

Presenting

PIANC

**The World Association for
Waterborne Transport Infrastructure**



**Presentation by
Onno Musch**

**at the occasion of
Coastal Engineering Day – NTNU, 19-04-2018**

Venue-Occasion / date



Practical Information

- Emergency Exits and toilets
- Lunch – canteen

Venue-Occasion / date



Program

- 09:00 *Welcome and some information about PIANC and Young Professionals.*
Onno Musch – Norconsult AS / PIANC Norge YP-Com delegate
- 09:30 *Coastal Engineering Group, NTNU*
Jørgen Krokstad – NTNU/Norconsult AS
- 10:00 *Government incentives – How to pave the way for the harbours of the future*
Sindre Ulstein Lid – Kystverket
- 10:30 **Coffee break**
- 10:45 *00-Star Wind Floater*
Kristine Ekeli Klingan – Dr. Techn. Olav Olsen AS
- 11:15 *Submerged breakwaters – REEF3D study*
Athul Sasikumar – Norconsult AS
- 11:45 *Aquaculture project*
Joachim Buarø – Aquastructures
- 12:15 **Lunch**

- 13:15 *Aquaculture – Sintef, Closed Aquaculture Cages*
David Kristiansen – Sintef
- 13:45 *Dynamic analyses of tankers moored at berth*
Thuve Hovden Martin – Multiconsult AS
- 14:15 *Large-Scale wave propagation modelling for the Norwegian Coast with REEF3D Hydrodynamics*
Hans Bihs – NTNU
- 14:45 **Coffee break**
- 15:15 *Arctic coastal engineering*
Raed Lubbad – NTNU
- 15:45 *Master Project Presentations (3 projects)*
NTNU
- 16:30 *Summary and comments*
Onno Musch – Norconsult AS
- 16:45 **Networking**

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About myself

- From the Netherlands, married, 2 children (4 and 6)
- MEng – Civil Engineering, University of Bristol. 2007
 - Worked for Dredging International in India and Qatar
- MSc – Coastal and Marine Engineering, Delft/NTNU. 2011
 - Working for Norconsult since 2011
 - Section Manager for the coastal engineering team:
 - Numerical modelling
 - Breakwater design
 - Realtime environmental data-analysis (fjord-crossings)
 - Floating structures analysis
 - Port and harbour design
 - Climate change analysis and Adaptation

PIANC YP Delegate for Norway and member of the board

- Member of WG 178: climate change adaptation guideline for ports

Venue-Occasion / date

What PIANC Stands For

- PIANC originally stands for: Permanent International Association of Navigation Congresses
- PIANC today: The World Association for Waterborne Transport Infrastructure

**The global organisation providing guidance
for sustainable waterborne transport infrastructure
for ports and waterways**

- Non-political and Non-profit = 100% impartial
- Established in 1885, PIANC is the longest-standing organisation in its field, and continues to be the leading partner for governments and private sector in the design, development and maintenance of ports, waterways and coastal areas.

Our Mission

To remain the leading international source of waterborne transport-related information in the 21st century

To provide expert guidance and technical advice

- Bringing together the best international experts, both public and private, on technical, economic and environmental issues pertaining to waterborne transport infrastructure
- High-quality *Technical Reports*
- *International Commissions and Working Groups*

To keep the international waterborne transport community connected

- *Four-yearly PIANC World Congresses*
- *Four-yearly PIANC-COPEDEC International Conferences on Coastal and Port Engineering in Developing Countries*
- *Two-yearly Smart Rivers Conferences bringing experts together on inland waterway infrastructure.*

To support Young Professionals and Countries in Transition

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Our Membership

**38 Qualifying Members
of which 25 have a National Section**

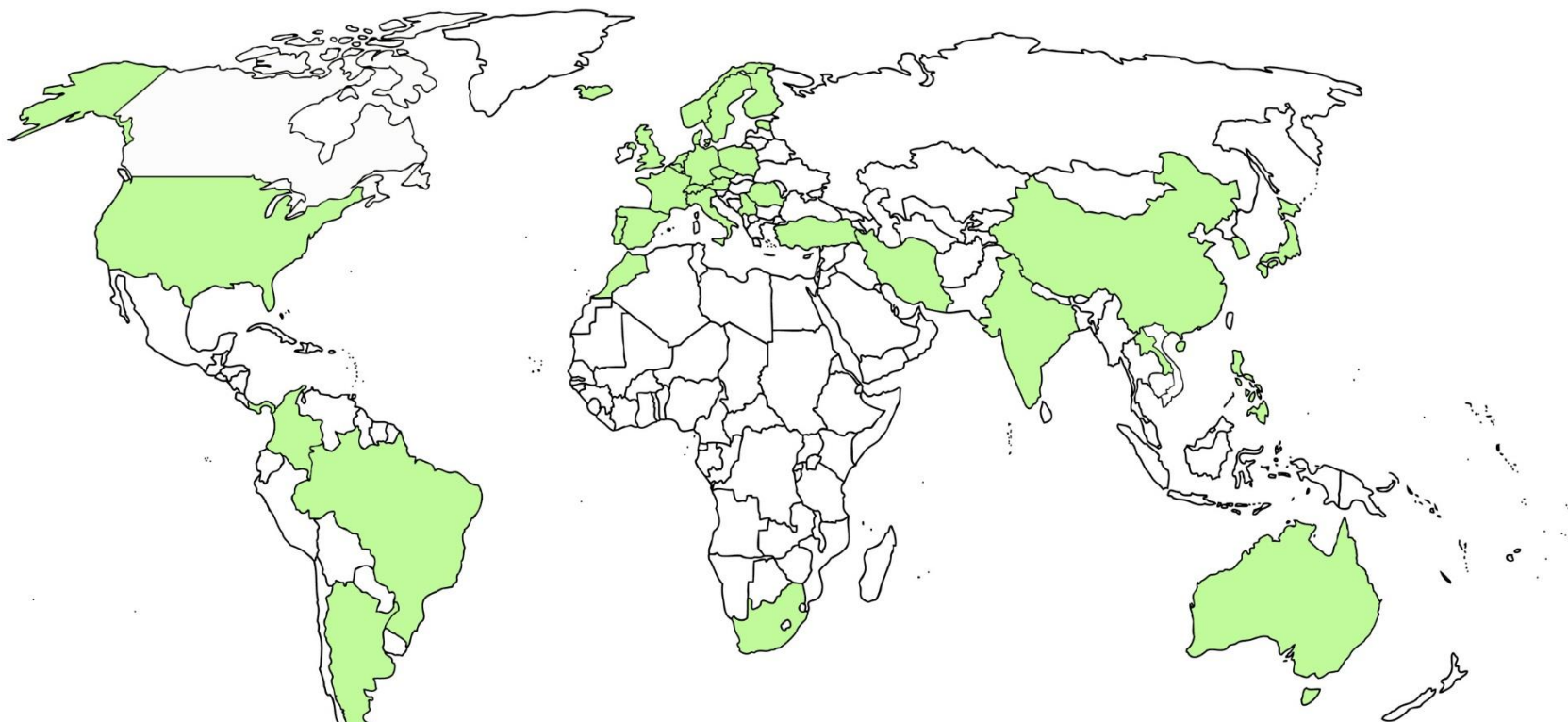
(i.e. governmental and non-governmental organisations representing a country)

more than 2,000 Individual Members
(Students included)

more than 450 Corporate Members
(port authorities, chambers of commerce, universities,
other public- and private-sector organisations)

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PIANC's Qualifying Members

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PIANC Norway

- 68 individual members – 11 YPs
- 12 small companies
- 2 large companies
- 3 honorary members
- 3 platinum member companies
 - Norconsult
 - Borg Havn
 - Oslo Havn

How we work

Our Commissions and Working Groups reflect the unique variety of topics and issues covered by PIANC

- 4 commissions
 - inland navigation (InCom),
 - maritime navigation (MarCom),
 - recreational navigation (RecCom) and
 - environmental matters (EnviCom).
- 1 commission for international co-operation and relations with Countries in Transition (CoCom).
- Commissions execute PIANC's Strategic Plan, co-ordinate the work of our technical Working Groups and Permanent Task Groups, and provide reference information for conferences and publications.

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How we work

Special focus on Young Professionals

- *Specific commission (YP-Com)* created in 2006 to better serve their needs and develop their involvement in PIANC's activities.
- *Our objective:* create an *international network of Young Professionals*, to share knowledge and facilitate contacts with the world's leading specialists across all working fields.
- Very active in many National Sections (31 delegates and 24 observers) and well represented (more than 100 Yps) in ongoing and former Working Groups.

Linked ™

Venue-Occasion / date



YP-COM

The goal of YP-Com is to encourage and promote active participation of Young Professionals in PIANC

Argentina



USA



South Africa



The Netherlands



Germany



Belgium



Italy



UK



Spain



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YP-COM: Norway

Horten - 2017



SMSC - 2016



Venue-Occasion / date



Recent YP-Com events

SmartRivers 2015, Argentina

- YP Activities
- PIANC YP Award



COPEDEC 2016, Brazil



Venue-Occasion / date

Awards

PIANC AWARDS

- **PIANC De Paepe-Willems Award:**

special prize established as a recognition of outstanding technical research on waterborne transport infrastructure by young engineers (< age of 40).

3 prizes: 4000; 2000 and 1000 EUR!



- **MEDA Award (RecCom)**

- **Working with Nature Award (EnviCom)**



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De Paepe-Willems Award

2018/2019



YEAR	COUNTRY	NAME	ARTICLE
2015		Mr S. SOLARI	Risk and Whole Life Cost-Based Verification and Optimisation of Harbour Approach Channel Depth
2014		Mr M. RUSTELL	Optimising a Breakwater Layout Using an Iterative Algorithm
2013		Mr H. MATSUSHITA	Breakwater Reinforcement Method against Large Tsunamis
2012		Mr H.D. JUMELET	A Theoretical Approach for the Notional Permeability Factor P
2011		No winner was appointed in 2011	
2010		Mr T. GERNAY	Optimisation and analysis of lock gates in the framework of the 'Saine-Escaut-Ert' waterway upgrading
2009		Ms Y.J.G. van KRUCHTEN	A probabilistic analysis of the ecological effects of sand mining for Maasvlakte 2
2008		Mr W.C. GLANMORE	A Decision Support Tool for Assessing the Impact of Boat Wake Waves on Inland Waterways
2007		Mr A.A. ROUBOS	Dealing with uncertainties in the design of bottom protection near quay walls
2006		Mr M. BLECK	Wave Attenuation by Artificial Reefs
2005		Mr J.L. LARA	A Numerical Wave Flume to Study the Functionality and Stability of Coastal Structures
2004		Mr E. FAGANELLO	Hydraulic Modelling to Revise the Sluice Gate Control Logic at Cardiff Bay Barrage
2003		Mr H. SCHÜTTRUMPF	Wave Overlapping Flow on Seadikes Experimental and Theoretical Investigations
2002		Mr M. CLARKE	The restoration of Anderton Boat Lift.
2001		Mr P. TROCH	Experimental study and numerical modelling of pore pressure attenuation inside a rubble mound breakwater.

Venue-Occasion / date



Our Technical Reports



The Core Business of PIANC

- Provide *state-of-the-art* guidance on waterborne transport-related topics for professionals
- Drafted by *international Working Groups* supervised by a Commission
- An average of 15 to 20 Working Groups active at any time!

Available FOR FREE for all PIANC members!

<http://www.pianc.org/technicalreportsbrowseall.php>

Venue-Occasion / date



Our Technical Reports

Browse Technical Reports – MarCom

Product	Price
 Classification of Soils and Rocks for the Maritime Dredging Process MarCom Working Group report 144 – 2015 (Only available as PDF) Written by: MarCom Working Group 144	€ 160
 Design and Maintenance of Container Terminal Pavements MarCom Working Group report 165 – 2015 (Only available as PDF) Written by: MarCom Working Group 165	€ 185
 Guidelines for protecting berthing structures from scour caused by ships MarCom Working Group report 180 – 2015 (Only available as PDF) Written by: MarCom Working Group 180	€ 195
 Masterplans for the Development of Existing Ports MarCom Working Group report 158 – 2014 (Only available as PDF) Written by: MarCom Working Group 158	€ 195
 Design Principles for Small and Medium Marine Container Terminals MarCom Working Group report 135 – 2014 (Only available as PDF) Written by: MarCom Working Group 135	€ 150
 Tsunami Disasters in Ports due to the Great East Japan Earthquake MarCom Working Group report 122 – 2014 (Only available as PDF) Written by: MarCom Working Group 122	€ 124
 Harbour Approach Channels – Design Guidelines MarCom Working Group report 121 – 2014 (Only available as PDF) Written by: MarCom Working Group 121	€ 195

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Working Groups - Insight

- **WG178: Working Group on climate change adaptation for maritime and inland port and navigation infrastructure: International guidelines for adaptation**

41 members

6 continents represented

3 representatives Scandinavia



- International Association of Ports and Harbors (IAPH)
- International Harbour Masters' Association (IHMA)
- International Maritime Pilots' Association (IMPA)
- International Bulk Terminals Association (IBTA), a coalition of the International Dry Bulk Terminals Group and the Coal Export Terminal Operators Association
- Smart Freight Centre (SFC)
- European Dredging Association (EuDA)

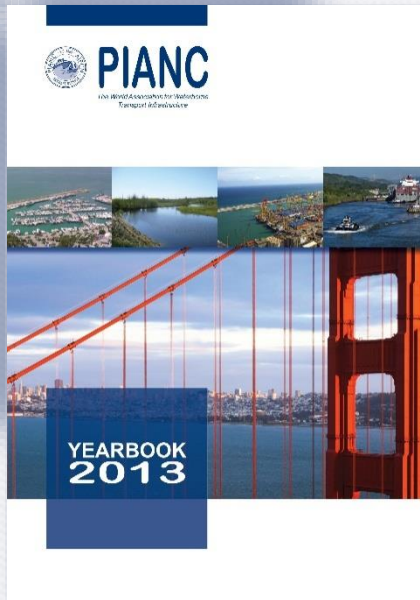
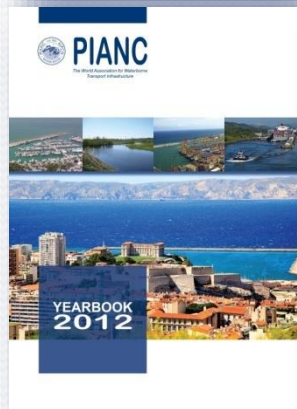
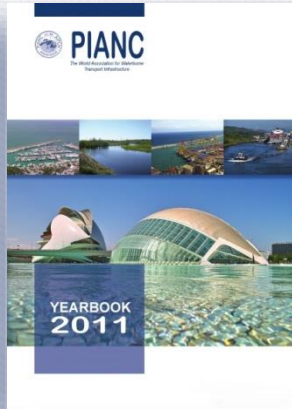
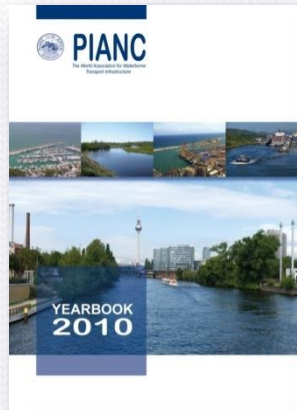


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Working Groups

- MarCom Working Group 208 on **“Planning for Automation of Container Terminals”**.
- InCom Working Group InCom 207 on **“Innovations in Shiplift Navigation Concepts”**.

Our Yearbook



1 issue per year

(April)

- Full-colour publication
(Reduced Hard Copy + full version on Website)
- The main points of interest of the commission on which they focused in the previous year, highlights of WG-reports, technical visits, etc.
- An overview of the activities of our Platinum Partners
- Article De Paepe-Willems Award winner
- ...

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7 reasons to join PIANC

- 1** Join a worldwide *network* of fellow experts and professionals
- 2** Benefit from more than a century of *expertise*
- 3** Gain access to advanced *technical information*
- 4** Share your knowledge and experience through *Working Groups, Commissions* and National Sections
- 5** Make your voice heard within the community and on the *international scene*
- 6** Use a unique springboard for *Young Professionals*
- 7** Team up with *public decision-makers*

Venue-Occasion / date



Your Contacts

PIANC Headquarters

PIANC
General Secretariat
Blvd. du Roi Albert II, 20-B3
B-1000 Brussels (Belgium)
Tel.: +32 2 553 71 61
Fax: +32 2 553 71 55
E-mail: info@pianc.org



PIANC Norway



Roar Johansen
President



Fridtjof Wangsvik
First Delegate Norway



Onno Musch
YP-Com Delegate Norway

Venue-Occasion / date



Membership

- Individual Membership Norway – 500,- kr
- Individual Membership International – 1000,- kr
- Student Membership International – 250,- kr !!
- Corporate Membership International (small organisation – 3700,- kr
- Corporate Membership International (large organisation) – 7200,- kr

To apply for membership please contact: Roar Johansen or Onno Musch

Venue-Occasion / date



Events



Marin Byggeteknikdagen
PIANC/NTNU – 27. April, 2017

Les mer



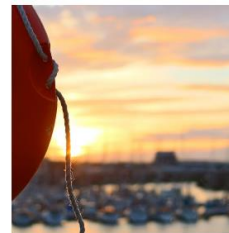
Fagdag – Miljø og Sikkerhet,
Horten – 01.03.2017

Les mer



Trelleborg: Technical Seminar –
8. November, 2016

Les mer



Årsmøte PIANC Norge – 24.
November 2016

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Teknisk Utflukt – SMSC – 24.
August 2016

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Fagdag – Marin
Byggeteknikdagen PIANC/NTNU

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Fagseminar – Svalbard – 14.
September 2016

Les mer



WORKSHOP – Climate Change

Les mer

Visit the website
www.pianc.no www.pianc.org

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Technical Excursion 2018

- Planning a technical excursion for 2018
- Please come with ideas and/or invitations

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THANK YOU

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