

Technical Committee TC 213
Scour and Erosion
International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE)

Meeting August 30, 2012, 17:45 – 18:45 h
Ecole des ARTS ET METIERS – PARISTECH, CENTRE PARIS
151, Bd de l'Hôpital, 75013 Paris, Grand Amphi

Call for attendance:

Michael Heibaum, Jean Louis Briaud, Cathy Avila, Jean Jacques Fry, Christophe Chevalier, Beatrice Hunt, Henk Verheij, Gjis Hoffmans, Liang Cheng, Scott Draper, Brett Nener, Knut Oberhagemann, Richard Whitehouse, John Harris, Eric Bollaert, George Annandale, Shinji Sassa, Mutlu Sumer, Yee Meng Chew.

TC 213 activities:

Name: In 2010, the technical oversight committee accepted renaming TC-213 committee to be in line with the name of the conference (Technical Committee on Scour and Erosion) to show its emphasis on scour.

Topics: Jean Louis Briaud sense is that over the years, the number of topics has increased. We don't want the topic of scour to be lost. Internal erosion and filtering should also be covered by our TC. Do we have a list of all the topics related to this committee including levee and levee overtopping? Add the keywords to the website.

Membership: Up to two members from each country can be members of the TC and unlimited corresponding members. There are only 9 countries currently represented on the TC-213 and we have not increased the number of countries since the last meeting. Members and friends should contact colleagues in unrepresented countries to encourage them to have their national society join this group in order to get new input and new ideas.

Chair: Michael Heibaum has 2 years of his 4-year term remaining as chair of the TC. Jean Louis Briaud noted that the TC Chair could serve two terms in a row. The Chair will be up for election at the 2014 meeting for the next 4 year term.

Website: In 2010, the committee initiated a new website for the TC-213 to find all the proceedings of the previous conferences (except San Francisco) which have been very helpful. The proceedings from ICSE-6 will be added in the next 6 months. Michael would also like to make available for download copyright free papers and pictures. Michael has tried several times to get more papers and photos but has not succeeded. Hank will send electronic files of the keynote papers over to Michel next week for ICSE-3 in Amsterdam.

Interaction with other Societies / other TCs

TC-201 – Dykes and Levees
is informed about the TC-213 activities, but no interrelation established.
TC-210 - Dams and Embankments
has no scour and erosion activities.
TC-209 - Offshore
has no scour issues at the moment – 2012 meeting has very little on erosion.
TC-307 – Sustainability
is a new TC that is just being founded.

We have had outreach to ICOLD and IAHR with the result that it is difficult to interact with, which is rather disappointing – but at least there is not a depth into the scour/erosion without this group. There is good potential for improving geotechnical and hydraulic approaches in the development of numerical tools. We especially need to have better numerical models for the soil portion of the analysis.

Comments on ICSE-6 (Jean Jacques Fry)

- The conference was able to integrate issues that had been covered by the "Geofilters" series from 1992 to 2004 (see website).
- Did not get enough papers on erosion on the catchment area scale, so it was not included as a separate subject.

Minutes

Technical Committee on Geotechnics of Soil and Erosion Meeting (TC-213)

August 30, 2012

- The conference included more than 200 participants. Because the deadline was translated several months, it led to some problems for organizing trips etc.
- The committee received 300 abstracts. 150 papers were submitted by the deadline. The committee struggled to get 50 more papers, but this delayed the organization.
- See budget – not completed quite yet. Included all the breaks and the lunch – needed more than 200 participants. SHF could take the financial risk of the organization.
- How do people feel about 4 concurrent sessions. There was also the option of posters/papers. The challenge with posters is that if you ask a professional to present a poster then he or his organization may say “I’m not paying for that”. One potential solution for future conferences would be to have a big room with posters around and lots of discussion with the authors. If the session included food and drink, it might be a great success.
- Bottom line, the organizing committee gets to decide how they would like to organize the conference.
- General reporters were not appointed. If we could find these guys then we could make steps forward, make state of the art about how far forward we will be moving. Jean Jacques needed 20 general reporters for the conference to make it work which he was unable to obtain.
- Special thanks to Michael Heibaum, Jean Louis Briaud and Cathy Avila for their assistance.
- Case histories (electronic journal) on the ISSMGE website
- See also Appendix A for presentation from Jean Jacques Fry

Presentation of proposals for ICSE-7 and ICSE-8

The first presentation was by Liang Cheng of the University of Western Australia, Perth, Western Australia. See handout included in Appendix B. There are 2.6 million people in Western Australia which is the largest state in Australia. Relatively unstable sea beds (calcareous sands) with very little research completed on that kind of sand. There are direct flights from many cities in the world. Conference fees would likely be approximately \$800 similar to the Paris conference.

Originally there was a second presentation from our Bangladesh colleague scheduled, but he was unable to attend the conference due to strikes at the university of Dhaka in Bangladesh. Michael Heibaum and Knut Oberhagemann could share some information. The boundary conditions are such that this country must cope with many scour/erosion interactions being located in a delta community. The idea of going for a first time to a developing country is appealing. They would be ready and able to accomplish the conference as they have also completed other conferences. The Country has 1001 people per km². It has the largest delta in the world. Common challenges include riverbank protection and levees/embankment stability. The Brahmaputra River is 12km wide and coastal areas due to the problems along the coast – mangrove forest that is allowing erosions now.

The discussion revealed that visiting a developing country would be an opportunity and a risk. The committee voted to hold ICSE-7 in Perth, Western Australia in November or December of 2014. The committee will consider a proposal for Bangladesh for ICSE-8 2016 conference.

See also Appendix B for presentation by Liang Cheng

Other committee projects

ISSMGE awards deadline extended. The awards are 1) outstanding innovator, 2) outstanding technical committee, 3) outstanding member society, 4) paper in the journal and 5) outstanding project. Award luncheon in Paris next year at the ISSMGE conference.

Hank: note for funding for the Technical committee

Handout on Maritime Engineering – See Appendix C.

Respectfully submitted,

Catherine Avila
Secretary for TC-213



ISCE-6 2012 PARIS

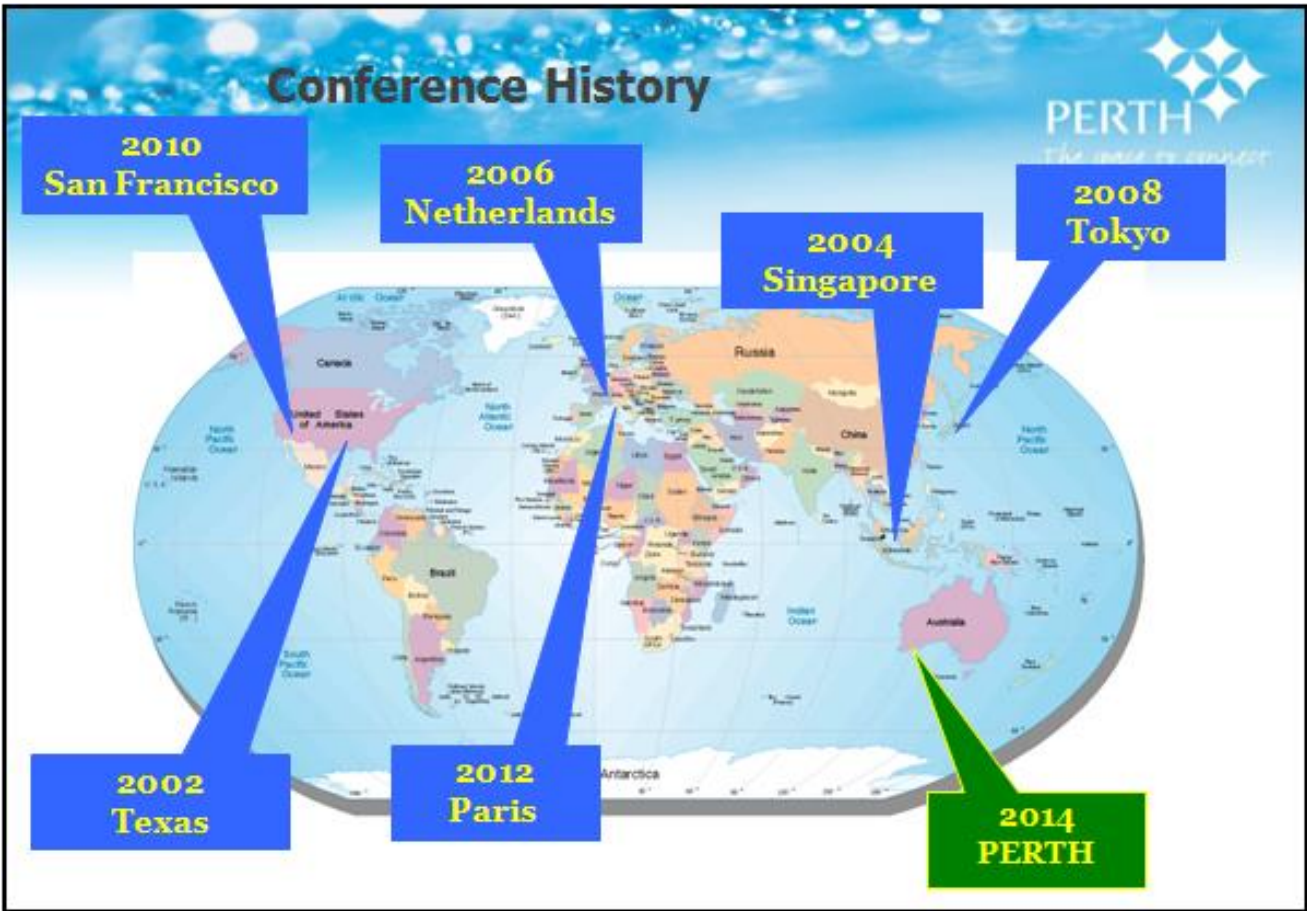
THE ACHIEVEMENT OF OBJECTIVES

- ▶ Integrate other workshops : OK
- ▶ Put emphasize on all aspects of erosion: not enough papers on catchment area
- ▶ more than 200 participants : OK but deadline was translated several months later and led to some problems for organizing trips
- ▶ General reporters were not appointed



Current budget (be consolidated)					
Expenditures	nb	Euros T.T.C.	Incomes SHF	nb	Euros T.T.C.
			Registration		
			<i>based on an average 535€ per payed participation:</i>	250	133 750
Printing and transport of Programme (3000ex)		4 500			
Book of Abstracts	300	2 000	- 75 normal price 600€		
Proceedings (USB keys)	300	1 850	- 145 reduced price 550€		
Breaks and lunch (pour 3 jours)+formation 45 p	275	33 500	- 30 student price 300€		
Cocktail - Welcome reception	275	5 000			
Banquet on boat	250	27 500	Courses		
Transport and service for installation		1 500	35 people at average price: 180€		6 300
Staff fees during conference		1 500			
Stands - posters - barnum		19 500	Sponsors		13 000
Communication (advertising, flyers, site,...)		3 500			
Rent of ENSAM rooms		5 000			
Courses (professor payment+rooms)		5 000	Exhibitors (7)		12 000
IntellAgence Technologies - web site ICSE		8 000			
bags and content		2 750			
Visit Mount St Michel works		4 900	Visits		5 200
Visit CHATOU Lab		1 500			
Pay back ISSMFGE + Transport and local expenses		6 400			
Sub total 1		133 900			170 250
Direction and organisational engineering by SHF (70 men.day)		30 000	Benefit SHF		1350
Secretary, information management during Conference		5 000			
Sub total 2		35 000			
TOTAL		168 900	TOTAL		170 250


Appendix B
ICSE-7 Presentation

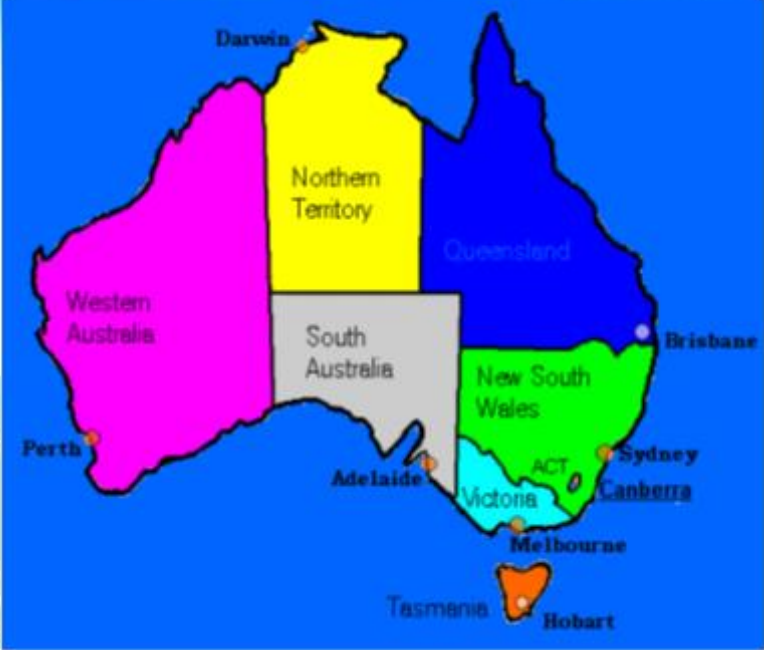


-Perth, Western Australia

PERTH
The space to connect.

-Situated around beautiful swan river and along coast of Indian Ocean
-population: 2.6 million
-1.5 million in Perth
-1.1 persons/km²
-The world's #1 mining state


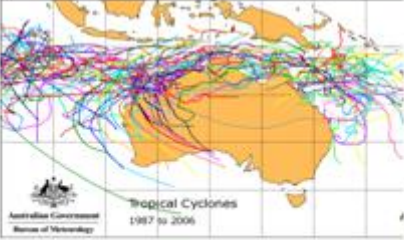





-Perth, Western Australia

PERTH
The space to connect.

The silicon Valley of the Energy Industry, a crossroad of industry, research and education. Engineering challenges



Challenges

- Cyclones
- Shallow water
- Calcareous soils
- Erodible seabed

Technical Committee on Geotechnics of Soil and Erosion Meeting (TC-213)

-The Location

Perth, Western Australia

...in a modern, safe and accessible environment...



The collage consists of five photographs. The top-left photo shows a modern, silver train traveling across a bridge over a body of water. The top-middle photo is a night view of the Perth city skyline, with several skyscrapers illuminated in blue and white. The top-right photo shows two kangaroos standing on a green lawn, with a golf cart and people in the background. The bottom-left photo is a daytime aerial view of the Perth city skyline and harbor. The bottom-right photo is a night view of the Perth city skyline from across the water, showing the city lights reflecting on the water.



Perth

The space to connect

-The Location

Perth, Western Australia

...surroundings by some of the most beautiful beaches in Australia and under a very welcoming climate...








The Organiser

Why choose the University of Western Australia?

- One of the top 8 universities in Australia
- Strong research groups in Geomechanics (COFS) and Hydraulics
- Excellent soil and flume testing facilities
- On the door step of a booming offshore oil and gas industry
- Strong research collaborations between UWA and industry
- Excellent track records for organising international conferences (ICHD, ISFOG ...)



–The Conference



Suggested themes

- Offshore Engineering for marine structures and pipelines
- Offshore Engineering: Case Studies and Field Studies
- Numerical Analysis
- Laboratory/Physical scale modelling
- Fundamental Grain scale, Continuum scale, Regional scale analysis
- Engineering applications: Bridge scour, river management, filter design
- Technical session building upon ICSE10 & ICSE12

–The Conference



Suggested format

- Three days conference
- State-of-the-art report on each of the suggested themes
- Full poster sessions
- Discussions prepared and facilitated by selected reporters
- Short courses on aspects of scour and erosion
- Exhibitions
- Best paper and best student paper awards in each themes
- Activities and tours



Appendix C
Handout

ice | proceedings

ice
Institution of Civil Engineers
publishing

Maritime Engineering

Scour in the marine environment

Volume 164 Issue MA4 December 2011

Editorial

Scour in the marine environment

J. M. Harris and R. J. S. Whitehouse

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Papers

Evaluating scour at marine gravity foundations

R. J. S. Whitehouse, J. Sutherland and J. M. Harris

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Sinking of armour layer around a cylinder exposed to a current

A. W. Nielsen, B. M. Sumer, J. Fredsoe and E. D. Christensen

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Long- and short-crested random wave-induced scour below pipelines

D. Myrhaug and M. C. Ong

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Jet scour

G. Hoffmans and H. Verheij

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The logo for the Forest Stewardship Council (FSC), featuring a stylized tree and the letters 'FSC'.

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