Chairman of the Construction Industry Council

Message by Mr CHAN Ka-kui, SBS, JP



Over the past three or four decades, both the Hong Kong Government and the construction industry have made a number of improvements to construction safety, including the enactment of legislation on industrial safety management, the introduction of a green card system, the implementation of an ordinance requirement "designated workers for designated skills" and the Pay for Safety Scheme. The Occupational Safety and Health Council (OSHC), the Housing Department (HD), the Development Bureau (DEVB), the Construction Industry Council (CIC) and the Labour Department all proactively organise construction safety promotional campaigns and construction safety competitions every year. The Safety Forum this year is already the 14th Forum organised by the HD. Regrettably, no obvious improvement to the construction safety was seen for the past two decades.

In terms of the number of deaths, nearly 20 construction workers' lives are claimed yearly as a result of industrial accidents. We therefore must have a structural change in the local construction industry. Everybody should have the determination to make reforms since occasional and small-scale remedies are not useful in changing the status quo.

In the interest of time, today I can only discuss with you two issues relating to the operational culture of the construction industry. The first one is about the management culture and the second one is about the design and construction cultures.

All of you may be aware that the CIC and the DEVB have initiated again the "Life First" campaign to promote safety this year and to remind us to do our best in a serious manner in construction safety risk management. To date, there were over 200 participating companies, involving more than 500 site projects, many of which are HD projects. The "Life First" campaign covers several important safety messages such as "site safety is a shared responsibility".

Whenever there is an accident on a site, people tend to evade their responsibilities and will point the finger immediately at the construction company and claim that ensuring safety is the contractor's duty. Legally speaking, contractors may have a greater responsibility. However, as a matter of conscience, all participating stakeholders of a project, including developers, consultants, main contractors, sub-contractors, workers, etc. should bear the responsibility. Those at a higher rank and with greater power should take on a heavier responsibility. For example, project managers of developers, engineers, site foremen and frontline supervisory staff, who have the closest contact with site operation, are the most influential and best placed people to prevent dangerous construction on sites.

As we have many project managers, architects, engineers and foremen at this Forum today, I would like to appeal to you to take care of safety management in addition to the management of works progress and quality. Once an unsafe work activity is observed, you should stop it immediately. Let's work with contractors to promote safety management and embrace safety together.

My second point for discussion is about the change in design and construction cultures. All accidents on sites are related to on-site construction. To reduce the number of accidents on sites, we should cut down on-site construction processes, reduce the number of site workers and transfer the work processes to factories. The more the work processes are transferred, the better and safer construction on sites we can achieve. It is my personal observation that a large number of on-site construction processes, particularly the process of working at height, were cut down in the 1980s and 1990s following the introduction of precast construction to Hong Kong by the HD. It is precisely the successful result of the precast construction that the number of industrial accidents relating to HD projects has decreased a lot. The accident rate per 1 000 workers dropped from 221 in 1991 to 11.1 in 2007, accounting for a decrease of more than 90%. We can say that the introduction of precast construction is equivalent to the first industrial revolution for the construction industry in Hong Kong. For the transfer of work processes to factories, we call it "DfMA" (Design for Manufacture and Assembly). According to the experience of the HD, the adoption of the DfMA is proved to be feasible and can enhance construction safety. The more transfer of work processes we make, the safer the construction will be and the more complete solution we can achieve. The Modular Integrated Construction (MiC) method is considered to be the highest level of the DfMA.

At this Forum, we have various stakeholders, either joining us in person or online, of different posts in the industry, including designers, engineers, architects, builders, property managers, electrical and mechanical engineers. I hope that all of us will bear the DfMA in mind and try to consider it as far as possible when handling New works, Maintenance Works, civil engineering works or electrical and mechanical engineering works. Ever since the design stage, we should consider what components can be completed in a factory and how the components be assembled upon delivery to the site, with a view to minimising work processes on sites.

Last month, I learnt from the news that the Housing Authority (HA) has decided to adopt the MiC method for the project at the Tung Chung site, followed by two other project sites respectively at Tak Tin Street and Anderson Road. I believe that the HA will, in the future, further step up its efforts to encourage the industry to get well prepared for the extensive application of the MiC in public housing developments. The MiC method is considered to bring about the second industrial revolution in the construction industry of Hong Kong, and will thus enhance greatly the performance of the local construction industry in terms of safety, environmental protection, quality and efficiency. With the support of the HD and given its considerable housing production, the reform will become smoother and meaningful, bringing a phenomenal change to the Hong Kong construction industry.

My fellow members of the construction industry, whether you join this Forum in person or online, please get yourselves well prepared for the coming of a great era. The CIC has set up an MiC Resources Centre at the CIC-Zero Carbon Park in Kowloon Bay, where you can obtain the latest information on the MiC. The CIC also hosts an array of high quality seminars by inviting experts to share their experiences in the MiC in terms of design, approval, procurement and construction. On 29 September 2021, an international symposium will be held for MiC experts around the world to share with us the latest development of the MiC. A number of MiC courses are also provided at the Institute of Construction.

That said, the most practical initiative must be the one-billion-dollar Construction Innovation and Technology Fund which provides a dedicated funding for the adoption of the MiC. Lastly, please allow me to remind you once again to enrol for this year's "Life First" campaign. Let us join hands to promote site safety and say "no" to all hazards.