

Online International Conference and Exhibition - India Construction Week – 2020 “Reviving Construction Industry in Post COVID World” – A Joint Initiative of CIDC & IndSTT- Sectional Steering Committee “Emerging Technologies in Construction & Infrastructures”

**Minutes of the First Virtual Steering Committee Meeting,
10th October, 2020, 11.30 am to 01.00 pm**

Participants:

1. Dr P R Swarup , Director General , Construction Industry Development Council (CIDC) - Chairman
2. Shri. Akhilesh Srivastava, Chief General Manager (IT & Highway Operations), National Highways Authority of India (NHA) - Member
3. Shri. Pathik Gopani, Chief Executive Officer, Uniexcel Agencies & Services Pvt. Ltd - Member
4. Shri.KN Ravindran, Chief Executive Officer,Paulose George Construction Company Pvt. Ltd - Member
5. Prof. Santosh Kapuria, CSIR - Structural Engineering Research Centre (SERC), Director - Member
6. Shri. Sanjay Surlaker, Director, Assess Build Chem Private Ltd. - Member
7. Shri. Sreenivasan Managing Director, Soma Srinivas Reddy - Member
8. Shri.Vivek Naik, Managing Director, Apple Chemie India Pvt Ltd - Member
9. Shri. Sreenivas Vandana, General Manager, Sudhakar Group - Member
10. Shri. Ashok Kumar, General Manager, Larsen & Toubro Limited - Member
11. Shri.Satya Narayan Sahu, National-Head (Strategic Accounts- Railways, Hilti India Private Limited - Member
12. Shri.Sanjay Kumar , AGM-HSE , KMV Projects Ltd - Member
13. Shri. Ajay Bhatt, General Manager, TRIO Elevators Company (India) Ltd - Member
14. Shri. Rajesh Jain, Head- Bitumen Business , G P Global Asphalt Pvt Ltd - Member
15. Shri. Ajay Singhal , Vice President (operations) G R Infra Projects Ltd - Member
16. Dr. Gopal Dhawan, Founder & Chairman, DDAG Pvt Ltd - Member
17. Shri. Moorthy Mahadeva, Advisor, PEMS Engineering Consultants Private Limited - Member
18. Shri.Binu T Paul, Project Manager Paulose George Construction Company Pvt Ltd - Member
19. Ms. Disha Karmakar , Student - Member
20. Shri. Jai Shanker Sharma, Mentor, IIT Kanpur Alumni Association Bangalore Chapter - Member
21. Shri. Gourishankar Dubey , Arbitrator, Mediator & ED, Sail (Retd) - Member
22. Shri. Ashutosh Bhardwaj, Director (Corporate Affairs) , Construction Industry Development Council (CIDC) - Convener

OTHER PARTICIPANTS:

1. Shri. Sunil Mahajan, Addl. Director General , CIDC
2. Shri . S. N. Murthy Vaddadi, Sr. Addl. Director (Finance), CIDC
3. Prof (Er) O.P Gupta, VSM Acting Registrar,CIAC
4. Shri . P K Mishra, Addl. Director ,CIDC
5. Shri Praveen Tiwari, General Manager, CIDC
6. Shri .Suresh lala, Sr. Advisor, CIDC
7. Shri . Arun Singh, Sr. Advisor, CIDC
8. Shri. B N Rao, AGM, CIDC
9. Ms. Tuhina Tripathi, Sr. Manager Projects , CIDC
10. Ms. Suruchi , Sr. Officer Projects, CIDC

The meeting started as scheduled at 11.30 am and the coordinator & host for the meeting welcomed the Chairman and Members present. This being the first meeting of the Sectional Committee, a formal round of brief introductions for each member was done. Members introduced themselves one by one and also made their opening remarks, if any. Coordinator also informed the gathering that, this being the first meeting, we have a limited agenda of 4 points which is already been circulated amongst all. He again requested all the members to actively participate and pen down their views for the next meeting which is proposed to be held by end of November 2020 where the program for the session will be discussed.

Post introductions, DG, CIDC and Chair for the meeting, explained the theme & objectives of the event and invited suggestions from the members. He heartily thanked and welcomed all the senior personnel from construction industry who are part of this event. He further emphasised on the importance of the subject & the event and briefed all the topics and subjects that are being covered in the forthcoming “International Conference and Exhibition India Construction Week-2020 to be held from 1st to 5th December 2020.

Dr. P R Swarup informed that the event will be attended by over 15,000 participants from 28 streams from the entire spectrum of construction industry and beyond. He further emphasised the importance of construction sector which has been badly affected by COVID and was already reeling under a slowdown for the last four years. Now, in order to revive and accelerate the pace of industry, he requested all the stakeholders to actively participate in these deliberations to chalk out a roadmap for revival of the sector.

Dr. Swarup thanked each and every one who has responded and emphasised the cohesiveness of the industry by underlining the fact that a single phone call has got everyone together for this mission and extolled that let us all work together for the revival of the sector and put it back on track. He emphasized the need for greater adoption of emerging technologies that are being evolved in the labs & in the field and which will provide a boost to the quality, safety and productivity of the sector. He further requested all the members to get together and revive the falling numbers in the country's economy. He provided the broad contours for working post COVID that will drastically change the working of industry because of the limited conventional resources and these emerging technologies would play a vital role in bringing the industry on track and thus benefitting the economy. He assured that CIDC would extend all support in any form to all those who are joining hands to make new technologies transform into workable business models.

Coordinator thanked Dr Swarup and requested all participants to share their views and suggest the way forward for firming up the agenda of the group.

Views and suggestions, forthcoming, from the members have been documented as below:

- **Shri. Akhilesh Srivastava, CGM, NHAI** expressed his happiness about this event and emphasized the need for greater adoption of the digital platform. He underlined the fact that all sectors that have a low penetration of digital technology have suffered badly during this pandemic and Construction Sector has also felt the brunt due to this fact. He stressed on the need for a big digital push in the sector and called upon the gathering to also focus on skilling of personnel for a seamless adoption and execution of the digital technologies. Construction being a manpower intensive activity, needs to focus on training its people in the emerging technologies to harness the power of digital in all construction processes. He urged all to

leverage on Artificial Intelligence and other emerging digital technologies to make the industry more resilient to the vagaries of uncertainty.

- **Mr. Moorthy Mahadeva Iyer of PEMS** Engineering suggested and requested to take up & encourage, during ICW meet, the indigenously developed pre-fabricated technology, under “Atamnirbhar Bharat” banner, for rural infra structure development. He also informed that CPWD is already on lookout and other organisations like NBCC etc may be pursued to encourage and develop vendors in this area. He also informed that many Tribal Schools are being built across using this technology which ensures faster construction.
- **Ms. Disha Karmakar** expressed her concern on how to address the development of technology which is already superseded by latest one. Dr Swarup and Er. Vivek Naik, MD, Apple Chemie, positively responded to the same citing examples on the issue with historical background of evolution and development of technologies. They reiterated the fact that technology is always evolving and one needs to upgrade their skill sets to remain abreast with the same.
- **Prof. Santosh Kapuria from CSIR-SERC** spoke on various new technologies and materials and stressed on the need for a comprehensive AMC system that should stretch beyond the customary one-year defect liability period.
- He highlighted the need for a greater use of precast technology, textile reinforced concrete, self-filling concrete etc. especially in the rural infrastructure creation to gain on speed and quality of construction.
- He emphasized that we need to go big on 3 D printing and encourage start-ups in that area. Use of Industrial IOT or IIOT, Machine Learning and AI need to leveraged on to enhance processes which will prove extremely beneficial in long run including gauging the health of machinery etc.
- He further stressed on monitoring the Structural Health of assets created is very important and the monitoring needs to be embedded at all stages of construction.
- **Prof Kapuria** also talked about the recent migrant stress that happened due to COVID and advocated avoidance of high density development in a few cities and go for uniform development by encouraging rural infrastructure development, particularly encouraging local material and expertise which will be important for environment. He also indicated that we need to construct our roads using waste plastic.
- **Shri. Ashok Kumar of L &T** informed the gathering that, recently government has enhanced the defect liability period to 3 years on upcoming projects which augurs well for the maintenance of structures built. He also said that IIOT as a technology is being used by L&T in the project which he is associated in rural Bihar (Bettiah) and other places and it has definitely provided a fillip to the whole process despite COVID significantly reducing the pace of work due to reduced manpower productivity.
- **Shri. Satya Narain Sahu from HILTI** spoke about environmental issues and emphasized the need for use of Dust Free Technology in many of the processes like grinding etc. He said that

the use of such technology and also others like Cordless etc. would result in enhanced productivity and empower us with new tools and cutting edge technologies. Dust free technology is important for the environment and use of this should be made mandatory in the contracts. Asset Management and tracking solutions were also highlighted by him.

- The Coordinator summed up the proceedings till that stage and suggested that the road to recovery points more towards greater adoption of best practices and technology, for gaining traction towards sustainable construction practices.
- Dr. Swarup in his closing remarks elaborated on the need to promote Performance Certification System for goods and services mooted by CIDC and said many things don't need to be imposed by ordinance but impressed by buyer who makes it as a specification and the higher benchmarks for quality. Safety and Productivity will be achieved when greater promulgation of emerging technologies and best practices is done through such platforms as ICW and people connect with each other.
- He called on the participants to actively engage with this for not only for the limited period of 1st to 5th December 2020 but beyond and create this into an active forum for promotion and promulgation of emerging technologies.
- The meeting ended with a thanks to the Chair and participants.