**GEOTECHNICAL DESIGN** with worked examples

13-14 June 2013, Dublin

# JRC Workshop on Eurocode 7 – agenda

European Commission

Dr Andrew Bond Director, Geocentrix Ltd Chairman TC250/SC7



# Trinity College, University of Dublin

- University of Dublin with Trinity College founded by Queen Elizabeth in 1592
  - Modelled on Oxford and Cambridge (several Colleges), but has only ever had one!
  - 3000 academic staff; 800 academic, an 17000 students (12000 u.g./5000 p.g.)
  - Recently ranked 48<sup>th</sup> in the world in the Leiden Rankings published in May 2013
- Engineering School founded in 1841 is second oldest in Ireland and UK
  - Now moved to a five-year Masters degree
  - First 2 years are common, then students choose between 4 traditional options:
    - Civil, Structural and Environmental Engineering
    - Mechanical and Manufacturing Engineering
    - Electronic and Electrical Engineering
    - Computer Engineering
  - In past 10 years staff in Engineering School have generated over €60 million in research income

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# Agenda

Day 1 10:00–10:30 Welcome 10:30–11:00 Coffee break

11:00–12:30 Lecture/Workshop 1 12:30–13:30 Lunch break

13:30–15:00 Lecture/Workshop 2 15:00–15:30 Coffee break

15:30–17:00 Lecture/Workshop 3 17.00 Close Day 2 09:00–10:30 Lecture/Workshop 4 10:30–11:00 Coffee break

11:00-11:30 Lecture 5 11:30-12:30 Lecture/Workshop 6 12:30-13:30 Lunch break

13:30–15:00 Lecture/Workshop 7 15:00–15:30 Coffee break

15:30–17:00 Lecture/Workshop 8 17:00–17:30 Conclusions



## European Commission

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## **Speakers**

- Dr Andrew Bond Director, Geocentrix Ltd, UK Chairman of TC250/SC7
- Dr Trevor Orr Trinity College, Dublin, Ireland Convenor of TC250/SC7/EG3

Professor Giuseppe Scarpelli Università Politecnica delle Marche, Ancona, Italy Former Vice-Chairman of TC250/SC7

Dr Bernd Schuppener

Former Head of Geotechnics, Federal Waterways Eng'ng and Research Institute (BAW), Karlsruhe, Germany Former Chairman TC250/SC7









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# Lectures

Thursday, 13<sup>th</sup> June 2013

- 1. Basis of design: EN 1990 and EN 1997-1 (Bond)
- 2. Shallow foundations: design of spread of foundations (Scarpelli)
- 3. <u>Retaining structures I</u>: design of gravity walls (Bond)

### Friday, 14<sup>th</sup> June 2013

- 4. Ground investigation and testing: EN 1997-2 (Schuppener)
- 5. <u>Slope stability</u>: design of slopes and embankments (Orr)
- 6. <u>Hydraulic failure (Schuppener)</u>
- 7. Retaining structures II: design of embedded walls (Bond)
- 8. Deep foundations: design of pile foundations (Orr)



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# Workshops/worked examples

Thursday, 13<sup>th</sup> June 2013

- 1. Combinations of actions (Bond)
- 2. Strip foundation (Scarpelli)
- 3. T-shaped gravity wall (Bond)

#### Friday, 14<sup>th</sup> June 2013

- 4. Characteristic values (Schuppener)
- 5. none for slope stability
- 6. <u>HYD and UPL limit states</u> (Schuppener)
- 7. Anchored sheet pile wall (Bond)
- 8. Pile foundations (Orr)



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# **Invitation for Thursday evening**

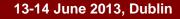
**Trevor and Diane Orr** are pleased to invite the Workshop participants to an **informal buffet meal** in their home in Shankill, this evening, starting between **7.00 and 7.30 pm**. For catering, they would like to how many are coming. Please sign on the sheet that will be circulated if you are coming. Accompanying guests are welcome!

Participants should take the DART train from Pearse Station (across the road from this building) to Shankill station, one stop after Killiney beach. The train journey takes 35 minutes and there is a 20 to 25 minute walk to the house, Clova, Lordello Road, Shankill. Directions to the house will be provided.

There are good views from the train of Dublin Bay, Dun Laoghaire harbour, Killiney Bay and the Wicklow mountains.

It is hoped to have the party for some of the time in the garden, so bring some warm clothes as it can get cool in the evenings.

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