

COST Action TU1202**Impact of climate change on engineered slopes for infrastructure****WG3 workshop**

Laboratório Nacional de Engenharia Civil – LNEC, Lisbon, Portugal

23-24th October 2014



Attending: Anh Minh Tang (AMT), Manuel Oliveira (MO), Beata Gajewska (BG), Lukasz Lesniewski, Yu-Jun Cui (YJC), Giovanna Grossi (GG), Mihael Brencic (MB), Javier Diez, Piotr Osinski (PO), Heather Kerr, Jonathan Asquith (JA), Sergio Lourenco, Herbert ter Maat (HtM), Cristina Jommi (CJ), Francesco Gentile, Emma Keszeyné, Say, Fotini Kehagia, David Toll (DT), Stanislav Lenart (SL), Anna Miskowska, Pat Carrillo, Mohd Syazwan Md-Rahim, Paul Hughes (PH), Sarah Springman (SS)

Meeting notes/minutes

23rd of October 2014 (Thursday)**1. Brief introduction and updates from AMT.****2. Updates on SOTA, presentation of each section:**

- Comment from DT on subsection 2.3 to go into more details for infiltration issues within this chapter.
- MB to send text and figure with experimental data to MO by the end of November.
- CJ suggested including more information regarding clay soils, additional contribution from Tibor Firgi to be submitted.
- Comment from YJC to stick to appropriate nomenclature: using SWRC rather than soil water characteristics.
- Comment from MO to correct the title of Fig. 7, section 3.4 (pore water pressure measured 1.5 h before failure).
- Section 5 modified by including research from Vera van Beek on “piping” special type of internal erosion.

3. Presentation from HtM on Influence of climate change on infrastructure network in the Netherlands:

- Suggestion to prepare introduction for all issue by HtM.

4. Presentation form GG on Potential climate change effects:

- Suggestion to include within the paper presentation of different approaches of hydraulic changes, involving statistic models.

5. Discussion on final draft of SOTA paper:

- BG about adding new contribution referring to erosion section. BG to contact PO.
- Important issue of appropriate allocating Climate Change section with SOTA paper.
- DT suggested firstly preparing the Climate Change section and then deciding where to fit it.
- Deadline set up for HtM and GG to submit Climate Change section by the end of November.
- Deadline set up for all sections coordinators to submit their feedback by the end of January.

6. Future plans for WG3 workshops

- Idea of preparing second paper on modelling and soil-vegetation-climate parameters application in numerical design.

24th of October 2014 (Friday).

7. SOTA paper deadlines

- Missing contributions and modifications to the current version: end of November 2014.
- Full draft: end of December 2014.
- Feedback of co-authors: end of January 2015.
- Final revision: end of February 2015.

8. Future plans for WG3 workshops:

- AMT to PH about preparing a separate paper on Climate Change. PH will discuss it with Editorial Board (PH, TD, CF). No specific answer was given.
- AMT proposed idea of organising additional meeting to discuss the shape of new papers. The meeting would be open to members from other WGs. PH declined idea of having open meetings, instead he suggested inviting only WG Leaders (due to Action budget plans).
- DT comment on the scope of the future paper to consider sharing knowledge and initiate cooperation between researchers from within WG3 members (i.e JA cooperation with AMT, a research on lysimeters).
- SL came out with the idea of doing an “internal research” with Josif Josifovski (WG1). SL asked PH if Action will support this. PH will reply as soon as he discusses it with other members.
- CJ suggested publishing new material in one of journal (special issue) that she has access to.
- AMT propose everybody to send him all materials (articles, images, photo, data, etc.) that would be interesting to put on to the website of the Action.
- Accordingly with the 3rd objective of the Action (MoU) - review current best practices in testing and modelling of interactions between climate, vegetation and soil, in order to identify key changes in soil material properties caused by

root growth, desiccation, surface erosion and precipitation – WG3 could perform some laboratory testing (physical modelling, freeze/thaw cycles) and participate in numerical modelling of the interaction between soil / atmosphere / vegetation.

- AMT suggested identifying ideas with participants from other WGs for the next WG3 meeting.

9. STSM updates:

- One STSM accomplished (Piotr Osiński to Durham).
- There are 5 STSMs planned for the next year (Barbara Likar planned for January (to ENPC), Ross Stirling (to ENCP), Rosalind Hen-Jones (to ENCP), Cristina Jommi (to ENCP), David Toll (to ETH Zurich).
- SL asked PH about splitting STMS into two visits. PH replied that it could be done if the two visits are in the same year.

10. Next WG3 meeting:

- The next WG3 meeting will be held in ETH Zurich (representative SS) at the end of April 2015, joint MC meeting.
- In this meeting there could be presentations of recent works, discussion of new papers.