

## DFI Europe

The world witnessed many changes and uncertainties in 2017 across geo-social-political areas, including political decisions and the debate of the importance of climate change. On the other hand, economic development was and continues to be quite positive and growing in many areas of the world, which is great news for our industry.

### BIM/Digitalisation Committee

DFI Europe had a very positive development regarding the establishment of the BIM (Building Information Modeling)/Digitalization Committee, which follows the rapid development of many influencing technologies, planning processes, design topics, Internet of Things, etc. The goal of this committee, which is in close liaison to the DFI Project Information Management Systems (PIMS) Committee based in the U.S., is to promote digitalization and BIM processes within the DFI Europe membership and to the geotechnical industry in Europe and throughout DFI worldwide.

This committee will comprise representatives from DFI member organizations as well as invited members with specialist interests. An estimated ideal size for this committee will be about 10 to 12 members from a range of European countries and with a broad representation from different sectors within the industry, including consultants, contractors, ground investigation contractors and client organizations. The committee will liaise with DFI headquarters for an exchange and dissemination of information around the world.



The committee is being chaired by Jason Boddy, associate director at Arup, where he leads the geotechnics team in the Newcastle office in the U.K. Body has 24 years of experience in the geotechnical field and has worked on projects all over the world, including the design of piled foundations, retaining walls, slopes and landslide stabilization, earthworks, ground improvement and bridge foundations. He has additional experience with extensive desk study and ground investigation, building foundation and basement design, brownfield site reclamation, and instrumentation and monitoring. Boddy is the global manager of Arup's Geotechnical Skills Network, a member of Arup's Global Digital Geotechnics Task Group, and has chaired national conferences on technical and digital innovation in geotechnics. He can be reached at [jason.boddy@arup.com](mailto:jason.boddy@arup.com).

The committee reports to the DFI Europe Regional Chapter Board at each board meeting, providing an update on the progress of its various initiatives and deliverables and future activities for discussion. The committee will discuss and develop guidance in the application of digital data and processes pertaining to ground engineering, including the following areas/actions:

- Explain the processing of digital data and its role in BIM through the project life cycle.
- Identify standards and guidance from across Europe regarding the application of BIM to the geotechnical aspects of projects.
- Encourage standardization of data formats between countries and organizations to facilitate coordination.
- Provide guidance on how best to adopt BIM within geotechnical projects.
- Identify challenges and opportunities faced by digitalization.
- Work with other organizations who are developing tools and protocols for the geotechnical industry to ensure these tools are practical, beneficial and compatible across other practices.
- Compare with other parts of the world as a benchmark for the industry.



**Frank Haehnig**  
President DFI Europe

The first deliverable being prepared is a position paper for presentation to the board, followed by the publication and presentation of the paper at the DFI-EFFC International Conference on Deep Foundations and Ground Improvement in Rome, June 5-8, 2018.

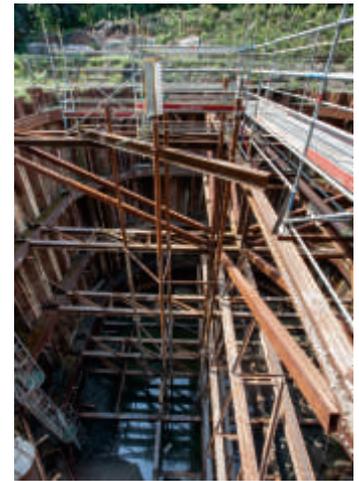
The committee held its first meeting on January 11, 2018, and will meet virtually at regular intervals yet to be determined but at least four meetings per year, including one face-to-face meeting.

### Oosterweel Link Project

In each DFI Europe regional chapter report, we like to present at least one project update. This time, we are highlighting work with which the Belgian Building Research Institute (BBRI) is involved. Coincidentally, Monika de Vos, DFI Europe secretary, is working at BBRI.

Construction of the Oosterweel Link in Belgium will begin in 2019. The R1 ring road around Antwerp will be closed to decrease the amount of traffic congestion, decrease the number of accidents and improve the quality of life within the Antwerp region. The Oosterweel Link extends over a length of about 15 km (9.3 mi) and comprises new interchanges and junctions, a new tunnel under the Scheldt River and dual-layered canal tunnels below docks and the Albert canal.

Several large-scale field tests were conducted to assess the feasibility of the planned infrastructure works and to optimize design. The details and results of these testing programs have been published in the proceedings of various international conferences. In 2013, a full-scale field test on the driveability of (sheet) piles in dense sands containing glauconite was performed. Between April 2014 and September 2015, a 24 m (79 ft) deep test pit was excavated using execution techniques that will be used to construct the dual-layered canal tunnels ('cut and cover' process). During excavation, various instrumentation was used to monitor sheetpile deformations, strut forces, the swell of the Boom clay, etc. In 2018, additional field tests are planned, which include full-scale static load testing using Osterberg cells of 45 m (148 ft) deep slurry wall panels and monitoring of the deformations in reinforced soils. The geotechnical elements will be extensively monitored using the latest fiber optic sensing techniques.



Photographs of different components of the field testing and evaluation program

## International Conference on Deep Foundations and Ground Improvement

Urbanization and Infrastructure Development: Future Challenges



June 5-8, 2018 | Rome, Italy

### 2018 DFI-EFFC International Conference in Rome

The DFI-EFFC International Conference on Deep Foundations and Ground Improvement is being held at Sapienza University in Rome from June 5-8, 2018. The intent of this year's conference is to explore the industry's challenges presented by owners and owners' representatives who are associated with building the infrastructure systems that meet modern demands.

This event provides a forum for presentations from contractors, engineers, researchers and manufacturers on various projects and studies related to new technologies, methods of construction, design concepts, equipment, and electronics in connection with developing a Project Information Management System (PIMS) and Building Information Modeling (BIM) for the geotechnical and foundation industry. Read the article about the conference on page 31 and visit [www.dfi-effc2018.org](http://www.dfi-effc2018.org) for more information or to register.

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