



Japan Society of Civil Engineers

International Activities Center

## IAC News No.107

### Seventh Engineers' Lounge "DOBOKU"

The Professional Development and Education Program Group of the International Activities Center regularly holds the Engineers' Lounge "DOBOKU" to help younger civil engineers understand overseas construction work, feel interesting and have challenging mind. However, this time, instead of introducing overseas infrastructure projects, we decided to offer the opportunity to exchange information on how the Japanese construction industry has been engaging their projects in overseas civil engineering work under the severe influence of the COVID-19 that has been prevailing more than a year.

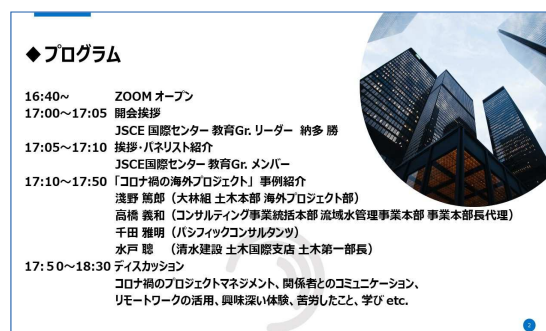
This time, we asked four panelists, Mr. Tokuro Asano (Obayashi Corporation), Mr. Yoshikazu Takahashi (Nippon Koei Co., Ltd.), Mr. Masaaki Chida (Oriental Consultants Global Co., Ltd.), and Mr. Akira Mito (Shimizu Corporation), to share the actual situations of overseas projects under the title of "Overseas Projects under COVID-19," and we had an online Q&A session with the lounge participants.

Mr. Asano showed sanitization policy and its practical application on site against COVID-19 for bridge construction project in Bangladesh where more than 10000 persons/day found positive. Mr. Takahashi introduced the project for improving agricultural incomes in Myanmar where people were facing two difficulties at the same time, COVID-19 and political turmoil. Mr. Chida gave an example of a project for building up robustness against cyclones in Mozambique. (This project case is introduced on the IAC News No.105:

[https://committees.jsce.or.jp/kokusai/system/files/IAC\\_News\\_No.105%28Jp%29ver2.pdf](https://committees.jsce.or.jp/kokusai/system/files/IAC_News_No.105%28Jp%29ver2.pdf).)

Mr. Mito explained the detailed applications against the first wave in the first half of the last fiscal year including temporary evacuation of Japanese staff in abroad and resumption of construction work on site, the bridge project in the suburbs of the capital city, and the hydroelectric power station project in remote mountainous areas also were introduced.

In addition to temperature check and sanitization, there are on-site doctor's diagnosis system, the provision of



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meals that would eliminate the need to go out from site camps, and preventive measures against pandemics, such as periodic PCR tests for staff members. It was also introduced that many companies prepared emergency evacuation by air. Regarding remote site management utilizing various IT tools, effective use is expected even after the end of the COVID-19 pandemic, and there is information that communication by chat apps is effective even when there are deficiency and/or restrictions on telephone line connections.

Stronger measures are often taken in many countries based on the local laws and regulations in comparison with the state of emergency in Japan. However, even in a lockdown state, no employers in any country issued suspension orders. In this regard, the sincere response and attitude of Japanese companies continuing the projects even under COVID-19, surprised the participants.

In many cases, cost and time claims associated with interruptions or productivity reductions due to COVID-19 cannot be fairly evaluated soon because there are no guidelines for dealing with pandemics. However, in most cases, it is difficult to get smooth approval for cost claims due as interruptions or stand-by costs, although the construction period may be extended. Thus, information exchange seems to be important for future disputes to be resolved.

The Participants in the lounge asked questions about the situation of companies from other countries. Then the panelist said that in Africa there were many construction projects that were fully suspended because many European companies returned to their home countries so that some employer tended to expect more to Japanese companies.

There was also a fundamental question, “Although the risks in overseas business seems to be increasing, including the pandemic like COVID-19, how can we maintain the motivation of people who want to work abroad?” The panelists expressed the following opinions: “Appreciations in restoration projects lead to motivation by themselves” and “It is wrong to worry too much just because of overseas projects, and to believe total safety just because of Japan domestic projects, so we will try to establish a firm security system even for overseas projects.” We need to consider serious measures for risks related to overseas business.

This event, Engineers’ Lounge “DOBOKU,” has been held on-line since the last two times, enabling the exchange of information to and from more engineers even in far distance. We will expand the use of this on-line system by incorporating the opinions from many JSCE members.

**【Reported by Hidemi Yanagi, Professional Development and Education Program Group, IAC】**

## First Phase of Construction of the Improvement Plan for the Tema Intersection in Ghana

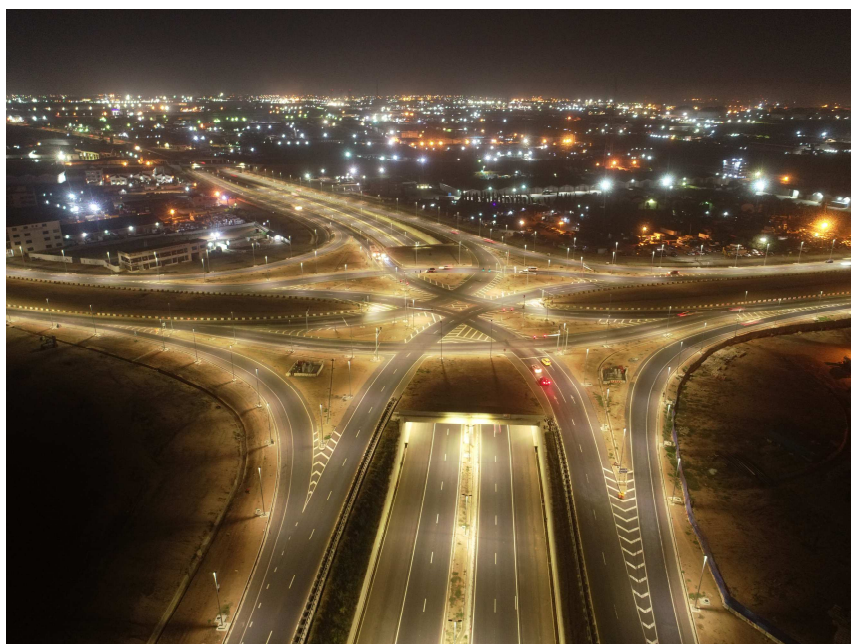
The first phase of the improvement plan for the Tema Intersection in Ghana was the raised construction of the Tema Intersection that sees the coming together of the “Lagos-Abidjan Corridor”, which is an international corridor for logistics that supports economic growth in Ghana, and the “Eastern Corridor” from Ghana’s largest port, the Tema Port. The Tema Intersection before the start of construction was a five-way intersection where the roads from the city of Tema merged together. The intersection was subject to a lot of traffic and chronic congestion and this meant it became a bottleneck that hindered the smooth international logistic operations of African countries including Ghana. This construction, which was carried out with grant aid from the Japanese government, is the number one project of the Ministry of Roads and Highways (MRH) in Ghana. The first bid was held in 2017, and the joint venture of Shimizu Corporation and Dai Nippon Construction Co., Ltd. was awarded the contract, with construction starting in February 2018. From around March 2020, when the construction was about to be completed, the number of people infected with the novel coronavirus increased in Ghana, and construction efforts became extremely difficult due to numerous restrictions such as the closing of the border and the government imposing restrictions on going outside. Under such difficult circumstances, the construction was, while waving the flag for economic development in Ghana, completed without a single infected individual, with staff and workers pulling together to prevent the pandemic from spreading. At the opening ceremony held on June 5, 2020, the president of Ghana praised the opening of the new Tema Intersection, saying that it will free local residents and road users from the inconvenience of traffic congestion.



**Yujin Uemura**  
(SHIMIZU CORPORATION)

This construction project is a road improvement project stretching one kilometer from the north, south, east, and west of the intersection, and the main types of work involved are paving work (area: 141,394 m<sup>2</sup>), box culvert work (extension: 190 m), pedestrian bridge work (4 locations), and other related road construction work (1 set). In undertaking the construction, the following three themes were raised: (1) The utilizing of resources (staff and materials) in Ghana, (2) the training of staff in Ghana (training staff through the transfer of skills, etc.), and (3) the utilizing of new technology (ICT technology, CIM). The main achievements of this construction are that it improved productivity by (1) creating about 200,000 jobs in total (up to 600 people/day), (2) implementing training sessions on the quality of concrete manufacturing and placement as well as experience-based safety training on-site, and (3) improving the understanding of local staff by making use of CIM.

Following the success of the first phase of construction, a second phase of construction is also being planned, and grant aid will be given following on from the first phase of construction. Furthermore, a road development plan around the intersection has been announced, and it is predicted that the urban expressway network from Tema City to the suburbs of the capital Accra will be enhanced in the years to come. It is expected that local engineers who reached new heights through the first phase of construction and students from the University of Ghana who were taken on as interns to gain experience at the worksite will thrive in these future projects for the development of Ghana.



**Full View of the Tema Intersection in Ghana**

【Reported by Yujin Uemura & Akira Mito (SHIMIZU CORPORATION)】

## Diversity and Inclusion Promotion Committee

### Diversity as a Keyword

Over the past years, we have heard the word “diversity” more than ever in Japan. The prevailing of the word may indicate the awareness that our society needs to do more to address issues such as the very low international ranking of the Gender Gap Index. The Japan Society of Civil Engineers (JSCE) has been working on gender equality and D&I issues, starting as a special research subcommittee in 2004. It is the Diversity and Inclusion Promotion Committee or D&I Committee today. We would like to introduce one of the ongoing activities, D&I Cafétalk, part of the D&I 2.0 Initiative of the selected JSCE 2020-2024 Project.



**Yoh Sasaki**  
(Chair of D&I Committee)

### D&I Cafétalk

“Diverse ways of working and living are around you. Let’s talk about them.” The 30 minute online talk program starts with this phrase every other Friday evening that began in March 2021. It covers various topics such as working styles, career development, studying and working abroad, and language barriers. The guests share their own experiences with the anchors in a relatively casual format. Each time we receive comments from the listeners that they have gained various insights and broadened their perspectives. The archives are available on “JSCEtv”, please take a look at it.

This program aims to talk about, listen to, accept, and think about D & I as each individual's issue, related to circumstances, ideas, and choices, rather than as a social requirement or a theoretical one. We hope that diversity, which we often perceive as visible attributes such as gender and nationality, becomes inextricably linked to respect for individual value.

### On a Chair of Your Choice

The information about D&I Cafétalk is disseminated through the website and SNS, with the illustrations of various chairs. Those chairs represent every unique stakeholder. The program secures the atmosphere for the listeners to place a favorite chair in their preferred positions, listens flatly to the topics, and freely express their thoughts. While valuing empathy for others, the D&I Committee is trying to think about D&I in the diverse world of civil engineers. We invite every JSCE member to think together about D&I as a personal matter.



Flyer for the D&I Cafétalk with Dr. Ji Dang



Background Image with Various Chairs

【Reported by Yoh Sasaki, Chair of D&I Committee, JSCE (Professor, Waseda University)】



## Updates

### ◆ FY2021 JSCE Annual Meeting International Program

<https://www.jsce-int.org/node/729>

- ◆ 【TC21】 How Covid-19 Affected Trans-Disciplinary Approach(TDA) and Decision Making on Building Disaster Resilience? (September 6, 13:00 – 15:00 (JST))  
<https://www.jsce-int.org/node/731>
- ◆ 【D&I Committee】 Open the door wide and bring diverse perspectives into the civil engineering community! (September 7, 10:00 - 12:00 (JST))  
<https://vimeo.com/592489127/8a759e17d3>
- ◆ JSCE-Faculty of Engineering, Kasetsart University Online Joint Seminar (September 28)  
<https://www.jsce-int.org/node/730>
- ◆ 【YouTube】 2nd JSCE Concrete Committee Webinar "Frontiers of Concrete Technology"  
Aging Management of Concrete Structures in Nuclear Power Plants - Internal swelling reaction of concrete – (August 4)  
<https://www.youtube.com/watch?v=ArU-x-oyGig>
  - 【YouTube】 1st JSCE Concrete Committee Webinar "Frontiers of Concrete Technology"  
<https://www.youtube.com/watch?v=IP65Dudd6tk>
- ◆ The 17th World Conference on Earthquake Engineering (17WCEE)  
<http://www.17wcee.jp/index.html>
- ◆ American Society of Civil Engineers (ASCE)
  - ASCE Lifeline Conference 2021 2022  
**Dates updated: Jan 31-Feb 4, 2022**  
<https://samueli.ucla.edu/lifelines2021/>
  - International Conference on Sustainable Infrastructure (December, 2021)  
<http://app.message.asce.org/e/es?s=1360&e=713080&elqTrackId=f2b02296aa9c4f699603ed9d506586f4&elq=5dbc17091cf64c9faaae1d65ba9cab2&elqaid=26738&elqat=1>
- ◆ The International Infrastructure Archives  
– A Compilation of Japan's Greatest Projects in Transfer of Civil Engineering Technology in Service –  
<http://www.jsce.or.jp/e/archive/>
- ◆ IAC YouTube Channel  
[https://youtube.com/channel/UCGIs6DHzX\\_cGD-mHUrRlKA](https://youtube.com/channel/UCGIs6DHzX_cGD-mHUrRlKA)
- ◆ 9th International Conference on Experimental Vibration Analysis for Civil Engineering Structures (EVACES2021)  
<https://ec-intl.co.jp/evaces2021/>
- ◆ IAC “News Pick Up!!” on the JSCE Japanese website  
[https://committees.jsce.or.jp/kokusai/iac\\_dayori\\_2021](https://committees.jsce.or.jp/kokusai/iac_dayori_2021)
- ◆ Summary of featured articles in JSCE Magazine Vol. 106, No.9 September 2021  
<http://www.jsce-int.org/pub/magazine>
- ◆ Journal of JSCE  
<https://www.jstage.jst.go.jp/browse/journalofjsce>



#### § IAC News Subscription §

The IAC News is one of the communication tools to share information and ideas with the members. We would like to invite you, your friends and colleagues to join the communication and to subscribe the IAC News. Please register online: (<http://www.jsce-int.org/node/150>). We look forward to meeting you.

#### § IAC Facebook §

Recent activity of International Activities Center is introduced on this Facebook. Please see this home page (<https://www.facebook.com/JSCE.en>).

#### Comments and Questions

Please send us your feedback and comments to help us improve the IAC news. We look forward to hearing from you.

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