

MAPPING THE FUTURE OF BUILT ENVIRONMENT: THE ROLES OF QUANTITY SURVEYORS

28 October 2023



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HKIS QSD Conference 2023

ABOUT QUANTITY SURVEYING DIVISION (QSD) OF HKIS



工料測量組 Quantity Surveying Division

Quantity Surveying Division (QSD) is one of the six divisions of the Hong Kong Institute of Surveyors. Members of the QSD are professionals who have been trained as construction cost consultants. They possess expert knowledge in costs, values, finance, contractual arrangements and legal matters pertaining to the construction field.

As at 20 October 2023, the QSD has 5,041 members. Among them, there are 3,463 Corporate Members, including 213 Fellow Members. Besides Corporate Members, the QSD has 213 Honorary Fellow Members, 29 Associate Members, 1,456 Probationers and 92 Student Members. Most of the Quantity Surveyors in Hong Kong are Members of The Hong Kong Institute of Surveyors. Entry qualifications of professional grade members shall require high level of education, extensive practical training and passing an assessment of professional competence.

The quantity surveying practice has a long history in Hong Kong. The oldest professional quantity surveying firm has been around for more than 60 years. It is believed that the government hired its first expatriate quantity surveyor even earlier. In the past six decades, the profession has witnessed a number of significant changes.

- The majority of quantity surveyors are now Hong Kong Chinese.
- The proportion of female quantity surveyors has increased dramatically.
- · The number of local graduates now outweigh the number of overseas graduates.
- · Measurement units have changed from imperial to metric.
- The measurement practice has evolved from manual to electronic.
- The role and scope of the services offered by quantity surveyors has been enhanced to keep abreast with the development of the society. In the old days, quantity surveyors worked on building projects only. Today, more are working on civil engineering, mechanical and electrical engineering, renovations, fitting out, and maintenance projects.
- Hong Kong has exported its professional quantity surveying services to other geographical locations, such as the Middle East, Southeast Asia, and Mainland China. It should be noted that quantity surveyors have been working on Mainland projects since the 1980s.

Over the past three decades, the QSD has achieved some remarkable feats:

- Signing Reciprocity Agreements with professional institutes overseas, namely the Australian Institute of Quantity Surveyors (AIQS), the Building Surveyors Institute of Japan (BSIJ), the China Cost Engineering Association (CCEA), the Chartered Institution of Civil Engineering Surveyors (CICES), the Canadian Institute of Quantity Surveyors (CIQS), the New Zealand Institute of Quantity Surveyors (NZIQS), and the Singapore Institute of Surveyors and Valuers (SISV).
- Joining International quantity surveying and cost engineering organisations, namely the Pacific Association of Quantity Surveyors (PAQS) and the International Cost Engineering Association (ICEC) in 2018, respectively.
- Its membership has grown from 71 founding members in 1984 to a staggering 3,463 fully qualified members as of Oct 2023.
- The International Construction Measurement Standards Coalition (ICMSC) officially launched the International Construction Measurement Standards in Vancouver in July 2017. The ICMSC is also available in Chinese. The HKIS is one of the 45 international professional organizations will strive to promote the ICMSC to the members, the allied professional bodies and relevant private organizations.

As the Institute's largest division, the QSD will strive for excellence to meet the challenges presented by a changing global economy and advancements in information technology. In the old days, it was focused on quantity as a measurement of its progress. Today, quantity surveyors must equip themselves with modern, sometimes innovative, skills in order to continue as highly valued and renowned professionals in the construction industries of Hong Kong and the Asia Pacific Region.

MESSAGE FROM GUEST OF HONOUR

HKIS QSD Conference 2023

Ms HO Wing Yin, Winnie, JP

Secretary for Housing, Housing Bureau

My sincerest congratulations to the Hong Kong Institute of Surveyors (HKIS) Quantity Surveying Division (QSD) for hosting the QSD Conference 2023.

The theme of the conference – "Mapping the Future of Built Environment: The Roles of Quantity Surveyors" – rightly gives us a heads-up to think about more ways Quantity Surveyors may contribute to meet the challenges ahead and the needs of the future built environment. Amidst the increasing demand for manpower and professionals to meet the expanding volume of development in both the public and private sectors in Hong Kong, the profession is facing a golden opportunity to transform its services into smarter and more valueadded solutions at all fronts. In this connection, I am delighted to know that the Quantity Surveying profession is progressing well towards such goal, as exemplified by the speakers today on four core areas including digitalization, procurement and contract strategy, decarbonisation and sustainability, and construction dispute resolution.

Indeed, all these would not be possible without innovation and technology (I&T). The Government advocates that overcoming resource constraints will require innovative solutions. Government departments, consultant firms and construction companies have started to apply I&T in their work. The Hong Kong construction industry and our built environment are migrating to a new digital era with the application of big data and artificial intelligence. With the joint efforts from different disciplines in the industry, I am confident that we will see a remarkable development of QS work in the near future.

We are grateful to have HKIS QSD as a key partner in the surveying professions leading to the industry continuously excelling towards the well-being of the built environment in Hong Kong.

MESSAGE FROM HKIS PRESIDENT

HKIS QSD Conference 2023

Sr WONG Kwok Leung, Paul

President The Hong Kong Institute of Surveyors

On behalf of the Hong Kong Institute of Surveyors (HKIS), I am beyond honoured to welcome you all to the HKIS Quantity Surveying Division Conference 2023. It's truly a pleasure to have our esteemed guests, renowned speakers and fellow members with us, sharing their invaluable experiences and insights in the surveying field. I am particularly delighted to welcome Ms. HO Wing Yin, Winnie, JP, the Secretary for Housing, HKSAR Government, as our honourable Guest of Honour. Her presence adds a layer of expertise and authority, further enhancing the depth of our discussions.

Since 1984, the Hong Kong Institute of Surveyors (HKIS) has been striving for greatness in the surveying industry by establishing professional standards, setting codes of ethics, and acting as a platform for our fellow surveyors to continuously improve their skills and knowledge. Among all our endeavours, we recognise the importance of continued professional development. Therefore, the HKIS QSD Conference 2023 aims to provide one of the most valuable opportunities for guests and members across the globe to exchange their perspectives and experiences.

As we are in an era with a dynamic and unprecedented pace, rapid urbanization, technological advancements, and sustainability becoming an imperative rather than an option. In this transformative era, the role of Quantity Surveyors is pivotal in the built environment, guiding the trajectory of development and ensuring the seamless integration of innovation, efficiency, and responsible practices.

With the theme of this year's conference, "Mapping the Future of Built Environment: The Roles of Quantity Surveyors", the conference today serves as a unique platform for us to collectively explore and navigate the latest issues, challenges and opportunities that lie ahead. I believe that through the enlightenment we gained from this conference and the collective efforts, the surveying industry in Hong Kong can continue to thrive.

Lastly, I would like to express my heartfelt gratitude to all participants, speakers, moderators, sponsors, supporting organisations as well as the organising committee led by Sr Amelia FOK, Chairman of the organising committee for their dedication to this conference. I wish the conference immense success and all of you have an engaging and inspirational conference today. Thank you.

MESSAGE FROM QSD CHAIRMAN

HKIS QSD Conference 2023



Sr CHOI Shing Lam, Sunny

Chairman Quantity Surveying Division, The Hong Kong Institute of Surveyors

Welcome to the HKIS QSD Conference 2023

It is my great honour as the Chairman of the Quantity Surveying Division (QSD) of the Hong Kong Institute of Surveyors, to extend a warm welcome to all participants of the HKIS QSD Conference 2023.

Our conference theme, "Mapping the Future of Built Environment: The Roles of Quantity Surveyors", signifies the pivotal moment at which our profession stands. With the industry experiencing constant change, the role of Quantity Surveyors has expanded beyond the traditional boundaries of cost estimation and project management.

During this conference, we will delve into the transformative impact of "Digitalisation in the Hong Kong Construction Industry," exploring how technological advancements are revolutionizing our practices. Furthermore, we will shed light on "Procurement and Contract Strategy," examining the influence of new procurement approaches and contract forms on contract consultancy and management. Recognizing the urgent need for "Decarbonisation and Sustainability," we will explore the opportunities and potential roles for Quantity Surveyors in this domain. Lastly, we will address "Construction Disputes and Resolution," sharing valuable strategies and best practices to effectively manage conflicts and achieve successful project outcomes.

We are truly privileged to have Ms. HO Wing Yin, Winnie, JP, the Secretary for Housing, HKSAR Government, as our esteemed Guest of Honour, along with eight distinguished guest speakers from government departments, statutory bodies, law firms, and the corporate sector. They will share their invaluable experiences and insights on the latest developments and challenges faced by Quantity Surveyors in the built environment.

It is also a pleasure to note the presence of over 200 participants, including our esteemed members, construction practitioners, QSD scholarship holders, and university students, who have joined us in person for this conference. Additionally, this year, we have invited our Young Quantity Surveyor Award Winners to serve as moderators, fostering a dynamic exchange of ideas between different generations. Through this conference, we aim to inspire and encourage more young talents to join the Quantity Surveying profession and contribute to its ongoing growth and development.

Finally, I would like to express my sincere gratitude to all our sponsors and supporting organizations for their unwavering support. I extend my heartfelt thanks to the conference organizing committee, led by Sr Amelia FOK, for their dedicated efforts in making this conference a resounding success. Last but not least, I extend my gratitude to all the participants for their support, which has truly made this conference a remarkable and successful event.

Thank you.

MESSAGE FROM QSD CONFERENCE 2023 OC CHAIRMAN

Sr FOK Ching Yin, Amelia

Organising Committee Chairman The HKIS - QSD Conference 2023

As the Chairman of the Organising Committee for the HKIS – Quantity Surveying Division Conference 2023, it is my distinct pleasure and honor to extend a warm welcome to each and every one of you.

HKIS QSD Conference

2023

The theme of this year's conference, "Mapping the Future of Built Environment: The Roles of Quantity Surveyors," encompass pivotal areas that are shaping the future of our esteemed profession. We will delve into the profound impact of Digitalisation in the Hong Kong Construction Industry, the imperative of Decarbonisation and Sustainability, the strategic insights into Procurement and Contract Strategy, and the effective resolution of Construction Disputes.

In the face of rapid digital innovation and transformative changes within the construction industry, it is imperative that we continuously seek new knowledge and assimilate the experiences of others. Through this unwavering commitment, we can better serve society and propel its continued success.

Our meticulously curated conference program is designed to showcase the latest developments and emerging trends in quantity surveying within the built environment. By exploring future opportunities, we aim to elucidate how our profession can continue to make meaningful contributions to the built environment, guided by unwavering professionalism.

We are truly honored to have the presence of Ms. Winnie HO Wing-yin, JP, the Secretary for Housing, as our esteemed Guest of Honour. Additionally, we are privileged to host esteemed practitioners as our speakers, who will share invaluable insights and best practices in empowering well-being, fostering innovation, driving efficiency, and preserving the environment. Together, we aspire to equip our fellows with well-rounded skills and knowledge, fortifying their professional competence and propelling the advancement of our industry.

Serving as the Chairman of the Organising Committee has been an immense privilege, made possible by the overwhelming support received from both the industry and society. I extend my heartfelt gratitude to our sponsors, supporting organizations, esteemed guests, and dedicated organizing committee members for their tremendous support and dedication in ensuring the resounding success of this conference.

Lastly, I extend my deepest appreciation to each and every one of you for your active participation today. May your engagement in this conference yield fruitful outcomes and rewarding experiences, as together we collectively shape the future of our profession.

ABOUT ORGANISING COMMITTEE

HKIS QSD Conference 2023

QSD Chairman

• Sr Sunny CHOI

QSD Conference 2023 OC Chairman

• Sr Amelia FOK

Members (in alphabetical order)

- Sr Pesire LAU
- Sr Betty LO
- Sr Eric TING
- Sr Amee TONG
- Sr Colin WONG
- Sr Karen WONG
- Sr Sunny WONG
- Sr Staw WONG

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CONFERENCE PROGRAM



Session 2: Decarbonisation and Sustainability

1120 - 1150	Opportunities for QS on the Journey Towards Net Zero	Sr Ling LAM Managing Director Rider Levett Bucknall Limited	
1150 - 1220	Surveyor's roles in decarbonisation and sustainability	Sr LEUNG Tak Ming, Anderson Director of Works and Contracts Urban Renewal Authority	
1220 - 1235	Panel discussion	Moderator Sr LAU Yuen Man, Pesire DTZ Postgraduate Scholarship recipient The Hong Kong Institute of Surveyors	
1235 - 1400	Lunch	here the second second	

CONFERENCE PROGRAM

Time	Programme	Speaker
Session 3:	Procurement and Contract St	rategy
1400 - 1415	Souvenir Presentation to Sponsors	
1415 - 1445	Three Runway System Project Procurement and Contract Management	Sr TONG Yuen King, Amen General Manager, Contracts (Third Runway) Airport Authority Hong Kong
1445 - 1515	Design and Build Contract using NEC Form	Sr AU Koon Shan, Raymond Principal Projects Commercial Manager MTR Corporation Limited
1515 - 1530	Panel discussion	Moderator Sr WONG Chi Ho, Colin Young QS Awards awardee The Hong Kong Institute of Surveyors
1530 - 1545	Break	

Session 4: Construction Disputes and Resolution

1545 - 1615	Managing Construction Disputes in a Post-pandemic Era	Sr CHEUNG Kwok Kit (KK) Partner (Litigation and Dispute Resolution) Deacons
1615 - 1645	Mapping the Future of Built Environment: QS in Alternative Dispute Resolution	Sr YEUNG Man Sing (MS) Partner Li & Partners
1645 - 1700	Panel discussion	Moderator Sr TING Yuen Chun, Eric Young QS Awards awardee The Hong Kong Institute of Surveyors
1700 - 1705	Closing Remarks	Sr FOK Ching Yin, Amelia Organising Committee Chairman Quantity Surveying Division Conference 2023 The Hong Kong Institute of Surveyors

* The programme rundown may be subject to change

LIST OF SPEAKERS & TOPICS in order of presentation delivery



Sr LEUNG Oi Kwan, Katherine

Assistant Director (Quantity Surveying) Architectural Services Department, HKSARG **Topic:** Overview of QS Innovation Journey - Mapping Future Vision of ArchSD

Sr LAM Ching Wah, Andrew

Assistant Director (Project) 2 Housing Department, HKSARG **Topic:** Beyond Zeroes and Ones: Building Quality Homes in the Digital Era



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Sr Ling LAM

Managing Director Rider Levett Bucknall Limited **Topic:** Opportunities for QS on the Journey Towards Net Zero

Sr LEUNG Tak Ming, Anderson

Director of Works and Contracts Urban Renewal Authority **Topic:** Surveyor's roles in decarbonisation and sustainability





Sr TONG Yuen King, Amen

General Manager, Contracts (Third Runway) The Hong Kong Housing Authority **Topic:** Three Runway System Project Procurement and Contract Management

Sr AU Koon Shan, Raymond

Principal Projects Commercial Manager MTR Corporation Limited **Topic:** Design and Build Contract using NEC Form





Sr CHEUNG Kwok Kit (KK) Partner (Litigation and Dispute Resolution) Deacons

Topic: Managing Construction Disputes in a Post-pandemic Era

Sr YEUNG Man Sing (MS)

Partner Li & Partners **Topic:** Mapping the Future of Built Environment: QS in Alternative Dispute Resolution



SPEAKERS INFORMATION & ABSTRACTS

HKIS QSD Conference 2023



Sr LEUNG Oi Kwan, Katherine

Assistant Director (Quantity Surveying) Architectural Services Department, HKSARG

About the Speaker

Sr Katherine Leung joined the Architectural Services Department (ArchSD) as Quantity Surveyor in 1997 and was promoted to Assistant Director (Quantity Surveying) in 2022. She has been involved in various capital works projects (such as schools, government offices, hospitals, quarantine facilities, public mortuary, data centre, swimming pool complex, open space, light public housing, etc.), and provides professional support to project team including preparing project estimate, devising and implementing procurement and contract strategy, monitoring financial position of project, providing cost, contract and procedural advices, and settlement of final account.

Katherine has also been involved in promoting innovation in Quantity Surveying Branch (QSB) of ArchSD to enhance the efficiency of quantity surveying practices. Innovative applications developed so far includes smart contract advisory system, e-project cost analysis platform, data digitization and visualization, artifical intelligence cost estimation system, auto building works tender price index compilation, etc.

To meet the future challenges of ArchSD, Katherine would maintain the innovation momentum in QSB and apply cutting-edge digital tools in quantity surveying practices.

Abstract

Overview of QS Innovation Journey - Mapping Future Vision of ArchSD

Public works projects will increase in volume, grow in size and become more complex in the coming years while the Government is investing in public housing projects, healthcare projects, sports and recreation facility projects, and various infrastructure projects to provide better public space and facilities for the residents in Hong Kong. To meet the future challenges, the Architectural Services Department (ArchSD) is exploring possible solutions to enhance efficiency.

In June 2020, ArchSD and the Hong Kong Science and Technology Parks Corporation jointly organized the "Project Cost Data Decode Hackathon" to inspire innovative ideas for cost estimation. More importantly, we sowed the innovation seed for tomorrow. Starting from hackathon, ArchSD led their quantity surveying (QS) colleagues to go through an eye-opening experience, among others, in the whole new realm of cutting-edge digital tools. They unveiled the state-of-the-art in artificial intelligence (AI), machine learning, big data analytics, building information modelling (e.g. 5D-BIM and BIM CAVE), data digitalisation and visualisation with tangible benefits in time, cost and quality.

Looking forward, the construction industry in Hong Kong will soon turn into a new chapter with the city blueprint megaproject of the Northern Metropolis in the pipeline. To assist in building the city, ArchSD would actively adopt green, innovative and smart designs to enhance productivity and sustainability performance in those related projects. We realize that innovation does not just hinge on technology but is more about the human motivation in exploitation of possible ideas to spur better changes. Our QS team is ready to ignite more potential in application of AI, automation and digitalisation in QS practices to streamline the operation for mapping future vision of ArchSD.

SPEAKERS INFORMATION & ABSTRACTS

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Sr LAM Ching Wah, Andrew

Assistant Director (Project) 2 The Hong Kong Housing Authority

About the Speaker

Sr Andrew Lam is an Assistant Director in the Development and Construction Division of Housing Department. He is responsible for overseeing the planning, design and construction of a range of public housing developments under the Housing Authority, including new construction and redevelopment of existing estates, in accordance with the housing construction programme. He assists in the formulation of construction policies and procedures with a view to producing quality homes and meeting the Housing Authority's objectives.

Before taking up the role of Assistant Director in 2022, Andrew was the Department's chief quantity surveyor, looking after the provision of professional services on construction expenditure budgeting, cost control, project planning, tendering, contractual advice, risk management, value engineering, dispute resolution, etc. in the delivery of public housing projects. Andrew has extensive experience in cost, procurement and contract management to oversee and monitor the programme, cashflow and contract administration for smooth implementation of housing construction programme. He had also provided strategic planning for the development of "Design and Build" procurement model for Housing Authority's projects.

Abstract

Beyond Zeroes and Ones: Building Quality Homes in the Digital Era

The digital revolution has transformed every aspect of our lives, and the construction industry is no exception. It has disrupted conventional processes, changed the way of design and build, and opened new possibilities for innovation. Digitalisation comes in different forms (e.g. spatial, data, textual), covers multiple facets (e.g. automation, artificial intelligence, analytics) and offers many opportunities.

The Hong Kong Housing Authority (HA) fully embraces the digital revolution and always strives for innovation to enhance its work in terms of efficiency and effectiveness. HA spares no effort in exploring, adopting, and often developing its own innovative technologies to underpin its work for the delivery of an ever challenging housing production programme.

This presentation outlines HA's experience in the development and use of various new technologies and digital tools in its projects, including Building Information Modelling, Quantity Take-Off, Geographic Information System, Generative Design, robotics, Reality Capture, etc. The presentation also shares HA's vision and mission and explains what goes beyond zeroes and ones in building quality homes for the public. The speaker will also share his views on digitalisation from a Quantity Surveyor's perspective.

SPEAKERS INFORMATION & ABSTRACTS

HKIS QSD Conference 2023



Sr Ling LAM

Managing Director Rider Levett Bucknall Limited

About the Speaker

Sr Ling Lam is the Managing Director of Rider Levett Bucknall Ltd. (RLB) overseeing the business in North Asia and a Global Board Director. RLB, one of the largest independent global QS consultants, operates from more than 120 offices across the globe and has over 4,000 people.

Qualified as a Quantity Surveyor, Ling has a unique portfolio of local and global knowledge and experience, which is enriched by her close working relationship with many diverse clients and stakeholders. She has successfully delivered many iconic projects with commendable outcome covering a variety of sectors.

Ling is an active member in the Hong Kong construction industry. She is Chairperson of the Association of Consulting Quantity Surveyors (2021/2023) representing the QS consultant community.

Ling's achievements in the construction industry were validated by RICS and nominated her as the Winner of the Woman of the Built Environment Award 2021. She was the awardee of the QS Award of Excellence 2022 of the Hong Kong Institute of Surveyors (HKIS) (QSD).

Abstract

Opportunities for QS on the Journey Towards Net Zero

Climate change and related consequences are fueling extreme weather conditions that are constantly affecting human lives and our planet. The extreme weather conditions will only get worse unless we take action. To address this issue, the building industry throughout the world has attempted to establish various frameworks to reduce carbon footprint of the built environment. The frameworks generally set out roadmap towards the carbon neutrality pathway and serve as platforms for evaluating carbon footprint, reporting the progress of stakeholders' carbon reduction commitment and achievements.

Hong Kong Government has committed to achieve carbon neutrality by 2050. To achieve this target, we need commitment not only from industry leaders, construction professionals, contractors and the whole supply chain to drive the adoption of decarbonization, and we also need a robust framework and good practice in guiding us along the decarbonization journey.

This presentation aims to identify some of the challenges for achieving this target, and the opportunities available for Quantity Surveyors to expand their service horizon. The presenter will provide a brief overview of the following aspects of the carbon journey, and highlights areas where Quantity Surveyors could support such value proposition: (1) approach for carbon quantification, (2) integrating carbon and cost reduction strategies for building design, (3) carbon benchmark database, and (4) adopting "Build Smart" strategies in design, procurement and construction.

SPEAKERS INFORMATION & ABSTRACTS

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Sr LEUNG Tak Ming, Anderson

Director of Works and Contracts Urban Renewal Authority

About the Speaker

Mr. Anderson LEUNG, a qualified Quantity Surveyor, is currently the Director of Works and Contracts Division in the Urban Renewal Authority. He is leading a multi-disciplinary team to manage the implementation of redevelopment projects and conservation projects, and arrange repair and maintenance works for the organisation's premises. He has extensive experience in setting the standard and quality of redevelopment projects. He is now coordinating the smart provisions and sustainable development of the redevelopment projects. He is also a co-opted member of Green Labelling Committee.

Abstract

Surveyor's roles in decarbonisation and sustainability

Mr Leung will introduce URA's sustainability development in the context of the urban renewal. There are three key parts in this presentation, highlighting URA's mission, industry challenges, and the role of quantity surveyors in contributing to the process.

SPEAKERS INFORMATION & ABSTRACTS

HKIS QSD Conference 2023



Sr TONG Yuen King, Amen

General Manager, Contracts (Third Runway) Airport Authority Hong Kong

About the Speaker

Amen Y K Tong, General Manager, Contracts (Third Runway Division) of the Airport Authority Hong Kong, is responsible for contracts management of all third runway system's contracts. Amen was recently held the position of General Manager, Technical Services Department and was responsible for the facility management of the Authority's assets at the Hong Kong International Airport, and for planning, technology development and implementing of improvement and enhancement works. Amen Tong is a Chartered Surveyor and Chartered Builder with more than 35 years of experience, within which over 25 years are on the planning, design, construction, contracts management, operation and maintenance of airport infrastructure, facilities and systems. Amen Tong had been taken up other senior positions including head of Procurement Department and General Manager of Property Development with the Authority.

Abstract

Three Runway System Project Procurement and Contract Management

The Three-runway System (3RS) project is critical for meeting long-term air traffic at Hong Kong International Airport (HKIA) and strengthening Hong Kong's status as a leading aviation hub. It is also an integral part of Airport Authority's long-term visions to transform HKIA from a City airport into an Airport City.

The 3RS project comprises the reclamation of approximately 650 hectares of land; building of T2 Concourse and an associated apron; building of a new 3,800-meter-long new runway (designated as North Runway) and it's supporting taxiway systems and reconfiguration of the existing North Runway (re-designated as Centre Runway); expanding Terminal 2 to provide full-fledged passenger services including arrivals and departures facilities; building a new 2,600-metre-long Automated People Mover system at a top speed of 80km/h that will connect Terminal 2 with the T2 Concourse; a new Baggage Handling System linking Terminal 2 with the T2 Concourse; and building other associated airport support infrastructure, road network and transportation facilities.

The 3RS project is one of the biggest airport expansion project in the world and also the biggest construction project in Hong Kong with a budget of HK\$141.5 Billion. The procurement strategy and contract management become crucial elements for the successful completion of the Project on time, within budget and in best quality.

SPEAKERS INFORMATION & ABSTRACTS

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Sr AU Koon Shan, Raymond

Principal Projects Commercial Manager MTR Corporation Limited

About the Speaker

Professional quantity surveyor / Cost Engineer, accredited commercial mediator of One Belt One Road International Commercial Mediation Centre (一帶一路國際商業調解中心) and RICS accredited Commercial mediator, Approved List of Dispute Resolution Advisor and Housing Authority Dispute Avoidance and Resolution Advisor, accredited adjudicator, arbitration practitioner, expert witness, NEC4 accredited Project Manager and NEC4 accredited Tutor. Possess more than 31 years practical working experience in building, civil and infrastructure, railway, tunnelling, building services and electrical & mechanical works and BIM specification & contractual matters & determination, in private and public sectors, with particular specialization in contract management of traditional form of contracts and NEC collaborative form of contracts, procurement strategy, contract documents formulation, cost planning & control, risk management, and claims review and determination.

Abstract

Design and Build Contract using NEC Form

- 1. Overview of Contractual frame of NEC4 Form a) Client's Scope for Contractor's design
 - b) Contractor's scope for design and build works
- 2. Design Responsibility Principles and Lesson Learnt a) Fitness for purpose
 - b) Reasonable skill and care
- 3. Inconsistence between Client's Scope and Contractor's scope
 a) Potential sources of inconsistence
 b) Contractual resolution
- 4. Design for Permanent Works and Temporary Works a) Acceptance Procedure
- 5. Design Related Compensation Eventsa) Potential compensation eventsb) Contractual procedure

SPEAKERS INFORMATION & ABSTRACTS

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Sr CHEUNG Kwok Kit (KK)

Partner, Litigation and Dispute Resolution Deacons

About the Speaker

Sr CHEUNG Kwok Kit (K.K.) has wide experience in dealing with a variety of private and government building projects in Hong Kong, some of which was gained when practising as a quantity surveyor. He also acts for developers, contractors and subcontractors in construction projects, in litigation, arbitration and mediation and undertakes general advisory work in relation to construction contracts in Hong Kong, Macau and Mainland China. He conducts CIETAC arbitrations in Shenzhen, Shanghai and Beijing and acts as an arbitrator and mediator in construction and commercial disputes. He also handles cross-border disputes involving Hong Kong, Mainland China and other countries.

He also handles cross-border disputes involving Hong Kong, Mainland China and other countries.

He has been recognised as a leading lawyer for the categories of Construction and Dispute Resolution: Litigation by Legal 500 Asia Pacific and Chambers Greater China and Asia-Pacific for consecutive years.

Abstract

Managing Construction Disputes in a Post-pandemic Era

Arbitration is the usual means for resolving construction disputes which is notoriously expensive. Legislations have recently been passed to allow third party funding and outcome related fee structures arrangements for arbitration in Hong Kong. In this session, KK will explain what these arrangements are and how quantity surveyors can assist their clients in managing construction disputes when one or both parties are using these arrangements.

SPEAKERS INFORMATION & ABSTRACTS



Sr YEUNG Man Sing (MS)

Partner Li & Partners

About the Speaker

Sr. Man Sing Yeung is a practicing arbitrator, mediator and construction lawyer in Hong Kong. He is accredited as a chartered arbitrator, chartered quantity surveyor and accredited mediator/adjudicator. Sr. Yeung was the former Chair of the Chartered Institute of Arbitrators (East Asia Branch), and the Hong Kong International Arbitration Centre - Hong Kong Mediation Council. He was a member of the Steering Committee on Mediation of the Department of Justice, HKSAR. He is now the Chair of the Law Society's Arbitrators Admission Sub-committee, and a director of the Asian Institute of Alternative Dispute Resolution, Malaysia. Having acted as an arbitrator for a fair no. of cases since 2000, he is with arbitral panels in China, Dubai, Hong Kong, India, Japan, Korea, London, Malaysia, Singapore and Taiwan; and being on mediation panels of different jurisdictions, he also mediates cases involving construction-related and cross border investment disputes. He acted for parties in arbitrations for Hong Kong infrastructural-related projects and a Korean commercial development, Macau hotels, and recently in establishing an adjudication mechanism for Hong Kong security of payment legislation and preparing standard construction contract documentation for the public sector. He studied QS and Law in Hong Kong and read Engineering at Cambridge.

Abstract

Mapping the Future of Built Environment: QS in Alternative Dispute Resolution

The ever-booming construction industry in Hong Kong and Mainland China not only brings in business for developers and practitioners but also generates a growing need for construction dispute resolution services. In the past decades, alternative dispute resolution ("ADR") has risen in popularity with construction contracts due to the confidentiality and expediency that it provides, which in turn significantly increased the demand for construction arbitrators, mediators, adjudicators, and quantum experts in Hong Kong.

With a record number of arbitration filings over the past years, the amended legislation of arbitration and mediation, and the incoming enactment of the Security of Payment legislation, quantity surveyors can seize up opportunities and play pertinent parts in the ADR industry. This talk will highlight the roles that quantity surveyors can take up in construction ADR, examine the pathways and requirements for these positions, and provide some thoughts into the developing landscape of construction ADR in Hong Kong. Through this sharing, we hope that quantity surveyors can learn more about how they can participate in ADR, explore possibilities, and grasp opportunities as Hong Kong becomes the dispute resolution hub in the region with its recognized judicial system and close proximity to Mainland China.

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MODERATORS INFORMATION



Sr WONG Shuk Yu, Karen

Young QS Awards awardee The Hong Kong Institute of Surveyors

Biography

Sr Karen Wong is a qualified quantity surveyor with over 13 years of professional practice in both consultancy and contracting firms. Sr Wong is now working as a Contracts Manager in CR Construction Company Limited. She qualified in 2015 and become a Fellow in 2023.

She is the Council Member of HKIS Quantity Surveying Division and Committee of LEAPS. Sr Wong was one of the awardees of the HKIS QSD Young QS Awards in 2022.

MODERATORS INFORMATION



Sr LAU Yuen Man, Pesire

DTZ Postgraduate Scholarship recipient The Hong Kong Institute of Surveyors

Biography

Pesire is a highly accomplished professional with a diverse academic background and over 15 years of experience in the construction industry. She holds a bachelor's degree in Construction Economics and Management from the Hong Kong Polytechnic University, where she was recognized as a Dean's List student. Additionally, she obtained a Bachelor of Laws from the University of London in 2011. In 2018, she was awarded a DTZ Postgraduate Scholarship and earned a master's degree in Project and Enterprise Management from the University College London graduating with distinction.

Pesire possesses a considerable depth of experience within the field of quantity surveying consultancy in Hong Kong and China, demonstrating a remarkable level of expertise in providing comprehensive quantity surveying services throughout the construction project lifecycle. She is particularly proficient in cost planning and estimating, pre-construction management and project planning, procurement strategies and contractual dispute settlement.

Pesire has successfully delivered a diverse range of complex development projects in Hong Kong, China, Macau and East Asia, including offices, residential buildings, retail complex and educational institution development. She has also made contributions to infrastructure projects for the Hong Kong Airport Authority, public housing projects for the Hong Kong Housing Society and government school projects for the Architectural Services Department.

In addition to her professional accomplishments, Pesire currently serves as a council member of the Quantity Surveyor Division of the Hong Kong Institute of Surveyors. She had also shared her knowledge and expertise as a part-time lecturer at the Vocational Training Council. Pesire's commitment and expertise make her a valuable asset in the field of quantity surveying.

MODERATORS INFORMATION



Sr WONG Chi Ho, Colin

Young QS Awards awardee The Hong Kong Institute of Surveyors

Biography

Sr Colin Wong is a Council member of Quantity Surveying Division.

Colin is now working as a Quantity Surveyor in Architectural Services Department. Graduated from the City University of Hong Kong, he received a Bachelor of Surveying and a Master of Law. Colin has been involved in a variety of projects including commercial, residential, public works project and mega size mixed use property development projects in Hong Kong. Colin is also qualified in acting as mediator.

MODERATORS INFORMATION



Sr TING Yuen Chun, Eric

Young QS Awards awardee The Hong Kong Institute of Surveyors

Biography

Young QS Awards awardee

Honorary Secretary, Quantity Surveying Division, The Hong Kong Institute of Surveyors

- Director of MJ Consultants Ltd.
- · Specialise in construction contract and claims and are experienced in projects in both private and public sectors
- Quantum Expert for cases in the arbitration tribunals and the High Court
- Adjudicator of HKIS, Adjudicators Nominating Body under Development Bureau's register
- Accredited Mediator of HKMAAL, listed mediator of Integrated Mediation Office and BMMCO of the Judiciary, mediator of HKIA & HKIS Joint Panel Mediators, Victim Offender Mediation Professional Mediator, Restorative Conference Facilitator
- Accredited NEC4 ECC Project Manager
- Chairman of the QSD Contract Sub-Committee, Vice-chairman of QSD Education Committee, committee member
 of the HKIS Editorial Board and Dispute Resolution Committee
- Board member of Surveyors Registration Board, Surveyors Registration Ordinance (Cap. 417)
- Member of Youth Affairs Committee and the Task Force on Review and Enhancement of Construction Contract Terms, Construction Industry Council (CIC)
- Committee Member of the Young QS Group of the Pacific Association of Quantity Surveyors (PAQS)
- Member of Appeal Tribunal Panel, Building Ordinance (Cap. 123)

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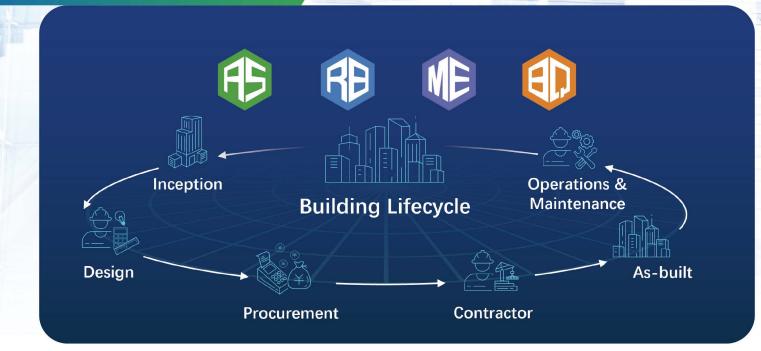
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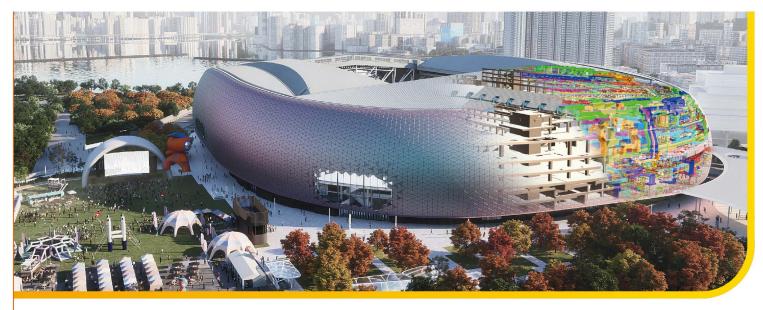
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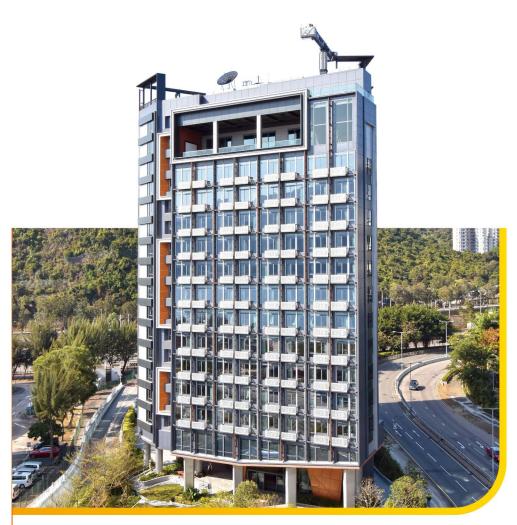
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NEC in Hong Kong

NEC procurement contracts have had a transformative effect on the built environment and infrastructure industry worldwide. They have proved that through collaboration, fair dealing and good management, even the most high-risk and complex projects can be delivered on time, within budget and without litigation.

NEC is a family of contracts that help apply good project management principles and practices, and define legal relationships. The contracts are suitable for procuring a diverse range of works, services and supply, ranging from major framework projects through to minor works and the purchase of supplies and goods.

NEC has been used on a variety of projects across the built environment, from construction of bridges to drainage improvement to maintenance of power stations.

In 2006, the Hong Kong government decided to trial the NEC3 on 30 pilot projects worth £1.2 billion to encourage collaborative working in the construction industry. The first NEC pilot project in Hong Kong was the Fuk Man Road nullah improvement in 2009, which was designed to improve the local environment of Sai Kung town, known to many as the back garden of Hong Kong. This project was completed six months ahead of time and 5% below the final target cost.

The success of these projects led the Hong Kong government to adopt NEC3 as the default contract for its ± 7

billion a year public-sector works programme from 2015. Hong Kong transport authority MTR and energy utility CLP also followed suit, along with a number of private sector developers.

Now, NEC has been used in Hong Kong on over 500 contracts with an accumulated value of over HK\$270 billion (£27 billion), and the Hong Kong Development Bureau has adopted NEC4 as their preferred contract for building and infrastructure works. Collaborative contracting remains at the core of government procurement policy in Hong Kong.

One of Hong Kong's largest NEC4 contracts was the Dongjiang P4 water main replacement project. The main transfers raw water from Dongjiang in mainland China received at Muk Wu pumping station to water treatment works or to impounding reservoirs for temporary storage. The project won the 2023 NEC Water Contract of the Year award.



Dongjiang P4 water main replacement project, Hong Kong



Why NEC?

The NEC suite has evolved over four decades, embedding consultation responses and user feedback while also reflecting industry developments and emerging best practice.

It is the only standard contract whose development has been led by project practitioners and not lawyers. Their insight means that the use of NEC stimulates good management of the relationships within the project and the work the parties deliver together.

NEC4 is the fourth evolution of the NEC suite of procurement contracts that were originally launched in the UK in 1993. All NEC4 contracts are designed around the following three principles:

- They stimulate good management of the relationships between those signing the contract and the work involved in the contract
- They can be used in a diverse range of commercial situations, for a wide variety of work and in any location around the world
- They are clear, simple and written in plain English, using a language and structure which is straightforward and easily understood

The benefits of using NEC4 contracts for a project include building mutual trust and cooperation, cultivating a collaborative mindset, more effective risk and claims management, and better portfolio management.

NEC offers a comprehensive range of practice notes, webinars, training, events and books to provide further support to users. NEC has been running accreditation programmes for NEC managers since 2013 and there are now over 5,000 NEC accredited project managers, service managers and supervisors worldwide.

In order for companies and organisations to understand what NEC is and how NEC can help support their projects and drive better delivery outcomes, NEC's Toolkit is designed to provide key messages and advice for senior leaders, decision makers and key stakeholders in their business. The NEC Toolkit is available to download on neccontract.com/resources/nectoolkit.



NEC Asia Pacific Conference

NEC is hosting the annual Asia Pacific Conference in Hong Kong on the 4th December 2023. This event will bring together industry players to discuss the latest in NEC in Hong Kong. It will include case studies, learning opportunities and discussion time with peers.

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