



# Hydro Asia 2016

## Training Course on Contracts Management and the Practical Use of FIDIC Conditions of Contract in the Hydropower Construction Industry

Supported by Asia Sustainable and Alternative Energy Program (ASTAE)



Sunday February 28 and Monday February 29, 2016

VIENTIANE, LAOS

## 1. Background

Hydropower projects are often blamed for time and cost overruns. Understanding contracts management is the key to mitigation measures. The World Bank Group is assisting the growing hydropower sectors in Asia & the Pacific. The International Federation of Consulting Engineers (FIDIC) Conditions of Contract are being increasingly used by the hydropower construction industry in countries of these regions. The Bank intends to organize a training course in contracts management and the practical use of the FIDIC Conditions of Contract to help build the capacity and confidence of engineers and managers in working with these documents whether representing private or public enterprises, employers, consultants or contractors.

## 2. Objective

The main objective of this training is to provide a good understanding of good practice of international contracts management and the practical use of Conditions of Contract for Construction (First Ed. 1999). Upon completion of this training, the trainee is expected to be able to understand the fundamentals of the practical use of the FIDIC Conditions of Contract, and understand the fundamentals of good contracting in the hydropower industry.



## 3. Methodology ---

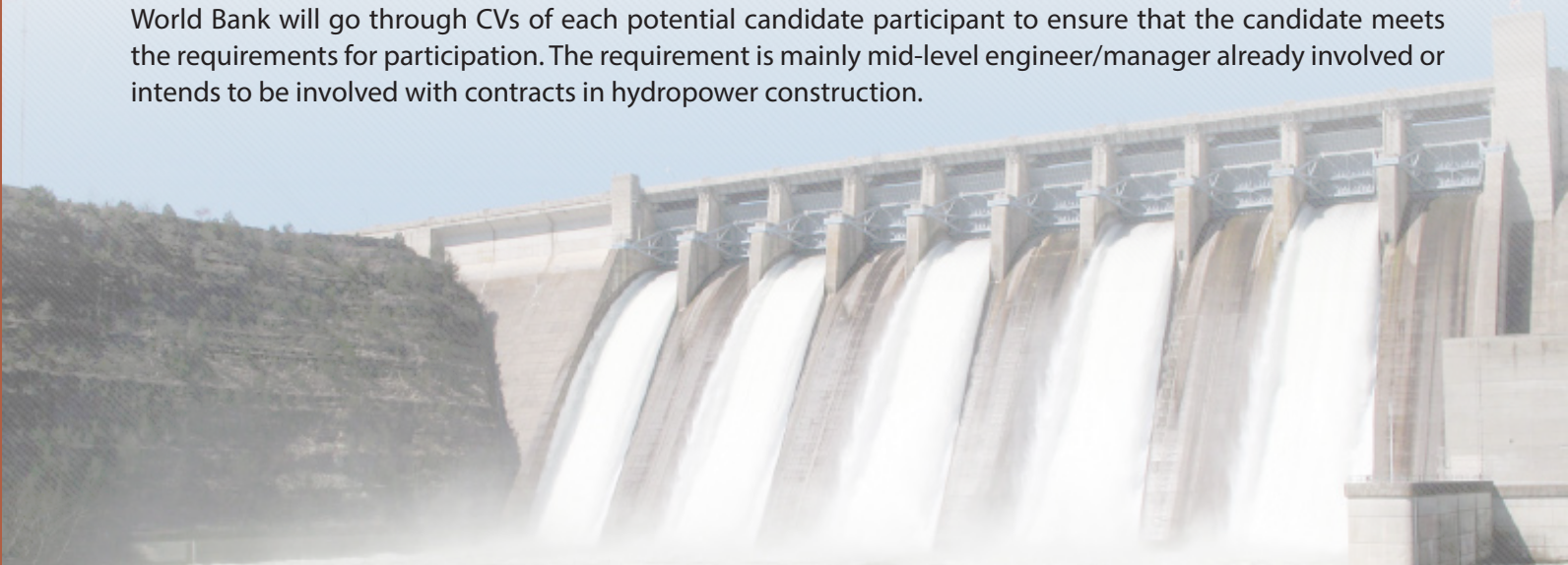
Participatory approach will be applied during the in-class training sessions. The two day training will consist of the following components:

- i. Comprehensive explanation of the Practical Use of Conditions of Contract for Construction for Building and Engineering Works designed by the Employer (First Ed. 1999, Red Book). Practical real life case studies will be used.
- ii. Explanation of the Construction Contract MDB Harmonised Ed (Version 3: June 2010 Harmonised Red Book).
- iii. A brief introduction to other FIDIC forms of contract (Yellow and Silver Books, others) and likely forthcoming revisions to them.
- iv. Introduction to good practice of contracts and project management, claims and dispute resolutions and settlements.
- v. Handling of issues that are unique to hydropower and other water mega-projects, and how they may differ from other types of construction.

## 4. Organization ---

The lectures will be delivered by Zoltan Zahonyi, FIDIC, Dietmar Scheel and William Dobbs of MWH Global (USA) who have extensive knowledge of FIDIC and solid experience of contracts management in hydropower and other major river and marine projects.

- ❖ The two day training will be held on February 28-29, 2016 at the beginning of Hydro Asia 2016 in Vientiane, Laos and will be organized by Aqua Media International. Participants will be able to attend the main conference from March 1 to 3, 2016.
- ❖ Participants will come from WBG clients from Afghanistan, Bhutan, Cambodia, India, Indonesia, Laos, Myanmar, Nepal, Pakistan, Papua New Guinea, Solomon Islands, Sri Lanka and Vietnam. AMI will be responsible for the logistics including venue, meals and coffee breaks and a full registration process for about 30 participants. The World Bank will go through CVs of each potential candidate participant to ensure that the candidate meets the requirements for participation. The requirement is mainly mid-level engineer/manager already involved or intends to be involved with contracts in hydropower construction.





# 5. Agenda

## DAY ONE

Sunday, February 28, 2016

08.30-09.00 Registration

08.30-09.00 Opening

09.00-10.00 Session 1: FIDIC

- The FIDIC Conditions of Contracts - a general overview
- Selecting a contract type

10.00-11.00 Session 2: FIDIC Red Book [Conditions of Contract for Construction] (1999), Part 1

- FIDIC Red Book (1999) -basic features, applicability
- Preparing for a FIDIC Red Book (1999) Contract
- The Structure of the Contract Conditions (Clauses)
- The Parties and their basic roles and obligations in accordance with the Conditions of Contract
- The Contract Documents
- The Defined Terms
- Subcontracting, Nominated Subcontractors
- Staff and Labour

11.00-12.00 Session 3: FIDIC Red Book (1999), Part 2

- The Quality Issues (Plant, Materials and Workmanship)
- The Time is of Essence (Commencement, Delays and Suspensions)

- Completion and Taking-Over
- Defects Liability
- Accepted Contract Amount | Contract Price
- Measurement and Valuation
- Payment Procedures
- Risk and Responsibility, Force Majeure and Insurance

12.00-13.00 Session 4: FIDIC Red Book (1999), Part 3

- Variations and Adjustments
- Claims & Disputes, the Key Features
- Management of Disputes
- Suspension, Termination

13.00-14.00 Lunch

14.00-14.30 Guest lecture, **Legal issues**. Kelly Malone, Global Power Team Head, King & Spalding

14.30-16.00 Session 5: Contracts Management in Hydropower Projects

16.00-17.30 Questions & Answers

18.00-21.00 Dinner

## DAY TWO

Monday February 29, 2016

08.30-09.00 Session 6: World Bank funded hydropower projects, issues & challenges

- Overview
- Public Vs. Private

09.00-10.00 Session 7: Where Do I Start?

- How Does Hydropower Differ from Other Types of Construction?
- Preparing a Contracting Plan
- Best Contract Types for Various Kinds of Hydropower Projects
- Integrating the Employer's Normal Practices & Potential Conflicts
- Particular Conditions of Contract ; General Specification Requirements
- Case Study

10.00-11.30 Session 8: Dams and Hydro – Specific Considerations

- Construction and Procurement Planning Issues
- Contextualizing a Contract to Local Cultures
- Interfaces with Rural Mountain Peoples

- Transparency
- Geotechnical Risks
- Other Constructability Concerns
- Price Escalation; Currency Issues
- Other Considerations, Trends, and Risks

11.30-12.15 Guest lecture. **Risk management**. Harald Wagner, Consultant

12.15-13.15 Session 9: Contract Administration

- General Philosophy
- Know Your Role!
- The Games People Play
- Risk Identification/Mitigation during the Construction Process
- Proactive Handling of Variations and Claims
- Appreciating Cultural Differences
- Final "Pearls of Wisdom"

13.15-14.30 Lunch Break

14.30-16.30 Breakout sessions

16.30-17.30 Discussions and closure



# About the speakers



**WILLIAM B. DOBBS, P.E., Project Manager, Neelum Jhelum Hydroelectric Project (Pakistan), MWH Global.** Bill has enjoyed 39 years on long-term assignments in 13 countries on large engineering projects in South Asia, North Africa, Latin America, and the USA, primarily on jobsites involving hydropower, river diversion, flood control, spillway gate rehabilitation, groundwater control, wastewater conveyance, and marine construction. Bill currently resides in Pakistan as he manages the joint venture performing post-tender designs and construction supervision on the Neelum Jhelum Project, a 969 MW run-of-the-river hydroelectric facility that involves substantial underground work, using the FIDIC Red Book. The project underwent substantial post-tender design changes as a result of the October 2005 Muzaffarabad Earthquake, centered adjacent to the power tunnel aligned. Over his career he served in both Contractor and Engineer roles.



**PRAVIN KARKI, Senior Hydropower Specialist, World Bank.** Pravin is a member of the core group of the Global Solutions Group on Hydropower & Dams at the World Bank. Pravin has over 20 years of professional experience related to hydropower and water resources - in hydropower engineering, international policy and academic research. He has experience of living and working in Nepal, Myanmar, Russia, Czech Republic, Norway, UK and US. Pravin completed his bachelor's degree in Water Resources & Hydraulic Structures from the Czech Technical University followed by MSc. in Hydropower Engineering from Norway. He graduated with a MPhil in Engineering for Sustainable Development from Darwin College, Cambridge University, UK. Pravin currently leads the work on resilience in hydropower & dams at the World Bank.

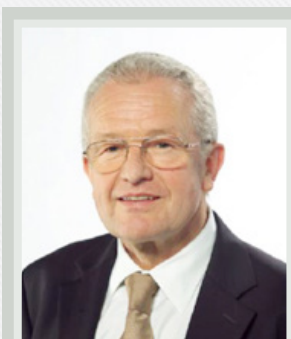


**KELLY MALONE, Global Power Team Head, King & Spalding.** Kelly is based in Singapore and serves as an international counsel advising state owned utilities and project sponsors on the development, construction, financing and privatization of major hydropower globally. During the past five years, he has advised on 29 hydropower projects located in 15 countries.





**DIETMAR SCHEEL, P.E.,** *Principal Construction Manager/Contracts Specialist*, MWH Global. Dietmar has 39 years of experience in construction planning/engineering of hydropower and other large river projects, preparing/administering major hydro/waterworks construction and equipment contracts, contract packaging, risk identification/mitigation, preparing commercial terms, claims analysis/resolution, construction scheduling/cost control, constructability reviews, quality control/ assurance, and managing field offices. His contracting experience covers various project delivery systems including design-build, EPC, build-operate-transfer, PPP, target-estimate, cost-plus, conventional design-bid-build and various unconventional hybrid contract forms. His first exposure to FIDIC was in the 1970s. Besides the USA, he has lived in China, Indonesia, Pakistan, Saudi Arabia, Palestine, Egypt, Ethiopia, Zambia, Lesotho, Haiti, Canada, and Germany.



**HARALD WAGNER, P.E.** *consulting engineer*. Harald is a licensed master builder (Austria), chartered expert, government counsellor by the Austrian president. He is an independent expert for underground infrastructures since 1985 and an assistant professor for architects, Technical University, Austria. He is also an adjunct professor at the department of civil engineering, KMUTL, Bangkok, Thailand and a director of the international civil engineering program at KMUTL. Harald is an expert member of the international tunneling association's (ITA) executive council since 2007. He is a consultant, lecturer, and advisor for underground structures with an emphasis on tunnel contracts in design and construction including hydro tunnels, risk management and geotechnical baselines.



**ZOLTAN ZAHONYI, M.Sc.,** *Civil Engineer*, postgraduate in Law. Zoltan is an accredited international FIDIC trainer. His first involvements with consulting engineering and FIDIC contracts took place in the early 90s. Took part in spreading the use and practice of using FIDIC Conditions of Contracts in Hungary, among others he is the translator of FIDIC 1999 Red, Green, 1995 Orange and also the 2008 Gold Book into Hungarian. Apart from providing consultancy services for engineers, employers as well as contractors for major infrastructure projects, he has been involved in a number of task groups and the contracts committee of FIDIC since 2007. He is an enlisted dispute adjudicator in Hungary. He has delivered a number of trainings internationally. Most recently Zoltán leads his own consulting engineers ltd. (Z & Partners) providing flexible engineering contracts advisory, and project management services.