

Number 19-01

Subject DIANA Users Association General meeting of members

Date June 18th, 2019

Time 4 pm.

Place De Middenhof, Nieuwegein, The Netherlands

Present Ane de Boer Consultant Ane de Boer (chairman)

Arcadis Coen van der Vliet
ABT Kris Riemens
Arthe Yannick Liem
DIANA FEA BV Gerd-Jan Schreppers
Royal HaskoningDHV Nynke Vollema
RWS Jasper Doorgeest

Report drawn up by Jolanda van Willige

JRI Communication vof

Date July 25th, 2019

1. Opening

The chairman opened the meeting at 16.05 and welcomed the attendees, especially Yannick Liem of Arthe, a new member of the DIANA Users Association. Jasper Doorgeest attended this meeting instead of Johan den Boon. Henco Burggraaf is on holiday, Bogdan Orlic is ill and Reno Couwenberg has signed off. The agenda will be laid down.

2. Announcements from the Board

Ane de Boer announced that we have 2 new members: Arthe and the University of Valencia. The reports and the agenda of the general meeting of members of the DIANA Users Association will be written in English in the future. Coen van der Vliet mentioned that it would be a good idea to organize a general meeting of members of the DIANA Users Association at the next DIANA Users Meeting.

3. The Minutes of the general meeting of members of the DIANA Users Association on December 11, 2018 and actions.

There are no comments so the Minutes will be laid down by Jolanda.

Actions

Action 16-13 Board A questions list for new study cells of the DIANA

Action completed Users Association

Action 17-02 Henco All presentations starting from the DIANA Users

Action remains Meeting 2015, shall be put on the website.

Action 18-01 Jolanda Ask all members of the DIANA Users Association to Action completed give the name of a second person of his/her company

give the name of a second person of his/her company who is present at the meeting if they cannot attend it

themselves

Action 18-07 Members Prefer new ideas to determine internal your company and

Action completed indicate the preference of these new ideas towards the

Secretary

Action 18-08 Ane Action completed	Ane shall contact Frank Kaalberg and ask him who will follow Richard from Witteveen+Bos up at the DIANA Users Association.
Action 18-11 Members Action completed	Please inform Ane if there is interest from members of NLFEA simulations for reliability and/or acceptance of NLFEA analyses.
Action 18-13 Ane/Jolanda Action remains	Will make a pdf file of all lectures which have been held during the DIANA Users Meeting 2018/2019 and send it to all members of the DIANA Users Association and all participants of the DIANA Users Meeting 2018/2019.
Action 18-14 Jolanda Action completed	Will ensure that on the registration form of the DIANA Users Meeting 2019 it is mentioned that Dutch participants can get 4 points at the Constructors' registry by participating in the DIANA Users Meeting. New action → 19-01: also for the Architect registry
Action 18-15 Coen Action completed	Coen will figure out whether members at the DIANA Users Meeting 2019 can also pay for half-day sessions or whether they pay a set price for 2 days.
Action 18-16 Board Action completed	Think about the scope of the Association in the context of recruiting new members, see Agenda 6.
Action 18-17 Jolanda Action completed	Will make a presentation list for the DIANA Users Association Lecture Evening.
Action 18-18 Henco Action completed	Will ask whether the website of the DIANA Users Association will be ready on January 22th, 2019.
Action 18-19 Gerd-Jan Action completed	Will figure out whether students can test the beta version 10.3 of DIANA.
Action 18-20 Coen	Will figure out whether a student can test the beta

4. International DIANA Users Meeting

Action completed

- Evaluation 2019 Trondheim, Workshop

Workshop parametric modelling: Kris: interesting workshop, useful, but there was not enough time to participate in all available examples.

version 10.3 of DIANA at Arcadis.

Ane remarked that Ab asked the members of the meeting several times if they wanted to do something alone, but got no reaction from the participants. In Porto, the meeting room was more an instruction room, where Trondheim has offered a lecture room, which was good for the lecture part of the program.

For the participants is was easier to do things alone in the workshop part in Porto. If it is possible, it is important to note that for the next meeting we need a good meeting room with possibilities of more active participation in the workshops.

Coen mentioned that Niels Kostense told him that the workshop was very good.

- Evaluation 2019 Trondheim, Contest

Kris: we were lucky that we almost had good results. Following the results of the actual failure load we have made improvements to our models.

Coen asks if we are going to do something with the postdictie? Ane answered that there will be a follow-up. The four plots from Yuguang Yang's presentation "Contest 2019 motivation and results"

and an Excel file which includes 'measured load-deflection relationship' of the three experiments will be send to the participants of the Contest.

After this action, we will ask the participants if they want to participate in the 'postdictie analyses'? The submission date of the 'postdictie' will be the 1st of October, 2019.

Coen offered to host this postdictie workshop at Arcadis in Amersfoort in end of October on the afternoon, during which the results of the postdictie will be presented and discussed.

Gerd-Jan notes that he is curious about the presentation of Yuguang Yang tonight. In Trondheim, there was no discussion about what DIANA in his models should do.

- Evaluation 2019 Trondheim, Lectures

The lectures were good. The lecture about the E39 was very interesting, as well as the visit to the Lab. There were around 30 participants, so the turnout was good.

- User Wishes Trondheim

A lot of wishes were made. An will make an overview of the wishes and will send it to the members of the Association \rightarrow 19-02

- 2020 DIANA Users Meeting in Valencia?

The University of Valencia has become a member of the DIANA Users Association. They have offered to organize the next DIANA Users Meeting in April/May 2020 in Valencia. The members all agreed with this offer and would like to go to Valencia, preferably on a Thursday and Friday. Ane will contact Juan Navarro-Gregori of the University of Valencia and will set a date with him for the DIANA Users Meeting 2020 **Action** \rightarrow **19-03**

5. Annual Report 2018 DIANA Users Association including the financial report in

The Annual Report is discussed. Ane will make a shorter version of the lecture of Bas Lottman Action \rightarrow 19-04. There are a few notes, and Jolanda will process these. Action \rightarrow 19-05 Subsequently, the annual report will be adopted.

Financial report: Coen has not sent the extensive financial annual report yet. It was calculated that our budget would decrease sharply due to the website and our contributions to the DIANA Users Meeting. Coen will send the extensive financial annual report to Jolanda so she will send it to the members of the association \rightarrow 19-06.

Internal Financial Auditors: Nynke Vollema will replace Kris Riemens in this commission.

6. Re-evaluation of aims of the DIANA Users Association

Please find below an overview of the activities of the DIANA Users Association

- 1) Developing DIANA Software
- 2) Developing non-linear analyses and creating support
- 3) Knowledge network around FEA and DIANA
- 4) Knowledge inventarisation
- 5) Maintaining international and national contacts

Coen asked if activity 5 is a task of the DIANA Users Association. Ane answered that we have to know what happens internationally, such as what happens with an organization like NAFEMS. This is the Organization for finite element analysis. Via the DIANA Users Association we have access to an (inter)national network like fib and IABSE.

Coen noted that combined, we have many contacts and we share these with each other.

Gerd-Jan ask if there are members of the DIANA Users Association member of NAFEMS or IABSE? Ane answered that Witteveen+Bos and Royal HaskoningDHV are member of IABSE. Many members of the DIANA Users Association are member of IABSE and *fib*.

Gerd-Jan notes that the DIANA Users Association can become a member of IABSE or NAFEMS so we can share even more knowledge with our members. Ane answered that many companies are not a member of NAFEMS so the DIANA Users Association can become a member of NAFEMS. It is decided that we elaborate even further on paragraph 5.

Point 4, Knowledge assessment: In our annual report there is a publication list of all members of the DIANA Users Association. Yannick asked if we can make a tool for all publication lists that can search for specific subjects. Gerd-Jan noted that DIANA FEA has a database filled with all

publications with a key-word. Members of the DIANA Users Association are able to access this database if they ask for an account to get access to this database.

7. Progress update website DIANA Users Association

Ane noted that a trial version of the website has been made and the board has responded to it. If you have anything that can be put on the website, please inform Henco.

8. Prediction Slab stress

Ane has sent the information of the Slab stress blind competition to the members for information.

9. Ideas working groups

1) Proposal for extending NLFEA simulations for Safety Formats.

Ane noted that a set of experiments are ready to be calculated as well as other simulations of structures.

How do we deal with these kind of simulations and how close do we get to the truth? Viaduct "De Beek" has been proof loaded. ABT have done the linear elastic analyses. The paper will be published in about one month. If there is anyone who wants to test a set he/she can contact Ane.

2) Evaluation DIANA Release 10.2/10.3.

The evaluation of DIANA 10.2 has passed. DIANA 10.3 can be evaluated now. Gerd-Jan notes that he can organize a session in Delft. DIANA FEA has a list of things which can be improved in 10.4. It is decided that Gerd-Jan will organize in autumn a session for evaluation DIANA 10.3, he will inform all users **Action** \rightarrow 19-07.

3) Workflow DIANA

The workflow DIANA will also be evaluated in the evaluation session of DIANA 10.3

4) Reviewing a nonlinear analysis by TNO

Strictly following the RWS-NLFEA Guideline, it is not enough anymore to make an analyses. TNO uses an extension of safety factors then the Eurocode or Model Code is given. Coen noted that we are not involved, we need to be more in line. There must be something happening that you can link to the reality. Gerd-Jan notes that we better understand how a structure is determined. analyzing is a tool that we use to balance different aspects. Extension of the load or material factors given by the Model Code or Eurocode should be communicated to the market in an earlier stage. Action \rightarrow 19-08

5) Random Fields

Coen had a wish for random fields. For the contest we have practiced the correlations between the different fields. It is a workable tool and a valuable enhancement.

10. Communications

- DIANA FEA BV

Gerd-Jan noted that nearly all DIANA Users use DIANA 10.3. Since one month, it is also available in Japan. In the beginning of this year we started to introduce a Chinese interface in China. We are now busy with testing DIANA 10.4, automatic mesh. We want to have more control to generate structured meshes. In DIANA 10.4 there will be more functionalities for geotechnical and design applications. Emile van Varsseveld will leave DIANA FEA.

11. Questions

There were no questions. The chairman closed the meeting at 18.00 hrs.

Actions of the General meeting of members of the DIANA Users Association, June 18th, 2019

Action 17-02 Henco All presentations starting from the DIANA Users

Meeting 2015, will be put on the website.

Action 18-13 Ane/Jolanda Will make a pdf file of all lectures which has been held

during the DIANA Users Meeting 2018/2019 and send it to all members of the DIANA Users Association and all participants

of the DIANA Users Meeting 2018/2019.

Action 19-01	Jolanda	Will ensure that on the registration form of the DIANA Users Meeting 2019 it is mentioned that Dutch participants can get 4 points at the Constructors' registry by participating in the DIANA Users Meeting
Action 19-02	Ane/Jolanda	Ane will make an overview of the wishes of the DIANA Users during the DIANA Users Meeting 2019 and Jolanda will send it to the members of the Association.
Action 19-03	Ane	Ane will contact Juan Navarro-Gregori of the University of Valencia and will set a date with him for the DIANA Users Meeting 2020.
Action 19-04	Ane	Ane will make a shorter version of the lecture of Bas Lottman in the Annual report 2018.
Action 19-05	Jolanda	Jolanda will process the comments concerning the annual report 2018.
Action 19-06	Coen/Jolanda	Coen will send the extensive financial annual report to Jolanda so she can send it to the members of the Association.
Action 19-07	Gerd-Jan	Gerd-Jan will organize in autumn a session for evaluation DIANA 10.3 in Delft and he will inform all DIANA users.
Action 19-08	Board	Asking TNO for the extensions of safety factors nonlinear analysis.