Construction Industry Council

Committee on Productivity

Meeting No. 002/23 of the Committee on Productivity (Com-PRO) was held on 21 June 2023 (Wednesday) at 2:30 pm in the Board Room, 38/F, COS Centre, 56 Tsun Yip Street, Kwun Tong, Kowloon and via MS Teams.

Present:	Ricky LEUNG	(RyL)	Chairperson
	MOW Tai-hing	(THM)	
	Rocky POON*	(LKP)	
	Derek SO	(KLS)	
	Victor CHEUNG	(VC)	
	Terence HUI	(TeH)	
	KAN Jun	(KJ)	
	Clarence LEUNG*	(CLWK)	
	Simon LIU	(SiL)	
	Edwin TONG	(ETg)	
	Simon Wong	(SnW)	
	Dominic LAW*	(DcL)	
	Joseph LO*	(JhL)	for Permanent Secretary for Development (Works)
	Rayson WONG*	(RnWg)	for Permanent Secretary for Housing (Housing)
	Franki YEUNG*	(FY)	
In Attendance:	Robert CHAN	(RCCM)	Director – Industry Development
	Julian LEE*	(JnL)	Assistant Director – Industry Development
	Yan ZHOU	(YZ)	Assistant Director – Industry Development
	Kenneth WU	(KKCW)	Senior Manager – Industry Development
	Zoe LAM	(ZeL)	Manager – Industry Development
	Christy KWONG	(CyK)	Senior Officer – Industry Development
	Mandy CHUNG*	(MC)	Senior Officer II –Industry Development
Apologies:	CHUNG Kwok-fai	(CKFi)	
	LI Tat-wai	(LTWi)	
	Stephen LAI	(SnL)	

* Members and presenters attended the meeting online via MS Teams.

MINUTES

2.1 **Confirmation of the Minutes of the Previous Meeting**

Members confirmed the minutes of the Com-PRO Meeting No. 001/23 without further amendment.

All to Note

2.2 **Matters Arising from the Previous Meeting**

All to Note

CIC Global Construction Sustainability Forum & Exhibitions (GCSFE) in November 2023: The event will be held on 20-23 November 2023, with 40 exhibitors and around 35 speakers. There will be award presentation ceremony, forum and exhibitions. The list of exhibitors will be reported to the Members in the next meeting.

Members took note of the event.

2.3 **2024 Business Plan, Budget and 2024 Key Performance Indicators of Com-PRO**

a. **2024 Business Plan and Budget**

The Secretariat presented the proposed Com-PRO 2024 business plan and the associated budget. The proposed 2023 business plan embraces on-going actions stemmed from Com-PRO's business plan 2023 (ref. CIC/PRO/P/002/22). Initiatives under the business plan are focusing on three strategic directions, *viz*.: **i) Shifting to Industrialisation**; **ii) Driving Smart Project Delivery**; and **iii) Promoting the Adoption of Productivity- enhancing Solutions**. The estimated budget for Com-PRO to conduct the items of works listed below is HK$3.39M.

i. **Shifting to Industrialisation**
   ▪ Launch a MiC & MiMEP Course and Explore New Skillset for Nurturing Local Students, Management Levels, Professionals and Senior Executives
   ▪ Establish a Digital Resource Centre with Object Library to Collect and Disseminate Useful Information of MiC and MiMEP and Promote Standardisation
   ▪ Promotional Activities for Industrialisation

ii. **Driving Smart Project Delivery**
   ▪ Promote the Adoption of Digital Solutions for Project Delivery

Action

iii. **Promoting the Adoption of Innovation**
- Promote Robotics and Automation Applications in Construction
- Expand the Application of Product Certification Scheme
- Identify Innovative Technology for Productivity Enhancement in Building Projects
- Promotional Activities for Innovation
- Organise CIC Construction Innovation Award 2025

b. **2024 Key Performance Indicators (KPIs)**

i. Manage the Digital Resource Centre with Object Library to facilitate MiC and MiMEP Adoption with 50,000 target number of visits to the Digital Resource Centre
ii. Identify and promote 5 practical solutions bringing significant gain to construction productivity
iii. Identify innovation technology to enhance productivity significantly in Building Projects
iv. Preparation of marketing works for the CIC Innovation Award 2025

Members had no further comments on the proposed initiatives and KPIs, and thereby endorsed the Com-PRO 2024 business plan and budget. The CIC Secretariat would submit the business plan and budget to the Council for approval.

2.4 **High Productivity Construction – MiC & MiMEP**

CIC Secretariat

a. **Update on TCQ Report (ID-1, ID2 & ID3)**

The Secretariat updated Members with the recent status of TCQ report items conducted by ID department under three main strategies: Development of Digital Library to facilitate MiC and MiMEP (ID-1), Support and Promote MiC and MiMEP (ID-2) and Build up Industry's Capability on MiC and MiMEP(ID-3).

Regarding "Development of Digital Library to Facilitate MiC and MiMEP", Members suggested including case study on real projects to address pain point of the industry.

Members also suggested seeking Housing Department's assistance to introduce and indicate standardization for MiC and MiMEP for industry as reference. Member, representative from Housing Bureau, advised that Housing Department is investigating a better solution with repetitive testing subject to verification upon project completion.

Besides, Members raised their concerns on contract term, particularly in payment terms, shall be reviewed to facilitate the adoption of MiC and MiMEP and reminded the Secretariat to be aware of those drawings of IPA listed in the Buildings Department to enhance the platform's effectiveness.

Members took note of the suggestions and reminders and will follow up accordingly.

b.   Reference Material on MiC Installation and Disassembly

Reference Materials on MiC Installation and Disassembly targets to launch in July 2023 and the Secretariat is seeking comments from Members of Committee on Productivity and Joint Working Group on MiC.

c.   2024 Business Plan and Budget Plan for MiC

The Secretariat presented the proposed 2024 business plan and the associated budget for MiC. Initiatives under the business plan are focusing on three strategic directions, *viz*.: **i) Operation and maintenance of the MiC Resources Centre**; **ii) Promotion, facilitation and engagement of adoption of MiC**; **iii) Development of MiC technical courses**; and **iv) Promoting the Adoption of Productivity- enhancing Solutions**. The estimated budget for MiC to conduct the items of works listed below is HK$5.64M.

i.   **Operation and Maintenance of the MiC Resources Centre**
- Maintain resources / knowledge library including updating MiC news locally and worldwide
- **Update** MiC project information, producing promotional / site videos of projects for uploading to the MiC website and showing in the MiC Resources Centre
- Update showcase and exhibits
- Conduct guided tours and carry out general maintenance and daily operation of the MiC Resources Centre
- Maintain and enhance MiC website

ii.   **Promotion, facilitation and engagement of adoption of MiC**
- Hold an International Conference on High Productivity Construction (HPC)
- Conduct seminars / workshops / webinars / focus group meetings etc. on various topics
- Organise overseas / Mainland China MiC project and factory visits, seminars and conference
- Updating and enhancing MiC reference materials

   iii.   **Development of MiC Technical Courses**
- i.   **MiC** Courses for Project Manager (Master Class)
- ii.   **HPC** Course for Senior Executive

   iv.   **Addressing and Tackling Technical and Policy Issues**
- Consultancy for HPC Research and Development

   d.   **2024 Key Performance Indicators (KPIs)**

- i. Update MiC exhibits to focus on MiC successful sites and adopted new MiC technology with target visitors of 7,000
- ii. Encourage industry engagement for wider MiC adoption by organising at least 3 events including but not limited to conference, workshop, webinar and site visit etc.
- iii. Conduct and publish research reports on HPC to study its latest development and way forward
- iv. Renovate MiC Resources Center (lower embodied carbon)

Members had no further comments on the proposed initiatives and KPIs, and thereby endorsed the 2024 business plan and budget for MiC. The CIC Secretariat would submit the business plan and budget to the Council for approval.

2.5   **Update on TCQ Report (Apart from ID-1, ID-2 & ID-3)**

                                                     CIC Secretariat

The Secretariat updated Members with the recent status of TCQ report items conducted by ID departments under four main strategies: Shifting to High Productivity Construction (ID), Streamlining Approval Processes (AP), Driving Innovation (I) and Enhancing Project Management and Procurement (PM) in terms of short term and long term action plan. All items target to complete by 2023 / 2024.

Members had a discussion on the benefits and concerns of the study in Early Contractor Involvement (ECI) under the strategy item PM-4. The Secretariat would continuously monitor the ECI consultancy study and follow up with the status accordingly.

2.6   **Progress Update on ConTech Accelerator Programme**

                                                     CIC Secretariat

The Secretariat updated Members that 5 successful cases were identified, including AI Video Analytics 2D to 3D Distance Calculation, Edge AI Wearable, Inspection Robot in Narrow Space, Drilling Robot and Remote e-Inspection System for prefab components.

Action

A Demonstration Day, consisting of conference and exhibition, will be held on 1 August 2023, at Hong Kong Science and Technology Park. Both suppliers and end users will share their cases during the conference.

Members took note of the event.

2.7 **Report on Oversea Study Tour**

The Secretariat reported that the Study Tour in Japan was held in May. It covered visits to Fujita Technology Center, Obayashi Technology Research Institute, New Environment Exposition (N-Expo 2023), Global Warming Prevention Exhibition 2023 (GWPE 2023) and CSPI-Expo.

Some new technologies were discovered during the visits, in productivity and environmental and sustainability aspect, such as alloys and metals XRF analyser, robotics, 3D printing, reinforcement automation and hydrogen fuel cell.

Members suggested the Secretariat to share the knowledge of the above new technologies to the industry stakeholders e.g. hydrogen fuel cell for their reference.

2.8 **Progress Update on the Funded Research Project – Autonomous Mobile Robot for Material Delivery and Site Inspection**

Mr. Stone CHAN from Shui On Construction Company Limited updated Members on the progress of the funded project. The research teams focused on the hardware development and AI recognition of safety in the past 8 months and the 1st and 2nd milestones have been successfully achieved. In phase 3, the team will develop the SLAM navigation, which allows the mobile robot to map the route through scanning so that it could automatically arrive its destination for material delivery.

Members had no adverse comments on the research. The Secretariat would liaise with the project team to monitor the research progress and update the Members the progress from time to time.

2.9 **Progress Update on the Funded Research Project – Development of an Artificial Intelligence Rock Type Classification and Fracture State Characterization APP for Engineering Applications**

Prof. Louis WONG from The University of Hong Kong reported the progress of the funded project to Members. The AI model development

Action

was finished in past few months and the progress is on track as planned. The research team appointed a WebApp development company to develop the webpage layout and the backend integration. The developed webpage layouts and AI recognition functions were showcased. The research project will complete by September 2023 and the team will seeking supports for site trial afterwards.

Members had no adverse comments on the research. The Secretariat would liaise with the project team to monitor the research progress and update the Members the progress from time to time.

2.10 **Request for Extension of Time (EOT) on the Funded Research Project – Study of Artificial Intelligence for Road Surface Depression Detection using 3D LiDAR Data**

Prof. Charles WONG made request of a six-month extension for the funded project, i.e. extending the completion date from June 2023 to December 2023, with no cost implication. The research team planned to include the scope of developing the AI tools, improving algorithm accuracy and increasing the efficiency of road segmentation in this extension period. The research team previously discussed with Highways Department in which the extension considered reasonable and necessary.

Members approved this extension request and the Secretariat would liaise with the project team to monitor the research progress and update the Members the progress from time to time.

2.11 **Report on Applications of the CIC R&D Fund 2023**

The Secretariat reported the status of CIC R&D fund application. CIC received 19 nos. of R&D fund proposals in April 2023 . After initial assessment by ID departments, there were six proposals shortlisted as "Recommended" to committee, six proposals were regarded as "Potential to be Recommended" and seven proposals were classified as "Not Recommended". Three proposals relating to productivity will be shortlisted for Members to comment and endorse in the next meeting.

Members took note of the applications status.

2.12 **Any Other Business**

There was no other business.

2.13 **Next Meeting 003/23**

Action

The next meeting would be held on 20 September 2023 tentatively. The Secretariat would inform Members upon confirmation of the meeting details.

All to Note

The meeting was adjourned at 5:00 pm.