

K.A.M KAMAR, Z.A. HAMID, I. DIN. *The adoption of Industrialised Building System (IBS) construction in Malaysia: The history, policies, experiences and lesson learned.* *Gerontechnology* 2012;11(2):175; doi:10.4017/gt.2012.11.02.634.00

Purpose Industry and government in Malaysia coined the term industrialised building system (IBS) to describe the adoption of construction industrialisation, mechanisation, and the use of prefabrication of components in building construction. IBS consists of precast component systems, fabricated steel structures, innovative mould systems, modular block systems, and prefabricated timber structures as construction components. Parts of the building that are repetitive but difficult – and too time consuming and labour intensive to be casted onsite – are designed and detailed as standardised components at the factory and are then brought to the site to be assembled. The construction industry in Malaysia has started to embrace IBS as a method of attaining better construction quality and productivity, reducing risks related to occupational safety and health, alleviating issues for skilled workers and dependency on manual foreign labour, and achieving the ultimate goal of reducing the overall cost of construction. The chronology of IBS-adoption in Malaysia goes back a long way, reaching back to the 1960s, when precast elements were adopted in the building industry to address the problem of an acute housing shortage. However, the introduction of IBS was never sustained beyond this period. As a result of the failure of early closed-fabricated systems, the industry is now avoiding changing its construction method to IBS. Some of the foreign systems that were introduced during the late 1960s and 1970s were also found to be unsuitable in Malaysia's climate and not very compatible with social practices. IBS has regained its popularity presently due to problems with construction workforces where the industry has been relying for a long time on unskilled workers from neighbouring countries. **Method** In 1999, the IBS Strategic Plan was launched to promote the system's usage in the industry. This was followed by the IBS Roadmap 2003-2010 and IBS Roadmap 2011-2015; these are blueprints for industrialised construction by 2015. The roadmaps have been developed by the government to chart progress and guide the awareness programmes, incentives, vendor scheme development, training, quality control and research and development programmes. The government also took the lead in 2008, by mandating that all public-sector projects must attain no less than 70% IBS-content under the Treasury Circular SPP 07/2008. This policy aims to build up momentum and to establish demand for IBS-components, thus bringing the cost down. **Results & Discussion** At present, IBS-construction is widely used as a mainstream method and the implementation has moved from prefabrication towards mechanisation, automation, and robotics applications. This paper highlights some of the history, policies, experiences, and lesson learned in adopting IBS in Malaysia. The outlook for IBS-implementation in Malaysia is bright, but much work is still needed from the government to convince the contractors, manufacturers, and suppliers to adopt IBS-construction.

Keywords: construction, industrialized building systems, Malaysia

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