

Creating Value Ethically for Engineers

# FROM THE PRESIDENT'S DESK





Dear Members and Friends,

Wishing All A Very Bright, Happy & Prosperous New Year.

Investments in the core engineering sectors have increased substantially and with that the turnover of those involved as contractors and consultants, amongst others. Those are good tidings and for executing all those CEAI has been advocating that all consultancy and construction works be done in a professional and ethical manner without compromising on integrity.

The flipside of the matter is that there have been issues with the quality of the consultancy services being provided as well as the quality of construction. These are reportedly due to low and unrealistic fees or rates being quoted.

To make the issue more complex, new players have entered the sector whereas the existing ones are facing business issues due to increased competition. Such a situation ought in the normal course result in better quality of work by all concerned. However, in the highway sector, the contractors are bidding at a discount on the estimated costs and in the consulting arena the fees are also being quoted below the actual costs. The quality of work being done is questionable. The unrealistic pricing is a serious matter both in consultancy for project engineering as well as in construction since it has a direct bearing on the quality of both.

ANNUAL GENERAL MEETING

WEBINAR ON CLIMATE CHANGE & SUSTAINABILITY – CHALLENGES & OPPORTUNITIES

IT ENABLED PROJECT
MANAGEMENT TRAINING

MULTIPLE FACETS OF CABLE SUPPORTED INFRASTRUCTURE

FORTHCOMING EVENTS

SEMINAR ON QUALITY OF DPR AND CONSTRUCTION OF HIGHWAY PROJECTS

WORKSHOP ON "AI, VR &AR FOR ENGINEERING PROJECTS

"QUALITY OF DESIGN AND CONSTRUCTION FOR SUSTAINABLE INFRASTRUCTURE"

FROM DIRECTOR'S DESK

**VIEWPOINT** 

FIDIC PUBLICATIONS



Another cause for concern is that IT related courses are the preferred ones. Consequently, the quality of engineers of other core disciplines is not what it used to be. Because of the salary structure, recruitment is made from non-premier engineering institutions. The above two issues are a very serious matter and require to be looked into and set right post haste.

These issues will be flagged and deliberated upon in the forthcoming Seminar on "Quality of DPR and Design for Highways" being held in New Delhi in the second week of January 2024 to find possible solutions. Your views and suggestions are welcome. All are requested to participate in the Seminar, which will be held in the physical mode only.

December 2023 has also had different engagements to support the consulting engineering fraternity and we look forward to more of them in the coming year.

### Warm regards,

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R S Sharma

### ANNUAL GENERAL MEETING OF CEAI

The **27**<sup>th</sup>Annual General Meeting of the Members of the Consulting Engineers Association of India was held on Friday, 22<sup>nd</sup> December 2023, at CEAI Centre, New Delhi.

The decisions taken were:

- 1. Minutes of the 26<sup>th</sup> Annual General Meeting held on 24<sup>th</sup> December 2022 were confirmed.
- 2. Adopted the Annual Report of the Association for the Financial Year ended 31st March 2023.
- 3. Passed the Audited Accounts of the Association for the Financial Year ended 31st March 2023.
- 4. Appointed Auditors for the Financial year 2023-2024.



AGM in progress





# CLIMATE CHANGE AND SUSTAINABILITY - CHALLENGES & OPPORTUNITIES

CEAI organized a webinar on "Climate Change and Sustainability – Challenges and Opportunities" on 12<sup>th</sup> December 2023. Presentations were made by Mr. Kishan Kalra, Past President, AIMA and Mr. Ashish Rakheja, Managing Partner of AEON Integrated Building Design Consultant LLP.

The speakers shared their views on the reasons for global warming and climate change. One of the main challenges was to reduce greenhouse gas emissions, which are the main drivers of global warming. Greenhouse gas emissions come from various sources, such as fossil fuels, agriculture, industry, and deforestation. Reducing emissions requires a shift to low-carbon energy sources, such as renewable energy, nuclear power, and carbon capture and storage. Most of the global carbon emissions would be generated by buildings and construction industry.

Link: https://youtu.be/M6DphvzEtxo





### TRAINING ON IT ENABLED PROJECT MANAGEMENT (ITEPM)

CEAI organise a training on "IT Enabled Project Management (ITePM)" from 14th to 16th

December 2023 at CEAI Centre, New Delhi.



The training was conducted by Mr Puneet Aggarwal, Chief Executive Officer and Mr Chander Mohan Saini, Consultant-Project Management Practice, 7 dot 2 IT Consulting.

The following topics were covered:

The following topics were covered in the training:

- Fundamentals of Project Management
- Handson Training on MS Project on: -
  - Developing a Time Network Plan of the Project, coupled with an easy understanding of Work Break-down Structure, Task Dependencies, etc.
  - Critical Path Analysis
  - Viewing, Updating & Monitoring of the Project
  - Reporting of the actual scenario in comparison with baselines
  - o Controlling different Projects at Enterprise level with Cross Linking in multi-Projects
  - Customization of Reports with some important reporting fields which otherwise are not available in-built in the software
  - o Governance of the Project with Tracking / Monitoring
  - Resource Management (Men, Machines & Materials)
  - o Cost Management, Procurement Management, and HR Management

### MULTIPLE FACETS OF CABLE SUPPORTED INFRASTRUCTURE

A live event on "Multiple Facets of Cable Supported Infrastructure" was held by the Eastern and North-Eastern regions of CEAI together with the Western Zone of IAStructE and the Mechanical Engineering Division of West Bengal State Centre of IEI on Friday 15-12-2023.

The event was dedicated to the memory of Sri Mahendra Raj, a doyen of the Engineering profession. The event was initiated by the Vice President (East) of IAStructE, Sri Anirban Sengupta. CEAI and IEI joined to make the event a landmark after the long drought of physical events due to the pandemic. A core committee was formed with representatives from the three organizations and they worked very hard to make the event a rarity within a fortnight from the date the decision was made to organize the event.

The event saw participation from more than 150 delegates who showed a lot of enthusiasm with lively interaction throughout the program. Five organizations from the related industry joined as sponsors and with their financial participation the registration fee for the participants was waived.





The participants came from consultancy organizations, the construction industry, manufacturers, and academia. What was remarkable was that the average age of participants was less than 40 years with many young engineers joining the event.

For the first session deliberating on Cable Supported Bridges, the topics covered design challenges, construction aspects, sustainability issues, and needs for effective health monitoring.

The second session dealt with appurtenances for the cable supported bridges and the methodology for continuous monitoring of the bridges to ensure its safe life.

The third session covered other cable-supported infrastructures like ropeways and cable cars and their increased use in urban centres.

The lessons learned from the event were:

- There is a strong demand from engineering professionals for more such live events on interesting engineering problems.
- The industry is ready to participate in such events and prepared to offer financial support if the demand is not for large sums.
- The industry is keen to participate in the technical deliberations and ready to depute speakers if they are allowed to highlight their capabilities and achievements.

## FORTHCOMING EVENTS

# SEMINAR ON "QUALITY OF DPR AND CONSTRUCTION OF HIGHWAY PROJECTS"

CEAI is organizing a Seminar on "Quality of DPR and Construction of Highway Projects" on 9<sup>th</sup> and 10<sup>th</sup> January 2024 at Hotel Le Meridien, New Delhi. The Government of India as well as State governments have and are making large investments for upgrading the existing road network and constructing new roads to enhance the mobility of goods and passengers in the country. For every project a Detailed Project Report (DPR) is prepared by the Consultants and thereafter work is executed through various modes by the Contractors/ Concessionaires under the supervision of Consultants.

The quality of the DPR, the designs and the construction are and have been questioned for some time by the stakeholders since a DPR reportedly is not upto the mark. That can adversely affect the implementation of the scheme and design and therefore the execution and the quality of work. Failures of pavements and structures have also been reported and these incidents have been on the increase in the recent past. There is, thus, an urgent and dire need to improve the quality of the DPR and all the activities that go into preparing it and thereafter the design and construction for the project.

CEAI's aim is to uphold the dignity and integrity of the profession for which CEAI's focus has been propounding that the quality of engineering services be delivered in a professional and ethical manner. CEAI is and has been seriously concerned about the reported quality of DPR and the Construction, since Consultants are closely involved in both the phases.



The seminar is aimed at apprising all the current scenario, the actions taken or being taken by the respective stakeholders, the best practices, worldwide, innovative materials, plant & equipment, the technologies, the failures, and the lessons learnt. The steps taken and proposed with a view to improve the quality of the roads will also be discussed.

Hon'ble Union Minister of Road Transport and Highways has kindly consented to inaugurate the Seminar.

For more details about the Seminar, contact CEAI Secretariat at ceai.ceai@gmail.com

### Registration link:

 $\frac{https://docs.google.com/forms/d/e/1FAIpQLScr70TrBnwh2BgRK8e6uBowQEezGoL1c5Q7xodjFnbX2}{T8p5A/viewform?usp=pp\_url}$ 

## **Be A Part of the Thrust on Quality**

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## Project India's Image as A Leader in Engineering

# WORKSHOP ON "AI, VR & AR FOR ENGINEERING PROJECTS"

CEAI Academy and CEAI-Western Region Centre have organized a unique daylong workshop on 20<sup>th</sup> Januadry 2024 at IMC, Mumbai, in which the participants will get an opportunity to experience themselves the use of AI, VR/ AR in Engineering Projects.

AI and its use in many spheres have been making headlines in the past few months since many of its deployment affect even the common man. Legislation to regulate its use is in the offing. However, for the workshop the theme will be its use in engineering. AI for a Project is useful right from the planning stage, and maybe in times to come from the conceptualization itself.

For VR/AR the presentation will cover as to how they enable virtual visualization and walkthrough to get a better appreciation of what is being planned and designed. The Project Teams of all the stakeholders would thus be fully aware of what the end product would be and can also include as to how the facility would be maintained to provide the functions for which it was intended. All these advances in digital technology will go to speed up and improve decision making apart from enabling excellent interface, eliminating interferences, minimising design/ construction errors and enabling better online on time coordination.

## SEATS ARE LIMITED SO REGISTER EARLY

Link to fill Registration Form online: <a href="https://forms.gle/Qj2GqgwPLAEAqnFT7">https://forms.gle/Qj2GqgwPLAEAqnFT7</a>

Early Bird Discount ends on 10th January 2024

# Learn, Experience & Be Ahead in The Real Time Run



# SEMINAR ON "QUALITY OF DESIGN AND CONSTRUCTION FOR SUSTAINABLE INFRASTRUCTURE"

India aspires to be a global engineering hub with a quantum jump in its export of engineering goods and services. That calls for a high degree of excellence in the quality of its engineering projects. With India's achievements and stupendous success of its Space missions, there has been a growing clamour for the engineering fraternity to achieve similar levels of excellence in project engineering in all sectors to meet prescribed standards and client expectations.

Various challenges that have arisen in recent years have resulted in increased stipulation for proficiency at every stage of engineering projects, to examine and overcome various impediments, and address them by interacting with policymakers, executing agencies, experts in design and procurement, construction management and contractors, so that the built project meets the specified requirements and functions for its design service life albeit with regular and proper maintenance — with emphasis on the obligations of an engineer vis-à-vis regulations, codes and standards, contractual commitments and the standard of care of an engineer.

In response to the above clarion call, the CEAI Ethics & Quality Committee has organised a seminar on "Quality of Design and Construction for Sustainable Infrastructure" on 18<sup>th</sup> &19<sup>th</sup> April 2024 at Le Meridien, New Delhi.

The Seminar thus aims to showcase best practices and solutions adopted to meet the highest standards of Quality along with Sustainable Development goals.

# Be Aware and keep Abreast of the 5 W's and 1 H Why? What? Who? When? Where? & How? For Sustainable Development

### FROM THE DIRECTOR'S DESK

During the month of November 2023, the Committees that met to conduct their business were:

- Governing Council
- Awards Committee
- Seminar Committees

The **Annual General Meeting** of CEAI was held on 22<sup>nd</sup> December 2023 at 12.30 p.m. at CEAI Centre, Vasant Kunj, New Delhi.



#### **VIEWPOINT**

The December 2023 issue of the ViewPoint on the theme "Consultancy in the Industrial Sector" will be circulated shortly.

The theme for the March 2024 issue of CEAI's quarterly magazine "ViewPoint" is "Consultancy for Start-Up and MSME".

There are a large number of consulting engineering organisations who are in the MSME category and added to those are the small Start-Up units comprising a few individuals from various disciplines of engineering. Many are doing creditable work which oft go unnoticed; they include those in niche areas and/ or high-end engineering. Other developing countries also need them.

Professionals are invited to share case studies of their achievements, how they addressed the challenges faced, practical issues experienced and the solutions to those, etc. in the various disciplines of engineering. Photographs, charts, diagrams, drawings, etc. would benefit readers for a better appreciation of the issues encountered and the manner in which they were addressed.

The theme for the issues for the year 2024 are:

1	March 2024 – Consultancy for Start-Up and MSME
2	June 2024 – Affordable Housing
3	September 2024 – Energy Transition
4	December 2024 – Recycling & Reuse of Building Materials in Construction Industry

The articles for an issue need to reach CEAI at least 3 weeks prior to the end of the month of the ViewPoint issue. Articles need to be in Times New Roman 12 with single line spacing with before and after 6 pt and normal margin, on A4 size. A recent clear and bright passport size photograph of the author(s) is to be sent along with the article. For details of formatting please refer to "Format for Articles for CEAI Viewpoint" on CEAI's website, under 'Publications'.

#### **Advertisement in ViewPoint**

ViewPoint is circulated to all CEAI Members, FIDIC, Ministries of the Government of India, Public and private Sector Undertakings, Construction Firms, Contractors, Consultants, Foreign Missions and Funding Institutions in India and other organisations related to or dealing with the engineering profession. Thus, all stakeholders partnering development and progress are its readers.

**Get Wide Exposure** 





Improve Visibility



Support from CEAI members and stakeholders are sought for increasing the number of advertisements so that ViewPoint gains in its stature as a unique Technical Publication for the fraternity and the public at large to spread information about how Consulting Engineers are helping society for improving the quality of life and doing so sustainably. The rates for advertisements in *VIEWPOINT* with effect from 1<sup>st</sup> January 2023 are given below:

Item	Rate Per issue* (Rs)	Discounted rate at 10% for 2 consecutive issues* (Rs)	Discounted rate at 20% for 4 consecutive issues* (Rs)
Back Cover	25,000.00	45,000.00	80,000.00
Inside Front Cover**	18,000.00	32,400.00	57,600.00
Inside Back Cover**	18,000.00	32,400.00	57,600.00
Full Page (Colour)	12,000.00	21,600.00	38,400.00
Full Page (Colour), if a specific page position is required.	14,000.00	25,200.00	44,800.00
Full Page (B&W) (such advertisements will be taken up for printing only when there are 4 or multiple of 4 advertisements for an issue)	8,000.00	14,400.00	25,600.00

Notes: \*GST @ 5% or as prescribed will be added to the above rates.

### FIDIC PUBLICATIONS

Hard copies of some of the FIDIC Publications are available with CEAI Secretariat.

A publication that may not be readily available could be obtained from FIDIC in about three weeks.

Please contact CEAI Secretariat for availability and price.

1	FIDIC Contracts Guide (2 <sup>nd</sup> Ed. 2022)
2	FIDIC Contracts Guide (1st Ed 2000)
3	EPC Turnkey Contract 2 <sup>nd</sup> Ed 2017 Silver Book Reprinted 2022 with amendments
4	Construction Contract 2 <sup>nd</sup> Ed 2017 Red Book, Reprinted 2022 with amendments
5	Plant & Design Build Contract 2 <sup>nd</sup> Ed 2017 Yellow Book, Reprinted 2022 with amendments
6	The Short Form of Contract (2 <sup>nd</sup> Edition, 2021).

<sup>\*\*</sup>Inside Front and back covers booked till June 2024



7	The Short Form of Contract (1st Edition, 1999).
8	Conditions of Contract for EPC Turnkey Projects (First Edition, 1999).
9	EPC/Turnkey Contract 2 <sup>nd</sup> Ed (2017 Silver Book)
10	Conditions of Contract for Construction (First Ed. 1999).
11	Construction (1999 Edition) Subcontract 1st Ed (2011)
12	Construction Contract 2 <sup>nd</sup> Ed (2017 Red Book).
13	Conditions of Contract for Plant & Design-Build (First Ed, 1999).
14	Plant and design-build contract 2 <sup>nd</sup> Ed (2017 Yellow book)
15	SUBCONTRACT for Plant and design (yellow book 1999) 1st Ed (2019)
16	Dredgers Contract 2 <sup>nd</sup> Ed (2016 Blue-Green Book).
17	Client/Consultant Model Services Agreement 5th Ed (2017 White Book)
18	Sub-Consultancy Agreement 2 <sup>nd</sup> ED 2017
19	Model Joint Venture (Consortium) Agreement 2 <sup>nd</sup> Ed 2017
20	GUIDE to Client/Consultant Model Services Agreement (White Book) 2 <sup>nd</sup> Ed 2001
21	Construction (1999 Red Book) Sub Contract 1st Ed 2011
22	Conditions of Contract for Design, Build and Operate Projects (1st Ed, 2008) GOLD BOOK
23	GUIDE to Conditions of Contract for Design, Build and Operate Projects (2008 GOLD BOOK) 1st Ed 2011
24	Conditions of Contract for Construction - MDB (Multilateral Development Bank Harmonised Ed. Version 3: June 2010)
25	Conditions of Contract for Works of Civil Engineering Construction (4th Ed. 1987 Reprinted 2011,
26	Selection of Consultant 3 <sup>rd</sup> Ed (2019)
27	FIDIC Guidelines for Selection of Contractors 1st Ed 2017
28	Conditions of Contract for Underground works (2019 Emerald Book)

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#### **CONSULTING ENGINEERS ASSOCIATION OF INDIA**

### WE OFFER

## FIDIC TRAINING COURSES

• Module I : Practical Use of FIDIC Conditions of Contract • Module II : Management of Claims and Disputes Resolution

• Module IV: Contract Management and Administration

The investment in infrastructure is growing and would continue to grow at an accelerated rate in the near and distant future across the Globe and especially in developing economy like India. The multilateral financial institutions are pouring in funds and want to be a part of the India growth story. These MDBs invariably use the FIDIC Conditions of Contract which are acclaimed as the Gold Standard of Conditions of Contract Globally.

The FIDIC Conditions of Contract are being used the world over where multi-lateral development banks provide the funding. And in large complex Government projects.

With a number of large and complex projects BOTH on-going and planned in the country, this training course will bring the participant the necessary detailed knowledge and insights as to the claim management and dispute resolution provisions under the FIDIC Conditions of Contract.

The comprehensive program on FIDIC Contracts led by accredited trainers

It covers the identification of project risks, their allocation, and the various causes of claim which can emerge over a construction contract and the way FIDIC addresses those. It details the way to handle claims preparation, submission, assessment, determination under FIDIC Contracts, and how disputes are prevented or otherwise resolved.

#### Certificate

After completion of the training a Certificate will be distributed to the participants.

**Contact for further query** 

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