Phase 2 Statement Theme Digitalisation
Statement number 4
Launch Date 04 August 2020
Closing Date for submission 14 September 2020

Title	Quantification of Site Situation against Building information Management (BIM) Model for Project Progress and Payment
Background	Currently, site progress is updated by site staff/modeller who verifies against the documents submitted by various parties before updating the BIM Model. Only after this verification is completed, the disbursement of payment (better cash flow for companies) is made. This is very time consuming.
Challenges	Quantification of actual site situation lacks accuracy due to the discrepancies between the documents submitted by the various parties and the actual site installation. There is no common platform to validate the actual site progress status. Currently, actual site progress status and update to the system is done manually which is very time consuming and labour intensive.
Desired Outcomes	We envision a solution to capture 360 photos and point cloud data to quantify the site progress automatically. A common platform to update, view and validate the site progress data and extract the site progress report from the platform automatically.
Requirements	1. Explains approach in getting multiple users inputs 2. Includes method to acquire 360 photo and point cloud data to generate a virtual tour. 3. Work flow to generate virtual tour should be explained, and should be simple enough to be operated by a site personnel 4. Include approach to check against BIM model to flag out discrepancies. 5. Includes method to quantify site progress automatically 6. Includes ability to generate site progress report automatically
Possible Solutions	Scan Quick Response (QR) code to trace the progress of installation, standalone progress tracking software.
Development Timeframe	Applicants are encouraged to propose phases of development and delivery. The total project delivery period shall not exceed 12 months. A proposed timeline is as follows: 1. 2 months: To scan, acquire/process point cloud data and capture 360 photos. 2. 4 months: To developing the progress tracking algorithm. 3. 4 months To developing progress report extraction from the platform.

	4. 2 months: To wrap up any outstanding matters.
Additional Info	Nil