



Creating Value Ethically for Engineers

FROM THE

PRESIDENT'S DESK



IN THIS

ISSUE

Dear Members and Friends,

The CEAI FIDIC Committee organised a physical cum online training for NHSRC Ltd in July/August 2024 in which 704 delegates participated.

Another major training programme on “*Design of Cable Stayed and Extradosed Bridges*” was organised under the banner of CEAI Academy during September. About 300 delegates from a wide spectrum comprising consultants, contractors, concessionaires, government departments, PSUs, research and educational institutes from India and abroad participated. It was a grand success. We convey our sincere thanks and gratitude to all those who contributed to the success of the training programme.

A one-day Conference on “*Recent Development of Laws and their Impact in Construction Industry*” is being organised by CEAI- Western Region on 18th October 2024 at Taj President, Mumbai.

SEPC-CEAI Global Services Export Conclave on “*Design, Engineering, Construction, Space, Energy (incl. Nuclear) and Defence*” will be held on the 29th of October at Hotel Le Meridien, New Delhi.

During November 2024 CEAI is organising a “*Construction Law Course*” in New Delhi on the lines of the successful one held in Mumbai last year. The Flyer for the course is attached.

CEAI Awards 2024 have also been announced.

ONLINE TRAINING COURSE ON
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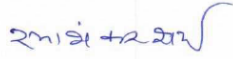
FIDIC TRAINING COURSES

Creating Value Ethically for Engineers

I request all of you to participate in large numbers and also give wide publicity to the forthcoming events.

I also request your suggestions on the training programmes, workshops, and seminars which you would like CEAI to organise.

Warm regards,



R S Sharma

CEAI ACADEMY ONLINE TRAINING COURSE ON “DESIGN OF CABLE STAYED BRIDGES AND EXTRADOSSED BRIDGES”

The online training course on “*Design of Cable-Stayed Bridges & Extradosed Bridges*” organised by CEAI-Academy, was a phenomenal success. The 24-hour training course, covering planning, design, construction, maintenance and monitoring of cable-supported bridges, was spread over 4 weeks; from 6th to 28th September 2024 on every Friday and Saturday between 4 pm to 7 pm. The Course Coordinator was Er. Alok Bhowmick and the course was moderated by Er. V N Heggade.

The Course was inaugurated by Shri D. Sarangi, Director General (Road Development) and Special Secretary MORTH, Government of India and was graced by Shri G Sharan, Former DGRD and Convener of IRC B-9 Committee on Special Structure. Shri R S Sharma, President CEAI welcomed the participants and Mr Alok Bhowmick provided insights for the training course.

15 lectures were delivered by domain experts on the subject and at the end there was a panel discussion regarding the future of cable supported structures. The lectures were followed by an interactive Q&A session with participants queries answered by a panel of experts. The day wise break-up of the topics and the brief on each is given below.

- a) Day 1: Two Lectures - Broad Overview of the New Guidelines of the Indian Road Congress (IRC) on Cable Supported Bridges
 Prof. Mahesh Tandon and Er. Alok Bhowmick



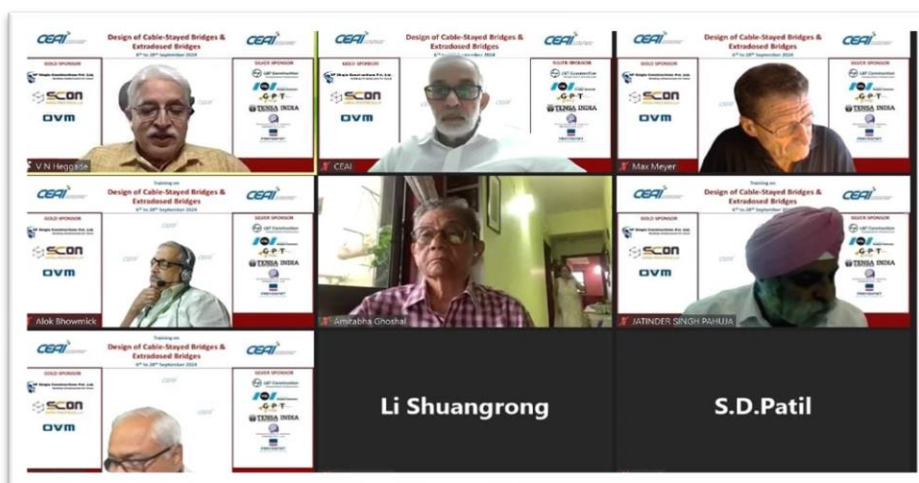
- b) Day 2: Two Lectures - Design Aspect of Cable Supported Bridges
 Er. P G Venkatram



- c) Day 3: Two Lectures - Treatment of Wind Forces and Earthquake Induced Forces
 Prof. Prem Krishna and Prof. Yogendra Singh



- d) Day 4: Two Lectures - Stay Cable Technology and its Durability Aspects
 Er. Jatinder Singh Pahuja and Er. Max Meyer



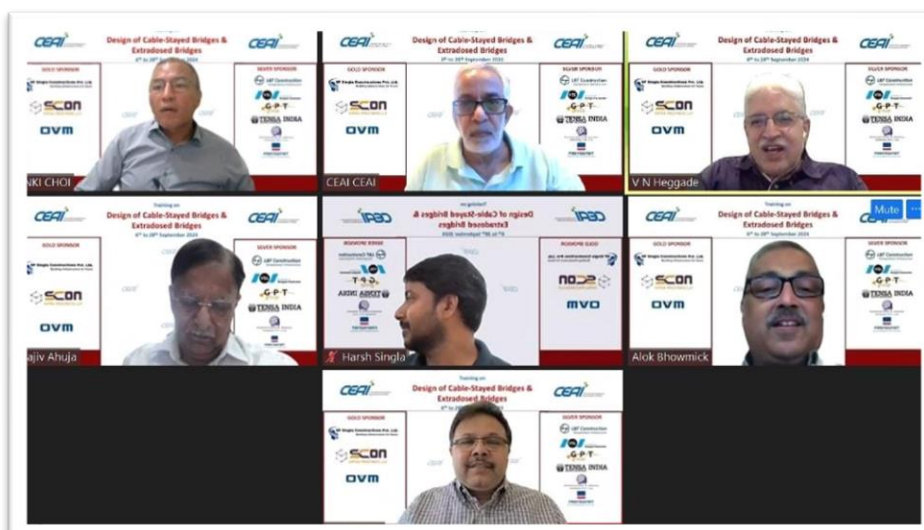
- e) Day 5: Two Lectures - Construction Aspects in Cable Supported Bridges:
 Er. Deepak Singla and Er. C Sankaralingam



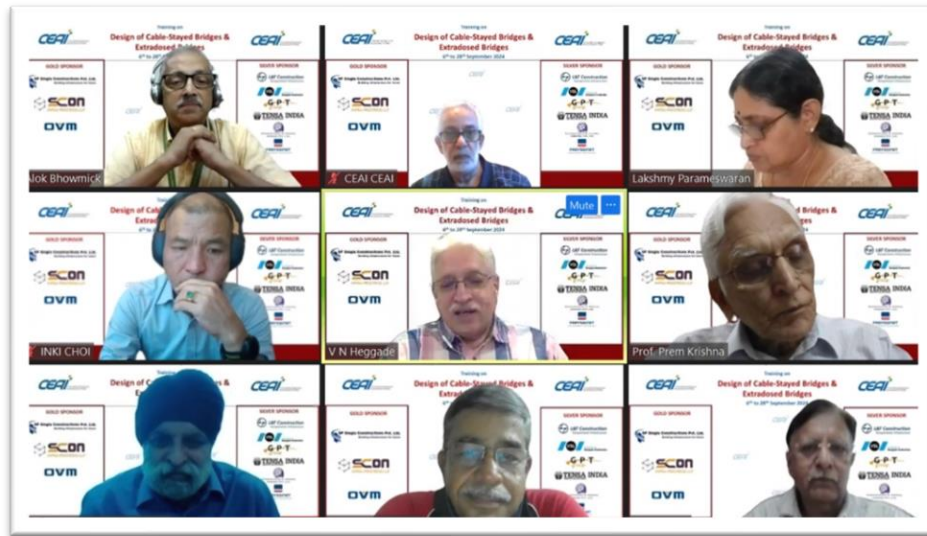
- f) Day 6: Two Lectures - Inspection, Maintenance & Monitoring of Cable Supported Bridges : Er. Amitabha Ghoshal and Dr. Lakshmy Parameswaran



- g) Day 7: Three Lectures - Case Studies of Longest Span Cable Stayed Bridges and Extradosed Bridges : Er. Rajiv Ahuja, Er. Inki Choi and Er. V N Heggade



h) Day 8: Panel Discussion and Proficiency Tests



There were over 300 participants for the online course from India, Nepal, and UAE; from Consulting Firms, Contracting Firms, Government Organisations, R&D Organisations and Students.

The training course was sponsored/ supported by firms representing contracting industry and stay cable system suppliers.

The Key Takeaways from the Training Course were:

Participants were given a broad overview about the content of the forthcoming IRC codes on Cable Supported Bridges. It covered all aspects of the design, construction planning, execution, maintenance and monitoring. Faculty who delivered the lectures were experts. Many of them are involved in the development of the IRC guidelines.

a) Key-Takeaways for Practicing Designers

The course traced the historical development of these bridge types, from their precursor to present practise. The lectures covered planning and conceptual design and preliminary design methods. Emphasis was laid on explaining the flow of forces in case of cable supported bridges and also explaining fundamental difference between girder bridges, extradosed bridges and cable stayed bridges. Design intricacies for Wind & Earthquake were covered in detail. Importance of construction-friendly design was emphasised. It was made clear to all the participants that design of cable supported bridges require high level of skill, experience and exposure. It is a multi-disciplinary activity requiring close interaction between contractors, temporary and enabling structure designer, stay cable system supplier, bearing and expansion joint supplier, etc.

b) Key-Takeaways for Engineers involved in Execution

Construction engineers were exposed to the challenges that needs to be faced in constructing cable supported bridges. Various alternative methodologies for construction were discussed and several real-life case studies from Indian projects were discussed to highlight the challenges. It was made clear by many of the speakers that the structures are complex in nature, requiring highly specialised techniques for their execution. Such bridges require constant supervision by the contractor's senior staff since a very high degree of quality control is essential. The procedures that are practiced routinely for conventional bridges are not sufficient for Cable Supported Bridges. Only

competent and experienced contractors, specialised sub-contractors, equipment suppliers and certified skilled operators should be involved in execution at site.

- c) Key-Takeaways for Engineers involved in Construction Supervision (Owners, Authority's Engineer, Independent Engineers)

The course flagged the importance of supervision during execution, quality control and quality assurance for cable supported bridges. It was emphasised that teamwork is absolutely necessary for success in these types of complex structures. Owners must ascertain that the culture of checking and reviewing all field activities exists at the site of works, from start to finish. There were several lectures in the training course which emphasised the need to create special provisions for ensuring structured procedures for inspection, maintenance and monitoring of these types of bridges.

- d) Key-Takeaways for Student

Students were exposed to the complexities involved in planning, design and construction of such bridges. They got a flavour about cable supported bridges, which are coming up fast in the country. They understood that it is a fascinating field of specialisation but a demanding field.

List of Participating Organisations

CONSULTANTS	GOVERNMENT DEPARTMENTS
Aartav Engineering Pvt Ltd	Central Railway
Aarvee Associates	Department of Roads, Bridge Branch
ADS Consultants	Indian Railways
AECOM India Pvt Ltd	Indian Railways Institute of Civil Engineering, Pune
AMAG Infrastructure Pvt Ltd	IRCON
Assystem India	Kerala Highway Research Institute
Aty Consult	Kerala Infrastructure Investment Fund Board
AYESA India Pvt Ltd	Kerala Public Works Department
B&S EC	MORTH
CASAD Consultants Pvt. Ltd.	National High Speed Rail Corporation Ltd
CDS Consult (India) Pvt. Ltd.	Public Works Department, West Bengal
Consulting Engineers Group	Public Works Road Department
Consulting Engineers Group Ltd.	PWD Maharashtra
COWI India Private Limited	PWD Odisha
DELFI Consulting Engineers (India) Pvt. Ltd.	PWD, Government of West Bengal

Dohwa	Railway Board
Force Structural Engineers Pvt Ltd	Staff Training College, Gujarat
GHD Pty Ltd	West Central Railway
HBS Infra Engineers India Private Limited	
ICT Pvt. Ltd.	EDUCATIONAL/ RESEARCH INSTITUTIONS
Indus Consultants Pvt. Ltd.	CAPA IC
Infinite Civil solution pvt ltd	CSIR - Central Road Research Institute
INFINITE Civil Solutions Pvt Ltd, Ahmedabad	ECR Hajipur
Infra Design Studio Pvt. Ltd.	Galaxy Global Group of Institutions
K&J Projects Private Limited	IIT Guwahati
LEA Associates South Asia Pvt Ltd	IIT Kanpur
Paragon Consultant	IIT Roorkee
SATRA Services and Solutions Pvt Ltd	IIT Delhi
Projects Consulting India Pvt Ltd	Indian Institute of Technology Mandi, India
RAMBOLL INDIA PVT LTD	Jadavpur University
RIE STRUCTURAL PVT LTD	Jamia Millia Islamia
Rithwik projects private limited	JNTU College of Engineering Hyderabad
Rodic Consultants Pvt. Ltd.	Motilal Nehru NIT, Allahabad UP
S2F Consultancy and Construction Pvt. Ltd.	MVR college of Engineering
SA Infrastructure Consultants Pvt. Ltd.	MVSR ENGINEERING COLLEGE
Samprisha Consultants	Quantam university
SMEC	R.G.P.V university
SPS CIVIL INFRA DESIGN PVT LTD	SCOE
Sri Infotech	SWR
Structcon Designs Pvt Ltd	VIT Vellore

STUP Consultants Pvt. Ltd.	VNIT Nagpur
Systra	WCTM, MDU
Tandon Consultants	XEN Design Ner
TATA Consulting Engineers Limited	Cube Highways Technologies Private Limited
Tech TANGENT Solutions Pvt Ltd	OVM
Theme Engineering Services Pvt.Ltd	
Transplex Infra Services Pvt. Ltd.	
FOREIGN DELEGATION	CONTRACTORS/ CONCESSIONAIRES
Consultant / Clients from Nepal and UAE	Afcons Infrastructure Ltd.
SPONSORS	AKC ANUV
S P Singla (GOLD)	Assystem India
Scon Infra Prestress LLP (GOLD)	Dineshchandra Infracon
Dineshchandra Infracon	GILCON PROJECTS SERVICES LIMITED
FREYSSINET India (SILVER)	GPT INFRAPROJECTS LIMITED
GPT Infra (SILVER)	L&T Construction
L&T (SILVER)	RUKY PROJECTS PRIVATE LTD
TENSA India (SILVER)	S.P.Singla Constructions Pvt. Ltd.
VSL India Pvt Ltd. (SILVER)	VR2 INFRA SOLUTIONS PVT. LTD.

FIDIC MEETINGS AND GIC 2024

FIDIC Annual Meetings with Member Associations and Global Infrastructure Conference was held in Geneva from 7th to 10th September 2024. From CEAI the following office bearers and Members attended – Mr. R S Sharma, President, Mr. Prashant Kapila GC member and FIDIC Board Member, Mr. Gagan Anand, GC Member, Mr. Ajit Kr Mishra, DFCC, and Ms. Veera Biradar CEAI Member, plus there were others who participated from India.

In the General Assembly Meeting (GAM) held on 8th September the proposal of **MA Annual Fee @1.5% of gross revenue** (average of latest three years) was accepted.

With the current level of revenue (in the range of 1.0-1.25 Cr), CEAI will be benefitted from 2025 onwards.

FIDIC AWARDS

CEAI was declared as winner in the Category of MA Excellency in Consultancy Service- “Showcasing value initiative-Consulting Engineer-CEAI Compendium” in bringing out the *CEAI Compendium* depicting key engineering projects in the 75 years of Independence.

Mr. R S Sharma, President CEAI received the award on behalf of CEAI.

India also received another award which was given to the Dedicated Freight Corridor Corporation of India (DFCC) for ‘East-West Connectivity of Dedicated Freight Corridors in India’ as **Highly Commended** in the **Megaproject** category.



Mr. Ajit Kumar Mishra GM, DFCC and his colleague Mr. Ajay Kumar and Mr. Prashant Kapila received the award.

REPORT ON ADB'S BUSINESS OPPORTUNITIES SEMINARS IN MUMBAI AND KOLKATA

CEAI was a Supporting Partner for the Asian Development Bank's (ADB's) Business Opportunities Seminars which were held in Mumbai on the 7th and in Kolkata on the 27th September 2024.

In Mumbai, Mr. A P Mull Member GC and Past President CEAI made a presentation about CEAI. He covered the various seminars, workshops, courses, webinars, etc. organised by CEAI including training on FIDIC Contracts by FIDIC Accredited Trainers and stressed that it is the only authorised body in India which can give a certificate for Training on FIDIC Contracts conducted in the country. He invited all Professionals connected with Engineering Projects to join CEAI. He also informed the audience that CEAI along with ECI and other associations was pursuing for the enactment of legislation for the Profession of Engineering.

Mr. Amitabha Datta, Past Chairman Eastern & Northeastern Region made the presentation in Kolkata and also stressed on FIDIC Training and invited professionals to join CEAI and strengthen the engineering fraternity.

Both the seminars were well attended and there was good interaction with all present.



Mr. A P Mull making a presentation about CEAI at the seminar in Mumbai



Mr. Amitabha Datta making a presentation about CEAI at the seminar in Kolkata



Representatives of Organising & Partnering Organisations in Mumbai



View of the dais at the seminar in Kolkata



View of audience at the seminar in Mumbai



Organisers, Partners and Participants at the seminar in Kolkata

FROM THE DIRECTOR'S DESK

During the month of September 2024, CEAI conducted the following meetings:

- Seminar & Events Committee Meeting on 18th September 2024
- Finance Committee Meeting on 20th September 2024
- Governing Council Meeting on 25th September 2024

CEAI MEMBER NEWS

- Dr Harshavardhan Subbarao, CEAI Member has been elected as President of the International Association for Bridge and Structural Engineering (IABSE) at its meeting on 24th September 2024 in Costa Rica.
- Mr Sunil Srivastava, CEAI Member has been appointed as Member of the Supervisory Board of Uzbekistan Railways.

FORTHCOMING EVENTS OF CEAI

- Conference on ***“Recent Development of Laws and their Impact in Construction Industry”*** on 18th October 2024 at Taj President, Mumbai.
- SEPC-CEAI Global Services Export Conclave on ***“Design, Engineering, Construction, Space, Energy (incl. Nuclear) and Defence”*** is scheduled on 29th October 2024 in New Delhi
- ***“Construction Law Course”*** on 8th, 9th, 10th and 16th November 2024 in New Delhi.

CEAI NATIONAL AWARDS 2024

CEAI has announced the CEAI National Awards 2024, which recognize Excellence in Engineering Consultancy Services.

Awards Categories:

For Organisations:

1. Excellence in Engineering Consultancy Services (separate awards for two groups based on average turnover in consultancy services over the last 3 years)

- Group 1: Up to ₹50 crores
- Group 2: Above ₹50 crores
- Categories:
 - Category A: Excellence in Project Engineering
 - Category B: Excellence in Engineering Innovation

For Individuals:

1. Achievement Awards in Consultancy Services

- Categories:
 - Category A: Excellence in Project Engineering
 - Category B: Excellence in Engineering Innovation

Nomination Details:

- Open to all organisations and professionals, regardless of CEAI membership
- Brochure and Nomination Forms attached
- Last date for receipt of nominations: October 31, 2024

CEAI invites your participation in the prestigious **CEAI National Awards 2024**.

VIEWPOINT

The theme for the December 2024 issue of CEAI's quarterly magazine "**ViewPoint**" is "**Recycling & Reuse of Building Materials in the Construction Industry**".

The December 2022 issue was on "**Circular Economy towards Sustainability**" hence this issue could be considered as a sequel to that.

Discussions and mandates based on sustainable considerations and to combat climate change are the norm. However, how much has really changed or in the process of being changed needs to be measured and tracked. While there is a tremendous amount of new construction being done there are also a very large number of facilities being dismantled and demolished. The questions that arise are -Is the dismantled and demolished materials a waste or can they be recycled and reused? The answer to both would be that a large quantum can be recycled and reused. The dismantled material could be used as is or modified for reuse. A lot of material if demolished carefully could be processed and reused. All permissions for re-construction or even new construction need to be mandated to do so. Some sectors could very easily and successfully utilise demolished material.

While the theme for this issue is Building Materials however, the same logic applies to all manufactured items as well. In the IT industry, while it is necessary for it to come up with new technology, but that should not make the older items or technology obsolete for a period of

about 25-30 years. It should be possible to continue to use them or modify them for continued use.

A number of consulting engineers and smaller organisations are engaged in the works which address and adopt practices of sustainable development incorporating recycle and reuse of materials or could address the issue. Many do not receive the recognition they deserve since their works do not get publicized. CEAI's ViewPoint provides an opportunity to all those engaged in such activities 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 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*'.

We urge all Professionals to use CEAI's ViewPoint to showcase the capabilities and achievements of the Engineers in India plus educate and guide new engineers.

The themes for 2025 will be decided by the Publication Committee that will be formed after the new Governing Council is elected for the term 2025-2026.

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.

Catch the Customers Eye

Get Wide Exposure

Improve Visibility



VIEWPOINT

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 1st 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

Please contact CEAJ Secretariat for availability and price.

1	FIDIC Contracts Guide (2 nd Ed. 2022)
2	EPC Turnkey Contract 2 nd Ed 2017 Silver Book Reprinted 2022 with amendments
3	Construction Contract 2 nd Ed 2017 Red Book, Reprinted 2022 with amendments
4	Plant & Design Build Contract 2 nd Ed 2017 Yellow Book, Reprinted 2022 with amendments
5	The Short Form of Contract (2 nd Edition, 2021)
6	Conditions of Contract for EPC Turnkey Projects (First Edition, 1999)
7	EPC/Turnkey Contract 2 nd Ed (2017 Silver Book)
8	Conditions of Contract for Construction (First Ed. 1999)
9	Construction Contract 2 nd Ed (2017 Red Book)
10	Conditions of Contract for Plant & Design-Build (First Ed, 1999)
11	Plant and design-build contract 2 nd Ed (2017 Yellow book)
12	Dredgers Contract 2 nd Ed (2016 Blue-Green Book)
13	Client/Consultant Model Services Agreement 5 th Ed (2017 White Book)
14	GUIDE to Conditions of Contract for Design, Build and Operate Projects (2008 GOLD BOOK) 1 st Ed 2011
15	Conditions of Contract for Works of Civil Engineering Construction (4 th Ed. 1987 Reprinted 2011)
16	Conditions of Contract for Design-Build and Turnkey First Edition 1995 Reprinted 2011
17	Conditions of Contract for Underground works (2019 Emerald Book)



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.

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.

**The comprehensive
program on FIDIC Contracts
led by accredited trainers**

Contact for further query

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