

## Talk on Construction Visualisation in Project 4D Planning & Scheduling

Organized by Project Management Technical Division, IEM  
BEM Approved CPD/PDP Hours: 2 Ref No: IEM17/HQ/027/T

**Date : 18 February 2017 (Saturday)**  
**Time : 9.00 am – 11.00 am (Refreshments will be served at 08.30 am)**  
**Venue : C&S and TUS Lecture Room, 2<sup>nd</sup> Floor Wisma IEM**  
**Speaker : Mr. Philip Palmer**

### SYNOPSIS

In construction, 4D is any model that combines space and time into a single interwoven project visualisation. Historically, space and time information of the construction industry has been disconnected. Design, defining spaces; and the project schedule, defining time, have always been created or as some would like to say "authored" separately, held in separate data silos, and only ever combined by the imagination of the people involved. In more recent history, there have been attempts by many of the engineering computer aided design (CAD) software systems to combine the spatial data from 3D design models with a time "attribute" from the project schedule to trigger computer graphics rendering to create a 4D visualisation.

The CAD oriented segmented method significantly limits project delivery effectiveness because the two components are not integrated, thereby maintaining industry silos. To consider time a fixed attribute in 4D may be convenient for computer graphics rendering, and may look interesting; however time is, and always will be, dynamic in construction operations. CAD oriented visualisation that is completely separated from construction management misleads the audience by appearing to be the output of 4D digital project delivery methods when it is only ever a 4D visualisation. The 4D visualisation does little or nothing to improve construction project delivery results and overall construction industry performance. Some critics will go as far as saying that 4D visualisation techniques damage the project delivery processes because it completely lacks substance, integrity and respect for the complex demands of project management that get masked.

Let's be clear, we are talking about using these tools to "validate" a project schedule by creating a "virtual rehearsal" of the project, and then communicating that idea to project stakeholders, from foremen to owners. It doesn't matter if the project is at a Macro-level (phase 1, 2, 3, etc) or the Micro Level (place rebar cage). It doesn't matter if the project is vertical construction or heavy civil, or airplane assemblies. What matters is that you have resources (i.e. materials, equipment, people, space, money, and time) and you need to figure out the best way to use these resources to complete your project.

### BIODATA OF SPEAKER

**Mr. Phil Palmer** is the Senior Consultant with PCS Sdn Bhd since September 2005 to date. He is responsible in establishing, implementation of Primavera and Synchro 4D project management software to suit clients' requirements; process and procedure definition and documentation; consulting, training and mentoring of clients in Project Management software, project controls and project management methodologies. He is also in charge to provide planning services to all industries.

In 1986, he completed Production Engineering with Sydney Technical College and further proceeded to Master of Science Degree in Project Management with Curtin University of Technology in the year 2004. He has been involved in Project Controls on many projects in oil & gas, mining, ship building, construction and IT in countries such as Australia, Singapore, Indonesia, Malaysia, China, Vietnam and Nigeria.

He is recognized and well regarded in project management, planning and scheduling, project control and risk management skills and highly regarded in the facilitation of training programmes within the area of project management. He is a member of professional bodies such as Project Management Institute (PMI), Association for the Advancement of Cost Engineers (AACE) and Australian Institute of Project Management (AIPM). Currently, he lectures part time at Curtin University of Technology in the Project Management Master of Science Degree program and is working in conjunction with Curtin Consultancy (Malaysia) Sdn Bhd to develop a short 3 day Project Management course.

**Ir. Dr. Ahmad Anuar B. Othman**  
**Chairman**  
**Project Management Technical Division**

### ANNOUNCEMENTS TO NOTE:

- **Non members** may also attend the talk but will need to pay a registration fee of **RM50** and an administrative fee of **RM15**. GST is inclusive.
- Limited seats are available on a "first come first served" basis (maximum 100 participants). **To secure your seat, kindly register online at [www.myiem.org.my](http://www.myiem.org.my).**

### ADMINISTRATIVE FEE

- Kindly be informed that an administrative fee of **RM15** is payable for talks organized by IEM. GST is inclusive.
- Student Members are however exempted.

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