

Seminar's Title:

Design-Build (DB) Project Management

Purpose and Background:

Design-Build (DB) contracting, one of the most prominent forms of contracting agreement in the construction industry, is used by a contractor to design the project facility, procure the necessary equipment and materials in order to build and deliver the functioning facility to its client, either directly or by subcontracting part of the work. This is the management of an increasingly used project delivery approach in which the client requires a single contract entity, a Design-Build (DB) contractor, to provide both the design and construction services through one point of contact. Companies that deliver Design-Build projects are commonly referred to as EPC contractors whose revenues are derived from executing projects for clients on a cost-reimbursable, or lump sum basis. The contractor carries the risk to complete the project's agreed work scope on time, within the client's approved budget and meet their requirements and expectations. Clients with large complex, industrial projects choose the Design-Build contracting with turn-key delivery, commonly known as a Lump Sum Turn Key (LSTK) contract.

This course is designed to give participants a good knowledge of Design-Build project management. It provides participants with the knowledge of DB activities from initial feasibility studies, to detailed engineering, construction and operations management of the actual project facilities and their benefits in effectively and efficiently managing DB projects that they can apply immediately in their EPC project environment.

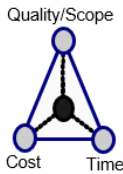
Learning Objectives

To provide practical coverage of all basic aspects involved with managing a Design Build contract. The seminar covers how DB contracts are set up, why owners choose DB contracts, project management activities from the DB contractor's point of view and what owner should be looking for during commissioning and start-up.

Key Benefits of Attending:

- Provide participants with the basic knowledge of DB project management and their benefits in effectively and efficiently managing construction projects.
- Learn practical skills, concepts and principles of the DB approach to be adapted to specific project environments.
- Understand the characteristics of a DB contract.
- Understand how DB contracts are set up
- Learn why owners choose EPC contracts
- Identify and perform the key DB processes as well as their implementation to increase the probability of success of a project and meet Owner's requirements and expectation.
- Learn to understand project management activities from EPC contractor's viewpoint





- Ensure effective management of Quality/Scope, Time and Cost parameters in DB contracting.
- What owner should be looking for during commissioning and start up in a DB contract

Who Should Attend

This seminar is for those responsible for managing and/or working on EPC projects of any size desirous to learn how to effectively use knowledge of basic, practical and formal EPC project management principles and methodologies in their day-to-day work. These include EPC Managers/Engineers, Technical Directors, Procurement Managers, Contract Managers, Contractors, Suppliers and other professionals working in the construction industry.

Outline

The seminar is scheduled for three (3) days; each day starting from 8:30 AM to 4:30 PM with two fifteen minute breaks (morning and afternoon).

DAY 1

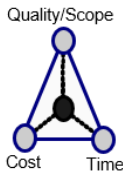
The Project Management Functions

- Initiating
- Planning
- Organizing
- Directing
- Coordinating
- Monitoring and Controlling
- Closing

The Design-Build (DB) Overview

- What is Design Build (DB)?
- Why owners choose DB contracting?
- EPC and DB contract
- The Design-Build/EPC Contractor
- Design Build (DB) versus Design Bid Build (DBB)
- The DB Project Teams (Owner & Contractor)
- Driving parameters for using DB
- The DB project characteristics
- DB Critical Success Factors (CSFs)
- DB performance criteria
- Advantages of DB contract
- Risks in DB contract





The DB Project Management Overview

- The DB Project Team
- The Deciding Factor for Using DB Project Management
- Post Contract Award for DB Approach
- DB Contract Technical Requirements
- DB Contract Cost Requirement
- DB Contract Schedule Requirement
- DB Scheduling Conference
- DB Schedule Imperatives

The Design Administration in DB Projects

- The DB Culture
- Design Personnel
- DB Contract Design Inputs
- DB Charettes
- Performance Criteria Interpretation
- Design Submittals and Reviews

Day 2

The Design Quality Management in DB Project

- DB Quality Assurance Model
- What is Design Quality in DB Projects?
- The Importance of Economics in the Design Phase

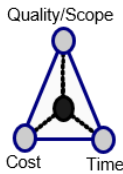
The Construction Quality Management in DB Projects

- What is Construction Quality in DB?
- Construction Quality Requirements and Owner's Roles
- Verification and Acceptance Testing
- Post Award Construction Quality Plans
- Construction Quality Personnel Requirements

The DB Change Orders

- DB Change Order Entitlement
- DB Change Management
- DB Change Order Process During Design





Day 3

Progress Payment During Design and Construction

- Design Progress Payment
- Retainage and Final Payment
- Payment Limitation
- Incentive Payment
- DB Cost Control
- Case Studies in DB Project Management
- Lessons Learned

DB Project Management Closing Thoughts

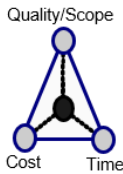
- Cost and Schedule Consideration
- DB Risks
- The Future of DB

Group Discussions, Video Presentation, Practical Examples, Exercises and Case Study

Seminar's Instructor: Dr. Nghi M. Nguyen, Ph.D., P.E., PMP, M.ASCE. President and CEO of NDV Project Management Services, Inc (NDV) since 1995, Dr, Nghi Nguyen has had more than 30 years of progressive, domestic and international consulting and training experience in the field of project/program/portfolio management on major construction, aerospace, defence and high-technology projects with leading Canadian and U.S. corporation such as the SNC-Lavalin Group, Lockheed Martin, CAE and the Canadian Space Agency and NASA. Prior to founding NDV in 1995, he served as Program Control Manager for the multi-billion dollar Canadian Patrol Frigate (CPF) program, the largest and most complex shipbuilding program in Canadian history for Lockheed Martin Canada (formerly Unisys Systems Canada).

As an internationally recognized project management consultant and trainer, Dr. Nguyen has assisted clients with project management approaches to effectively and efficiently complete projects and attain their objectives. He is a specialist in project management training, consulting, definition, development, identification of project objectives, constraints and methodologies. Dr. Nguyen worked as a project management consultant for the Canadian Space Agency (CSA) on projects associated with the International Space Station (ISS) program, the 16-nation effort, lead by NASA, to build the permanently orbiting laboratory in space, the largest and most sophisticated international engineering project ever undertaken in the history of the world as well as for SNC-Lavalin International on China's Three Gorges hydro-electric development project, the largest construction project in the world to date, and was involved in a number of projects in the Information Technology (IT) and Oil and Gas (O&G) sectors, among them was the construction of the \$ 5 billion Hibernia Oil Production Platform in St John, Newfoundland, Canada. Dr. Nguyen has delivered project management seminars for the American Society of Civil Engineers (ASCE), International Institute for Learning, Inc (IIL) in the USA, EuroMatech and Britannia of the U.K., Glariden Global in Singapore and various





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organizations in Asia and Vietnam as well as those associated with the engineering organizations worldwide.

An internationally recognized speaker, author and presenter, Dr. Nguyen has written and presented numerous technical papers on project/program management related topics in international conventions and congresses in Canada, the U.S., Europe, Asia and the Caribbean, sponsored by professional associations such as the Project Management Institute (PMI), the American Consulting Engineering Council (ACEC), The Association for the Advancement of Cost Engineering (AACE) International, American/Canadian Society of Civil Engineers (ASCE/CSCE), the Pan-Pacific Business Association (PPBA), the American Institute of Aeronautics and Astronautics (AIAA), the Caribbean Council of Engineering Association (CCEA) and the Paris-based association Francais des Ingenieurs et Techniciens d'Estimation et de Planification de Projets (AFITEP). Since 1995, Dr. Nguyen has conducted numerous project management seminars for thousands of project managers practising in all industries in a variety of topics in many countries including Canada, the U.S.A., the U.K., France, Spain, Germany, the Netherlands, Austria, Norway, Switzerland, Cyprus, China, Hong Kong, Thailand, Singapore, Malaysia, Japan, Indonesia, Vietnam, Australia, New Zealand, the U.E.A.(Dubai and Abu Dhabi), Kuwait, Saudi Arabia, Colombia and Barbados.

Educated at McGill and Concordia Universities in Montreal, Quebec, Canada, Dr. Nguyen holds B.S., M.S. and Ph.D. degrees in Civil Engineering and Construction & Project Management, is a Certified Project Management Professional (PMP) and has been a part-time professor at the Faculty of Engineering and Computer Science at Concordia University, teaching project management courses at both undergraduate and graduate levels since 1997. He has also lectured under the United Nations Development Programme (UNDP), McGill University Executive Institute, the Maastricht MBA programme (a joint programme between the Maastricht School of Management of the Netherlands and the School of Industrial Management of Ho Chi Minh City University of Technology, Vietnam) and is a registered civil engineer and project manager in both Canada and the USA. Dr. Nguyen was certified as a PMP (Project Management Professional) by the Project Management Institute (PMI) in 1995. He served as a member of the Canadian Advisory Council (CAC), set up by The Standards Council of Canada (SCC) to participate in the development of the International Organization for Standardization (ISO)'s project management standard released in September 2012 as ISO 21500 for project management as well as provided recommendations as Draft Reviewer and Contributor to the PMBOK® Guide – Fifth Edition of the Project Management Institute (PMI) released in January 2013, both considered by project management professionals worldwide as globally and internationally accepted project management standards. Dr. Nghi Nguyen has also been serving the same role to the “soon-to-be-released” PMBOK® Sixth Edition to be published in 2017 by PMI.

