

**Presenting**

# PIANC

**The World Association for  
Waterborne Transport Infrastructure**



**Presentation by  
Onno Musch**

**at the occasion of  
Coastal Engineering Day – NTNU, 29-04-2019**

**Venue-Occasion / date**



# Practical Information

- Emergency Exits and toilets
- Lunch

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## Program

- 09:00 *Welcome and some information about PIANC and Young Professionals.*  
Onno Musch – Norconsult AS / PIANC Norge YP-Com delegate
- 09:30 *Centre of Coastal Technology – Status update*  
Jørgen Krokstad – Norconsult AS
- 10:00 *Developing the Norwegian coastline – future fairways*  
Ruben Rostad – Kystverket
- 10:30 **Coffee break**
- 10:45 *Improving marine operations with real time simulators*  
Bård Helge Thingstad – Kongsberg Maritime
- 11:15 *Machine Learning – possibilities for shipping and coastal engineering*  
Andreas Ravnstad – Norconsult AS
- 11:45 *Modelling of ocean currents near the coastline*  
Ole Anders Nost – Akvaplan-Niva
- 12:15 **Lunch**

- 13:15 *Offshore wind and floating bridges*  
Vegard Aksnes – Sintef Ocean
- 13:45 *Digital screening and geological mapping of bathymetry*  
Erling Siggerud – Digital Geologi
- 14:15 *Projects*  
Hans Bihs – NTNU
- 14:45 **Coffee break**
- 15:15 *Projects*  
Raed Lubbad – NTNU
- 15:45 *Master Project Presentations (3 projects)*  
NTNU
- 16:30 *Summary and comments*  
Onno Musch – Norconsult AS
- 16:45 **Networking**

**WELCOME!**

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# About myself

- From the Netherlands, married, 2 children (5 and 7)
- MEng – Civil Engineering, University of Bristol. 2007
  - Worked for Dredging International in India and Qatar
- MSc – Coastal and Marine Engineering and Management, Delft/NTNU. 2011
  - Working for Norconsult since 2011
  - **Section Manager** for the coastal engineering team (16 pers) and **Marked Manager for Aquaculture:**
    - Numerical modelling
    - Breakwater design
    - Realtime environmental data-analysis (fjord-crossings)
    - Marine structures analysis (Aquaculture/Offshore wind/Floating bridges)
    - Port and harbour design
    - Climate change analysis and Adaptation

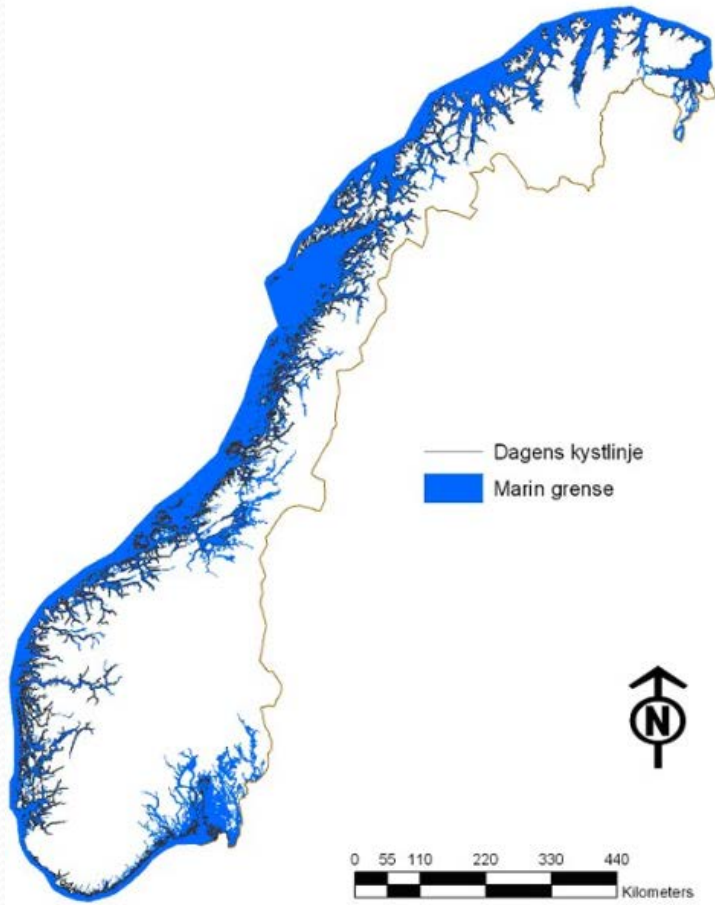
**PIANC YP Delegate** for Norway and member of the board

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# Coastal Engineering - Norway

100 000 km (including islands)!

240 Harbours (++)!



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# Coastal Engineering Day

- Cooperation between NTNU and PIANC to establish better links between industry and university and to inspire the next generation of coastal engineers!
- Increased focus on coastal engineering in Norway!
- 4th coastal engineering day
- **3 Requests:**
  - University – ensure that studies are relevant for industry
  - Industry – increased involvement in university and students (master projects)
  - Coastal administration – increased focus on R&D

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# 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 21<sup>st</sup> 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**

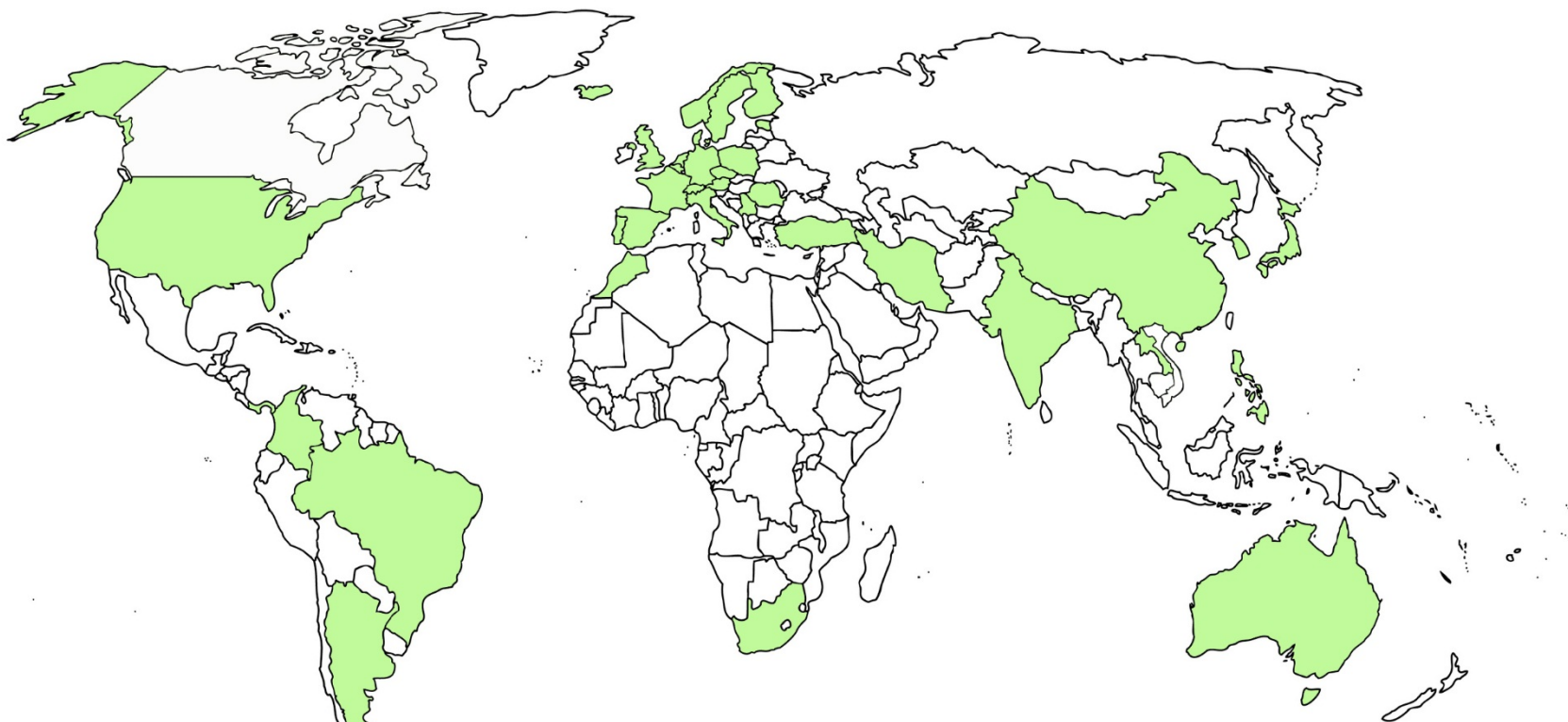
(i.e. governmental and non-governmental organisations representing a country)

**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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# 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 ™

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# 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>**

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# Our Technical Reports

## Browse Technical Reports – MarCom

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

*Presented at COP21 – in front of world leaders!*



- *Every working group and commission should include at least one YP – Amazing learning opportunity!!*

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# 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



UK



Spain



Italy



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# YP-COM: Norway

Annual: Coastal  
Engineering Day



Oil Spill facilities - 2017



Kongsberg Maritime simulations - 2016



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# Coming YP-Com events - international

International 📍 Guangzhou (China)

## IAPH World Ports Conference 2019

May 06, 2019 - May 10, 2019

International 📍 Singapore

## The 7th PIANC YP-Com Biennial Technical Visit

June 10, 2019 - March 13, 2019

International 📍 Kuala Lumpur, Malaysia

## PIANC seminar on "Working With Nature and Sustainable Development"

June 17, 2019

International 📍 Hobart (Australia)

## Australasian Coasts & Ports 2019

September 10, 2019 - September 13, 2019

International 📍 Ostend (Belgium)

## 5th International Conference on Ship Manoeuvring in Shallow and Confined Water (MASHCON)

May 19, 2019 - May 23, 2019

International 📍 Gdynia, Poland

## 13th International Conference on "Marine Navigation and Safety of Sea Transportation" TransNav 2019

June 12, 2019 - June 14, 2019

International 📍 Bonn (Germany)

## Workshop on Cybersecurity in Inland Navigation

September 05, 2019 - September 05, 2019

International 📍 Hirtshals (Denmark)

## NordPIANC Meeting 2019

September 11, 2019 - September 13, 2019

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# 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)

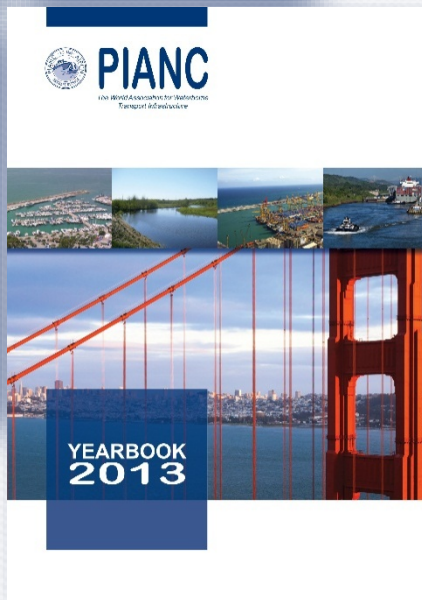
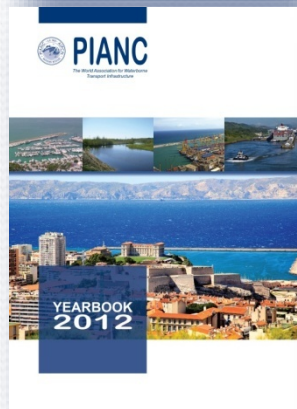
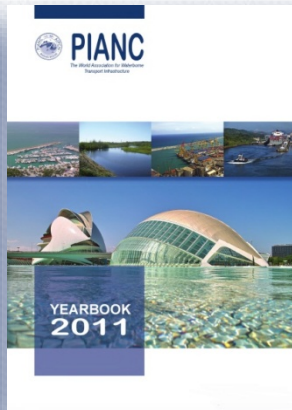
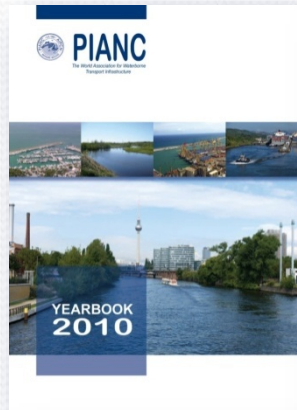


- *Working with Nature Award* (EnviCom)



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# 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*

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# 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](mailto:info@pianc.org)



## PIANC Norway



*Roar Johansen*  
President



*Fridtjof Wangsvik*  
First Delegate Norway



*Onno Musch*  
YP-Com Delegate Norway

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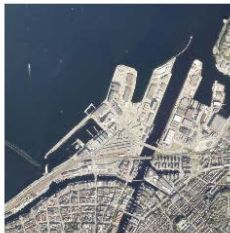


# Membership

- 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

# Events



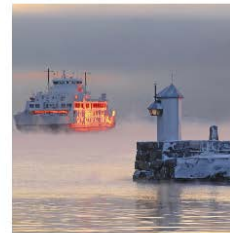
Fagseminar – Trondheim –  
AVLYST PGA FLYSTREIK

Les mer



Marin Byggteknikkdagen  
PIANC/NTNU – 29 April, 2019

Les mer



Årsmøte PIANC Norge – 29 Nov.  
2018, Oslo Havn

Les mer



NordPIANC – Hirtshals, 11 – 13  
Sept. 2019

Les mer



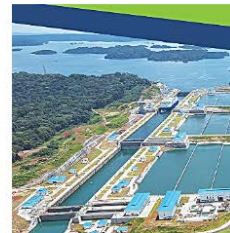
PIANC Norge faglig sekretær  
prøver ut Gamification!

Les mer



Marin Byggteknikkdagen  
PIANC/NTNU – 19. April, 2018  
(Ny påmeldingsfrist)

Les mer



PIANC World Congress – 7. Mai  
2018

Les mer



Årsmøte PIANC Norge – 23.  
November 2017

Les mer

## Visit the website

[www.pianc.no](http://www.pianc.no)

[www.pianc.org](http://www.pianc.org)

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# Technical Excursion 2019

- Planning a technical excursion for 2019
- Please come with ideas and/or invitations

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***THANK YOU***

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