

HOW IMPROVED PROJECT AND COST MANAGEMENT OF CONSTRUCTION IS CRITICAL TO RECOVERING ECONOMIES

Construction Economics is Fundamental in Responding to Coronavirus



Global construction will be critical in countering the economic effects of coronavirus. Whilst most construction has been adversely affected in the short and medium term by closing sites, social distancing, material shortages and investment uncertainty, it will provide an important stimulus to the world economy if governments enable projects to proceed after the virus abates. Coupled with this,

the crisis is providing a catalyst for change in the industry in terms of the greater adoption of technology, consideration of sustainability and social value impacts, and greater collaboration. Construction allows value creation – and the world will need this more than ever as it recovers from this pandemic. Hence, the financial management of construction – ensuring value for money in both the public and private sectors - will be key in the economic reconstruction of the world economy.

FIG Commission 10

Construction project and cost management is represented by [FIG Commission 10](#). The mission of Commission 10 is:

- The promotion of the practice of construction project and cost management globally.
- The promotion of “best practice” for construction project and cost management globally.
- The promotion of dialogue between member organizations engaged in construction project and cost management
- Fostering of research appropriate to the better understanding of construction project and cost management practice around the world.
- The promotion of cooperation among FIG Members organizations involving construction project and cost management for their mutual well-being and that of their individual members.
- The advancement of construction project and cost management by education and research and continuing professional development
- To secure uniformity in education, standards and methodology for construction project and cost management throughout the world
- To facilitate and assist in development of formal education framework and competencies in the profession of construction project and cost management among member organizations that may not have a formal education or professional development in these professions
- To achieve the above mission objectives, FIG Commission 10 will collaborate with other international or regional organizations such as RICS, ICEC, PAQS, CEEC, AAQS, PMI and other similar organizations and promote the use of international standards such as ICMS (www.icms-coalition.org).

Global standards in construction

[FIG](#) is a member of the ICMS coalition and part of the agreed role of Commission 10 is to disseminate and advocate the use of ICMS (updated September 2019) with FIG stakeholders worldwide. As a global surveying body operating in the construction and infrastructure sector, FIG can be an important catalyst in promoting the use of ICMS with NGO's, governments and end-users, as well as the profession.

Greater use of these standards will allow more consistent and standardized global construction cost reporting and the ability to collect and share data in a standardized form.

There is also much collateral developing for ICMS. This includes a User Guide, mapping to national, granular, cost measurement standards, a data standard, examples of ICMS in use and standard Excel templates.

Through these efforts, ICMS has achieved good adoption worldwide and promises to aid the unification of the financial management of construction projects. As ICMS has now been extended into life cycle costs, it also becomes a tool for better design decisions on sustainability and the inevitable trade-offs that occur between capital and life cycle costs.

Standardizing global cost reporting will be important in enabling better decisions on construction investment and project initiation. In a fiscally constrained, post-pandemic world, this rigour will be even more important as governments attempt to extract maximum value from their stimulus measures.



The need for increased collaboration in construction and global standards necessitates greater use of new technologies.

Working week

Applying these aims and objectives to the current environment, two principal categories for Commission 10 papers emerged for the [FIG Working \(from home\) Week](#), which relate to the overall conference themes.

Firstly, session [Construction Economics: Problems and Solutions](#), construction is a fragmented industry often suffering from low efficiency. It is ripe for change. Africa and Asia have some particular problems, which the papers address, in terms of productivity, performance and people. Recognized international standards can also help to address some of these problems and this is underlined by the collaborative success of ICMS. This category relates to the conference theme of '*ten years to achieve the United Nations' Sustainable Development Goals*'.

Secondly, the need for increased collaboration in construction and global standards necessitates greater use of new technologies. Hence, the second theme deals with '[Construction 4.0](#)', which refers to the fourth industrial revolution in construction. It deals with a confluence of trends and technologies that promise to reshape the way that built environment assets are designed, constructed and operated. Construction 4.0 fuses innovations in industrial production (off site, 3D printing), cyber-physical systems (actuators, sensors, IoT), digital computing technologies (BIM, AI, blockchain). This session examines, therefore, not only developments in BIM, but also related innovations in facilities management and machine learning. This category relates to the conference theme of '*smart surveyors*'.

Conclusion

By improving standards in construction project and cost management and applying new technologies, construction can play an important part in economic recovery from the coronavirus. The sessions in the Working Week examine problems and potential solutions in construction investment and delivery and link new technologies to these potential solutions in a pragmatic way. Longer term, these improvements will allow construction to contribute meaningful to the attainment of sustainable development goals and which will remain a problem long after the pandemic has abated.

Further readings:

[FIG Working Week 2020 Proceedings](#)
[FIG Surveyors Reference Library](#)
[FIG Peer Review Journal](#)
[FIG Publications](#)

FIG Commission 10 Sessions:

- [TS02C: Construction 4.0: a wider BIM Agenda](#)
- [TS05C: Construction Economics: Problems and Solutions](#)

FIG Commission 10 website:

- [General](#)
- [Work Plan 2019-2022](#)