According to Prof Broyd's UK experience, commitment from the Government (being a major client in the construction industry) through its procurement requirements would be the most effective vehicle in expediting consultants and/or contractors to adopt a particular innovative technology.

As a postscript to the forum, the Chief Executive of HKSAR Government has announced in his 2017 Policy Address on 18 January 2017 that the Government will actively seek to require consultants and contractors to use BIM when undertaking design of major government capital works projects from next year onwards. The Policy Address also announced that an Innovation and Technology Application Centre will be set up by CIC HK in the second half of 2017 to provide a platform for introducing innovative technologies into the construction industry to enhance productivity.

Distinguished Civil Engineering Lecture and Briefing Session for ICE 200 Board Game Design Competition

By Ms Carrie CHEUNG, Secretary for ICE HKA ICE 200 Planning Committee

As a kick-off for the series of activities under ICE bicentennial celebrations in Hong Kong, the "ICE HKA Distinguished Civil Engineering Lecture and Briefing Session for ICE 200 Board Game Design Competition" was successfully held on 11 March 2017 at the Hong Kong Productivity Council, Kowloon Tong.

In order to enhance target participants' interests and understanding of the civil engineering world, as well as their knowledge in board games such that they would find integration and synergy between the two subjects, Mr CS Wai (Managing Director of Urban Renewal Authority) and Ms Jenny Yeung (Chief Geotechnical Engineer of Civil Engineering and Development Department) shared their personal experience and insights on "Why Civil Engineering is Fun and Meaningful?". Mr Thomas Lam, a registered social worker and a board game expert, gave an interesting talk on "How to Create a Successful Board Game?" while Ms Eva Kong (ICE Chairman 2016/17) and Mr Wing Li (Organising Committee of ICE 200 Board Game Design Competition) introduced ICE and the design competition rules.

The event has received overwhelming responses from more than 100 people with a wide range of backgrounds, including graduate/newly chartered engineers, civil engineering undergraduate students, management trainees, directors of non-government organisations, secondary school teachers and students, as well as the board game industry. Facebook live broadcast was first used in our activities. Those who were unable to register could still view it real time!

This design competition will tie in with ICE Council's Guidance on "ICE 200: Civil Engineers Transform Your Life". The winning board games are intended to be produced as a souvenir, or publicity/outreach merchandise, or a charity product for ICE 200. Through this competition, it is expected that the participants will gain a better understanding of our profession and their products will help further promote civil engineering to the younger generation. The competition is open to public. Deadline for application is 30 June 2017 (see the Rules for application).

Website: <https://www.ice.org.uk/near-you/asia-pacific/hong-kong/awards#ice200>

Follow us on Facebook: <https://www.facebook.com/ICE-200-Board-Game-Design-Competition-1632170770417917/>



Taiwan Delegation 2016

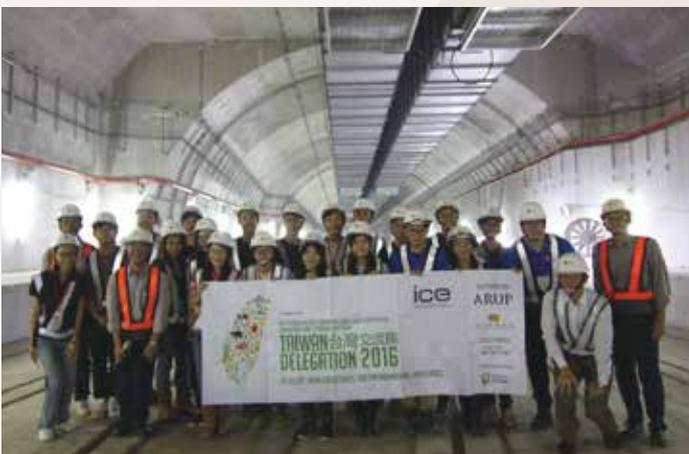
By Mr Marco Li

The Taiwan Delegation 2016 was successfully held between 17 and 20 November 2016 with 20 delegates. It was our pleasure to have Dr Benson Hsiung, ICE Representative in Taiwan, with us during our stay in Taiwan.

During the delegation, we explored the resilient technologies and materials showcased in National Taiwan University of Science and Technology as well as the research institute of Sinotech Engineering Consultants. To construct greener and more resilient buildings, we noted that Taiwanese engineers made use of hybrid solar lighting and high volume fly ash concrete to reduce CO2 emission. The application of Building Information Modelling in Taiwan is not only for construction, but also for controlling evacuation during an earthquake or a fire to increase public resilience to disasters.

We also visited the site of a residential development called 55 Timeless near Taipei 101 and the site of Taipei MRT Sinjhuang Workshop being constructed by Continental Engineering Corporation. The contractor illustrated how to optimise the seismic performance of the building by using fluid viscous dampers and how to minimise the impact of deep excavation by using sequential excavation method with stringent monitoring and control.

Our visit to Lanyang Museum had deepened our understanding of the cuesta formation in Yilan and how the landscaping works and superstructure were designed to blend into the special geological setting in Yilan. The delegation ended with a technical visit to Taipei 101 where delegates could understand the mechanism of the tuned mass damper in attenuating seismic movements of the skyscraper while enjoying the stunning view of Taipei city.



Technical Seminar on “Central Oasis” Revitalisation Project

By Mr Howard KWOK

Technical seminar on “Central Oasis” Revitalisation Project” was held on 7 December 2016. The seminar was presented by Mr Wilfred Au, General Manager (Planning and Design) of the Urban Renewal Authority.

Mr Au started the presentation by introducing the initiatives of the project and emphasised the importance of URA as an agent between the government and the public. URA endeavoured to strike a balance between the three opposing factors in the design of Central Market, namely the retention of significance, physical condition and stakeholders’ opinion. After extensive character-defining surveys, structural surveys and public engagement activities, the design of “Urban Floating Oasis” was finalised.

Mr Au then explained that the complexity of the structure implied considerable time and cost implications. URA then took the approach of a simpler design, which could still provide public open space in Central. Mr Au gladly shared with us the lessons learnt from the project, including technical challenges and resistance from stakeholders. He emphasised on engineers’ roles to keep the project viable and reasonably constructible. Moreover, he encouraged us to allow flexibility in design to cater for unforeseeable factors.

On behalf of ICE HKA G&S, we would like to express our sincere appreciation to the Mr Wilfred Au for sharing his knowledge and experience in implementation of revitalisation projects. In particular, as an architect, Mr Au’s sharing allowed our young engineers to stand in architects’ shoes and learn to work with professionals from other disciplines.



Model Building Competition 2017

By Mr Howard KWOK

Model Building Competition 2017 was held successfully on 21 January 2017. There were eight teams from four institutes joining the competition to build models of tower crane. The completed models were judged based quantitatively on self-weight and load capacity, and qualitatively on appearance and presentation.

The morning started off with the model building session. The teams were given limited Balsa wood and glue sticks to build tower crane models according to the specification. The afternoon session started soon after lunch break. Three experienced judges from different sectors of the civil engineering industry were invited to evaluate on the performance of the teams.

Each team was given five minutes to present their engineering justification of the model. All teams shared their design philosophy, mainly focusing on various failure modes and the arrangement of structural members to cope with them while some even carried out structural analysis to verify their design philosophy.

The highlight of the day was the model testing session. The load trial was carried out in four rounds. As the masses were loaded onto the models, we occasionally heard the cracking, or even observed exaggerated deflection of the structural members. Nonetheless, half of the models performed remarkably well and supported more than 4kg of masses.

Congratulations to the following winners of the competition:

Champion : The Engineering Disciples
 First runner-up : Happy New Megabuilders
 Second runner-up : FWJSG-Civil
 Best presentation : Civil carry you

The judges gave comprehensive feedback at the end of the session, and complimented the technical capabilities, alongside passion and enthusiasm in engineering the tower cranes. On behalf of ICE HKA G&S, we would like to express our sincere appreciation to the honourable judges, Mr Koon Yu LEUNG, Mr Jimmy TANG and Mr Wing LAW, for sharing their knowledge and experience with our young engineers.

Overall Event Rating: 8.33/10

Communications Competition 2016-17

By Ms Emily FUNG

Have you ever engaged in public consultation for development projects? Six teams of finalist of the Communications Competition 2016-17 Hong Kong took this challenge on 11 February 2017. Given twenty minutes to present on a given project in a mock public consultation meeting, followed by ten minutes Q&A session, the finalists tried their very best to win the support from the audience by conveying a clear message and comprehending the concerns from stakeholders.

Since December 2016, participants have prepared for the competition. They went through the preliminary round by submitting an Expression of Interest (EOI). Six teams of young passionate engineers were shortlisted to the final. All teams exhibited outstanding communications skills as well as in-depth engineering knowledge. They excelled in promoting their approach to the project to the public, and also interacted vibrantly with the judges. The judges were amazed by the quality of the teams and encouraged them to continuously demonstrate their communications skills throughout their careers.

The winners of the competition are as follows:

Champion : A.E.P.A.W.
 First runner-up : OAPeners
 Second runner-up : FWJSG-Civil
 Best presenter : Mr Ken Lai from OAPeners

Congratulations to the above winners. We would like to express our sincere gratitude to all the honorable judges, including Mr Eric MA, Mr Raymond LEE and Mr P K LEE, for their selfless contribution and support to the event. Their experience and knowledge in handling a public consultation was certainly a treasure for our young members.

Overall Event Rating: 8.33/10

One-day Seminar 2017 on "Project Optimisation - from Planning, Design to Construction"

By Mr Stanley CHEUNG

One-day Seminar 2017 on "Project Optimisation - from Planning, Design to Construction" was successfully held on 25 February 2017 with more than 80 participants.

The seminar consisted of presentations by six speakers from different backgrounds. Knowledge and experiences regarding effective and innovative project optimisation measures, e.g. cost control, New Engineering Contract (NEC) management and Building Information Modeling (BIM) technology, were introduced.

Cost is one of the key performance indicators for construction projects. Cost control can be centred around planning, estimating, budgeting, financing, funding and managing costs so that the project can be completed within the approved budget. Two speakers, Mr John Kwong and Mr Malcolm O'Neill, shared their views on cost management.

NEC is a formalised system that guides the drafting of documents on civil engineering and construction projects for the purpose of obtaining tenders, awarding and administering contracts. Three speakers, Mr Hon-shing Kan, Mr Harrison Cheung and Mr Tony Chiu, shared their experiences in NEC management.

A BIM-based integrated project delivery approach results in many advantages during the construction project lifecycle. It optimises the value of a project by improving efficiency through all phases. Combining and unifying detail information from all parties into an integrated model will improve the productivity of a project team and facilitate its management. A speaker, Mr Simon James Gallagher, illustrated the importance of IBM.

On behalf of ICE HKA G&S, we would like to express our sincere appreciation and gratitude to the six speakers for sharing their knowledge and experiences regarding effective and innovative project optimisation measures.

Overall Event Rating: 8.33/10

Emerging Engineers Award 2017 Regional Final

By Ms Elaine LAM

Emerging Engineers Award 2017 Regional Final was held successfully on 18 March 2017. The Award aims at promoting the communication of civil engineering ideas, researches, and best practice in projects and designs. Four finalists selected by experienced professionals had to give a 10-minute presentation on their submitted papers under the following four disciplines: (i) Structural and Materials, (ii) Geotechnical, (iii) Environmental, Hydraulics and Hydrology and (iv) Highways, Railways and Transportation. A 10-minute Q&A session followed.

The winners of the Emerging Engineers Award 2017 are as follows:

Champion	: Cheung Yan Long
First runner-up	: Kong In Yee
Second runner-up	: Wong Pak Yue
Merit	: Zhang Zirui

The judges had given comprehensive feedback on the presentations. They appreciated the high quality of work by the young engineers, and encouraged them to further develop their potential. On behalf of ICE HKA G&S, we would like to express our sincere gratitude to the honourable judges for their contribution and support to this event.



2016 Professional Review (Hong Kong) Pass List

Online Album



The Institution of Civil Engineers is pleased to announce that the following candidates have passed their Professional Review at the 2016 Hong Kong Professional Review.

Certificate presentation ceremony has been held on 14 January 2017 where new members received certificate from President Tim Broyd. Photos of ceremony can be found from ICE Hong Kong online album.

Chartered Professional Review Progressive (CPRP)	
Surname	Forenames
Lok	Tsz Hin

Member Professional Review (MPR)	
Surname	Forenames
Zeng	Congyi

Chartered Professional Review (CPR)					
Surname	Forenames	Surname	Forenames	Surname	Forenames
Cen	Jiajun	Cheung	Chung Ho Marcellina	Ekanayake	Prasad Amindra
Chan	Ching Yee	Cheung	Hong Yin	Fan	Dave
Chan	Chun Hin	Cheung	Kin Hang Thomas	Fung	Cho Kin
Chan	Chun Yin Victor	Cheung	Lap Pong	Fung	Ho Hon
Chan	Ka Hung	Cheung	Man Chun	Guo	Jiuhao
Chan	Ki Lok Clark	Cheung	Man Tung	He	Yufan Eddie
Chan	Leong Ting Lawrence	Cheung	Wai Yee	Ho	Ching Yeung Anson
Chan	Lok Him	Cheung	Yat Hang Vito	Ho	Chuen Fung
Chan	Sing Kit	Cheung	Yi Nga Regina	Ho	Chun Yuen
Chan	Wai Yin	Chim	Chiu Fung	Ho	Kin Ho
Chan	Wing Yin Fiona	Chiu	Shun Him	Ho	Kit Tak
Chan	Yin Wing	Chiu	Yik Kan	Ho	Leung Ming Sunny
Chang	Dongsheng	Choi	Chi Wai	Ho	Pui Ting
Chao	Man Sai	Chong	Hok Pan	Ho	Yuk Hong
Chee	Man Choi	Chow	Tsz Kin	Huang	Jialiang
Chen	Xianju	Chow	Wing Fai Jacky	Joshua	Rachel
Cheng	Ho Yin William	Choy	Ka Wun	Kanittanon	Anek
Cheng	Kam San	Choy	Wai Chiu	Kiziewicz	Dariusz
Cheng	Keung	Chu	Siu Hung	Ko	Ka Shing
Cheng	Yan Chie	Chui	Sai Yau	Koo	Wai Kin
Cheung	Cho Yeung Joe	Chung	Chi Hang	Kum	Chin Fai
Cheung	Chun Ki	Ding	Ching Shun	Kwai	Ka Lok



Membership

Surname	Forenames
Kwok	Ka Ho
Kwok	Yu Hang
Kwong	Ka Po
Kwong	Siu Tai
Lai	Ka Keung
Lai	Tsun
Lai	Ut Sang
Lai	Wing Yan Winnie
Lam	Chun Yin
Lam	Kiu Lau
Lam	Ping Chiu
Lam	Wan To
Lam	Yu Leung Alex
Lau	Chi Yuen
Lau	Hong Lok
Law	Bo Cheuk
Law	Sin Hang
Law	Wai Kuen
Law	Yu Him Jonathan
Leang	Yan Lai
Lee	Elizabeth
Lee	Jimmy Hok Cheong
Lee	Richard
Lee	See Wai Swire
Lee	Yim
Leong	Cheung Ching
Leong	Hiu Kan
Leung	Chun Hung
Leung	Chun Sai
Leung	Kar Kim
Leung	Pui Kuen
Leung	Siu Wun Kenny Alex
Leung	Wing Hang
Leung	Yu Wai
Li	Kwan Ting
Li	Siu Cheong

Surname	Forenames
Lin	Sheng Kuo
Liu	Chun Ming
Liu	Long Ting
Liu	Wung Tsun
Lo	Wai Lun Alan
Lui	Ho Lam
Lui	Kar Po Kate
Luk	Shiu Heng Wilson
Luk	Yik Chun
Luk	Yin Pok Alec
Mak	Chi Hung
Mak	Ching On Andy
Man	Wai Kong
Ng	Ka Hang
Ng	Ka Lok
Ng	Ka Yuen
Ng	King Wai
Ng	Sung Yuen
Ngai	Ka Kit
Nguyen	Khanh Thuy Mai
Poon	Chi Chiu
Poon	Fong Kwan
Poon	Ka Fai
Poon	King Hung
Sham	Cleon Kin Long
So	Hon Ching
Stonehill	Edward
Sung	Benjamin
Tam	Chi Ho
Tam	Kwok Kwong Tom
Tang	Chin Yuen
Tang	Pak On
Tang	Wing Hong
To	Wai Kit
Tong	Ka Kit
Tong	Vira Liwei

Surname	Forenames
Tsang	Fan Kong
Tsang	Shuk Woon
Tse	Ka Ki
Tse	Kwai Mo
Tse	Lai Yin Vincent
Tse	Nicolau
Tse	Tsz Kin
Tse	Vivian
Vishnoi	Paresh
Wan	Yee Ting
Wong	Chi Hin, Andrew
Wong	Hiu Kam
Wong	Lai Kay
Wong	Lam Kin
Wong	Pak Lim Daniel
Wong	Sin Yan
Wong	Vincent
Wong	Wai Lam, William
Wong	Wai Yu
Wong	Jimmy
Yan	Tung Hin Borze
Yang	Ran
Yeung	Kai Ching
Yeung	Wan Chun
Yip	Chi Kwan
Yip	Ho Tsang
Yip	Ka Yin
Yip	Lam Fung
Yiu	Tak Ki
Yu	Ricky Ho Yin
Yung	Siu Fung
Yung	Wan Yin
Zhang	Xun
Zheng	Alvin Wan Lung



State of the Nation: Digital Transformation report

ICE has launched its State of the Nation: Digital Transformation report.



The report looks at the challenges and opportunities around digital transformation of infrastructure, examining three key themes: productivity, behaviours and resilience. It argues that harnessing emerging and existing digital technologies and data to radically improve the design, delivery and performance of infrastructure assets – is the best way for industry and Government to embed digital transformation of infrastructure. We must deliver improved outcomes for consumers, the end-users of infrastructure, and make our assets and networks more resilient.

Visit our website to find the full report and animation video.



2017 Chartered Professional Review Preparation Workshops

Whether you are still under training or preparing for CPR, the key to success is understanding the ICE attributes. Writing up your professional development in terms of the attributes has never been more important, particularly now that the requirement for an experience report has been removed from the training submission. Understanding the ICE attributes is equally important to those coming to CPR from non-ICE training routes.

A series of training courses, including writing skills, are planned to follow the CPR process through the cycle of preparing the submission, presentation, interview and written exercise, providing detailed specific advice in a timely manner.

Code	Date	Topic	Application
A	18 Mar 2017	Understanding ICE Attributes	Completed
	28 Mar 2017	Writing Attributes	
B	10 Jun 2017	Preparing the Professional Review Report	Open for registration
	17 Jun 2017	Writing the Professional Review Report	
C	15 Jul 2017	ICE Professional Review Presentation, Interview and Written Exercise	Open for registration
	22 Jul 2017	Writing the Written Exercise	

Time : 9:00am - 12:00nn (Saturday)

Venue : 1/F HKPC Building, 78 Tat Chee Avenue, Kowloon Tong

Fee : HK\$900 per person (ICE & HKIE member) for 2-day course/
HK\$1,200 per person (non-ICE & HKIE member) for 2-day course

Speaker : Ms Gillian Castka, ICE Membership Development Officer

Book Now



Your contribution to Chartered Professional Reviews

By Ms Gillian CASTKA, ICE Membership Development Officer, Hong Kong

The annual Hong Kong Chartered Professional Reviews are scheduled for 9-16 September, with the application date looming, 5-9 June. What will be your contribution?

Under the ICE Code of Conduct, Rule 5 "All members...shall give all reasonable assistance to further the education, training and continuing professional development of others". What is your contribution to the Hong Kong Chartered Professional Reviews?

The Candidate

It is anticipated that some 200 first-time candidates will apply to become chartered civil engineers in September. They will be accompanied in equal number by those re-sitting following previous unsatisfactory Review. Of those 200 first-time candidates some 140-150 will have completed their professional development under non-ICE managed routes many of whom will not even be graduate members of ICE.

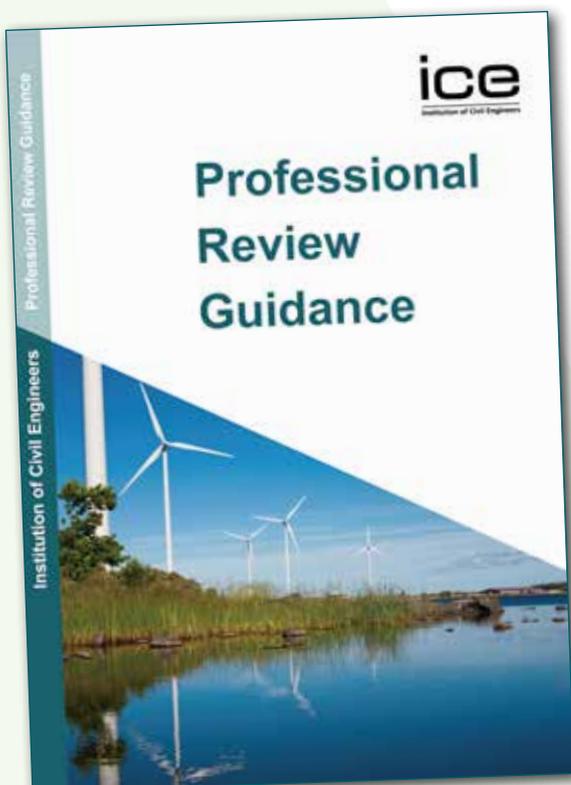
If you are applying for ICE Chartered Professional Review make sure you understand the requirements by reading the guidance note, <https://www.ice.org.uk/my-ice/membership-documents/professional-review-guidance> discuss your application and submission with your colleagues and most importantly engaging your sponsors.

If you are re-sitting, please review the comments provided to you following your unsatisfactory application. They are intended as constructive feedback. Do you understand those comments? Can you demonstrate a genuine effort has been made to improve in those areas?

Sponsors

The role of the three sponsors is equally important. Do you as a sponsor have first-hand knowledge of the candidate's technical and professional capabilities? Do you understand the ICE attributes and the ICE requirements for recording CPD? In sponsoring a candidate you are declaring that you believe them to be able to demonstrate the ICE attributes at the required level of a chartered civil engineer. Furthermore, that "The candidate is a fit and proper person for admission to membership". Please consider adding an additional personal statement of support to further endorse your candidate. If the candidate is re-sitting critically review the efforts that have been made since the previous application. Is six months sufficient to bring about the necessary improvement?

In addition the lead sponsor is committing to providing guidance to the candidate's submission in the form of reviewing content, proof reading reports and providing a mock interview. Carefully consider how many candidates you can reasonably support on what is for them, the most important day of their professional careers to date.



Reviewers

Reviewing some 400 candidates over nine days would not be possible without the assistance of senior members of the Institution giving up their time to act as Reviewers. It is always a challenge for the hardworking Administration team to find sufficient local reviewers with the time to spare, and typically some 20 or more Reviewers will be flown into Hong Kong from overseas to help out.

If you would like to take up the challenge of becoming a Reviewer please consider submitting an application <https://www.ice.org.uk/my-ice/membership-documents/professional-review-application-form> Training will be provided. Likewise if you have previously reviewed but have been too busy recently, refresher training can be provided. We look forward to hearing from you.

Colleagues

You may not have the time or seniority to act as a Sponsor or Reviewer, but on this important day every little bit helps. Knowledge is a two-way street, and you may be surprised at the opportunities to learn something new from becoming involved supporting a CPR candidate...and you will be fulfilling your professional commitment under ICE Rule 5.

IPD online upgraded

IPD Online has been upgraded in March 2017 to make it easier to use and introduce new features.

IPD Online is our platform to support members on an ICE Training Scheme or following our mentor-supported training programme. It helps you to record your progress and get feedback as you aim to complete your initial professional development (IPD) and become professionally qualified with ICE.

If you already use the system your information will be transferred to the new platform – you don't need to do anything. ICE Training Scheme Guidance and Mentor Supported Training Guidance have been updated to reflect changes.

Straightforward transfer to the new system

All the information – evidence, feedback, documents, annual appraisals and completions – entered by you or your advisor will be carried over to the new platform, without you having to do anything.

A simplified structure

One of the first things you'll notice about the new platform is the simplified structure for recording experience and assessing progress against attributes. The attributes aren't changing and you'll still need to demonstrate the same breadth of experience, but they will be consolidated to make it easier for you to record and keep track of evidence. You can see an example in the screenshot of the new system above.

Attribute level sign-offs

Because the attributes have been consolidated to make them easier to manage, we've also consolidated your attribute level sign offs by choosing the lowest level previously signed off for that attribute.

If these aren't what you expect, don't worry. Next time you submit some evidence to your advisor, they can consider that attribute in the round and choose to sign off your evidence at the appropriate level. You'll see more detail about this when you log into the new platform.

Other improvements

Other improvements for trainees include:

- A document library to help you manage your documents such as development reports, drawings and CPD records. You'll be able to link a single document to many attributes (you can see a screenshot of the new document library below)
- Increased flexibility if you wish to record your IPD at IEng or CEng level while you are working towards gaining the required academic qualifications to sit professional review at this level
- A help centre to answer the common questions around initial professional development and IPD Online (you can see a screenshot of the new help centre below)

To find out more



Event Schedule 2017-18

Remember to visit our website at www.ice.org.uk/hongkong for latest updates of events. Notice will also be sent to all Hong Kong members by email every month.

Activity Date	ICE Hong Kong Programme	Responsible Party
3-10 Apr 2017	G&S Denmark Delegation	G&S Division
18 Apr 2017	G&S Seminar Road to Chartership	G&S Division
21 Apr 2017	2017 CPR Candidates Briefing	Regional Support Team
22 Apr 2017	G&S Joint Soc One Day Seminar	G&S Division
23 Apr 2017	G&S Career Development Workshop	G&S Division
28 Apr 2017	Annual Conference "Strengthening Competence and Competitiveness for Internationalisation of Hong Kong's Construction Industry"	Annual Conference Sub-committee
29 Apr 2017	G&S Technical Visit to Liantang -Contract 2	G&S Division
10 May 2017	G&S Seminar on marine construction safety	G&S Division
11 May 2017	HKA Networking Tesla Test Drive	Networking Activities Sub-committee
13 May 2017	HKA Site Visit - Wan Chai Bypass	Technical Visit Sub- Committee
15 May 2017	G&S Delegation Dissemination Seminar	G&S Division
26 May 2017	G&S AGM and Seminar	G&S Division
29 May 2017	G&S Talk – "CPR - from failure to success"	G&S Division
09 June 2017	HKA AGM and Annual Dinner	Annual Dinner Sub-committee
17 June 2017	HKA Breakfast Forum	Technical Seminars / Talks Sub-committee
24 June 2017	HKA Site Visit to Central Police Station - Tai Kwun	Technical Visit Sub- Committee
10 & 17 June 2017	Chartered Professional Review Preparation Workshops	Regional Support Team
30 June 2017	Career Appraisal counselling, Hong Kong	Regional Support Team
Jul 2017	HKA ICE200 Boardgame Comeptition - 1st Round	CEO Sub-committee
15 & 22 Jul 2017	Chartered Professional Review Preparation Workshops	Regional Support Team
28 Jul 2017	Attribute based Professional Assessment counselling, Hong Kong	Regional Support Team
08 Sep 2017	CPR 2017 Reviewers Conference	Regional Support Team
9-16 Sep 2017	CPR 2017	Regional Support Team
9, 11 Sep 2017	CPR 2017 New Reviewers Training	Regional Support Team
14 & 21 Oct 2017	Chartered Professional Review Preparation Workshops	Regional Support Team
11 & 18 Nov 2017	Chartered Professional Review Preparation Workshops	Regional Support Team
25 Nov 2017	Candidate Briefing for UK Spring	Regional Support Team
Nov 2017	HKA Delegation	Delegation Sub-committee
Dec 2017	X'mas Party	G&S Division
11-13 Jan 2018	Presidential Visit	Regional Support Team
13 Jan 2018	Membership Certificate Presentation Ceremony	Regional Support Team

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