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Quantity Surveyors

Canadian Institute of Institut canadien des économistes en construction

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To promote the professional status of Institute members by establishing and maintaining high standards and ethics, and fostering excellence through education and the interchange of knowledge and partnership with industry stakeholders.

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Staying Relevant and Remaining Connected

Engaging for the benefit of our profession

Arif Ghaffur, PQS(F)

his is my penultimate message as Chair and an appropriate time to start reflecting on the ongoing progress of our global profession, particularly as we enter the 65th anniversary of the Canadian Institute of Quantity Surveyors. The objectives of the CIQS continue to be closely interlaced with other forward-thinking and progressive professional organizations that are seeking to pivot themselves to consider new and continuously developing socio economic norms.

To an increasing extent, these norms are requiring that the CIQS proactively reaches out to engage stakeholders in a manner that seeks to share and elevate the profession. This requires worthwhile effort to connect and seek conversation. Iterative stakeholder engagement has the benefit of understanding and benchmarking the approaches and priorities of other professional organizations – across multiple jurisdictions – that also seek to elevate their statuses.

In this vein of outreach and progression, I was pleased to recently meet Tina Paillet, incoming President of the Royal Institution of Chartered Surveyors, in London, UK. On the same occasion, CEO Sheila Lennon and I met with Justin Sullivan, RICS President Elect and Lorella Paterson, Director, International Markets. We had a broad and engaging discussion at the core of which covered various aspects were important initiatives including the need to update the RICS/CIQS reciprocity agreement, dual member fee considerations, continuing annual joint events, the Canada construction



Sheila Lennon, Arif Ghaffur, Tina Paillet, Justin Sullivan, and Lorella Paterson.

"

In engaging in the above outreach, the CIQS continues to focus on elevating the profession to establish its members as the go-to thought leaders in the arena of construction economics.

monitor, updates to project loan monitoring guidelines, thought Leadership, and standards. We covered many areas of mutual interest and agreed on a roadmap for future discussions and ongoing dialogue.

Whilst in London, we had the opportunity to meet with Batsetswe Motsumi, President of the Chartered Institution of Civil Engineering Surveyors (CICES). In our discussion with Batsetswe, we explored several emerging thematics, including adding value through collaboration, approved personnel development schemes, and accredited courses. It was interesting to learn of how the CICES supports its members and many employer organizations engaged directly with the CICES in the geospatial and commercial management space.

During our visit, we also met with Catherine Dixon, the CEO of the Chartered Institute of Arbitrators (CIArb) and Nina Fletcher, Executive Director of Membership and Education. CIArb is a global leader in the arena



Arif Ghaffur, Batsetswe Motsumi, and Sheila Lennon.



Nina Fletcher, Arif Ghaffur, Catherine Dixon, and Sheila Lennon.

of alternative dispute resolution. Catherine and Nina explained CIArb's ongoing initiatives in providing value to its members and its initiatives in upholding standards. The common thread of our dialogue was the shared vigour with which the CIQS, RICS and CIArb are pursuing agendas to remain current and relevant.

In engaging in the above outreach, the CIQS continues to focus on elevating the profession to establish its members as the go-to thought leaders in the arena of construction economics as we collectively build an inclusive community of global professionals.

In closing, I extend heartfelt thanks to our members, friends, and family for your encouragement as the CIQS continues to elevate itself and as I work with the Board to achieve its objectives. I wish you all the best for the months ahead and look forward to every opportunity to meet members who continue their excellent work in advancing construction economics across Canada!

Respectfully submitted, Arif Ghaffur, PQS(F) Chair, CIQS



Rester pertinent et connecté

S'engager pour le bien de notre profession

Arif Ghaffur, ÉCA (F)

oici mon avant-dernier message en tant que président, et le moment est bien choisi pour commencer à réfléchir aux progrès continus de notre profession au niveau international, en particulier à l'aube du 65e anniversaire de l'Institut canadien des économistes en construction. Les objectifs de l'ICÉC continuent d'être étroitement liés à ceux d'autres organisations professionnelles progressistes et tournées vers l'avenir, qui cherchent à s'adapter aux nouvelles normes socio-économiques en constante évolution.

Dans une mesure croissante, ces normes exigent l'engagement proactif de l'ICÉC auprès des parties prenantes afin de partager et d'élever la profession. Il nous faut donc mettre en place des efforts pour nouer des liens et rechercher la conversation. L'engagement itératif des parties prenantes présente l'avantage de comprendre et de comparer les approches et les priorités d'autres organisations professionnelles (dans différentes juridictions) qui cherchent également à améliorer leur statut.

Dans cette optique de sensibilisation et de progression, j'ai eu le plaisir de rencontrer

récemment Tina Paillet, future présidente de la Royal Institution of Chartered Surveyors (RICS), à Londres, au Royaume-Uni. À cette occasion, la directrice générale Sheila Lennon et moi-même avons rencontré Justin Sullivan, président élu de la RICS, et Lorella Paterson, directrice des marchés internationaux. Nous avons eu une discussion ouverte et passionnante au cours de laquelle nous avons abordé divers éléments et des initiatives importantes, notamment la nécessité de mettre à jour l'accord de réciprocité entre la RICS et l'ICÉC, les considérations relatives à la cotisation des personnes membres des deux associations, la poursuite d'événements joints annuels, le suivi de la construction au Canada, les mises à jour des lignes directrices relatives au suivi des prêts de projets, le leadership d'opinion et les normes. Nous avons abordé de nombreux domaines d'intérêt mutuel et avons convenu d'une feuille de route pour les discussions futures et le dialogue continu.

Lors de notre séjour à Londres, nous avons eu l'occasion de rencontrer Batsetswe Motsumi, président de la Chartered Institution of Civil



Sheila Lennon, Arif Ghaffur, Tina Paillet, Justin Sullivan et Lorella Paterson.

En participant aux activités de sensibilisation décrites ci-dessus, l'ICÉC continue à se concentrer sur l'élévation de la profession afin de définir ses membres comme les leaders d'opinion incontournables dans le domaine de l'économie de la construction.

Engineering Surveyors (CICES). Lors de notre discussion avec M. Motsumi, nous avons abordé plusieurs thèmes émergents, notamment la valeur ajoutée par la collaboration, les programmes approuvés de développement du personnel et les formations accréditées. Il était intéressant d'apprendre comment la CICES soutient ses membres et les nombreuses organisations d'employeurs qui collaborent directement avec la CICES dans le domaine géospatial et de la gestion commerciale.

Au cours de notre visite, nous avons également rencontré Catherine Dixon, directrice générale du Chartered Institute of Arbitrators (CIArb) et Nina Fletcher, directrice exécutive de l'adhésion et de l'éducation. Le CIArb est un chef de file mondial dans le domaine des modes alternatifs de résolution des d. Catherine et Nina ont expliqué les initiatives en cours du CIArb pour apporter de la valeur à ses membres et ses initiatives pour faire respecter les normes. Le fil conducteur de notre dialogue a été le



Arif Ghaffur, Batsetswe Motsumi, et Sheila Lennon.



Nina Fletcher, Arif Ghaffur, Catherine Dixon, et Sheila Lennon.

dynamisme avec laquelle l'ICÉC, la RICS et le CIArb poursuivent des programmes visant à rester actuels et pertinents.

En participant aux activités de sensibilisation décrites ci-dessus, l'ICÉC continue à se concentrer sur l'élévation de la profession afin de définir ses membres comme les leaders d'opinion incontournables dans le domaine de l'économie de la construction, alors que nous construisons ensemble une communauté inclusive de professionnels internationaux.

En conclusion, je remercie sincèrement nos membres, nos amis et ma famille pour leurs encouragements alors que l'ICÉC continue à s'élever et que je travaille avec le conseil d'administration pour atteindre ses objectifs. Je vous souhaite le meilleur pour les mois à venir et j'attends avec impatience chaque occasion de rencontrer les membres qui poursuivent leur excellent travail pour faire progresser l'économie en construction au sein du Canada!

Salutations respectueuses, Arif Ghaffur, ÉCA (F) Président, ICÉC



Help Us Shape the CIQS Future

Participate in our member survey

Sheila Lennon, CAE Chief Executive Officer, CIQS

he staff and directors of the Canadian Institute of Quantity Surveyors are continuously seeking new and innovative ways to improve user experiences for our members.

Part of this process involves gaining a better understanding of what is expected of our products and services. We are therefore pleased to announce that we are preparing a member survey to give us your perspective on the profession and your expectations of your Institute membership.

Why should you participate?

Your feedback will offer us valuable insight into our member's needs,

information that can help shape future policies, educational offerings, and other Institute services.

2 Enhance user experience Share how you prefer to interact with the Institute in various situations to personalize and enhance various touchpoints, such as customer service, website, online member profile, event registrations and member renewals.

(3) Improve member engagement Offer your input on what the Institute can do to attract new volunteers and improve member engagement at every level of the organization.





Expand our webinar series Help us identify topics and speakers for our annual webinar series to ensure we continue to maintain the high calibre of learning that our members have come to expect.

Ensure that you stay informed Offer input on content about which you would like the Institute to keep you informed, such as industry and technology updates, market demands, emerging trends.

6 Voice your concerns

Your voice matters. Participating in member surveys offer a convenient platform where you can share issues that you feel need to be reviewed and resolved.

7 Offer your expertise

Your feedback can help the Institute effectively allocate resources to Institute initiatives in high demand by members.

We appreciate that your time is valuable so our survey will be made available online on various platforms to that you can complete it at the office, at home, or on the go.

Once the survey is launched, your participation will be a crucial component for us in making informed decisions about the type of products and services that are of utmost importance for our members. This will help us enhance the quality of our offerings so that we can continue to provide members with engaging and valuable user experiences.



You are invited to submit articles for consideration to the editorial team of the *Construction Economist.* We are particularly interested in knowledge share and thought leadership, with a focus on innovation and sustainability. CIQS continues to work in elevating the profession of quantity surveying and estimating, in a manner that seeks to make these careers of choice. We welcome members and readers of this journal to contribute their subject matter knowledge as the *Construction Economist* continues to be the preeminent voice of construction economics in Canada.

Should you be interested, please contact Kelsey Wright at <u>memberservices@ciqs.org</u> for additional information.



Aidez-nous à façonner l'avenir de l'icéc

Participez à notre questionnaire pour les membres

Sheila Lennon, ÉCA Directrice générale, ICÉC

e personnel et les administrateurs de l'Institut canadien des économistes en construction sont constamment à la recherche de façons nouvelles et innovantes d'améliorer l'expérience utilisateur pour nos membres.

Une partie de ce processus consiste à mieux comprendre ce que l'on attend de nos produits et services. Nous avons donc le plaisir de vous annoncer que nous préparons un questionnaire pour les membres afin de connaître votre point de vue sur la profession et vos attentes en tant que membre de l'Institut.

Pourquoi participer?

Influencer la direction de l'Institut Vos commentaires nous permettront de mieux connaître les besoins de nos membres, et ces informations nous aideront à définir les politiques futures, les offres de formation et les autres services de l'Institut.

- Améliorer l'expérience utilisateur Partagez la façon dont vous préférez interagir avec l'Institut dans diverses situations afin de personnaliser et d'améliorer les différents points de contact, tels que le service clientèle, le site Web, le profil de membre en ligne, les inscriptions aux événements et les renouvellements d'adhésion.
- Améliorer l'engagement des membres Donnez votre avis sur ce que l'Institut peut faire pour attirer de nouveaux bénévoles et améliorer l'engagement des membres à tous les niveaux de l'organisation.
- Élargir notre série de webinaires Aidez-nous à identifier les sujets et les intervenants pour notre série annuelle de webinaires afin de nous assurer de continuer à maintenir le haut niveau de formation que nos membres attendent de nous.



S'assurer de rester informé(e) Proposez des contenus sur lesquels vous souhaitez que l'Institut vous tienne informé, tels que les mises à jour industrielles et technologiques, les demandes du marché, ou les tendances émergentes.

6 Faire entendre votre voix Votre voix est importante. La participation aux questionnaires pour les membres apporte une plateforme pratique vous permettant de faire part des problèmes qui, selon vous, ont besoin d'être examinés et résolus.

7 Offrir votre expertise

Vos commentaires peuvent aider l'Institut à allouer efficacement des ressources aux initiatives de l'Institut les plus demandées par les membres.

Nous sommes conscients que votre temps est précieux. C'est pourquoi notre questionnaire sera disponible en ligne sur différentes plateformes afin que vous puissiez y répondre au bureau, à la maison ou en déplacement.

Une fois le questionnaire lancé, votre participation sera un élément essentiel pour nous permettre de prendre des décisions éclairées sur le type de produits et de services qui sont de la plus haute importance pour nos membres. Cela nous aidera à améliorer la qualité de nos offres afin de pouvoir continuer à fournir aux membres des expériences utilisateur intéressantes et de valeur.

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COST ESTIMATE CLASSIFICATION SYSTEMS CONSIDERATIONS & ESSENTIALS

By Karen Cheung, Bsc(Surv), PQS, MRICS, MCInstCES Senior Contracts & Commercial Specialist, Lakeland Consulting Inc.

Context & Background

CIQS members play an essential role as financial strategists in the construction industry. An example is the recent call for a panel of experts to review cost estimates on Burnaby's major civic projects in response to projects being reported as over budget.

This British Columbia initiative prompted me to contemplate whether the forecast of actual construction costs was accurately/sufficiently accounted for and captured in cost estimates that formed part of such budgets for such projects. Such cost estimates hold significant importance and often mean the difference between the success and failure of a project. The stated purpose of these cost estimates is to provide a realistic budget of the out turn cost for the completed of the project, achieved through the prediction of resources and hence cost.

The sufficiency, accuracy and completeness of budgets empowers clients/owners/developers and funders (collectively referred to as clients) to make informed decisions on the financial viability of individual projects. This assurance is a fundamental part of the success of projects.

Classification Systems

Based on my experience and ongoing best practices, the accuracy and quality of estimates change over the project design cycle. To align the estimating process with the stages of design development, various classification systems for cost estimates have been established.

My review of various classification systems and publications (e.g., CIQS, AACE, Canadian government

Context	Class 'A' (Pre-Tender) Estimate	Class 'B' (Substantive) Estimate	Class 'C' Estimate	Class 'D' (Indicative) Estimate
Basis of Estimate	Tender documentation	Detailed working drawings and outline specifications with the design of all major systems and subsystems	Plans, elevations, sections, and preliminary material selection	Project requirement, initial schematic design, and preliminary functional program
Maturity Level of Project Information	~ 90% to ~ 100%	~ 60% to ~ 90%	~ 30%	~ 10%
Methodologies	Detailed quantity takeoff and use of prevailing market rates	Elemental cost analysis in which approximate quantities of all items of work are measured and priced at composite rates	Elemental cost analysis in which approximate quantities of major elements and sub-elements are measured and priced on the basis of unit costs	Unit cost analysis such as \$/m², \$/room, \$/car parking space
Expected variance with the actual contract award price, excluding exceptional and unique projects. Refer to Canadian Construction Association, 2012	±5% to ±10%	±10% to ±15%	±15% to ±20%	Up to ±30%

Table 1: Attributes and characteristics of estimate classifications.

etc.) confirm that estimating practitioners continue to adopt structured classification, i.e. Class A, B, C and D estimates. Table 1 shows my assessment of the attributes and characteristics of each of these estimate classifications.

Skills & Competencies

Proficiency in estimating, including achieving the aforementioned classifications, requires knowledge and certain skills that encompass a spectrum that spans from the understanding of benchmarking, quantity take-offs, composition of a unit rate and risk analysis to the application of historical data, estimating software, value engineering, and cost adjustment factors.

A thorough understanding of a project in its entirety, including likely contract form, schedule, specification, procurement strategies, evaluation of tenders and designation of suppliers/ sub-contractors, lie at the foundation of the skills possessed by those preparing estimates and budgets for individual projects.

In addition to the above baseline skills, experienced professionals can proactively apply a cognitive grasp across a broad spectrum, notably incorporating an acute awareness of market conditions, potential fluctuations, and emerging construction techniques influencing construction costs.

Ongoing Challenges

Those preparing cost estimates often encounter problems; following are some of the hurdles considered, along with potential solutions.

ISSUE 1 The outcomes of cost estimates deviate significantly from the planned budget

Potential Approach: Communicate with the client transparently. The cost estimate is not intended to actualize the goal of the client but rather to furnish an accurate projection of a project's viability. Based on the level and qualify of the information



available at the time of preparing the estimate, the estimated figures indicate whether a project is feasible within the allotted budget.

Considering the resultant estimates, clients may: a) implement modifications in design and materials through value engineering, and/ or; b) make changes on the terms and conditions of the intended contract, and/or; c) re-strategize the procurement approach and risk allocation, and/or; d) re-consider the construction funding.

If the cost estimate is proved to be a valuable indicator, guiding the client towards the achievement of a financially successful project, it is considered optimal!

ISSUE 2 The pricing information for specific scopes of the overall work is not available

Potential Approach: This is a common issue faced by those preparing cost estimates, particularly small companies whose internal cost database may not encompass a sufficiently broad scope and may lack recent cost.

The searching from pricing library, use of industry reports, and cost-estimating software can substantially enhance in-house databases. Still, a prudent approach should be taken regarding the compositions and combinations constituting such a database.

Those preparing estimates should be capable of discerning cost deviations between the database and the project being reviewed. Necessary adjustments may be made, geographic location, and project complexity, etc.

As the estimate approaches status as either a Class A Estimate or Class B Estimate, the materials and suppliers should be specified. Supplier quotes can then be requested and utilized during the compilation of such estimates. **ISSUE 3** Contingencies have to be adequately factored into project cost estimates

Potential Approach: Contingency is a reserved fund added to the base cost estimate to accommodate the risks and uncertainties identified within the original scope of the project. Despite the accurate measurement of quantities and sufficiency of forecast of unit rates, an error in adequately estimating the contingency can still leave the project vulnerable to cost overruns.

An often-used deterministic methodology to calculate contingency is by applying a pre-set percentage for each class of cost estimate. For Class D Estimate when the project blueprint is provided, there are various categories for contingency such as scope, design, bid, construction, and escalation.

The percentage, in its entirety, could sum up to 30%. For Class A Estimate, when the designs and details of the project are more mature, construction contingency is often calculated at 5% to 10%. A deficiency in comprehensive risk analysis behind this predetermined figure hardly instills confidence in its accuracy.

It is, therefore recommended that such an approach should be used for small-scale and less complex projects. Contingency for projects of greater complexity often benefit from an approach that applies differing allowances for each and every line that forms the estimates, i.e., line-based contingency approach, for example, unknown site conditions such as work below ground attracting higher levels of contingency. Therefore, for "big-ticket" and complicated projects, a probabilistic risk assessment should be encouraged.

This approach requires project teams to identify "known-unknown risks," estimate the probability of risk occurring and predict corresponding cost impacts to compute the expected monetary value of potential risks as the contingency.

As design evolves and advances, such risks can be increasingly defined

and mitigated. The cost contingency factor must be adjusted to reflect those alleviated risks, explaining the decrease in contingency from Class D Estimate to Class A Estimate; however, this methodology can be constrained by the tight timeframe, availability of expertise, meticulous analysis, and calculations.

Evolution & Innovation

Emerging technologies, multifactorial global events, complexities in projects and demand for sustainable construction are factors, in isolation and in combination, posing challenges in cost estimating.

To transform challenges into opportunities in a dynamic environment, those preparing estimates can embrace evolving options in the era of innovation. Such enhancement of the accuracy, efficiency, and quality of deliverables in estimating process can be achieved through:

• **Cost Database:** Establishing a centralized construction cost database across all provinces in Canada to allow easy access to

A thorough understanding of a project in its entirety, including likely contract form, schedule, specification, procurement strategies, evaluation of tenders and designation of suppliers/ sub-contractors, lie at the foundation of the skills possessed by those preparing estimates and budgets for individual projects. reliable, broad, and up-to-date data that can be filtered by type, scale, and location of the project.

- Building Information Modeling (BIM): Using internationally recognised methods adopted by the use of BIM in order to streamline the estimation process, enabling the automated quantity takeoff, energy analysis, and lifecycle management.
- Artificial Intelligence (AI): Adopting AI and machine learning algorithms to analyze project data and generate cost estimates, avoiding human error resulted from manual data entry.

In conclusion, robust systems for cost estimate classifications have been firmly established in Canada. The presence of challenges continues to be multi-factorial and multi-dimensional, promoting the call for Continuing Professional Development to augment competencies in the arena of cost estimating.

Cost estimating merits further in-depth study requiring thorough research to provide deeper insights on the a) identification of fixed and variable costs in a project, and the implementation of corresponding estimating techniques; b) variations in contingency allowances across different class levels of cost estimate; and c) assessing the impact of price fluctuations.

Looking ahead, the landscape of cost estimating is brimming with exciting innovations to keep project costs in check. An assurance of the absolute accuracy of a cost estimate is insurmountable, but improvement of the accuracy is attainable!



Karen Cheung is a Professional Quantity Surveyor and Chartered Surveyor with working experience on projects in Canada and Hong Kong.

Karen continues to be involved in project planning/design and cost estimating during pre-contract, delivery, and post-construction phases of projects. YQS

BREAKING GROUND: EMBRACING MENTORSHIP AND ON-SITE EXPERIENCE FOR YOUNG QUANTITY SURVEYORS

By Mykola Pulnyev, PQS, MRICS, PMP, P.GSC

magine standing at the intersection of ambition and construction, armed with a hard hat and a determination to make a mark. This is the reality for young quantity surveyors in Canada, navigating a dynamic industry filled with possibilities. The challenge, though, arises when the path to leaving a lasting impact is obstructed by the confines of the office or home.

In the dynamic realm of construction, the role of quantity surveyors is undergoing a transformative shift. This article explores the empowerment of young quantity surveyors in Canada, emphasizing the crucial connection between leaving the traditional workspace and actively engaging with seasoned professionals while navigating key market trends in 2024.

To empower the next generation, mentorship programs and collaborative initiatives become indispensable. Seasoned industry veterans possess insights that extend beyond the virtual interface, providing guidance on navigating complex projects and emphasizing the importance of adapting to technological advancements. Cultivating a culture of continuous learning, best achieved outside the familiar desk setting, ensures that young quantity surveyors not only grasp traditional practices but also embrace the transformative trends reshaping the industry.

As the construction landscape evolves, and virtual work environments become more prevalent, quantity surveyors must adeptly navigate the waves of change brought about by key market trends in 2024. Acknowledging that knowledge transfer and practical acumen thrive beyond the comfort zone and within the confines of construction sites is crucial. Sustainable construction practices, digital transformation, and ever-fluctuating material prices are just a few of the challenges and opportunities that demand attention; however, what can be seen and observed on-site in person cannot be matched to the information and knowledge obtained from staring at a computer screen.

Understanding fluctuating material prices and supply chain challenges requires a strategic mindset. Engaging with suppliers, contractors, and trades, conversing with contractor foremen on-site, and truly comprehending the needs of engineers, architects, and clients by visiting them in person are actions that contribute to a well-rounded estimation process. Young quantity surveyors, by stepping out and actively participating in on-site meetings, distinguish themselves as professionals who not only understand industry intricacies but are also willing to experience them firsthand.

In this industry, the construction of the built environment cannot be achieved by working solely from the office or home. To streamline your career growth, leave your desk and go to the places where construction happens. This will not only help you adapt to current market dynamics but also contribute to shaping their future. The mentorship and collaboration between seasoned professionals and emerging talents creates a dynamic synergy that ensures the industry is not only responsive to current challenges but also well-prepared for those on the horizon. By bridging the gap between theory and practice, the next generation of quantity surveyors contributes to the resilience and innovation of the Canadian construction sector.



Mykola Pulnyev's deep understanding of the construction world comes from working for both public and private clients in property,

transportation, food manufacturing, defence, and clean energy sectors. These diverse experiences have resulted in a balance of knowledge and creativity that drives the desire to advocate and promote the Quantity Surveying profession and practise best industry standards.

Mykola's true desire is to guide clients towards predictable and successful outcomes. In time off projects, he can often be found sitting on industry panels, speaking at industry events, working out at the gym, downhill skiing or paddling kayak. Mykola holds an Advanced diploma in Construction Engineering Technology Management from George Brown College and a bachelor's degree in applied science in Technology Management from Bemidji State University.

Marketing



WELCOME TO THE 6IX

By Alexandra Parliament, Director, Marketing and Communications, CIQS

he CIQS is excited to host Congress in Canada's largest city, often referred to as The 6ix after, some say, the six municipalities that made up Metro Toronto before the amalgamation in 1998. Over the course of two days, industry experts will share valuable insights with our delegates about what's next in construction economics at the Delta Hotel in downtown Toronto.

With a focus on professional development, CIQS recognizes the importance of in-person networking in today's virtual world. Congress, therefore, offers a well-balanced program of networking opportunities such as receptions and refreshment breaks along with highly anticipated educational sessions led by some of the industry's best.

"Grow your career network with fellow members and industry stakeholders from across Canada and abroad"

Congress Program

FRIDAY, JUNE 21, 2024			
Title	Speaker		
Legislation begins! Measuring and managing GHG in Construction Supply Chains: The role of ESG reporting and the QS opportunity	Ross Huartt, <i>MBC Group</i>		
Construction Law Developments and Issues	Sandra Astolfo, <i>WeirFoulds</i> Andrea Lee, <i>Glaholt Bowles LLP</i> Seema Lal, <i>Construction and Infrastructure Practice Group</i> Patricia Morrison, <i>Borden Ladner Gervais LLP</i>		
Mass Timber - Tunneling Through the Barriers	Angela Lai, <i>Core Two</i>		
Al in the Construction Industry - Insights, Advantages, and Risks	Andrew Wong, Osler, <i>Hoskin & Harcourt LLP</i> Joel Heard, Osler, <i>Hoskin & Harcourt LLP</i> Sam Ip, Osler, <i>Hoskin & Harcourt LLP</i>		
Lessons Learned During Construction Phase Monitoring	Barry Maguire, <i>BTY</i>		
Collaborative Procurement - Panacea or Problem	Wasiu Omotoso Paul Hughes, <i>Altus Group</i> Dr. Diana Nada		
The Real Public Private Partnership Alliance	Joshua Strub, Margie Strub Construction Law LLP		

SATURDAY, JUNE 22, 2024				
Title	Speaker			
The Path to the Future of Decarbonization	Peter Van Dyck, <i>Turner & Townsend</i> Gordon Bourque, <i>Akanovia</i> Kyle Goehring, <i>Turner & Townsend</i> Kathy Seli, <i>Green Standards</i>			
Artificial Intelligence and Construction Quantities and Pricing - The Opportunity	Amir Kia, <i>Roni Group*</i> Marius Tawembe, <i>Pomerleau*</i> Shahram Heidari, <i>Tarra Engineering*</i> Layal Ebrahimi, <i>SKYGRiD Construction Inc.</i>			
Human Capital Deficit and Canadian Construction	Naumaan Hameed, Greenberg Hameed PC			
Blueprint to Byte: The Digital Lifecycle of Data Center Construction	Saad Minhas, <i>Equinix</i> Crystal Eggers, <i>Engineering and Land Planning Associates</i>			
Schedule and Cost in Progressive Design Build Projects - Prevailing Realities	Taha Syed, <i>Stantec Consulting</i> Brad Smid, <i>Scarborough Subway Extension</i> Mel Yungblut, <i>Lakeland Consulting</i>			
The Canadian Project Conundrum	Gary Williams, <i>IEDG</i> Ray Seker, <i>IEDG</i> Nermina Harambasic Krishan Mittal			
Adjudication as a Service Industry	Robert Kennaley, <i>Kennaley Construction Law*</i> Chad Kopach, <i>Blaney McMurtry LLP</i> Sahil Shoor, <i>Gowling WLG</i> Jerry Crawford, <i>KGC Consulting Services Ltd</i>			
Best Practices in Estimating and Quantity Surveying	Vikram Singh			
How to identify and prevent cost overruns	Robyn Player, BTY			

*Speaker to be confirmed

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QUANTIFYING CARBON IN BUILDINGS AND CONSTRUCTION PART 2 **THE ICMS3 WHOLE LIFE CYCLE EMISSIONS FRAMEWORK**

By Ayo Daniel Abiola, P.Eng, PQS and Susan Neil, PQS(F), MRICS

his second part of the series "Quantifying Carbon in Buildings and Construction" introduces the ICMS3 framework for reporting carbon emissions. ICMS3 is the third edition and the first global standard developed for reporting life cycle costs and carbon emissions for various construction projects and constructed assets. The framework was released in 2021 by The International Cost Management Standard (ICMS) Coalition, which comprised 49 member organizations, including the Canadian Institute of Quantity Surveyors (CIQS). Buildings and construction are responsible for a large share of global carbon emissions. International agencies, including the United Nations Environmental Program (UNEP) and the Global Alliance for Buildings and Construction (GlobalABC), reported that CO_2e emissions from buildings and construction activities have hit new highs since the pandemic-related dips and are now off-track to decarbonize by 2050.¹ As nations must work together to meet

Code	Projects or Sub-Projects	Code	Projects or Sub-Projects	
01.	Buildings	11.	Chemical plants	
02.	Roads and runways	12.	Refineries	
03.	Railways	13.	Dams and reservoirs	
04.	Bridges	14.	Mines and quarries	
05.	Tunnels	15.	Offshore structures	
06.	Wastewater treatment works	16.	Near shore works	
07.	Water treatment works	17.	Ports	
08.	Pipelines	18.	Waterway works	
09.	Wells and boreholes	19.	Land formation and reclamation	
10.	Power-generating plants			

Table 1: List of ICMS project and sub-project (Level 1 hierarchy) codes.



Figure 1: ICMS Categories (Level 2 hierarchy) for lifecycle carbon emissions reporting.

the common NetZero-by-2050 goal recommended by the International Panel on Climate Change (IPCC), global consistency in measuring, analyzing, presenting, and comparing carbon emissions has become imperative. As an international standard, the ICMS3 reporting framework is a significant standard that allows construction practitioners to map, assess and compare carbon emission measurements from different countries or jurisdictions.

The ICMS3 Hierarchical Framework

The ICMS presents carbon emissions through a hierarchical framework with four levels: the top Level 1 is for Projects or Sub-Projects, Level 2 for Categories, Level 3 for Groups, and an optional Level 4 for Sub-Groups. In the top level, 19 different types of projects and constructed assets are defined. Each is represented by unique two-digit codes. Code 01 is assigned to Buildings, 02 to Roads and runways, 03 to Railways, all the way to Code 19 for Land formation and reclamation projects. A complete list of ICMS project codes is shown in Table 1.

For ease of comparison, the Attributes and Values (units and/ or descriptions) are laid out for each of the Project/Sub-Project types. Level 2, Categories is characterized by six (6) types of carbon emissions which may be reported under each project type. The six (6) carbon emissions categories are shown in Figure 1: ICMS Categories (Level 2 hierarchy) for lifecycle carbon emissions reporting. The Acquisition Carbon Emissions (AE) Category, which is carbon emissions that may be due to site acquisition, administrative, financial, legal, marketing, etc., prior to physical

construction and not reported, except where they are significant. Hence, the Lifecycle Carbon Emission reported for a building or constructed asset as per ICMS3 will be the sum of its Construction Emissions (CE), Renewal Emissions (RE), Operation Emissions (OE), Maintenance Emissions (ME) and End-of-Life Emissions (EE). Furthermore, Groups (Level 3) will be reported under each of the six (6) Categories. Groups are also represented by unique two-digit Codes, and if detailed analysis is needed, Sub-Groups (Level 4) represented by three-digit codes may be reported.

It should be noted that ICMS3 is both a cost and carbon emissions framework. While both frameworks are similar, the cost framework in ICMS3 always includes the Acquisition Cost (AC) Category and its Group (Level 3) elements. Additionally, certain Group



Figure 2: How the ICMS reporting maps to the stages associated with whole life carbon assessments.

The emissions due to sales and most income activities during the life of the asset, as well as externalities, are excluded from the carbon emissions reporting framework.

components in the other categories are excluded as they are considered insignificant or subjective. For instance, the emissions due to sales and most income activities during the life of the asset, as well as *externalities*, are excluded from the carbon emissions reporting framework. Externalities include carbon credits, sequestration, as well as other quantifiable benefits or loads associated with the asset and occurring beyond the project's boundaries. Externalities, Income and Non-Construction Activities may be included in a Whole Life Carbon Emissions reporting; however, ICMS3 is designed to present Lifecycle Carbon Emissions and therefore excludes these elements.

Carbon Assessments and ICMS3 Reporting

Several carbon assessment standards are available for guantifying Whole Life Carbon Emissions of buildings and assets. As ICMS3 is primarily a reporting system, it is not intended to be used as the standard for how carbon emissions should be assessed or calculated since the methods of calculation often vary from country to country and may also vary across jurisdictions within the same country. The common unit of measure for emissions is the Carbon dioxide equivalent (CO₂e) and its multiples such as kilograms

CO₂e (kCO₂e), tons of CO₂e (tCO₂e), etc. The first part of this series (published in the past Winter 2023 issue of Construction Economist)² described why carbon dioxide or Carbon was chosen as a common metric. Monetary valuations of emissions where required may be used in ICMS3 reporting, but the practitioner should carefully consider the time value of money, as well as currency conversions if this approach is included in the reporting. Some of the most common assessment frameworks include the ISO 21930 standard on sustainability in buildings and civil engineering works, EN 15978 sustainability of construction works and the National research Council of Canada's National guidelines for whole-building life cycle assessment.³ These frameworks present a common topology which are easily mapped and reported through the ICMS3 framework as shown in Figure 2.4

Using the topology in Figure 2, practitioners can map the carbon

emission values (CO₂e) across the various ICMS3 categories of their project against carbon measurements at the various life stages A0 to C4 and may also include carbon assessments beyond the life of the building or asset (stages D1 and D2).

Finally, an important feature of the ICMS is consistency with the International Property Measurement Standards (IPMS) for measuring floor areas, allowing carbon emission to be reported either per Gross External Floor Area (CEFA) or Gross Internal Floor Area (CIFA). The consistency with IPMS ensures that practitioners can easily account for any variability in measurements, to establish accurate indices and for like-for-like comparisons to be made.

Next, Part 3 – Case Study on Carbon Quantification and Reporting for Buildings and Construction

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Ayo Daniel Abiola, P.Eng, PQS, is the Founder/Principal of Avalanche Nation Services Inc., offering cost, energy, and sustainability consulting for Industrial, Commercial, and Institutional (ICI) properties in the Prairies, and across Canada. Ayo is licensed to practise engineering in Ontario and Saskatchewan. He is also

a Certified Energy Manager and a WELL Accredited Professional, having the skills and experience to foster health and wellness in the built environment. Ayo lives in Regina, Saskatchewan.



Susan Neil, PQS(F), MRICS, President of Hanscomb, leads an independent Quantity Surveying firm specializing in major infrastructure projects. A Fellow of the CIQS, RICS member, and former CACQS President, she is a vocal advocate for the profession. Susan passionately champions the independent oversight of capital investments and standardized carbon

measurement in construction projects, emphasizing the pivotal role of Quantity Surveyors. Susan lives in Hamilton, Ontario.

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FEDERAL PROMPT PAYMENT FOR CONSTRUCTION IS LIVE

By Sahil Shoor

n December 12, 2023, the Minister of Public Services and Procurement Jean-Yves Duclos announced that the federal prompt payment legislation, the *Federal Prompt Payment for Construction Work Act* (the "Act") came into force on December 9, 2023.

The designation process under the Act already prescribes that federal construction projects in Ontario will be exempt from the Act's prompt payment regime and, instead, must comply with the regime under the Ontario *Construction Act*. However, the Designation does not apply to construction projects that straddle the border between two or more provinces.

Similar to provincial prompt payment statutes, the Act includes a transition provision. The Act does not apply, for one year after coming into force, to contracts and subcontracts to perform construction work entered into before December 9, 2023.

The new legislation aims to tackle payment delays along the contracting chain and enhance financial stability in the industry, protecting vital construction jobs and making it easier to do business with the federal government.

What is Captured as "Construction" Under the Act?

The Act applies to any service provider, contractor or subcontractor that is to perform construction work for the purposes of a construction project located in Canada in respect of any federal real property or federal immovable, as defined under the

Federal Real Property and Federal Immovables Act.

A construction project is defined as containing one or more of the following elements in a contract between a contractor and His Majesty or a service provider:

- a) the addition, alteration or capital repair to, or restoration of, any federal real property or federal immovable.
- b) the construction, erection or installation on any federal real property or federal immovable, including the installation of equipment that is essential to the normal or intended use of the federal real property or federal immovable; or
- c) the complete or partial demolition or removal of any federal real property or federal immovable.

Construction work means the supply of materials or services, including the rental of equipment.

Before His Majesty or a service provider enters into a contract or subcontract with a person under which that person is to perform construction work, His Majesty or that service provider has a duty to inform the person that they will be subject to this Act if they enter into the contract and provide them with any information prescribed by regulation.

What Does the Federal Prompt Payment Regime Look Like?

The federal government must make payments within 28 calendar days after receiving the proper invoice. The contractor then must pay each of its subcontractors no more than seven days thereafter. The subcontractors will have another seven days to pay their subcontractors, and so on down the contracting payment chain.

The federal government may decline to pay for some or all of the construction work, if, no later than the 21st day after the day on which the proper invoice is received, His Majesty or the service provider provides the contractor with a notice of non-payment.

How Does the Act Defer to Ontario and Interact with Other Provinces?

The Act permits the Governor in Council to designate any province that has prompt and adjudication regimes that are reasonably similar to the regimes set out in the Act. Where that designation occurs, federal construction projects in those provinces will be exempt from the Act's prompt payment regime and must, instead, comply with legislation in the designated province. The Governor in Council has already designated Ontario to be exempt from the Act's prompt payment regime. That does not mean there is no prompt payment regime on federal projects, it means that the prompt payment regime under the Ontario Construction Act applies to the federal project in question. The Governor in Council has also already designated Saskatchewan and Alberta. We can expect future designations for other provinces. Designation does not apply to construction projects that straddle the border

between two or more provinces. Careful consideration of the extent of the inapplicability of the Act and the application of provincial regimes is critical.

How Is Prompt Payment Enforced? Does the Act **Prescribe Adjudication?**

Canada Dispute Adjudication for Construction Contracts (CanDACC) is the Adjudicator Authority under the Act. As the Adjudicator Authority, CanDACC is responsible for administering construction-related adjudications.

Adjudication under the Act is not mandatory. If a contractor or subcontractor has not been fully paid for its construction work within the time limit provided under this Act, they may refer the matter to adjudication and seek a determination with respect to the non-payment. A notice of non-payment must be provided no later than the 21st day after the later of: (a) the day on which the contractor receives a certificate of completion with respect to the construction project from Her Majesty or a service provider; and (b) the expiry of the time limit provided under this Act for payment for that work, if any of its construction work is covered by the last proper invoice submitted with respect to the construction project. An adjudicator's determination will be binding unless the parties come to a written agreement or the determination is set aside by a court order or arbitral award. Courts or arbitrators will have jurisdiction to consider any adjudicated matter on its merits.

What are Some Takeaways?

Federal government projects are substantial employers and can be very large in scope, involving numerous general and subcontractors at a given time. Projects on military establishments, airports, ports, bridges, and other areas of federal jurisdiction may be affected. In light of the new Act,

a few strategic steps for industry participants include:

- whether the project relates to federal real property or a federal immovable.
- whether the project satisfies the statutory definitions of "construction project" and "construction work".
- whether the project is located in a designated province and the applicability of the provincial legislation.
- considering any appropriate amendments to procurement and contract documents to reflect the applicable regime; and
- reviewing existing contractual provisions and payment mechanisms to ensure compliance with the Act.

The introduction of the new federal prompt payment and adjudication scheme marks a positive step forward by ensuring swift resolution of construction disputes. However, the extent to which the industry will embrace and actively utilize the federal adjudication process remains uncertain. The success of the system will ultimately depend on widespread acceptance and implementation within the construction community.

The rules about prompt payment and adjudication at the federal level are guite similar to those in provinces such as Ontario's Construction Act. However, it is important not to assume that they are worded or are applied in the same way. It is crucial for

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stakeholders to consult legal advice to understand and follow the requirements of the federal and provincial regulations so as to avoid misunderstandings or issues when it comes to prompt payment and adjudication.



Sahil Shoor is a litigation and dispute resolution partner with Gowling WLG (Canada) LLP. His national practice is

focused on commercial construction, real estate development, infrastructure/ civil works, power/energy and major public-private partnership/transit projects. He provides strategic advice to clients to minimize legal risk during procurement and construction. He is as comfortable managing large trials on highly technical issues as he is in conducting mediations, adjudications, and other forms of alternative dispute resolution. Sahil's experience as counsel on large arbitration and trials allows him to guickly understand the technical aspects of a construction claim and to provide advice as to the appropriate methods to efficiently resolve disputes. He has extensive experience in disputes involving tenders, RFPs, construction contracts, construction liens, engineering issues, and negligence claims involving architects and engineers. Sahil has been recognized by Chambers Canada, the Legal 500 Canada and in 2022, was named a Lexpert's "Rising Stars: Leading Lawyers Under 40."



IN MEMORIAM

Desmond Welch, PQS



By Norm Lux, PQS(F)

orn 1951, died November 13, 2023, Desmond will be missed by friends and co-workers.

Des spent his early years with Hanscomb, PCL, and Alberta Government Telephones. Beginning 1982, he was a major player with TCCL out of Calgary for over 30 years. From 2012 to the present, Des was an associate of LCVM Consultants. During the same time, he kept up his electrical estimating through Wiremasters in St. Albert, Alberta.

He has consistently been depended on for professional responsible costing and cost advice to benefit clients. Des always put a good word in for everybody he worked with. He maintained communications regularly in the last few years when his home base was in Ontario. Even from 2,000 miles away, he assisted with planning, marketing, advising, mentoring students, and being a friend always.

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CIQS ADVOCACY: A PERSONAL REFLECTION ON Success and the road ahead

By Huw Williams

s the biting cold of winter envelops Ottawa, Members of Parliament (MPs) have returned to Parliament Hill with a renewed sense of energy as they prepare to address the challenges facing Canadians. The affordability crisis, characterized by high inflation, elevated interest rates, escalating housing prices, and a rising cost of living, looms large over the waning poll numbers of the Liberal government. This session holds paramount importance for Prime Minister Trudeau, with internal rumblings within his own party questioning his leadership, contemplating his potential departure before the next election after an eight-year stint in the top role. As MPs take their seats, a palpable awareness of the public's negative perception of the government and the rising popularity of Pierre Poilievre's Conservatives permeates the chamber, which is sure to lead to one of the most politically exciting session seen in some years.

This is the political backdrop against which I have had the privilege of witnessing the remarkable success of the Canadian Institute of Quantity Surveyors (CIQS) advocacy efforts in 2023. Their Advocacy Hill Days in May and October – that bring together industry professionals, policymakers, and stakeholders – have been instrumental in advancing crucial conversations around fairness, affordability, and the involvement of our industry professionals in Canada's infrastructure programs.

The CIQS commitment to advocating for fair and efficient payment practices within the construction sector has been evident. This past December, Public Services and Procurement Minister Jean-Yves Duclos announced that Federal Prompt Payment for *Construction Work Act* was to finally be implemented after four long years of waiting. What is even more impressive is that there will be no grandfathering of older contracts, and all existing construction contracts will have one year to comply with the Act. The resounding success on the issue of prompt payment has set a solid foundation for the Institute. Hill Days have provided a platform for constructive dialogue between industry leaders and policymakers, fostering a collaborative environment to address the challenges that hinder the timely compensation of contractors and subcontractors.

Looking forward, the CIQS is poised to elevate the discourse on affordability, a critical issue that continues to shape the landscape of the construction industry. Affordability extends beyond the cost of construction materials; it encompasses labour, regulatory compliance, and the overall financial burden borne by all stakeholders. By delving into these multifaceted aspects, the CIQS aims to lay the groundwork for policies that not only ensure fair compensation but also promote sustainable practices in the long run.

One notable area where the CIQS is gearing up for further success is the pressing need for the involvement of designated Professional Quantity Surveyors (PQS) and **Construction Estimator Certified** (CEC) professionals involved in price escalation. The construction industry is inherently susceptible to fluctuations in material costs, and recent global events have only accentuated the need for a proactive approach to mitigate the impact of price escalation on projects. To help kickstart this new policy shift, Impact Public Affairs and the CIQS will be hosting a webinar and Push Politics campaign focused around Price Escalation. Amid a high-interest rate economy, it is important to highlight the need for PQS and CEC involvement in infrastructure revitalization and procurement strategies to mitigate risks and enhance overall project success. Capping off this push will also lead to the next CIQS Advocacy Day in April 2024. 📕



Huw Williams is the President of Impact Public Affairs in Ottawa, Ontario. Huw provides strategic advocacy advice to the Canadian

Institute of Quantity Surveyors.

Education

NURTURING EXCELLENCE: THE CRUCIAL ROLE OF PROFESSIONAL DEVELOPMENT FOR CIQS MEMBERS

By Ibrahim Oladapo, PQS, PMP

he field of quantity surveying and construction economics is dynamic and ever evolving, demanding that CIQS members stay abreast of industry advancements, technologies, and best practices. Embracing continuous learning through professional development is not just a recommendation, it is a professional obligation, a pathway to sustained excellence and growth in the dynamic field of quantity surveying, and a vital component of a successful and fulfilling career.

Benefits of Active Professional Development

Professional development is a lifelong commitment that empowers quantity surveyors to thrive in a rapidly changing landscape. It ensures that members stay current with industry standards, regulatory changes, and technological advancements. The CIQS recognizes that staying relevant and advancing one's skills is crucial for maintaining the highest professional standards. Benefits include:

- Enhanced Expertise: Professional development activities deepen the expertise of quantity surveyors, making them more proficient in areas such as cost estimation, contract management, and administration. This enhanced expertise not only benefits the individuals but also contributes to the overall excellence of the construction projects in which they are involved.
- Improved Competencies: Continuous learning enables quantity surveyors to develop and enhance their technical, managerial, and leadership skills, making them more proficient in their roles.

3 Staying Informed: The construction industry is dynamic, with new materials, methods, and regulations emerging regularly. Professional development ensures that CIQS members are well-informed about the latest trends and changes in their field. Staying informed about regulatory changes ensures that one can navigate legal landscapes effectively, reducing the risk of compliance issues.

4 Adaptability to Technological Advances: The construction industry is witnessing rapid technological advancements, with Building Information Modeling (BIM) and advanced cost estimating software becoming integral parts of project cost management. Quantity surveyors who actively engage in professional development can easily adapt to these technological

"

By actively engaging in continuous learning, members can enhance their skills, stay informed, and contribute to the advancement of the profession.

changes, ensuring efficiency and accuracy in their work.

- 5 Career Advancement: Employers value professionals who invest in their growth and development. Professionals who actively seek opportunities to enhance their skills and knowledge are more likely to be considered for promotions and leadership roles within their organizations.
- 6 Networking and Collaboration: Active participation in professional development events facilitates networking and collaboration with peers, mentors, and industry experts. Building a robust professional network opens doors to new opportunities, collaborations, and a supportive community that can be instrumental in overcoming challenges.

Earning Continuing Professional Development (CPD) Points

Maintaining a CIQS designation requires PQS/ECA and CEC/ECC members (except those specifically exempted) to accumulate a minimum of 50 Continuing Professional Development (CPD) points, annually.

The CIQS offers a variety of activities for members to earn these points:

 Professional Activity: Active professional practice is a major factor in maintaining and improving skills. Professional quantity surveying work within the scope of practice: construction estimators, construction/project managers, and contract management. Employment in the duties of cost control and construction within government departments, banks, insurance, developers, hospitality industry, suppliers, manufacturing, educators, and industry associations. 20 hours of professional work equals 1 CPD point up to a maximum of 20 CPD points per year.

- Formal Activity: Structured courses related to the profession and administered by universities, colleges, industry, and technical societies. Typically, these courses award a diploma or certificate upon successful completion.
 hour of formal learning equals
 CPD points. Points unlimited, no maximum.
- Informal Activity: Unstructured courses related to the profession such as self-directed study, conferences, technical sessions, seminars, webinars, research, and reading articles related to the profession. 1 hour of informal learning equals 1 CPD point. Points unlimited, no maximum.
- Participation: By way of service on quantity surveying boards or committees, other boards and committees related to the profession, organizing an Annual Chapter Meeting for a CIQS chapter or nationally, attending a chapter meeting or CIQS AGM. 1 hour of professional participation equals 1 CPD point. Points unlimited, no maximum.
- Presentations: Technical and professional presentations within your workplace, at conference meetings, workshops, seminars, and courses related to the profession. 1 hour of formal technical equals 2 CPD points.
 Points unlimited, no maximum.
- Contributions to QS Knowledge Base: Activities that expand or develop technical knowledge such as development of exams or courses, invigilating at or marking examinations, publishing papers

and articles, mentoring, reviewing diaries. 1 published paper/ article course/development of exam equals 15 CPD points. 1 hour of invigilating, marking examinations, mentoring, reviewing diaries equals 1 CPD point. Points unlimited, no maximum.

Members participating in the CIQS CPD program must maintain a detailed record of their professional development activities, annually. They are also required to confirm they meet the minimum CPD requirements when renewing their annual membership. Watch out for the new CIQS CPD Tracker coming later this year and updates to the activity categories!

In summary, for CIQS members, professional development is not just a requirement but a key driver of success and career fulfillment. By actively engaging in continuous learning, members can enhance their skills, stay informed, and contribute to the advancement of the profession.

By providing diverse avenues for members to earn CPD points, the CIQS is encouraging a culture of lifelong learning that benefits not only the members but also the Institute and the construction industry.

For more information on our CPD program, please refer to the CIQS National Standards, available on the CIQS website (www.ciqs.org).



Ibrahim Oladapo's career spans three continents (Africa, Europe, and North America) and almost 18 years in consulting,

contracting, academia, and public service. He possesses a master's degree in project and enterprise management and a bachelor's degree in quantity surveying. He is a Cost Manager with the Government of Alberta and provides expertise for the planning and delivery of the province's vertical infrastructure projects. Ibrahim is the CIQS Education Director, and is based in Edmonton, Alberta.

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