COMMISSIONS
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1 REPORT OF THE FINANCIAL COMMISSION (FINCOM) 2019

1.1 Members

Ian White, PIANC UK, Chairman
Herbert Smitz, PIANC Belgium, Secretary
Joe Mantey, PIANC USA
Neil Lawson, PIANC Australia
Johan Boon, PIANC Netherlands
Remi van der Wijk, PIANC Netherlands
Manuel Arana Burgos, PIANC Spain
Jan Reche, PIANC Germany
Jacques Paul, PIANC France
Xavier Laloum, PIANC Colombia
Geert Van Cappellen, PIANC HQ, Secretary-General

The Commission met twice over the last year 2019, with its first meeting on 28-29 January being held in Brussels (PIANC HQ) in preparation for the February 2019 ExCom and Council meetings. The second meeting was held in Lyon (France) on 28 September alongside the PIANC-SMART Rivers 2019 Conference.

1.2 FinCom Wants to Maximise Revenue from the PIANC Portfolio, Despite Today's Low Interest Rates

The Brussels meeting covered significant discussions with two banking institutions, our actual bank BNP Fortis and Bank Nagelmackers, with the aim of collecting meaningful information from them on how a higher return from the PIANC HQ Portfolio could be obtained. Unfortunately, at the time of these discussions, the global financial market was at a low point, which had drastically reduced the value of our Portfolio, however there were some hopeful preliminary expectations at the start of 2019.

The discussions with the two banks also sought to reduce the management costs of the current BNP Portfolio.
Whether the open structure of Nagelmackers could provide some advantages, it was not determined directly as a certainty. FinCom members felt that a rather different philosophy was required from the one which Nagelmackers wanted to distinguish itself from the other banks in not selling its own investment products as the other banks all do.

Higher revenues are normally accompanied by higher risks, lower yields with low risks. Both the US section and the UK Sections therefore opt for ‘certain’ deposits. On the one hand, the result is nowadays of course a limited yield, especially in a European framework, but on the other hand, we have ample reserves in our bank account, and since 2010, we have never had to use any funds from the bank in support of the daily operation of PIANC. So, converting our portfolio into a medium-sized banking product was one of the possibilities.

Following this FinCom consultation with the banks, and on the basis of additional information and proposals by the two banking institutions, it was proposed to convert the existing PIANC portfolio – after approval of the FinCom vision by ExCom and the Council at the AGA in Kobe – into SRI products (Social Responsible Investments: SRI’s of BNP), as well as to stay with BNP and combine our two existing Portfolios in order to reach a higher total Portfolio amount and also resulting in less banking costs.

These SRI’s give a slightly higher interest than normal investments and are in line with the current trend of investing in environmentally friendly funds. PIANC is committed to promoting environment-friendly transport worldwide, so we should expect this philosophy in our investment Portfolio as well.

In making this proposal, PIANC would be acting outside of the framework conditions of Article 27 of the Rules & Regulations. Therefore, Article 27 needed to be amended as well.

1.3 FinCom Wants to Minimise the Organisation Costs of Congresses, Seminars, AGA’s, etc. and Maximise Revenue from These Activities, Both for the Organiser and for PIANC HQ

The Brussels meeting also noted the excellent financial result of the Panama Congress. Attention was paid to the preparations and guidance from PIANC HQ for the World Congress in 2022 in Cape Town, South Africa. FinCom also considered the transfer of the conference venue for PIANC-COPEDEC Conference from Iran to the Philippines, and the organisation in Manila.

A ‘Manual’ may be useful to avoid the negative experiences of organisations such as the one for the previous PIANC-SMART Rivers Conferences. Templates are available (World Congress, PIANC-COPEDEC, PIANC-SMART Rivers, Short Courses), but not for the organisation of the AGA’s. We must keep the costs of this events within limits. FinCom noticed that where the organisation is being outsourced to commercial organisations, they may initially start to run with the proceeds, the PIANC team paid a lot and the yield dwindles.

Every event entails certain risks. Therefore, prior information for our local organisation partners (LOC’s of PIANC-SMART Rivers, PIANC-COPEDEC, etc.) is important. FinCom wants to create a SharePoint network on the new PIANC HQ website, allowing us to share the general rules for the organisation of events, and also to make the ‘lessons learnt’ readily available.

During the Kobe meetings, at ExCom and Council, our Portfolio proposal and rule change was submitted and approved. This contained the option for a choice for the SRIs, as in the long term, an additional interest rate of circa 1% looks possible. This SRI option was also chosen because it seemed the least expensive to manage, and it aims to minimise costs and exit fees through a gradual transition from the current funds to the new ones.

In between the winter and autumn FinCom meetings in Lyon (28 September 2019), the Secretary-General held several conversations with our Bank BNP. These conversations with the bank had not yet been finalised at that time before Lyon.

Unfortunately, in the meantime, BREXIT and the relationship between the USA and China have created an increasingly difficult world market, which means that HQ should now consult BNP again on the effective transition of the Portfolio in October 2019 to maximise the yield where possible.
We must remind ourselves of the consequences of BREXIT and the relations between the USA and China, which will give a very different character to the stock-exchange quotations for the foreseeable future. Nevertheless, the recent improvement in the Portfolio from the beginning of the year up to August (+7.44 %) looked optimistic, but this is mainly due to the very poor result just right at the beginning of 2019. During the last months of 2019, the transition of the Portfolio, after negotiations and in consultation with the Bank BNP, was partly implemented.

Similarly, during the Lyon meeting, FinCom drew the attention to the preparations by the LOC’s in Cape Town (World Congress) and Manila (PIANC-COPEDEC). Neil Lawson and Geert Van Cappellen have had direct talks in Cape Town with the organisers of the PIANC World Congress Cape Town 2022. They believe in the success of the Congress but are convinced that there is still a lot to do.

1.4 FinCom Closely Follows Budgetary Revenues and Expenditure and Endeavours to Adjust Where Possible

Additionally in Lyon, the financial and budgetary situation of PIANC was reviewed and discussed based on the monthly results for 2019 and the official ‘Balance Sheet 2019’ prepared by the bookkeeper for the tax administration. Proposals were worked out by FinCom for the 2020 budget and the 2021-2022 business plan.

FinCom noted that there is a long period between the dispatching of its invoices and the receipt of the payments. The Secretary was asked to make a graphic review, which showed that on average a fairly high percentage of annual income remained unpaid for more than one year. This result needs to be further investigated, and measures are necessary to stop PIANC HQ from acting as a lender for National Sections!

1.5 FinCom Is Concerned About the Evolution of PIANC’s Membership

There is a problem of non-synchronisation with the follow-up of the membership, because there is no conformity between what is mentioned as members on the website and in the membership software (input by the National Sections). A consultant, a member of PIANC and relevant WG-member, will have a look at our IT-architecture with the aim to make it more resilient and reliable, and define the needs for proper membership software.

FinCom undertook a review of the development of the membership and the revenues per Qualifying Membership and countries from 2012 to August 2019. In this long-term review, a slight increase in membership and income is perceptible, but relative growth has changed little over the past few years, in the last year it even showed a slight decline. Appropriate measures need to be taken.

It has been around ten years since the last increase in individual and collective membership fees (€ 95 per year) and the subvention tariffs. If we wish to maintain these membership fees at this amount, despite rising staff, and maintenance and development costs, it is necessary that additional members should be recruited. Specifically, people should be addressed who are currently using our valuable reports but are not members of PIANC. Each National Section and especially their Secretaries shall be asked for the necessary efforts to achieve this.

PIANC delivers international guidelines which are useful for everyone involved with ports, waterways and coastal engineering. FinCom believes that PIANC should actually strive to ensure that all (national) ports, consulting offices with regard to port infrastructure, universities, etc. should be members of PIANC (as a minimum a small Corporate Member) because they are the ones who frequently make use of the PIANC WG-reports. FinCom found that in some cases only 5 % of the maritime ports are members of PIANC, we should aim for 100 %. We must, in the short term, try to ascertain the reason for this poor situation. FinCom believes that ProCom can take actions to help grow the PIANC membership.

FinCom believes that as PIANC, we must include in our marketing plans the best way of selling the Working Group reports, and by this way improve the recruitment of members. Each National Section should include this in its national strategic vision.
Table 1: Summary of the financial results 2019

The summary shows that the global financial affairs of PIANC have continued to do extremely well, especially as a much higher financial income of €105,685 was made in 2019 compared with only €15,760 in 2018 and relative to a negative estimation of €9,250 as foreseen in the 2019 budget. This positive result was due mainly to the financial negotiations with our bank, and a transfer to other portfolio products in recent months by combining our two previous portfolios into one to reduce bank costs in the future. Of course, this cannot be repeated in subsequent years!

Income from subscriptions on the one hand (€349,124 [2019], > €337,861 [2018], > €325,761 [2017], < €342,401 [2016] > €324,744 [2015]) increased in 2019 compared to 2018, 2017, 2016 and 2015, and on the other hand subventions decreased slightly related to 2018 and to 2015 too (€165,300 [2019] < €167,200 [2018] > €163,400 [2017] > €130,150 [2016] < €166,250 [2015]). To counter the good luck situation of the financial income side, the expenditure side of the budget plan was influenced by Financial Charges and Taxes related to the portfolio transfer. Lower Congress and seminar costs were noted during the past year 2019 (€26,180), related to 2018 (€44,379) as well.

Sales of Working Group reports produced an income of €20,160, about 40% more than the previous year 2018 (€14,532). So, we approximately equalled the sales for 2015 of €20,737, and even more than 2017 (€17,298 including Knovel royalties at that time).

As for 2018, this year, there are no costs for the publication and mailing of the Yearbook, as it was only published in a digital version. From next year on, being zero, this item will no longer be a part of the annual report. Of course, we lose some sponsorship and advertising income, but compared to the printing and mailing expenses, the final result is still positive! FinCom proposes that National Sections etc., seek advertising and sponsorship support by companies and institutions, so that the Yearbook can continue to be published in a digital version at a profit for the Association.

On 31 December 2019, the value of the actual global PIANC portfolio was €1,181,689. Compared to the old Portfolio I and extra investment from the Panama Congress, this result is an improvement of about roughly +73%, compared to €792,044.85 (Portfolio I) at the end of 2018, so we can speak of a real success.
Of course, at the end of 2018, the stock market prices were at the lowest point for several years due to the generally poor global economic climate in Europe and worldwide. Therefore, part of the + 7.3-% growth is also due to the global financial recovery.

The number of international events that PIANC organised or hosted remains large, with events such as the PIANC World Congress, PIANC-COPEDEC, PIANC-SMART Rivers, COP 21, Navigating a Changing Climate, etc. Even with the organisational experience gained over the years, this ‘business’ remains an ever-increasing workload on the headquarters team and is reducing its capacity to undertake other duties and functions. Therefore, FinCom and its members, as well as the Secretary-General, will try to support the Local Organising Committees were possible. To prevent these events from failing financially, FinCom, once again, requests that all LOCs endeavour to undertake as much as the preparatory work as possible to reduce the headquarters’ input.

To summarise the financial items, a large surplus of € 106,678 is generated to be added to the reserves of PIANC in the coming months! This result should not be viewed too optimistically, because this ‘financial income act’ we got in 2019 is a once-only ‘event’.

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The membership level has increased in 2018 by 35 Individual Members, an increase of 2.2 % in 2018. The Corporate Members decreased by 3 organisations, or -0.6 % in percentage terms, which unfortunately crashed the hopeful expectations of Corporate Membership a year ago. We note also a decrease of 25 members in Student, Life and Honorary Members, but those have of course a minor impact on the PIANC financial income.

<table>
<thead>
<tr>
<th>Date</th>
<th>31 Dec 2019</th>
<th>31 Dec 2018</th>
<th>Evolution</th>
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<tr>
<td>Individual Member</td>
<td>1,662</td>
<td>1,627</td>
<td>35</td>
</tr>
<tr>
<td>Corporate Member</td>
<td>472</td>
<td>475</td>
<td>-3</td>
</tr>
<tr>
<td>Student, Life, Honorary</td>
<td>141</td>
<td>166</td>
<td>-25</td>
</tr>
<tr>
<td>Total</td>
<td>2,275</td>
<td>2,268</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 2: Development of PIANC Membership 2018-2019

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In conclusion, we can only say again that FinCom wants to take measures to minimise the organisation costs of events. FinCom will follow further budgetary revenues closely. FinCom must be concerned about membership evolution, and all Working Group members must join PIANC as a member too. FinCom believes that subscriptions and subventions are decisive for the income of PIANC. FinCom has to look to measures that stop PIANC HQ from acting as a lender for national sections either financially or in terms of workload.

A large attendance of participants at Congresses and seminars is an expression of the importance of the Association. Our products are the Working Group reports, which should be a major reason to attract new members. Once they have joined the Association, it is up to the National Sections to keep their members and corporate members on board, to ensure that the membership records are up-to-date so that the correct charges can be made for subscription and subvention payments, and once invoiced, are paid promptly.

Once again, the financial sustainability of PIANC is totally reliant on these sources of income and expenses and is a challenge that continues to be looked at in some detail by both FinCom and ExCom.

Yours sincerely,

Ian White  
Chairman of PIANC FinCom

Herbert Smitz  
Secretary of PIANC FinCom
REPORT OF THE MARITIME COMMISSION (MARCOM) 2019

2.1 General

2.1.1 Programme

2019 has been a year of changes for MarCom without affecting the consolidated list of Working Groups in progress and motivation for new topics to be developed within this Maritime Commission tasks, which is adding real value for PIANC members.

During this year, we have said, after eight years, goodbye to our old Chairman Mr Esteban Lefler, due to his new role as PIANC President. In October 2019, the MarCom members welcomed Mr Egbert van der Wal as new MarCom Chairman.


All of them will keep on improving documentation to be used as a guide or recommendations for improving specific maritime projects (Dry bulk Terminals and Greenfield Ports) plus a helpful tool for the implementation of renewable energy devices and energy efficiency measures in port infrastructures.

WG 145 on berthing velocities also finished its work and after integrating the final MarCom comments, the report was finished at the beginning of 2020.

2.1.2 Meetings

In 2019, MarCom held two Commission meetings:

- Brussels, 29-30 January 2019, where MarCom received as invited speakers the Chairmen in charge of WG 211 – ‘Guidelines for the Design of Fender Systems’ and WG 194 – ‘A Framework for Early Contractor Involvement for an Update on their Work in Progress’. A total of five new ToR were reviewed.
- Stockholm (Sweden), 3-4 October 2019, hosted by the Swedish National Section and Port of Stockholm. The new MarCom Chairman’s first meeting, where MarCom had the chance of attending his presentation on ‘Digitalisation, Energy Transition and Innovation in Infrastructures’, as well as a presentation on WG 145’s state of review before its publication. Five Potential ToR were discussed and two were agreed upon to send to Excom.

2.1.3 MarCom Membership

In 2019, there have been important changes with regard to the MarCom membership, including the designation of the new MarCom Chairman and Vice-Chairman: Mr Egbert van der Wal was designated by the ExCom as new MarCom Chairman, and Mr Babak Banijamali as Vice-Chairman of the Commission.

A couple of new members were also designated:

- Mr Sohyun Kwon as Korean member
- Mr Hidenori Takahashi as Japanese alternate member

Two new YP-members were also welcomed as new representatives, Mrs Sara Iglesias from Spain and Mr Filip Mortelmans from Belgium. Mrs Iglesias substitutes Mr Santiago Povedano. MarCom appreciates the work done by our departing members, key for MarCom success.

In December 2019, there were thirty-six MarCom members, among them five were Young Professionals and one of them was YP-Com Observer. Eighteen National Sections are represented in MarCom.
2.2 Working Group Presentations

2.2.1 January Meeting

Mr Erik Broos, Chairman of WG 211, kindly accepted to make a brief presentation on the ‘Guidelines for the Design of Fender Systems’ WG’s first steps. Some suggestions were made by the MarCom members and moreover, Mr Broos could clarify some doubts about the organisation and coordination of the WG with other related WG’s.

2.2.2 October Meeting

Mr Egbert van der Wal, Chairman in charge of finishing the coordination for WG 145 – ‘Final Report on Berthing Velocities in Sheltered Environments’ made a summary of the state of works for MarCom members to be informed. After some agreements on the content organisation and final amendments, it was ready for publishing.

MarCom Chairman, Mr Egbert van der Wal gave a presentation on ‘Digitalisation, Energy Transition and Innovation in Infrastructures’. New development trends are interesting areas for MarCom to work on. The MarCom members discussed how to implement these objectives within MarCom.

2.3 Publications

In 2019, the following MarCom Working Group reports were published by PIANC:

**PIANC MarCom WG 159 – ‘Renewables and Energy Efficiency for Maritime Ports’ published in March 2019 (Chairman: Mr Andrea Ferrante)**

This report analyses the best practice related to the implementation of renewable energy devices and energy efficiency measures in port infrastructure. Moreover, it provides a general approach to RE and EE opportunities from a strategic perspective and describes the best available technologies at present. The contents of the report are applicable not only for project planners (greenfield and brownfield projects) but also for port authorities and terminal operators.

**PIANC MarCom WG 184 – ‘Design Principles for Dry Bulk Marine Terminals’ published in March 2019 (Chairman: Mr Richard Morgan)**

This Working Group report aims to provide planning and design guidelines for dry bulk terminals in order to provide a safe, efficient and cost-effective operation and includes guidance on: terminal location and type, vessel handling and mooring, required water depths, cargo hazard, management, materials handling equipment, ship loading and unloading, outloading or receival facilities, storage facilities, processing and post-processing, operational considerations, transshipment, social and environmental considerations and impact of climate change.
PIANC MarCom WG 185: ‘Master Plans for the Development of Greenfield Ports’ published in April 2019 (Chairman: Mr Ian Cruickshank)

The objective of this new WG 185 is to provide a comprehensive guide for the masterplanning of new ports and specialist marine terminals on greenfield sites. The report considers the overall timeframe for implementation, including design, tender processes and construction periods for typical developments. At each stage, the approach considers the environmental aspects, constraints and requirements of the port development adopting PIANC’s Working with Nature concepts.

2.4 Progress of MarCom Working Groups

This section summarises the status of ongoing MarCom Working Groups:

- **WG 145 – ‘Berthing Velocities and Fender Design’**
  This report was reviewed and published in 2020.

- **WG 153B – ‘Recommendations for the Design and Assessment of Marine Oil, Gas and Petrochemical Terminals’**
  This WG-report will supersede WG 153. Draft report expected by the end of 2020 and report by 2021.

- **WG 164 – ‘Upgrade of Port Terminals by Increasing Dredged Depth’**
  The draft report is expected to be ready for September 2020.

- **WG 167 – Design of Terminals for Ro-Ro and Ro-Pax Vessels’**
  The draft report is expected to be ready for September 2020.

- **WG 171 – ‘Ship Handling Simulation Dedicated to Channel and Harbour Design’**
  The draft report is expected to be ready for September 2020.

- **WG 186 – ‘Mooring of Large Ships at Quay Walls’**
  The draft report is expected to be ready for September 2020.

- **WG 187 – ‘Protection of Undersea Pipelines and Cables in Navigable Areas’**
  Progressing, a new Chairman is taking the reins of it.

- **WG 194 – ‘A Framework for Early Contractor Involvement in Infrastructure Projects’**
  The draft report is expected to be presented to MarCom by the end of 2020.

- **WG 199 – ‘Health Monitoring for Port and Waterway Structures’**
  Joint InCom-MarCom WG in progress.

- **WG 200 – ‘Recommendations for the Design and Assessment of SPM or MPM Facilities’**
  The draft report was presented to MarCom in January 2020.

- **WG 205 – ‘Design and Construction of Breakwaters in Soft Seabeds’**
  Kick-off meeting was held in the fourth quarter of 2019.

- **WG 208 – ‘Planning for Automation of Container Terminals’**
  A wide ranged Working Group is in progress.

- **WG 211 – ‘Guidelines for the Design of Fender Systems’**
  An update of the state of works has been presented to MarCom.
• **WG 212** – ‘Criteria for Acceptable Movement of Ships at Berths’
  The Working group is making good progress.

• **WG 213** – ‘Design Guidelines for Marine Multipurpose Terminals’
  The WG Chairman to be designated in January 2020.

• **WG 215** – ‘Accidental Impacts from Ships on Fixed Structures’
  The kick-off meeting was held last September 2019 in Brussels.

• **WG 224** – ‘Planning of Fishing Ports’
  In formation.

• **WG 225** – ‘Seismic Design Guidelines for Port Structures’
  The WG Chairman was designated in January 2020.

### 2.5 Approved Terms of Reference

The following Terms of Reference were approved in 2019:

• **WG 224** – ‘Planning of Fishing Ports’
• **WG 225** – ‘Seismic Design Guidelines for Port Structures’

### 2.6 Terms of Reference in Discussion Expected to be Submitted to ExCom in 2020

The list of Terms of Reference in discussion illustrates the working guidelines that MarCom follows at present.

• Post-Extreme Event Inspection
• Construction Risk in Marine Works
• Circular Economy and Materials for Breakwaters
• Bollard en Mooring Hooks; Selection, Maintenance and Testing
• Inspection, Maintenance & Repair of Waterfront Facilities
• Tsunami Mitigation in Ports.
• Navigation in Fluid Mud

### 2.7 Cooperation with Other Commissions

MarCom has corresponding Members in the following joint or other Commission’s Working Groups:

• EnviCom ‘Working with Nature’
• EnviCom Permanent Task Group on Climate Change
• Permanent Task Group Universities

MarCom also participated in the Juries of the De Paepe-Willems and Working with Nature Awards.
2.8 Pictures

MarCom meeting in Stockholm

Visit to Port of Stockholm
2.9 List of Members of MarCom – December 2019

Chairman: Mr Egbert van der Wal, the Netherlands
Vice-Chairman: Mr Babak Banijamali, Iran
Secretary: Mrs Noelia González Patiño, Spain

Members
Mr Arjan van der Weck, the Netherlands
Mr P.D. Hunter, UK
Mr H.F. Burcharth, Denmark
Mr Tore Lundestad, Norway
Mr Koen Van Doorslaer, Belgium
Mr Yoshiaki Higuchi, Japan
Mr Pierre Aristaghes, France
Mr Andrea Ferrante, Italy
Mr Ron E. Heffron, USA
Mr Rafael Escutia, Spain
Mr Mattias Sandell, Sweden
Mr Peter Fountain, Australia
Mr. Mohammad Reza Allahyar, Iran
Mr Sohyun Kwon, Korea
Mr Héctor Escobar, Colombia
Mr Carlos Gines, Argentina
Mr Constante T. Fariñas, Philippines
Mr Simo Kerkelä, Finland
Mr Patrick Verhoeven, IAPH

Alternate Members
Mr Richard Styles, USA
Mr Scott William Keane, Australia
Mr Juan Francisco Herrera, Colombia
Mr Marcelo Peyregne, Argentina
Mr Carlito M. Castillo, Philippines
Mr Hidenori Takahashi, Japan
Mr Olivier Piet, France

Young Professionals
Mr Kim Andersson-Berlin, Finland
Mr Michael Grace, UK
Mr Christopher Thomas, USA
Mr Santiago Povedano Marcos, Spain
Mr Christopher H. Ornum, Philippines
Mr Ed Backlund, USA

Egbert van der Wal
Chairman of PIANC MarCom

Noelia González Patiño
Secretary of PIANC MarCom
In 2019, the Inland Navigation Commission (InCom) worked on the promotion of inland navigation, contributed in the organisation of PIANC-SMART Rivers 2019 in Lyon and published two very successful reports.

PIANC-SMART Rivers 2019 was the main event for InCom. The InCom members were involved in different organisational steps of the Conference. InCom would like to thank Mr Fabrice Daly (French member of InCom) for his great efforts in the organisation of this event.

In addition, invitations for three new WG’s were launched:

- WG 219 – ‘Guidelines to Develop and Operate Sustainable Inland Waterway Tourism and Recreation Infrastructure’
- WG 228 (joint InCom/EnviCom/RecCom WG) – ‘Extended Values of ‘Low-Use’ Inland Waterways’
- WG 229 – ‘Guidelines for Sustainable Performance Indicators for Inland Waterways’

### 3.1 Commission Membership

The InCom membership has remained stable in 2019, only Mrs Fran Littlewood, Young Professional from the UK, has changed jobs and will not be active anymore within InCom in the future. We would like to thank her for her devotion to the InCom activities.

The InCom members at the end of 2019 were:

- Philippe RIGO (Belgium)  **Chairman**
- Jasna MUSKATIROVIC (Serbia)  **Secretary**
- Leonel TEMER (Argentina)
- Michael FASTENBAUER (Austria)
- Jürgen TRÖGL (Austria)
- Jean-Michel HIVER (Belgium)
- Stefan DEVOCHT (YP-Com, Belgium)
- Adalberto TOKARSKI (Brazil)
- José Renato Ribas FIALHO (Brazil)
- Gernot PAULI (Central Rhine Commission (CCNR))
- Luc BOISCLAIR (Canada)
- Jim ATHANASIOU (Canada)
- Wu PENG (China)
- Yun LI (China)
- Gensheng ZHAO (China)
- Fabio ZAPATA (Colombia)
- Tero SIKIÖ (Finland)
- Benoit DELEU (France)
- Fabrice DALY (France)
- Holger SCHÜTTRUMPF (Germany)
- Reza SAFFARI (Iran)
- Masaru SUZUKI (Japan)
- Choonghyo LEE (South Korea)
- Otto KOEDIJK (the Netherlands)
- Ljubisa MIHAJLOVIC (Serbia)
- Ignacio SANCHIDRIÁN VIDAL (Spain)
- Rodrigo Garcia ORERA (Spain)
- Jim STIRLING (United Kingdom)
- José SANCHEZ (USA)
- Brian TETREAUt (USA)
- Ton Nu Thi Thanh YEN (Mekong River Commission)
- Akula NIDARSHAN (expert, India)
3.2 Meetings

InCom held two meetings in 2019:

- Meeting No.82, held on 29-30 January 2019 at PIANC HQ in Brussels (Belgium)
- Meeting No.83, held on 30 September 2019 during the PIANC-SMART Rivers 2019 Conference in Lyon, France

The main subjects of the meetings were:

- information on the activities of the Association
- update on the progress made by various Working Groups
- preparation of ToR for new Working Groups
- promotion of finalised WG-reports

3.3 Published Reports

In 2019, two InCom reports were published:

Permanent Working Group 125 on RIS with three parts:

- WG 125/I – ‘Guidelines and Recommendations for River Information Services’
- WG 125/III – ‘RIS Related Definitions 2019’

Piotr Durajczyk, Jan Bukovsky, Dierik Vermeir, Piet Creemers, Alaric Blakeway, Birgitta Schäfer, Robert Rafael, Mario Sattler, Jürgen Trögl, Csaba Kovacs, Giang Hoang Hông, Pedro Vila, Peter Stuurman, Jeffrey van Gils, Evgeny Brodsky, Richard Lockwood, Brian Tetreault, and Cas Willems (Chairman)


Lieven Dejonckheere (Chairman), Wim Van Santvoort, Kim Geylen, Michiel Coopman, Stephen Kwok, Leonard Swift, Laurent Luchez, Cyrille Chaussat, Rainer Strenge, Walif Achim Schneider Lead Architect, Ad Kloppenburg, Albert Barnes, Kathy Griffin, Jason Hudson, Brian Molloy

InCom would like to thank the Chairmen and Members of these two Working Groups for their great work and dedication in the preparation of these reports.
3.4 PROGRESS OF EXISTING WORKING GROUPS

  *Chairman: Piet Creemers*
  The WG started with its work in 2019, with a kick-off meeting held in Lyon during the PIANC-SMART Rivers Conference.

- **WG 128** – ‘Alternative Technical-Biological Bank Protection Methods for Inland Waterways’
  *Chairman: Bernhard Söngen*
  A well accepted workshop was held during the PIANC-SMART Rivers Conference in Lyon and Mr Söngen presented the work of the WG to InCom. Finalisation of the work is expected during 2020.

- **WG 179** – ‘How to Deal with New Ships in the CEMT ’92 Classification – Towards a New CEMT (ITF) Classification’
  *Chairman: Ivo ten Broeke*
  Mr ten Broeke participated in the InCom fall meeting where he presented the draft report and answered questions from InCom members. The final version of the report is expected in the first quarter of 2020.

- **WG 189** – ‘Fatigue of Hydraulic Steel Structures: Design, Analysis, Assessment and Maintenance’
  *Chairman: Dirk Jan Peters*
  The WG-report was finalised and submitted for publication at the very end of 2019.

- **WG 190** – ‘Corrosion Protection of Lock Equipment’
  *Chairperson: Rebekah Wilson*
  The WG-Chair participated at the InCom fall meeting in Lyon and the first draft of the report is planned for the first half of 2020.

- **WG 191** – ‘Use of Composites on Hydraulic Structures’
  *Chairman: Hota Ranga Rao*
  The WG was published in June 2020.

- **WG 197** – ‘Small Hydropower Plant in Waterways’
  *Chairman: Nicholas Crosby*
  This WG is in the final phase of work and the draft of the report is planned to be released to the InCom members mid-2020.

- **WG 198** – ‘Saltwater Intrusion Mitigations and Technologies for Inland Waterways’
  *Chairman: Tom O’Mahoney*
  This WG had its kick-off meeting in June 2017 and held 5 meetings by the end of 2019. The draft report is planned by the end of 2020.

- **WG 199** – ‘Health Monitoring for Port and Waterway Structures’
  *Chairman: Mathew Smith*
  A WG-member was a guest at the InCom meeting in Lyon and he presented the progress of the work. The first draft of the report is expected for mid-2020.

- **WG 203** – ‘Sustainable Inland Waterways – A Guide for Waterways Managers on Social and Environmental Impacts’
  *Chairman: Andreas Dohms*
  The WG-members had two meetings in 2019, in Brussels and Lyon, and are working hard to finalise the report in 2020.
- **WG 206** – ‘Update of the Final Report of the International Commission for the Study of Locks’
  *Chairman: John Clarkson*
  The kick-off meeting for this WG was held in Brussels in January 2019, a second meeting was held in Utrecht in May and a third one in Lyon in October. The next meeting was planned for March 2020 in Brazil.

- **WG 207** – ‘Innovations in Shiplift Navigation Concepts’
  *Chairman: Hu Yaan*
  This WG held two meetings in 2019, one in China in April, and the second one in Lyon in September 2019.

- **WG 210** – ‘Smart Shipping on Inland Waterways’
  *Chairpersons: Ann-Sofie Pauwelyn and Lea Kulters*
  The kick-off meeting for this WG was held in January, in Brussels, with two more meetings in 2019, with the latest one held in Lyon during the PIANC-SMART Rivers Conference.

- **WG 210** – ‘Best Practices in Planning Inland Waterways Multimodal Platforms’
  *Chairman: Roberto Zanetti*
  The kick-off meeting was held in June, in Brussels, with the second meeting held in Brussels as well, in October. The WG-members defined the table of contents and split the work into chapters.

- **WG 219** – ‘Guidelines to for IW Infrastructure to Facilitate Tourism’
  A Call for Members was sent out in October 2019, and InCom would like to ask all National Sections to nominate their experts for this Working Group.

- **WG 228** – ‘Extended values of ‘Low-use’ Inland Waterways’
  A Call for Members was sent out in November 2019, and InCom would like to ask all National Sections to nominate their experts for this Working Group.

- **WG 229** – ‘Guidelines for Sustainable Performance Indicators for Inland Waterways’
  A Call for Members was sent out in November 2019, and InCom would like to ask all National Sections to nominate their experts for this Working Group. The kick-off meeting was planned for April 2020 in Brussels.

### 3.5 InCom Website

The InCom website is permanently being updated. It is a very valuable source of relevant information to users and the InCom community, as well as a tool to promote inland navigation. It consists of two parts, one public part and one restricted to the InCom members. On the public part of the site, visitors can find detailed information on the progress of the InCom Working Groups, as well as information on events in which InCom is participating or organising and InCom members’ details. In the restricted section, the InCom members can share specific working documents. More information can be found at the website at [http://incomnews.org](http://incomnews.org)
3.6 Conclusion

The year 2019 was the year of PIANC-SMART Rivers in Lyon, in which InCom participated, and a number of InCom activities were devoted to this conference.

InCom would like to thank all experts, participating in the preparation of Working Group reports, for their enthusiasm and their hard work in the preparation of high-quality reports.

Philippe Rigo  
Chairman of PIANC InCom

Jasna Muskatirovic  
Secretary of PIANC InCom
4 REPORT OF THE ENVIRONMENTAL COMMISSION (ENVICOM) 2019

4.1 Introduction

Sustainable development of infrastructure systems is an emerging priority worldwide. The 17 UN Sustainable Development Goals (SDGs) provide a framework for discussion, deliberation and the development of infrastructure. Navigation infrastructure provides vital contributions to national economies. Significant investments are being made in new and upgraded navigation infrastructure systems around the world. These investments present important opportunities to incorporate principles and practices that support sustainable development. EnviCom’s strategic initiatives of Working with Nature and the Permanent Task Group on Climate Change (PTG CC) and EnviCom’s Working Groups are actively contributing to this emerging priority. Our goal is to provide practical, science-based guidance to shape and inform future practice in the development of sustainable navigation infrastructure.

4.2 Members

33 members from 17 nations (Australia, Argentina, Belgium, Colombia, Finland, France, Germany, India, Iran, Japan, Korea, the Netherlands, Norway, the Philippines, Spain, UK, USA) and 7 partner organisations (CCNR, CEDA, EUDA, IADC, IAPH, INE, Ports Australia).

Chairman: Todd Bridges (USA)
Secretary: Edward Brauer (YP, USA)

Country members:

- Argentina: Gerardo Bessone
- Australia: Marika Calfas
- Belgium: Filip Vandeputte, Siegfried d’Haene
- Colombia: Ricardo Schmalbach
- Finland: Olli Holm
- France: Paul Scherrer
- Germany: Elmar Fuchs
- India: R.D. Tripathi
- Iran: Nasser Hadjizadeh Zaker
- Japan: Masahiko Fukami
- The Netherlands: Daan Rijks
- Norway: Anne Kibsgaard, Arne Petterson
- Philippines: Reynard Parafina, Emiler Nonatus A. Cadano, Christopher Ornum (YP)
- South-Korea: Myounghak Oh
- Spain: Rócio López Picon, Carlos Acosta, Aina Garcia Gomez (YP)
- United Kingdom: Jan Brooke, Jack Muldoon (YP)
- USA: Burton Suedel, Victor Magar

Commission Representatives:

- Ron Cox, Australia (CoCom)

Members from Partner Organisations:

- IAPH: Eric de Decker
- IADC: René Kolman
- CEDA: Anna Csiti, Frederik Roose
- EUDA Paris Sansoglu
- CCNR: Kai Kemppmann, Gernot Pauli
- INE: Karin de Schepper
Additionally, the following experts acted as Chairpersons of Working Groups and attended EnviCom meetings in 2019:

- PTG CC: Jan Brooke/Chair (UK)
- PTG EU WFD Navi TG Jan Brooke (UK)
- WwN Jury Elmar Fuchs (Germany)
- WG 174: Eric deDeckere (IAPH)
- WG 175: Burton Suedel (USA)
- WG 176: Victor Magar (USA)
- WG 195: Al Cofranseco (USA)
- WG 188: Doug Daugherty (USA)

### 4.3 Meetings

EnviCom held two face-to-face meetings in 2019.

The 50th meeting was held in Brussels, Belgium, hosted by PIANC Headquarters, during 28-29 January 2019 in conjunction with the 20th meeting of the Permanent Task Group on Climate Change (PTG CC) on 27-28 January 2019. The winter meeting was attended by 17 members from 9 countries and partner organisations.

The 51st meeting was held on 29-30 September 2019 in Lyon, France in association with the 9th International PIANC-SMART Rivers Conference which was held from 30 September to 3 October 2019. The meeting was attended by 13 members from 11 countries and partner agencies.

**Next meetings in 2020:**

- **28-29 January 2020 in Brussels**, Belgium, hosted by PIANC headquarters, in conjunction with PTG CC (27-28 January 2020)
- **Week of 28 September in the Canary Islands**, to be led by EnviCom Spain members to include a workshop of international experts on emerging environmental risks to waterborne infrastructure on islands

### 4.4 Working Groups, Technical Recommendations and Guidance

EnviCom continued its work in 2019 in the following fields:

#### 4.4.1 Dredging:

- **Working Group 157 – ‘Environmental Aspects of Dredging, Port and Waterway Construction around Coastal Plant Habitats’**
  *Chairman: James Matt Jury (IADC), EnviCom mentor is René Kolman (IADC)*
  The work continues on this important topic, which began with a kick-off of the Working Group in 2015. A complete draft of the report is expected in Spring 2020.

- **Working Group 170 – ‘Dredging Operations and Port Construction around Marine Turtles and Mammals’**
  *Chairman: Chris McDougall, EnviCom mentor is René Kolman (IADC)*
  During 2019, progress continues on drafting the WG-report, which will focus on best practice guidance, with supporting examples. The WG is planning to complete a draft of the report by mid-2020.

- **Working Group 214 – ‘Sediment Beneficial Use’**
  *Chairman: Paul Doyle (Australia), EnviCom mentor is Burton Suedel (USA)*
  WG 214 made good progress in 2019 with a meeting in Brisbane in October and monthly web meetings. Mentor Burton Suedel (USA) presented the WG progress to date at the 51st EnviCom meeting in Lyon.
PIANC EnviCom WG 214 on ‘Sediment Beneficial Use’ held their second face-to-face meeting at the North Queensland Bulk Ports Corporation office in Brisbane, Australia on 15-17 October 2020. Attending were WG members (L-R): Francois De Keuleneer (Belgium); Yiying Sun (China); Luca Sittoni (the Netherlands); Don Hayes (USA); Paul Doyle (Australia); Helmut Meyer (Germany); Thomas Vijverberg (the Netherlands); Victor Magar (USA); Burton Suedel (USA); Mitsuo Nozu (Japan); Shinya Hosokawa (Japan); and Dave Hopper (Australia).

As part of the October WG-meeting, the WG also organised a workshop on 16 October 2019 that was hosted by the Port of Brisbane. Led by WG Chair Paul Doyle, the purpose of the workshop was to assemble subject matter experts from throughout Australia to discuss challenges and opportunities associated with sediment beneficial use as related to waterborne navigation transport in country. Information gleaned from the workshop will be integrated into the WG-report.

4.4.2 Ports:

• IAPH-PIANC WG 174 – ‘Sustainability Reporting for Ports’
  Chairman: Eric de Deckere (IAPH), EnviCom/PTG CC
  This joint PIANC/IPH report will provide sector guidance and will be published in early 2020.
4.4.3 Navigation:

- **WG 175 – ‘Environmental Risk Management for Navigation Infrastructure Projects’**  
  *Chairman: Burton Suedel (USA), Co-Chairman: Kevin Kane (Australia), EnviCom mentor: Todd Bridges (USA)*  
  The main goal is to provide a methodology to inform risk management decisions for the comprehensive range of environmental risks pertinent to navigation infrastructure. The WG-report was published on 24 October 2019.

![Final meeting of WG 175 in Christchurch, New Zealand (L-R: Kevin Kane, Rebecca Gardner, Burton Suedel, John Lally and David Moore).](image)

- **WG 195 – ‘An Introduction to Applying Ecosystem Services for Waterborne Transport Infrastructure Projects’**  
  *Chairman: Al Confrancesco (USA), EnviCom/PTG CC mentor: Elmar Fuchs (Germany)*  
  The Working Group (WG) composed of 15 individuals from seven countries and five sectors (mainly Waterborne Transport Infrastructure (WTI)) is developing a definition of Ecosystem Services (ES) and specifications on how to successfully apply ES in WTI projects. Methodological and technical information on ES identification, mapping, assessment and management in terms of good governance in the WTI sector are being developed. The WG expects to have a complete draft of their report completed in mid-2020 with publication in late 2020.

4.4.4 Climate Change:

- **WG 178 – ‘Working Group on Climate Change Adaptation for Maritime and Inland Port and Navigation Infrastructure’**  
  *Chairman: Charles Haine (UK), EnviCom mentor: Jan Brooke (UK)*  
  PIANC WG 178 spent its final year enhancing the critical risk assessment part of the methodology and refining the overall document. The WG was hosted by Professor Íñigo Losada at the Institute of Hydraulics and Environment at the University of Cantabria, Santander, Spain, in June (see photograph below).
A follow-up meeting was held at the Institute of Civil Engineers in London just before Christmas.

Key contributors at these face-to-face meetings were WG members: Jan Brooke (Envicom, UK); Lena Lankenau (HS Bremen, Germany); Bärbel Koppe (HS Bremen, Germany); Charles Haine (WSP, UK); Ine Moulaelt (Jan de Nul, Belgium); Iñigo Losada (HIS, Spain); Sabrina Delelis (IHMA, UK) and Susana Lizondo (Arup, Ireland).

Desk-based support was provided by Anne Carnegie (IHMA, UK); Roberto Tomasicchio (Salento University, Italy); Ina Comhaire (Ministry of Water, Belgium); and on case studies Tanja Mackenzie (Cardno, Australia).

Various members of the WG presented papers at key international conferences in 2019 and/or mentioned the work of the WG at events. Examples include: Annual GreenPorts Congress, Oslo; COP 25 Madrid; AIVP Europe, Riga, Latvia.

Jan Brooke made an extraordinary effort to coordinate the final publishing with PIANC Staff in Brussels during December/January and the Guidance was published in early January 2020: [https://www.pianc.org/publications/envicom/wg178](https://www.pianc.org/publications/envicom/wg178).

- **WG 188 – ‘Carbon Management for Port and Navigation Infrastructure’**
  **Chairman: Doug Daugherty (USA), Secretary: Talmor Meir (USA), EnviCom/PTG CC mentor: Filip Vandeputte (Belgium)**

  The WG reported on the technical literature related to the carbon footprint of navigation infrastructure and supporting activities, provide guidance on applying life cycle analysis and related assessment tools and techniques, and investigate opportunities for reducing atmospheric carbon dioxide through operational practices, Working with Nature, land use management, blue carbon projects, and related environmental management. The WG was very active to the end and published their report on 23 April 2019.

- **TG 193 – ‘Resilience of the Maritime and Inland Waterborne Transport System (MIWTS)’**
  **Chairperson: Katherine Chambers (USA), EnviCom/PTG CC mentor: Todd Bridges (USA)**

  The WG will develop the concept of resilience as applied to navigation infrastructure in order to inform the technical commissions of PIANC on future topics and activities that are needed to make full use of the concept of resilience. The WG provided a draft for review in 2019 and was published in early 2020.
4.4.5 Strategic Initiatives

Working with Nature (WwN)
https://www.pianc.org/working-with-nature

The Working Group 176 report ‘Guide for Applying Working with Nature to Navigation Infrastructure Projects’ has been published in September 2018 and is available on the PIANC website.

Different presentations of this report have been made worldwide and in particular during the PIANC World Congress in Panama, during the PIANC Med Days in Seville in October 2018 and during different General Assemblies of several National Sections.

Support of WwN continues to grow within the navigation sector worldwide. Several projects were submitted to PIANC by project teams around the world to have their projects considered for WwN certification and to have their projects considered for the WwN award presented every four years during PIANC World Congress. This award recognises outstanding application of the WwN philosophy and approach to navigation infrastructure.

During the last Panama Congress in May 2018, the three winners were:

- First place: Middle Harbour Port of Oakland from USA
- Second place: Le Havre Port 2000 – Rehabilitation of the Seine Estuary from France
- Third place: Kalkense Meersen Cluster Upper Sea Scheldt from Belgium

EnviCom and PIANC continue to develop ideas for promoting WwN within the sector.

PIANC Permanent Task Group on Climate Change (PTG CC)

The PTG CC held two face-to-face meetings in 2019. Meeting Number 20 took place on 28-29 January 2019 in Brussels, jointly with representatives of the Navigating a Changing Climate (NaCC) initiative partners. Meeting Number 21 was held on 30 September 2019 in Lyon, France in connection with the PIANC-SMART Rivers Conference.

Chair of the PTG CC, Jan Brooke, is now supported by a new Secretary, Monica A. Altamirano, the Dutch YP-representative on the PTG CC. Several new members joined the PTG CC over the course of the year. In 2020, ‘Climate Change Champions’ will be appointed by each of PIANC’s Technical Commissions to strengthen interactions and help ensure the PTG CC meets the needs of the wider PIANC membership.

The Working Groups supported by PTG CC made good progress during 2019. WG 188 on ‘Carbon Management’ was published in April; WG 178 on ‘Climate Change Adaptation’ was published in early January 2020; and TG 193 on ‘Resilience of Maritime and Inland Waterborne Transport Systems’ was published in May 2020. The update of the 2008 TG 3-report on ‘Climate Change and Navigation’ is also expected to be published in 2020.

PTG CC members organised a session on climate change and extreme weather during the PIANC-SMART Rivers Conference. This session, chaired by Turi Fiorito, Secretary-General of the European Federation of Inland Ports (EFIP), included presentations on the implications of the 2018 low water on the Rhine (Frederik Vinke), dealing with climate change uncertainty when making investment decisions (Laure Herbert), and an insight into the costs and consequences of extreme weather events (Jan Brooke). A subsequent panel discussion involving the speakers plus guests from Port of Strasbourg (Emilie Gravier), viaDonau (Robert Toegel) and
Rijkswaterstaat (Milou Wolters), highlighted the urgent need for action and the importance of good data, collaboration, flexible forward planning, and maintenance when planning to adapt to the expected increase in the frequency of extreme weather events.

Discussions at the PTG CC meeting and subsequently in the margins of the PIANC-SMART Rivers Conference led to the preparation and endorsement of a PIANC Declaration on Climate Change.

This Declaration was launched by PIANC’s President, Francisco Esteban Lefler, during the UN Resilience Round Table at the COP25 climate change meetings, in Madrid, Spain, in December 2019.

PIANC Declaration on Climate Change

The climate is changing. The evidence is unequivocal. Climate change represents a significant risk to business, operations, safety and infrastructure – and hence to local, national and global economies. However, a positive, proactive response, now and into the future, can both reduce these risks and bring business opportunities. Uncertainties remain, but these can be addressed and are not reasons for delay. It is time to reinforce the message and upscale prudent action.

Waterborne transport infrastructure will be adversely affected by climate change. In addition to playing their role in decarbonisation (i.e. moving to net zero greenhouse gas emissions), owners and operators need to take urgent action to strengthen resilience and adapt – both to gradual changes in parameters such as temperature and sea level, and to the expected increase in the frequency and severity of extreme meteorological, hydrological or oceanographic events.

PIANC recognises the importance of the climate change challenge and will actively pursue the sustainable future of the waterborne transport industry by supporting its members in addressing this challenge. PIANC and its members will strive for:

- develop approaches to decarbonise the operation of port and navigation infrastructure (i.e. move to net zero emissions), whilst at the same time enabling the reduction of greenhouse gas emissions from vessels by providing the necessary facilities, infrastructure and, where appropriate, incentives
- prioritise inspection and maintenance to optimise the resilience of existing infrastructure
- apply monitoring systems and effective data management to inform and support timely climate change action
- strengthen operational resilience by developing risk assessments, contingency plans and warning systems
- collaborate with energy and water suppliers, onward transport providers and others involved in the supply chain to understand interdependencies and reduce exposure to associated risks
- seek win-win opportunities, including through nature-based solutions such as PIANC’s Working with Nature programme
- consider a range of climate change scenarios when developing adaptation strategies and include an appropriate combination of structural, operational and institutional measures set out in phased adaptation investment pathways
- focus on flexible and adaptive infrastructure, systems and operations to allow for future modification and to avoid ‘lock-in’ to solutions that prove inappropriate as conditions change
- promote engineered redundancy to improve resilience.

PIANC will continue to support ports, harbours, marinas and inland waterways by facilitating knowledge sharing and preparing practical technical guidance to help them manage the climate change challenge through effective risk management.

PIANC will also contribute to the global discussion to ensure that waterborne transport infrastructure interests are properly acknowledged, and to disseminate key messages to its members and the wider port and navigation community, through implementation guidelines where appropriate.

PIANC and its members will join forces with other waterborne transport infrastructure stakeholders to meet these new challenges, explore opportunities and contribute to a responsible, informed and sustainable way forward.

PIANC – The World Association for Waterborne Transport Infrastructure - www.pianc.org
Update on the Activities of Navigating a Changing Climate

Several important actions were progressed during 2019 by the partner associations in the PIANC-led Navigating a Changing Climate initiative http://navclimate.pianc.org. The initiative now has more than 50 organisations signed up as ‘Supporters’ and the new search option means the website is becoming a valuable source of references on climate change mitigation and adaptation for the wider maritime and inland waterborne transport sector (http://navclimate.pianc.org/news).

In early May 2019, the partners’ survey on the costs and consequences of extreme weather events was launched at the IAPH World Ports Congress in China. Initial results were presented at the PIANC-SMART Rivers Conference in Lyon, France, in October 2019. These highlighted that more than 50 % of the ports and waterways responding had experienced at least one severe weather event in the last 5 years that they regarded as ‘significant’ or ‘critical’ in terms of port or waterway closure or downtime. 30 % had experienced significant or critical damage. Yet, only 14 % of respondents have undertaken an extreme weather risk assessment, prepared a contingency plan and instigated a warning system. 30 % have done none of these things. The survey will close in December 2019 and the final results will be discussed at the IAPH conference in 2020.

In December 2019, the work of the Navigating a Changing Climate initiative was presented at several events during the COP25 meetings in Madrid, Spain. The focus of these presentations was on the urgent need to adapt waterborne transport infrastructure, not only to the projected gradual changes in temperature, sea level and precipitation, but also to the expected increase in extreme meteorological, hydrological and oceanographic events. The important role of nature-based solutions such as PIANC’s Working with Nature in strengthening resilience to adapt to climate change was also highlighted during many of the sessions.

Update on the Activities of EnviCom PTG1, the WFD Navigation Task Group

The PIANC-led WFD Navigation Task Group (WFD NAVI) comprises a thematic cluster of associations and organisation with interests in commercial and recreational maritime and inland waterborne transport infrastructure. In addition to PIANC, its members include:

- CEDA, the Central Dredging Association
- European Barge Union
- European Boating Association
- European Boating Industry
- European Dredging Association
- European Federation of Inland Ports
- European Sea Ports Organisation
- ICOMIA, the International Council of Marine Industry Associations
- Inland Navigation Europe
- European Inland Waterway Transport (IWT) Platform

These organisations attend two-yearly meetings in Brussels to receive updates on implementation progress with the EU Water Framework Directive and to discuss the sector’s position on key issues.

The main activity during 2019 was the so-called Fitness Check of the Directive. As stakeholders, the WFD NAVI Task Group made a substantive input to this process, in particular highlighting the inadequacies in the Directive’s recognition of the vital natural role that sediments play in aquatic systems. Our response drew attention to the need for proper consideration of sediment quality, sediment...
quantity and sediment dynamics when EU Member States prepare their River Basin Management Plans, and to the potential cost implications downstream if these issues are not effectively managed at source.

The other area of focus of the NAVI TG response was on policy coherence. Specifically, NAVI Task Group member associations drew the Commission’s attention to examples of where there is a lack of coherence between the WFD and the EU’s Industrial Emissions Directive, the Biocidal Products Regulation, REACH, the Waste Framework Directive, the Nature Directives, and the Marine Strategy Framework Directive. Other issues highlighted related to the potential implications for water and sediment quality of the discharges from open loop scrubbers (exhaust gas cleaning systems being used by vessels to ensure compliance with sulphur limits); difficulties meeting the standards set for PAHs (polycyclic aromatic hydrocarbons) in water because of atmospheric deposition even though air quality is in compliance; and the compatibility between EU environmental policy and transport policy initiatives intended to move more freight to Europe’s inland waterway transport, which is generally regarded as an environmentally preferable transport option.

4.5 The Future

2020 promises to be a busy and productive year for EnviCom. Several of our WGs will be completing their work in 2020. Several new Terms of Reference are under active development, which should lead to new WGs on a range of topics of importance to the navigation sector, including restrictions on dredging, invasive species, and dredging impacts from underwater sounds.

We express our deep gratitude to all of our EnviCom Members, WG/TG Chairs and Secretaries, WG/TG Members, our partners and supporting colleagues for the important work they are doing to advance the development of sustainable navigation infrastructure.

We are looking forward to working together in 2020.

Todd Bridges
Chairman of PIANC EnviCom

Edward Brauer
Secretary of PIANC EnviCom

Jan Brooke
Chairperson of the PTG CC
5 REPORT OF THE RECREATIONAL NAVIGATION COMMISSION (RECCOM) 2019

5.1 Introduction

RecCom has been established to deal with recreational navigation infrastructure. It relates to leisure, sport and tourism navigation and focuses on the specialised facilities necessary to serve these activities. Sustainable planning, design and management of marinas and recreational navigation infrastructure, are matters on which the Commission serves the marina industry and the broad recreational navigation community. The community that we support includes technical, academic, government and business actors, who can be drivers of a large economic activity.

RecCom recognises that it needs to be useful to the professional community that it serves, it needs to reach out to this community to raise awareness of its activities, and it needs to offer these community members the opportunity to participate in PIANC.

Recreational navigation berthing and supporting facilities interact among themselves and with other types of waterfront infrastructure, forming often complex systems. These activities and infrastructure need to relate positively with commercial navigation, such as transport and fishing, and its infrastructure, seeking synergies and mutual benefits. RecCom intends to continue working with MarCom and InCom to promote synergies and prevent conflicts between recreational navigation and commercial waterborne transport.

Ecological planning and social sustainable approaches to marina design can enhance the societal benefits of these facilities. Coastal and shoreline land uses, such as urban waterfronts and tourism development, often include this type of facilities and can receive added value from sustainable recreational navigation. Recreational navigation infrastructure can also be part of habitat protection and ecological restoration programs, including those that are part of waterborne transport projects. RecCom intends to continue working with EnviCom to promote synergies between both commissions and expand WwN and PTG CC activities in the marina community.

It is the policy of the Commission to produce a regular flow of reports and to contribute in the technical support of the professional community working in the marina industry. Interaction with this community includes participation in industry events and PIANC conferences, training professionals involved in marina development, and recognition of excellence in design.

It is the aspiration of this Commission to be useful and relevant to this community in all parts of the world, supporting the growth of recreational navigation activities and businesses though the promotion of best practices for the development of sustainable infrastructure.

To achieve these goals, RecCom works closely with other organisations with similar and complementary objectives, such as the International Council of Marina Industry Associations (ICOMIA) and aims at strengthening its commitment through outreach to the marina and boating industry worldwide. In order to serve the community, we reach out to all its members to understand their needs, seek their collaboration, and offer our services and products in a collaborative framework.

5.2 Strategic Alignment with PIANC Mission

5.2.1 PIANC Mission by RecCom

RecCom provides expert guidance and technical information through high-quality technical reports and connects the international recreational navigation infrastructure and marina community through a variety of products and events on a global scale and the environment.

RecCom develops technical knowledge and guidance to advance the sustainable development and use of recreational navigation infrastructure to support world and national economies, our communities.
RecCom promotes excellence in sustainable planning, design, construction, operation and management of marinas and recreational navigation infrastructure.

### 5.3 Members

Commission Members as of 20 January 2020 are:

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<tr>
<th>Members</th>
<th>Country, Role</th>
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<tbody>
<tr>
<td>Esteban Biondi</td>
<td>Argentina, Chairman</td>
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<tr>
<td>Nicolas Pisarello</td>
<td>USA, Secretary</td>
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<tr>
<td>Michiel de Jong</td>
<td>The Netherlands, Vice-Chair, PR</td>
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<td>Claudio Fassardi</td>
<td>Argentina, PR</td>
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<td>Greg Britton</td>
<td>Australia, PR</td>
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<td>Steve Timmermans</td>
<td>Belgium, PR</td>
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<td>John Kwong</td>
<td>China, PR</td>
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<td>Eduardo Alejandro Montagut C.</td>
<td>Colombia, PR</td>
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<td>Hans Nickels</td>
<td>Deutschland, PR</td>
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<tr>
<td>Liina Harm</td>
<td>Estonia, PR</td>
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<tr>
<td>Mirja A. Rosenberg-Kurki</td>
<td>Finland, PR</td>
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<tr>
<td>Arnaud Guillard</td>
<td>France, PR</td>
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<tr>
<td>Laurent Monsaigeon</td>
<td>France, AL</td>
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<tr>
<td>Pierre Gaufrès</td>
<td>France, PTG CC Observer</td>
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<tr>
<td>Fabiana Maccarini</td>
<td>Italy, PR</td>
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<td>Mahdi Kamyab Roudsari</td>
<td>Iran, PR</td>
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<td>Masato Yamashita</td>
<td>Japan, PR</td>
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<tr>
<td>Thor Messel</td>
<td>Norway, PR</td>
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<td>Gian Battista Borea d’Olmo</td>
<td>Principality of Monaco, PR</td>
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<td>René Bouchet</td>
<td>Principality of Monaco, AL</td>
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<tr>
<td>Hong-Yeon Cho</td>
<td>Republic of Korea, PR</td>
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<td>Lee Wook-Jae</td>
<td>Republic of Korea, AL</td>
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<td>Sara Calvo</td>
<td>Spain, PR</td>
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<td>Francisco Sarrias</td>
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<td>Stig Jansson</td>
<td>Sweden, PR</td>
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<td>Gosse De Boer</td>
<td>The Netherlands, YP</td>
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<tr>
<td>Mohammad Al Mannaie</td>
<td>UAE, Observer</td>
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<td>Tim Beckett</td>
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<tr>
<td>Matthew Trammell</td>
<td>USA, YP</td>
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<tr>
<td>Martinho Fortunato</td>
<td>Portugal, ICOMIA/IMG</td>
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<tr>
<td>Roberto Perocchio</td>
<td>Italy, ICOMIA/IMG</td>
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<tr>
<td>Oscar Siches</td>
<td>Spain, ICOMIA/IMG</td>
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<tr>
<td>Peter Jansen</td>
<td>Germany, ICOMIA/IMG</td>
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</table>

The Commission will continue trying to increase participation by members, expand membership by additional representation, and promoting the invitation of observers from non-member countries to expand its reach and become more meaningful internationally.
5.4 RecCom Core Activities

The Commission is responsible for setting up and managing:

- Working Groups for production of high-quality technical reports and guidelines
- The Marina Excellence Design ‘Jack Nichol’ Award (MEDA), for promoting excellence in marina design
- The Marina Design Training Programme (MDTP), which organises specific courses on marina design at an international level

The Commission also organises marina-related activities within PIANC major events and participates in other industry events.

5.5 Working Group Activity during 2019

No RecCom Working Group reports were published during 2019, but significant progress was made on important efforts.


**WG 168** – ‘Single Point Yacht Mooring Design’ has a final draft under review and publication is expected in early 2020.

**WG 182** – ‘Underwater Acoustic Imaging of Waterborne Transport Infrastructure’ is expected to have a draft for review by other commissions in early 2020.

A significant number of new Terms of Reference were approved during 2019, with some of those Working Groups already launched. RecCom continues to encourage the participation of YP’s in existing WG’s, as well as the participation of Observers, who can contribute to the WG providing information regarding needs for technical information in various parts of the world.

5.6 Working Group Status Summary

5.6.1 Ongoing Working Groups

<table>
<thead>
<tr>
<th>No.</th>
<th>Working Group Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>147</td>
<td>Guidelines for Management of Recreational Navigation Activities within Fishing and Commercial Ports</td>
<td>Published in January 2020</td>
</tr>
<tr>
<td>148</td>
<td>Recommendations for Environmentally Sustainable Recreational Navigation Infrastructure</td>
<td>First draft circulated within the WG by the end of 2019</td>
</tr>
<tr>
<td>149</td>
<td>Guidelines for Marina Design</td>
<td>Parts 3 and 5 pending completion</td>
</tr>
<tr>
<td>168</td>
<td>Single Point Yacht Mooring Design</td>
<td>For publication in 2020</td>
</tr>
<tr>
<td>169</td>
<td>Fire System Detection and Controls in Marinas</td>
<td>Making slow progress</td>
</tr>
<tr>
<td>182</td>
<td>Underwater Acoustic Imaging of Waterborne Transport Infrastructure</td>
<td>For publication in 2020</td>
</tr>
<tr>
<td>202</td>
<td>Influence of Recreational Navigation Infrastructures (RNI) on Waterfront Projects</td>
<td>Started in 2019</td>
</tr>
<tr>
<td>209</td>
<td>Recommendations for use of AIS Data for Recreational Navigation Infrastructure</td>
<td>Launched in 2019</td>
</tr>
<tr>
<td>217</td>
<td>The Impacts of Alternative Fuel Propulsion Systems on Marina Design and Management</td>
<td>In formation</td>
</tr>
<tr>
<td>220</td>
<td>Planning, Design and Operational Guidelines for Pump-Out Systems in Recreational Facilities</td>
<td>In formation</td>
</tr>
<tr>
<td>221</td>
<td>Design Guidelines for Recreational Boating Slipways</td>
<td>In formation</td>
</tr>
<tr>
<td>222</td>
<td>Design Guidelines for Floating Breakwaters in Marinas</td>
<td>Set up on January 2020</td>
</tr>
<tr>
<td>223</td>
<td>Meaningful Inclusion of Fishing Communities in Recreational Marinas – Guidelines for Planning</td>
<td>In formation</td>
</tr>
</tbody>
</table>
5.7 PIANC Marina Excellence Design ‘Jack Nichol’ Award (MEDA)

On 20 November 2019, RecCom Chair Esteban L. Biondi presented the Marina Excellence Design ‘Jack Nichol’ Award (MEDA) 2019 to Mr Salvatore La Mura, representing Marina di Stabia (Italy).

The award was presented during the METSRADE trade show, in Amsterdam, as part of the programming activities of the Marina and Yard Pavilion.

The purpose of the Award is to recognise excellence in the design of modern recreational boating facilities around the world. The award is administered by the Recreational Navigation Commission and funded by an endowment through PIANC USA. Received submittals have resulted in the selection of the award recipient, Marina di Stabia.

A new call for applications was launched in 2019 and was closed on 31 January 2020, with four high-quality submittals.

5.8 PIANC Marina Design Training Programme (MDTP)

A very successful one-day MDTP was held during the METSRADE trade show, as part of the programming activities of the Marina and Yard Pavilion. This boating industry event also hosts activities by our sister organisations ICOMIA and GMI.

This first marina design course at a marina industry event was held on 19-20 November 2019. The course was organised by the Recreational Navigation Commission (RecCom) of PIANC, hosted by RAI Amsterdam as part of the activities of the Marina and Yard Pavilion (MYP), and sponsored by Poralu Marine. It attracted 24 participants and 4 instructors from 15 countries and 4 continents.

The underwriting by PIANC HQ provided a secure financial support for the participation of instructors. PIANC HQ registration system performed very effectively.
In attendance was a blend of senior marina professionals: managers, engineers, consultants, architects, suppliers and other industry representatives. Presenters were RecCom members: Elio Ciralli (former Chairman of RecCom and founder of the MDTP), Oscar Siches (member of RecCom representing ICOMIA), Claudio Fassardi (member of RecCom and Chairman of one of its Working Groups), and current Chairman of RecCom Esteban L. Biondi. Because a significant number of senior marina industry participants attended the course, the gathering became a dialogue on industry topics.

This experience reveals that there is genuine demand for quality events that focus on discussions on marina planning and design at advanced level. Interest was very strong, and we had to make some space adjustments to accommodate special requests for late registrations. The feedback on the course was very positive. Martinho Fortunato CMM, President of ICOMIA Marina Group, said: “It is, for sure, a course I recommend for any marina professional in the world”.

5.9 RecCom Meetings during 2019

RecCom meetings during 2019 were organised in:

- Brussels, during the Winter PIANC week (RecCom 73)
- Lyon, France, during PIANC-SMART Rivers (RecCom 74)

RecCom held its first meeting of 2019 in Brussels, where the Strategic Plan was approved. Other important decisions were related to Working Groups, the MEDA award and outreach to the marina industry.
5.10 Activities of RecCom

5.10.1 PIANC AGA RecCom Open Meeting, Kobe, June 2019

As part of the activities during the Annual General Assembly in Kobe, an open meeting was held for the marina community, organised by the Local Organising Committee and Japan Marina & Beach Association. RecCom Chairman Esteban Biondi thanks its representative of Japan, Mr Masato Yamashita, and all members of the LOC for their excellent work in the organisation of this very successful event.

Technical presentations during the meeting were offered by: Mr Sadao Suwa (Windward Ocean Club: ‘Marinas in Japan – Current Conditions and Plans’); Mr Masaaki Amano (Agriculture and Fisheries Promotion Division, Economic and Tourism Bureau, Kobe City Government: ‘Fisherinas in Kobe Area – The Japanese Experience’) and Mr Lee Wook Jae (RecCom Korea: ‘Marina Fire Protection Systems Progress of Korean Report’).
Greg Britton, a member of RecCom and Deputy Chairman of the Australia/New Zealand National Section of PIANC, attended the Marinas19 International Conference and Trade Exhibition on the Gold Coast in Queensland on 27-28 May 2019 and made a presentation on behalf of PIANC. The Conference was attended by 300 delegates. The presentation covered the following topics: ‘What is PIANC’; ‘How is PIANC relevant to recreational boating and marinas’; ‘How can you become involved and derive benefit from membership of PIANC’ and ‘PIANC’s initiative of ‘Working with Nature’.

PIANC RecCom implemented new collaboration initiatives with the Association of Marina Industries (AMI), a PIANC sister association. PIANC RecCom and PIANC-USA joined forces to support AMI’s Marina Design and Engineering track for the International Marina & Boatyard Conference (IMBC) programme. IMBC is held annually in the USA.
PIANC RecCom supported the content committee for the 2020 event (14-16 January, Fort Lauderdale, Florida) to shape the core Marina Design and Engineering track. Working with a significant number of topic submittals, we proposed thematic groupings for dynamic discussions, added invited speakers to discuss ‘Engineering with Nature’ programme experience.

A new session to promote environmental issues in marina infrastructure was proposed by PIANC RecCom. It included presentations on USACE’s ‘Engineering with Nature’ (EwN) by Dr. Burton Suedel, EnviCom Working Group 175 on ‘Working with Nature’ by Dr. Victor Magar, and progress material on RecCom Working Group 148 on ‘WwN applied to Marinas’ by Esteban Biondi.

RecCom and PIANC USA collaborated to bring PIANC supported program to IMBC 2020

5.10.4 PIANC in SeaTourism at Dusseldorf Boot, Dusseldorf, January 2020

RecCom was represented by Roberto Perocchio, who participated in a panel about the future of the nautical tourism industry, discussing the role of marina infrastructure development.
5.10.5 Planning for Major PIANC International Events in 2020

RecCom is seeking coordination with the Local Organising Committees of the PIANC AGA 2020 (Bristol) and PIANC-COPEDEC (Manila) and will continue supporting PIANC-APAC 2020, in order to include activities relevant to the local recreational navigation community.

5.10.6 Planning for Major Marina International Events in 2020

RecCom is planning its involvement in the following major international or regional events:

- ICOMIA World Marina Conference, Dubai, October 2020
- METSTRADE Marina and Yacht Pavilion, Amsterdam November 2020
- Sea Tourism Summit, Boot Düsseldorf, January 2021
- The Association of Marina Industries Conference & Expo (former IMBC), Daytona Beach, USA, 2-4 February 2021
- Marinas 21, Gold Coast, Australia, 23-25 May 2021

5.11 Communication and Social Media

5.11.1 Marina World

PIANC RecCom collaborates with various industry publications. Marina World, one of our partners, routinely publishes news and articles prepared by the Commission.

In addition to announcements of PIANC activities, Marina World published an article that outlines our vision for the relationship with the professional marina community and our training programmes.

5.11.2 LinkedIn

The Commission’s LinkedIn is used to make announcements and promote activities. The user has over 2,100 followers.
5.12 Message to PIANC National Sections and Qualifying Members

- We want to be useful in your country.
- We know that there is a recreation or tourism navigation activity in your country, even if they are probably not your typical PIANC members, and we hope to work together to connect with them.
- We know that the recreational navigation industry has potential for positive economic impact in your country, we can help you participate in their events and bring PIANC into your marina community.
- The recreational navigation community is likely an untapped or undeveloped source of PIANC members for your National Section. Even the largest and most developed National Sections can do more to work with them.
- We intend to use PIANC major events to connect with the marina industry in your region, and we hope to work with LOC’s to maximise the opportunities offered by these events.

Esteban Biondi
Chairman of PIANC RecCom

Nicolas Pisarello
Secretary of PIANC RecCom
6 REPORT OF THE CO-OPERATION COMMISSION (COCOM) 2019

6.1 Introduction

2019 saw a continuation of the activities of the Commission begun over the last several years. This Annual Report summarises these activities and describes the progress made with respect to certain goals of the Commission during the year.

6.2 The Commission

- Edward Schmeltz, USA – CoCom Co-Chairman
- Akula R. Rao, India – CoCom Co-Chairman
- Peter De Wolf, Belgium – Secretary
- Jefferson Vianna Bandeira, Brazil
- Kenji Ono, Japan
- Jean-Marc Deplaix, France
- Ron Cox, Australia
- Kevin Knight, USA
- Abbas Sarmad, USA (alternate)
- Elizabeth Follosco, the Philippines
- Hector Miole, Philippines
- Hartmut Brühl, Germany
- Michaël Fastenbauer, Austria
- Rogelio Gordon, Panama
- Ronald Stive, the Netherlands
- Geert Van Cappellen – PIANC Secretary-General
- Freddy Wens, Belgium – COPEDEC IOC Chair
- Enrique de Faragó Botella, Spain
- José-Luis Monso de Prat, Spain (Alternate)
- Young-Min Oh, South Korea
- Daphne Thoon – YP, Belgium
- Razzazan, Iran
- Mohammad Hossein Nemati, Iran (Alternate)
- Han Ligteringen – Observer
- Lilian Almodovar – Observer

One change to the membership occurred: Bum Sik Shin joined CoCom as a member for South Korea.

6.3 CoCom Meetings

In 2019, a meeting was held on 30 January at PIANC HQ in Brussels.

The meeting focused on recruitment and subcommittee activities. The national target list was updated, and specific nations pursued during the year. Our focus continues to be on membership development. Attendance at the meetings has been good, generally including at least 10 to 12 members.

6.4 Sub-Committees

6.4.1 SC 1 – Training & Education

SC-1, Training in Ports and Waterways, (formerly WG 126) continues to be headed by Ronald Stive. The SC’s database is on the PIANC website and relates to available training activities for Ports and Waterways. The Sub-Committee continues to solicit input to that database but the response continues
to be poor. We reiterate the request that anyone with training opportunities provide information to the database to maximise its utility in the future.

6.4.2 First PIANC Cambodia Seminar

Cambodia became a Qualifying Member in 2019. On that occasion, PIANC Headquarters and PIANC Japan supported a first PIANC Cambodia Seminar on Waterborne Transport Infrastructure Development and Management. This seminar took place in Phnom Penh on 24-25 October 2019 in the presence of Mr Geert Van Cappellen, PIANC Secretary-General and Mr Kenji Ono, Mr Han Ligteringen, Mr Jean-Marc Deplaix and Mr Freddy Wens on behalf of CoCom. A special note of thanks to Mr Kenji Ono for his efforts in driving the seminar.

The more than 100 Cambodian participants were headed by Mr Eang Veng Sun, Secretary of State and Mr Chan Dara, Undersecretary of State of the Cambodian Ministry of Public Works and Transport.

The course was another one in a series sponsored by CoCom to enhance membership benefits in target countries or new members. Previous efforts were conducted in Colombia, the Phillipines and Indonesia.

We would like to express our sincere appreciation to the Local Organising Committee and the trainers, because without them this event would not have been such a success.

In case local PIANC sections are interested to consider similar Guideline-related training events, please do not hesitate to contact Ronald Stive, the Chairman of the CoCom Sub-Committee on Training and Education, via ronald.stive@rhdhv.com.

6.4.3 SC 2 – Regional Activities

Specific, targeted countries have been identified by CoCom members and will be invited to become active, participating members of PIANC. Mentoring will be provided by individuals on the Committee, regional Vice-Presidents and HQ staff. Some examples include the mentoring of the Mekong river countries by the region of Flanders (Belgium), of Morocco by the French Section, Colombia by the US Section and of Argentina by the Spanish Section. Others we believe would benefit from membership include:
<table>
<thead>
<tr>
<th>Continent / Country</th>
<th>To be followed up by National Section(s)</th>
<th>To be followed up within CoCom</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMERICA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Mexico</td>
<td>USA/Spain/HQ</td>
<td>Kevin Knight</td>
</tr>
<tr>
<td>2 Chile</td>
<td>USA/Spain/Argentina</td>
<td>José-Luis Monsó/Kevin Knight</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(AAPA Conf. Valparaiso nov. 2018)</td>
</tr>
<tr>
<td>3 Uruguay</td>
<td>USA/Spain/Argentina</td>
<td>Kevin Knight</td>
</tr>
<tr>
<td>4 Peru</td>
<td>Netherlands/Spain/Argentina</td>
<td>Ronald Stive</td>
</tr>
<tr>
<td><strong>AFRICA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Morocco</td>
<td>Spain</td>
<td>José-Luis Monsó</td>
</tr>
<tr>
<td>6 Egypt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Kenya</td>
<td>Netherlands/UK</td>
<td>Abbas Sarmad</td>
</tr>
<tr>
<td>8 Mozambique</td>
<td>Portugal/South Africa</td>
<td>Ask Gary Mocke, South Africa, Ronald Stive</td>
</tr>
<tr>
<td><strong>ASIA</strong></td>
<td></td>
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</tr>
<tr>
<td>9 China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Myanmar</td>
<td>USA/Netherlands/Japan</td>
<td>Ronald Stive/Edward Schmeltz/Kenji Ono</td>
</tr>
<tr>
<td>11 Fiji &amp; Papua New Guinea</td>
<td>Australia</td>
<td>Ron Cox</td>
</tr>
<tr>
<td>12 Cambodia</td>
<td>Japan/Belgium</td>
<td>Neil Lawson</td>
</tr>
<tr>
<td>13 Singapore</td>
<td></td>
<td>Neil Lawson</td>
</tr>
<tr>
<td>14 Indonesia</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MIDDLE EAST</strong></td>
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<tr>
<td>15 UAE</td>
<td>PIANC HQ</td>
<td>Geert Van Cappellen</td>
</tr>
<tr>
<td>16 Qatar</td>
<td>USA</td>
<td>Edward Schmeltz/Abbas Sarmad</td>
</tr>
<tr>
<td>17 Kuwait</td>
<td>USA</td>
<td>Edward Schmeltz/Abbas Sarmad</td>
</tr>
<tr>
<td>18 Oman</td>
<td></td>
<td>Mohammadreza Allahyar/Port of Antwerp</td>
</tr>
<tr>
<td><strong>EUROPE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Poland</td>
<td>PIANC HQ</td>
<td>Geert Van Cappellen</td>
</tr>
</tbody>
</table>

The list is dynamic and continues to be adjusted based on political and practical realities.

A key component of CoCom’s membership initiative is the nurturing of new member organisations. Successes in the Philippines, recruited during 2015 with a seminar held in the country in late 2014 to help solidify the Section, were followed by successes in Indonesia in 2015 and 2016 and in Cambodia in 2019.

The overall approach is being used as a template to reach out to other nations in a similar fashion to encourage membership in the organisation. Lillian Almodovar and Kevin Knight, with support from HQ, continue to provide coordination and support to the Colombian Section and other Latin American activities. José-Luis Monso de Prat continues to encourage Chilean involvement in the organisation.

Additionally, PIANC USA, in collaboration with other PIANC National Sections and Qualifying Members in America, has continued to refine a work plan aimed at strengthening and expanding PIANC in America. One of the primary elements of this work plan is the development and implementation of a biennial Regional Conference for the Americas. This Conference would be tailored to address the particular needs and challenges of the Americas and help achieve the goals of the work plan. The second Conference is planned for the first quarter of 2021 in USA.

PIANC sections in Australia, the Netherlands and Japan are all currently actively engaged in similar efforts in their respective geographies.
The Australian Section has taken a number of actions consistent with their strategic plan and with the objectives of CoCom for expanding PIANC membership.

6.4.4 SC 3 – PIANC-COPEDEC X Conference

As reported last year, a decision was made by ExCom in August 2018 to relocate the PIANC-COPEDEC X conference to the Philippines. The theme of the conference will be ‘Enhancing Waterborne Transport and Sustainable Coastal Development’. During the meeting, a further decision was made to organise the PIANC-COPEDEC X Conference from Monday 16 to Friday 20 November 2020. The specific location in Manila will be proposed by the LOC based on site visits conducted during that meeting.

The IOC is composed of following members: Ir. Freddy Wens (Chairman), Mr Geert Van Cappellen (PIANC Secretary-General), Ir. Louis Van Schel (Belgium), Dr. Hartmut Brühl (Germany), Dr. Gary Mocke (South Africa), Mr Raúl Escalante (Argentina), Mr Hector Estrella Miole (the Philippines) and Mr Mohammadreza Allahyar (Iran). Jay Santiago is the LOC Chairman for the Philippines.

6.5 Action Plan

An Action Plan based on the new Strategic and Operating Plans was developed late in 2013 and is currently undergoing revision. That plan forms the basis for CoCom’s activities during the year. Specific undertakings are identified in the sections above. In brief, we anticipate continuing the technical outreach efforts to potential National Sections who are interested in participating in these events.

Respectfully submitted

Edward J. Schmeltz and Akula Rao
Co-Chairpersons of PIANC CoCom

Peter Dewolf
Secretary of PIANC CoCom
7 REPORT OF THE YOUNG PROFESSIONALS COMMISSION (YP-COM) 2019

7.1 FOREWORD

2019 was perhaps YP-Com’s busiest year in terms of technical events, site visits, seminars, as well as networking and social activities. Leveraging relationships, utilising our organisational structure/lines of communication, existing global footprint, and YP-Com’s overall marketability were all put to work for the benefit PIANC and YP’s in 2019. More YP’s than ever before participated across all areas of PIANC, including and especially the higher numbers of YP’s contributing to Technical Commissions and Working Group members.

In 2019, YP-Com set high marks to aspire to meeting or exceeding in the coming years. YP-Com took a tactical approach to addressing PIANC’s 2019-2023 Strategic Plan while initiating and participating in a variety of activities. Much of this success is attributable to YP-Com's proactive management of the Strategic Plan, involving adaptation to PIANC’s mission points and strategic objectives by carrying out the commission’s own unique goals and action items that it structured expressly with the challenges and interests of the modern YP in mind. In general, YP-Com’s action plan not only includes future objectives, but also communicates a number of activities that are already underway and in direct alignment with furthering some of PIANC’s most important undertakings, such as PTG CC, WwN, growing membership numbers and creating new activity in target countries.

These goals and actions were iteratively refined in 2019 as status updates were reported by YP-Delegates, Board Members, and Observers during the 30th YP-Com Meeting, held in February at the Port of Zeebrugge. They were again refined in Kobe, Japan alongside the AGA and in Singapore during YP-Com’s 31st meeting in May, which also gained the perspective of YP-Com supporters and members without formal roles in the commission. By adhering to these goals and regularly communicating status updates during commission meetings, board meetings, and frequent workshops in different countries, YPs around the globe were able to actionably participate in YP-Com’s implementation of the overall Strategic Plan in 2019.

Many of these objectives – Special attention to YP’s, disseminating PIANC expertise, special attention to Countries in Transition, enhancing vitality of Qualifying Members & National Sections, growing membership – were met simultaneously. Among the most notable examples include May 2019, during which the Japanese Section hosted a multi-day seminar and series of events alongside the AGA, which served as an excellent prelude to the 7th Biennial Technical Visit (BTV) in Singapore the following week. This event focused special attention on PIANC YP’s and knowledge-sharing most relevant to MarCom during an abundance of technical presentations, networking events, and site visits to some of the waterborne transport industry’s most timely and prolific undertakings, such as the next-generation Tuas Terminal under construction by Maritime and Port Authority of Singapore (MPA). The occasion also marked Singapore’s first major-event-recognition as a Qualifying Member in PIANC, a status accredited to the efforts of the country’s dedicated YP’s who made it their mission to introduce PIANC to Singapore during the past several years, and especially in 2019.

YP-Com remained focused on evening its spread across existing and new geographies in 2019. Doing so increased overall PIANC membership of YP’s as Individual and Corporate Members, but it also helped carry out PIANC’s growth strategy in target countries from which PIANC seeks more involvement. In addition to enhancing Singapore’s vitality as a Qualifying Member and eventual National Section, the BTV also showcased participation at the YP level from numerous countries – including and especially those without PIANC Qualifying Membership Status or National Sections, such as Malaysia, Myanmar, and Vietnam. YP-Com was also pleased with the continued, strong YP-participation from some of its most active sections from within the Asia-Pacific region, such as Australia, Iran, Japan and the Philippines – as well as from resurgent groups like the Korean Section. YP-Com believes that all YP’s should be welcome to participate in the betterment of the industry through PIANC channels, and we are pleased to have offered the BTV as such an opportunity, along with many others in 2019 that have since led to new Individual Members in Countries in Transition.
A precedent was clearly set in the Asia-Pacific Region, but YP-Com is equally fortunate for the 2019 efforts by YP’s in the Americas and the Europe-Africa Regions who have worked relentlessly, from the top-down and from the bottom-up, to maintain constant activities across their own, very-active YP-sections in PIANC. The sustained-momentum in Europe-Africa was extremely significant to YP-Com’s implementation of the Strategic Plan, as this region supports the highest number of PIANC YP’s, including YP-Observers to Technical Commissions and Working Groups. In fact, YP-Com’s European contingents are so closely aligned that annual regional events are commonplace, and technical presentations are combined with social outings – we find this to be of great enjoyment in our Belgian, Dutch, and UK YP-Sections. Also, in proper reflection of the Europe-Africa Region, the Spanish YP-Section was a deserving recipient of the inaugural Best Performing YP Group Award, announced during the AGA in Kobe, Japan. Meanwhile in the Americas, the Argentine YP-Section continues to lead the region in activities both internally within the region and externally within the other regions. Within the Americas, Argentine YP’s constantly provided invaluable guidance to surrounding South and Central American countries, such as Chile, that have become much more connected to PIANC in recent years. Brazil also had a busy year planning ahead, as its YP’s carve out the path toward its eventual establishment as a National Section. In North America, USA’s YP’s have become well organised as they hosted regular meetings throughout the year and were pleased to have been preliminarily selected to host the next BTV. The section has also taken a leading role in collaborating with YP-Delegates in countries such as Canada, from which PIANC is seeing increased YP interest.

As a last point in summary, and further to strengthening PIANC’s capabilities and enhancing its visibility, YP-Com is dedicated to inclusion of all types of professionals within the waterborne transport industry, including professionals with backgrounds including and in addition to engineering and construction. In 2019, YP-Com was pleased to host at its events, YP-participants with backgrounds in environmental science, finance, economics, freight and logistics, navigation, technology/cyber security, planning, resiliency and sustainability, and other fields pertinent to the future of the waterborne transport infrastructure industry.

On behalf of the YP-Com Board, thanks to our Delegates, Observes, Members, and Supporters for your efforts in fulfilling a strong 2019. Please be sure to join our LinkedIn Group, which grew to over 2,500 members in 2019.

### 7.2 YP-Com Board

The YP-Com Board is the governing body of the PIANC Young Professionals Commission, responsible for the commission’s adherence as a Permanent Commission to the mission points, guiding principles, strategic objectives, and administrative matters of PIANC International. The Board serves its Delegates, Observers, Members, and countries through representation allocated into International Levels (Chair, Co-Chair, Secretary) and Regional representation (Regional Vice-Chairs and Alternates (formerly known as Supporters)) for the Europe-Africa, Asia-Pacific and Americas regions. Following is the 2019 composition of the YP-Com Board:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Thomas (USA)</td>
<td>Chairman</td>
</tr>
<tr>
<td>Eslie Vrolijk (the Netherlands)</td>
<td>Co-Chair</td>
</tr>
<tr>
<td>Rodrigo Moltó (Spain)</td>
<td>Secretary</td>
</tr>
<tr>
<td>Carolina Piccoli (Brazil)</td>
<td>Vice-Chair, Americas</td>
</tr>
<tr>
<td>Juan Martín Rodríguez (Argentina)</td>
<td>Alternate Vice-Chair, Americas</td>
</tr>
<tr>
<td>Ingrid Klimann (Argentina)</td>
<td>Alternate Vice-Chair, Americas</td>
</tr>
<tr>
<td>Tom Shand (New Zealand)</td>
<td>Vice-Chair, Asia-Pacific</td>
</tr>
<tr>
<td>Chris Ornum (the Philippines)</td>
<td>Alternate Vice-Chair, Asia-Pacific</td>
</tr>
<tr>
<td>Daan Jumelet (Netherlands)</td>
<td>Vice-Chair, Europe-Africa</td>
</tr>
<tr>
<td>Enrique Ripoll (Spain)</td>
<td>Alternate Vice-Chair, Europe-Africa</td>
</tr>
</tbody>
</table>
7.3 The 2019 Membership Roster of YP-Com

YP-Com representation within PIANC National Sections and Qualifying Members are represented by Delegates and Observers, while all other countries may be represented by YP Observers. In addition to those mentioned for the YP-Com Board, the following sections list the name of the current YP-Com Delegates and Observers around the world.

7.4 Delegates

**AMERICAS**
- Matías Palma (Argentina)
- Vincent Besson (Argentina)
- Sebastián Iglesias (Argentina)
- Neville Berard (Canada)
- Andrea Viteri (USA)
- Ashley Frey (USA)
- Matthew McCarty (USA)
- Sebastián Solari (Uruguay)

**ASIA-PACIFIC**
- Rodney Hancock (Australia)
- Gensheng Zhao (China)
- Reza Sohrabi (Iran)
- Alireza Shafieefar (Iran)
- Naozumi Yoshizuka (Japan)
- Masayuki Banno (Japan)
- Adrian Cayanan (the Philippines)
- Zi Qian Yang (Singapore)
- Vera Wong (Singapore)
- Deokhee Won (South Korea)
- Julie Kim (South Korea)
- Minook Kim (South Korea)

**EUROPE-AFRICA**
- Lisa-Maria Putz (Austria)
- Katrin Haselbauer (Austria)
- Filip Van de Wiele (Belgium)
- Kim Andersson-Berlin (Finland)
- Laure Herbert (France)
- Anja Brüning (Germany)
- Francesco Ligorio (Italy)
- Irena Doets (the Netherlands)
- Onno Mush (Norway)
- Mónica Tsitsas (Romania)
- Pablo Pita (Spain)
- Sara Zoccari (Spain)
- Heather Armour (United Kingdom)
- Kishan Tulsi (South Africa)
- Henrik Granroth (Sweden)

7.4.1 Observers

**AMERICAS**
- João Dobrochinsky (Brazil)
- José Aldunate (Chile)
- Raúl Oberreuter (Chile)
- Melina Godoy (Costa Rica)
- Carlos Miranda (Ecuador)
- Ricardo Álvarez (Panama)
- Chantal Lazarus (Panama)
- Edward Backlund (USA)
- Rachel Grandpre (USA)

**ASIA-PACIFIC**
- Zhao Hongbo (China)
- Sherlin Prem Nishold (India)
- Sahar Mokhtari (Iran) – ProCom Member
- Ayushi Abhay (India)
- Ben Nair (Malaysia)
- Jack Lee Yun Zac (Malaysia)
- Chip Pohlen (New Zealand)
- Jia Hann Tan (Vietnam)

**EUROPE-AFRICA**
- Koen Van Doorslaer (Belgium) – MarCom Member
- Kristine Pliegaard (Denmark)
- Jordan Lagnado (France)
- Saber M. Elsayed (Germany)
- George Ioannidis (Greece)
- Ilse van den Bosch (the Netherlands)
- Pieter Nordbeck (the Netherlands)
- Axel Hortebörn (Sweden)
7.5 Biennial Technical Visit 2019

In May 2019, we had the 7th Biennial Technical Visit (7th BTV) of the PIANC Young Professional Commission in Singapore with about 20 nationalities from all over the World.

The BTV is organized every two years in a country with once-in-a-lifetime projects. The port of Singapore is massively expanding. The new TUAS container terminals are about to enlarge with an extra container capacity of 65 million TEUs. In comparison, this extra capacity is about 5 times larger than the total throughput of the largest port in Europe (Rotterdam); Singapore can truly be considered the world’s beating heart of the Port & Maritime industry.

Figure 1: BTV 2019 attendees

During this event, we all have seen that the Port, Maritime and the Inland Navigation industry is dealing with several big challenges: the transport sector understood as one of the biggest contributors to CO₂ emission and maritime and inland water transport can be regarded as the cleanest options. This means that we still have a lot of opportunities in maritime transport but changing industries and people views is not easy.

However, if we join our forces, think beyond our (national) borders, share our knowledge, learn from other industries and implement the new digital techniques, we will come up with ground-breaking innovations and then we will be able to solve the global problems and deal with the maritime challenges. PIANC as THE global association in Maritime, Port and Inland Navigation is the exquisite network for doing this and the BTV is a very good start point to meet the new generations of professionals that will likely change this world!

Figure 2: YP-Com Board at the 7th BTV Photocall
(L-R: Nina Piccoli, Daan Jumelet, Andrew Thomas, Eslie Vrolijk, Rodrigo Molto, Tom Shand)
On Tuesday 11 and Wednesday 12, morning keynote speakers from all over the world presented several maritime related topics, such as breakwater and quay wall blockwork design, working with nature, climate change, rock revetment for TTP1 and the future port management of Singapore.

![Figure 3: Panel discussion with the keynote speakers at Tuesday morning](image)

On Wednesday 12 in the afternoon, a group of 8 Young Professionals were also given open-mic presentations about high level innovations in maritime design. Afterwards, we could share our questions and thoughts during the panel discussion.

![Figure 4: Panel discussion with the YP keynote speakers on Wednesday afternoon](image)

On Tuesday afternoon, we visited the Singapore Maritime gallery and gained some more insight into the history of Singapore.

![Figure 5: Several YP’s attending the POCC visit](image)

Another interesting activity was the visit to the POCC (Port Operations Control Centre), which is responsible for the management of the navigation in Singapore. This is quite challenging for a port where every 2-3 minutes a ship arrives or leaves.

On Thursday morning, we went on a bus tour, visiting the multi-purpose Jurong port and having a look at some bulk and cargo activities.

During night time, social network events were organised at the hotspots in Singapore, which made us enjoy the Skylines of the ‘Garden City’.
Figure 6: Marina Bay Sands Light Show

The BTV ended with a real highlight: a sailing trip to Finger 2 (TTP1) which is part of the TUAS project. The Maritime Port Authority of Singapore (MPA), Surbana Jurong and the joint venture Dredging International Asia Pacific (DEME-group) and Daelim have adopted a variety of innovative solutions for the design of TTP1.

TTP1 is a reclamation of about 300 Ha, a caisson quay wall of 8.6 km (with 221 caissons with a height of 28 m), sand filling of about 90 million m$^3$ and dredging works of about 70 million m$^3$. For this project, the world's largest equipment has been used (e.g. Grab Dredger Gosho with a bucket size of 200 m$^3$ & Cutter Suction Dredger Ambiorix).

To manage the planning, costs, risks and especially the complex soil conditions, new techniques have been applied such as artificial intelligence, drones for site surveying and progress monitoring. For this project, specific equipment had to be built: the caisson casting Yard, a floating 20,000-t dock vessel, the crane pontoon Sirraff and the fallpipe pontoon Themarock. All those machines were allocated for a safe and secure way of fabricating, installing, and filling, thereby protecting the new reclamation, quay wall and dredging works. We can only describe this visit with one word: impressive!
Many thanks for the Organising Committee!! This BTV was far beyond our expectations!!

And, last but not least, also a big thanks to the BTV sponsors, companies that have sponsored their employees to come to Singapore and the maritime port authorities of Singapore for opening your doors and made this BTV a success!
7.6 Best Performance YP National Section Award

During the AGA session in Japan, the 1st edition of the Best Performing YP Group Global Award took place, referring to the activities organised by the YP-groups of the different National Sections during 2018.

In this first edition, the prize was awarded to the Spanish Section. Several members of the Spanish Young Professionals Committee had the chance to attend the AGA in Kobe to receive in person the recognition by YP Chairman, Andrew Thomas, and YP Co-Chair, Eslie Vrolijk.

During the acceptance speech, the Spanish Section had the opportunity to emphasise that the Award did not only go to the current board of the Spanish Young Professionals Group, but also to their predecessors that started the activities more than 15 years ago.

![Figure 9: Francisco García (1st row, 4th from the left) with the rest of the YP-Com colleagues while visiting the Kobe Port](image)

Among the activities developed by the Spanish Young Professionals Group outstand the management of the social media with presence in LinkedIn, Twitter, Instagram and a new website with an intranet including an updated agenda, a repository of documents, member contact details, etc.

The Spanish YP-Section also organised the 15th Edition of the YP Annual Congress, held this year in Tenerife (Canary Islands), as well as other daily technical sessions with the senior experts of the maritime engineering field.

Moreover, in 2018, the 17th Edition of the Modesto Vigueras Award for the best national technical papers and the first edition of the PYCture Award for the best photos sharing maritime and coastal landscapes took place. To expand the impact of the YP-Section among the new professionals entering the maritime market, there is a continuous contact with the Universities, and other technical one-day visits are developed around the Spanish Geography such as Port Laboratories, marine works under construction, etc.

All these activities were organised and monitored in the bi-monthly meetings of the board that also promotes the active participation of the YPs inside the national and international Working Groups.

The Spanish YP-Section is currently composed of ten members: Rafael Aznar (Chair), Vicente Pardo (Vice-Chair), Rodrigo Moltó (Secretary) and seven additional members: Sara Zoccari, Vanesa Câmara, Enrique Ripoll, Jorge Molines, Pablo Pita, Francisco García y Daniel González. In that Commission, all the maritime sector agents are represented: contractor companies (Rover Maritime & SATO), engineering and consultancy firms (WORLEY, TYPSA, Increa & TPF Getinsa Euroestudios), universities (Polytechnic University of Valencia) and the Government Administration (Motril Port Authority & Ports of Spain).
It is important to highlight that other National Young Sections had made great progress and magnificent performances, which makes this Award much more remarkable.

### 7.7 YP-Com Events

A few other highlights of the YP-activities within the National Sections of PIANC:

#### 7.7.1 America

#### 7.7.1.1 Argentina

The 2019 edition of the PIANC-SMART Rivers Conference took place last October in Lyon and Argentina was well represented by a delegation of nine professionals and port representatives. Argentina’s YP’s had a very active role during the Congress: Ariel Savarese, together with Mr Sebastián Villalba and Mr José Grau, were the group of Argentinian YP’s presenting technical works during the conference.

Ariel presented ‘Development of the Port of Barranqueras and its Role in the Paraguay-Paraná Waterway’ where a Reactivation and Reconversion Plan was implemented since 2016, driven by the Port Authority. Secondly, Sebastian’s paper, ‘Use of Hydrodynamic Models for Decision Making in Dredging Works. Uruguay River Waterway Case (Argentina),’ described the studies performed to determine the appropriate location of the navigable channel in a 15-km section in the Uruguay River.
Finally, Jose’s presentation, ‘Container Logistics in Paraguay, Terport Case’, showed the very significant growth of container throughput in Paraguay during recent years.

Sebastian Garcia, Secretary of the Argentinian National Section, and Ramiro López Saubidet also exposed the remaining two Argentine papers of a total amount of five papers. On the one hand, Mr Garcia gave insight about how to deal with non-authorised intervention on Aids to Navigation sharing found solutions to mitigate acts of vandalism on buoys and wave gauge, which should be based not only on technical analysis and security policies, but also on social interchange involving stakeholders in everyday Inland Waterway issues. On the other hand, Mr López Saubidet talked about the City-Port relationship and its influence in the social environment.

7.7.1.2 Brazil

Carolina Piccoli (Nina), the YP-Com Chair for the Americas Region, was an invited speaker at the 1st edition of the Ports and Coasts Brazil 2019 (Portos e Costas Brasil 2019) on 4-5 November in Florianópolis. Nina provided an overview of PIANC and highlighted the importance of establishing a National Section in Brazil. “One of PIANC’s mission is to provide state-of-the-art guidance on waterborne transport-related topics for professionals through the Technical Reports. Having a PIANC National Section in Brazil would facilitate the involvement of Brazilian professionals in the development of such reports”.

The National Waterway Transportation Agency (ANTAQ) is leading the establishment of Brazil as a National Section which is expected to be realised in 2020.

7.7.1.3 Chile

In Valparaíso, on 28 September, our PIANC member Raúl Oberreuter gave a keynote speech in the ‘Planning, Management and Governance of the Port Cities Program’ of the University of Santiago of Chile.

As a PIANC member, the professional exhibited on Maritime and Port Engineering in Chilean cities, referring to national and international regulations highlighting the importance of PIANC as an international technical entity for the planning of maritime works.

His talk entitled ‘Maritime, Port and Coastal Engineering and The Chilean Coastal Cities’ addressed topics that went from the definition of natural conditions in the sea to parameters of ports designing relating the technical dimension with urban elements that makes up the port cities.

Figure 12: Nina Piccoli speaking at the 1st edition of the Ports and Coasts Brazil Conference 2019

Figure 12: Raúl Oberreuter during its speech at the University of Santiago of Chile
7.7.2 Asia-Pacific

7.7.2.1 Australia – New Zealand

The NSW Chapter of PIANC ANZ and the Port Authority of New South Wales celebrated a technical tour for YP’s and a networking event in Sydney on Thursday 15 August.

The event kicked off with a technical tour of the Overseas Passenger Terminal at Circular Quay. Flanked by the Sydney Opera House on one side and The Rocks Precinct and Sydney Harbour Bridge on the other, the Overseas Passenger Terminal is one of the most iconic and memorable cruise hubs in the world. Following the tour, all the attendees met at Cruise Bar’s courtyard just next to the terminal for drinks and canapes.

Moreover, on 16 October, 30 YP’s from PIANC ANZ were hosted by the Wynyard Edge Alliance on a tour of the America’s Cup infrastructure construction project. The tour, led by Alliance Director Kurt Grant, included visits to the Hobson Wharf Extension, the new breakwater structures off Halsey and Wynyard Wharves and new Team New Zealand base. The tour concluded with a networking event in the Wynyard Quarter.

![Figure 13: Group of YP’s attending the technical visit celebrated on 16 October](image1)

![Figure 14: Several attendees to the visit and to the networking event, respectively](image2)

Later, another event took place on 21 November at Hotel Darwin and was well attended by professionals from a diverse range of organisations who came to meet new people and strengthen existing connections.

The Port of Darwin is a hub of commercial and recreational activity, linking both business and leisure with its maritime environment. With recent and planned major projects shaping Darwin and its port activities, PIANC YP-Com recently took the opportunity to provide an event that would connect the local coastal and maritime community.
A variety of engineering consultancies, including Aurecon, GHD, Cardno and SMEC, were represented, as well as industry suppliers, oceanographic study consultancies and Darwin Port.

The event was organised by local PIANC YP-Com Rep Jade Hundziak who described how she is keen to establish and build a PIANC community in which people from throughout industry and academia can share knowledge and expertise. Jade called on the attendees to get involved and have their say on events which would be of interest and benefit.

7.7.2.2 Japan

In parallel with AGA in Kobe, the YP-Com seminar took place in the same place with about 30 YP’s attending from many countries. The seminar event consisted of the seminar and the technical visits. On 4 June, we visited the Kobe Port and observed the rehabilitation of RC 6/7 from the typhoon disaster hitting last year. It was supported by Kobe-Osaka International Port Corporation. Also, we visited local sake brewery in the afternoon to know Japanese traditional culture well.

On 5 June, we had a YP-seminar concurrently with the AGA. In the morning, participants from seven countries (USA, the Netherlands, Argentina, Spain, the Philippines, Korea and Japan) gave a presentation on the activities in each national YP-group in the context of the Best Performing YP Section Award. The first prize was awarded to Spain’s YP group. In the afternoon, four technical presentations and one keynote presentation were given.
As a network event, a futsal was organised in the evening of the third day to deepen the relations between YP’s.

In this seminar, YP’s from each country not only stimulated each other by sharing each activity, but also deepened friendships through technical visits, cultural tours and futsal.

In addition, on 14-15 November, the YP’s of Japan organised a site visit of Kagoshima Port and Ibusuki Coast. Kagoshima Prefecture has 131 ports, the largest number in Japan.

Before the site visit, they had seminars from YP’s: 1) Fluidised sand method for filling after pile remove, 2) Reliability of liquefaction and post-liquefaction properties data of hydraulic fill sampled from a reclaimed site, 3) Sedimentation simulation and the countermeasure, 4) Introduction of wave-dissipating block used in Ibusuki coast, 5) Bathymetry survey using green LiDAR mounted UAV.
They visited the new terminal for cruise ships at Kagoshima Port. The current 160,000-tonne berth will be changed to 220,000 tonnes, and another 160,000-tonne berth will be developed in 2021.

Ibusuki is an ‘Onsen town’ that is the famous for its sand baths. The hot spring groundwater is heating the beach sand and bathers are buried in the heated sand. However, the beach erosion has been severe. As the countermeasure, detached breakwaters, groins and shore protection are now being constructed and the beach will be nourished as not to affect the hot spring groundwater.

7.7.2.3 Singapore

As mentioned at the beginning of this YP-Com article, this year, the 7th Biennial Technical Visit (7th BTV) of the PIANC Young Professional Commission was held in Singapore with about twenty nationalities from all over the World.

The first day (Day 0) was dedicated to the YP-delegates who attended this event. Over ten countries were represented, including representations from Belgium, the Netherlands, Austria, Spain, Japan, South Korea, Singapore, Australia, New Zealand, Iran, USA, Brazil and Argentina. The day started with a visit to the Singapore Maritime Trail, where we embarked on a walking tour to learn about Singapore’s history of the maritime industry that dates back to the mid-1800’s.
After an enjoyable lunch hosted by Surbana Jurong, the YP-Delegates participated in the 31st YP-Com meeting in one of the Surbana Jurong’s meeting rooms. The day ended with a social event located at Bones and Barrels, with great appetizers and a great opportunity to mingle with the international delegates from all over the world.

The BTV kicked off on Day 1 at PSA Singapore with a series of world class technical presentations respectively from Dr. Song Tian Cheng of Maritime and Port Authority Singapore (MPA), Professor Ron Cox of PIANC and University of New South Wales (UNSW), Mr James Lam Pei Wei of Surbana Jurong, and Mr Youri Karelle of DEME Group. An interactive panel discussion ensued after the presentations whereby participants were given the opportunities to inquire the speakers from the floor.

Figure 21: YP-Delegates at the YP-Com Meeting in the Surbana Jurong Office
Figure 22: Discussion Panel during the Morning Technical Session at the MPA offices
Figure 23: Group picture of the attendees to the Day 1 Technical Sessions

After a delightful lunch hosted by PSA, the participants visited the Port Operations Control Centre (POCC) at PSA Vista. Following the briefing, the participants were given a private tour to observe the operation centre and Day 1 finally concluded with a visit to the Singapore Maritime Gallery which recently undergone a refurbishment and upgrade.

Day 2 was kicked off by YP-Com Chair Andy Thomas at the Suntec convention centre. The morning session was hosted by four keynote speakers: Prof. ir. Kees d’Angremond, Prof. Jasmine Lam Siu Lee (NTU Singapore), Mr Ricardo Van Den Berg (DMC) and Mr Mishra Koushik Kumar (Trelleborg), concluding all with a very interactive Q&A session, where the attentive audience had prepared quite some questions for all of the speakers.
The afternoon session of Day 2 was dedicated to speeches about innovations in waterborne transport of the Young Professionals. Eight members of PIANC YP-Com from Belgium, Singapore, Japan, US, Malaysia and Austria presented about their companies’ recent developments.

The topics covered a broad spectrum, but sustainability issues were a major focus within all the presentations, showing that PIANC Young Professionals are working for a better future. The session was followed by a podium discussion, which provided room for the many questions of the audience. In brief: it was a successful, highly interesting session. Many thanks to the presenters.

On Day 3, a visit to Jurong Port (JP) took place, which has the largest common-user Cement Terminal in the world. Yeo Ying Sze and her colleagues shared with us some of their innovations and initiatives in cement handling and cargo handling.

We were also given an overview of their green initiatives, such as how they are the world’s largest port-based solar panel facility and the construction of their Green berth, which uses recycled demolished concrete and ‘green’ materials. We also had a glimpse of their future plans, a Smart Multi Energy System where they can better monitor and control their energy usage and a Ready-mix concrete ecosystem which will be concentrating the various cement batching facilities at JP leading to land savings and reducing truck trips.

The visit then ended with a tour of the terminals in Jurong Port.

Towards the end of the event, on Thursday afternoon the visit at Project TUAS Terminals construction site took place. With these projects, the Singapore Port Authority will achieve, by 2040, the consolidation
of each container terminal of Singapore in a unique huge one with a capacity of 65,000,000 TEU. The TUAS Project Phase I, whose entire construction will be completed by December 2020 with almost 21 berths and a total capacity of 20,000,000 TEU, was firstly presented by reference professionals from several involved companies, as DEME Dredging International, Surbana Jurong and MPA Singapore (Maritime and Port Authority of Singapore) supplemented, additionally, with a site visit by boat whereby was possible the observation of the construction processes and the innovative applied construction equipment and methods.

![Figure 26: Group picture before starting the TUAS Terminal Site Visit on Day 3](image)

7.7.3 Europe-Africa

7.7.3.1 Belgium

Instead of the annual get-together of YP-Com at PIANC HQ in Brussels, this year, the meeting was hosted in the Port of Zeebrugge (https://www.portofzeebrugge.be/en) at the Belgian North-Sea coast. In the morning, Belgium’s National Section YP-Chairman, Frederik Sanders, working for the Port of Zeebrugge, gave a presentation on the port and its present and future works. Also, Frederik Buffel, PIANC Belgium Secretary, who is working for the Maritime Access Division of the Flemish Government, gave a talk on the future infrastructure projects and the ongoing lock programme in Belgium. After both interesting presentations, a site visit was organised to the Albert II-dock where a new quay wall was being constructed. The different phases of the works were explained and shown on site.

After lunch, we had a fruitful meeting with fifteen international participants (seven in Zeebrugge, eight online), being able to finish all topics on the agenda. The afternoon ended with a workshop on the YP-Com action plan.

In the evening, a yearly recurring event of the Belgian YP's took place, in which the present international YP-Com members participated: a culinary walk through a historical Belgian city, partly sponsored by PIANC Belgium. This year, this networking event took place in Bruges. About 30 Young Professionals gathered at the market square in Bruges, after which they were shown around town by two city guides. The walk took us to the historical centre of the city and offered three stops for aperitif, dinner and desert in three cosy local restaurants. The night ended with a nice Belgian beer, interesting talks and good laughter. A fruitful, interesting and nice day to look back at.
On 26 September, the Working Group Evening event took place. The evening started with a dinner in ‘de Ruif’ and continued afterwards with two presentations on WG’s that published their reports last year: WG 166 – ‘Inflatable Barriers in Hydraulic Engineering’ (MarCom) by Peter Jansen (RWS) and WG 159 – ‘Renewables and Energy Efficiency for Maritime Ports’ (EnviCom) by Alex Ruijs (RHDHV). Both presentations were presented by YP’s in which they shared their experience on being part of a WG. The presentations were very interesting, and vivid discussions arose with the audience. After the presentations and discussion there was plenty of time to enjoy some drinks and socialise.

Several days after, on 17 October, YP Belgium and YP Netherlands organised a site-visit to the locks of Terneuzen. After a nice coffee and ‘Zeeuwse Bolus’ the morning programme kick-started with a seminar with insightful presentations about the site visit that was going to happen.
The afternoon programme consisted of two parts in splitted groups: a boat ride around the locks of Terneuzen and a walk on the site, guided by people working on the project. The construction site was very impressive, with a lot of activities occurring on one site.

![Figure 30: Construction activities carried out at the same time captured during the site visit](image)

Finally, the day was ended with bitterballen and Belgian beer, a perfect blend of Dutch and Belgian culture. YP Netherlands and YP Belgium are looking back on a perfect day with 120 attendees and are looking forward to future collaborative events! We would like to thank the sponsors VNSC (Flemish & Dutch Government), Sassevaart (DEME, BAM & Van Laere), PIANC Belgium and PIANC Netherlands for making this event happen.

For all the international YP’s who made the effort to travel to Terneuzen, another activity was organised on 18 October: a visit on the trailing suction hopper dredge (TSHD) from DEME, working on the maintenance dredging for the River Scheldt, the gateway to the Port of Antwerpen. First, Filip van der Wiele, Project manager at DEME and YP-Com Delegate for Belgium, gave a presentation on the project in the head-office of DEME. Then, the YP’s geared up and launched the TSHD Pallieter while dredging and received a nice tour on board.

![Figure 31: Small group of YP’s during the TSHD visit](image)
Young PIANC Netherlands finished off the year with a great networking event with maritime partners organising the first edition of the Maritime Pubquiz. An enthusiastic group of 80 YP’s from Boskalis, Van Oord, Damen, Royal HaskoningDHV, Damen, KIVI and PIANC crushed their brains and pumped up their maritime knowledge in a bar in Rotterdam. Teams were mixed YP’s from different companies enabling maximum networking (and knowledge). After the pubquiz itself, the DJ started his music and dancing lasted till closure of the venue.

Figure 32: YP’s during the networking event to celebrate the end of the year in the Netherlands

7.7.3.3 Spain

Once again, the Spanish YP-Com organised its annual YP Technical Congress on 3-4 October in the Port of Maó, in Menorca (Spain).

This year, the Port of Maó has been chosen as the main economic agent and gateway to the service of the island of Menorca, which brings together a wide variety of traffic such as general cargo, Ro-Ro traffic and cruises, and, in addition, to a booming and strategic nautical sector for the revitalisation of its productive activity.

The day before the congress, a networking event took place with a large group of YP’s to spending time together enjoying the sunset from the Cova d’en Xoroi, a famous pub hung on the side wall of a cliff with amazing views.

Figure 33: Views from the Cova d’en Xoroi in Menorca, during the Networking Event for YP’s on 2 October
On 3 October, the technical conference was kicked off with topics like composite section piles for the new LNG terminal at the Açú Port, soil treatment strategies using small-diameter technique or geotechnical and geophysical studies for floating wind farms and fixed base mills foundations that were part of more than twenty presentations shared with more than eighty attendees to the Congress.

During the two-day congress, the attendees also had the opportunity to participate in a technical visit to the facilities of the port of Maó itself and to know its current operation activities and infrastructure under construction. At the end of this boat trip, a tour took place inside the famous Isabel II Fort (colloquially called ‘La Mola’) where an official dinner for all the Young Professionals was celebrated in an amazing scenario.
7.7.3.4 United Kingdom

In mid-September, six Young Professionals joined us in the ICE HQ in Westminster London to present at the annual PIANC YP Seminar series.

An overview of the speakers and their presentations is as follows:

- Andy Symonds (Port and Coastal Solutions) presented on the analysis and challenges he experienced on his project to dredge in the Great Barrier Reef World Heritage area so as to avoid or reduce sedimentation of ports.
- Matt Greaves (Royal HaskoningDHV) presented on his experience working on the Teesport (UK) No. 1 Quay berth deepening and reconstruction project. Matt covered aspects including the structural monitoring, demolition of the 1960s post tensioned structure and reconstruction of a new suspended deck quay.
- Siobhan Vaughan (Royal HaskoningDHV) and Tristan Banks (HOP Consulting) gave two presentations on the history and present maintenance campaign on the breakwater at Brighton Marina (UK). The Marina is formed of a series of cylindrical RC caissons and was constructed in the 1970s.
• Graham Gatherwood (Beckett Rankine) spoke about the recent construction works at Wandsworth Pier, including the challenges encountered from feasibility, design and tender phases, through to construction.

• Brocque Preece (AqualisBraemar) presented a number of case studies pertinent to mooring loads generated by passing vessels. Driven by bulk AIS data, Brocque discussed his take on establishing a realistic design scenario with regard to passing vessel speed, distance and design vessel particulars.

After the seminar, the audience and speakers (joined by PIANC Chairman Greg Haigh) moved on to the Westminster Arms for a few pints and a catch-up.

Andrew Thomas  
Chairman of PIANC YP-Com

Eslie Vrolijk  
Co-Chair of PIANC YP-Com

Rodrigo Moltó  
Secretary of PIANC YP-Com
8 REPORT OF THE PROMOTION COMMISSION (PROCOM) 2019

8.1 Introduction

8.1.1 A Small Step for a Commission

ProCom was established in 2007 and co-chaired by the Secretary-General and a representative from a Platinum Partner throughout the years however not being a full commission with voting rights or dedicated chairperson.

As the marketing and communication activities of PIANC are central strategic topics, it became necessary to transform ProCom into a full Commission and to look for a Chairperson. A marketing background, good management and communication skills, as well as adhering to PIANC values were only some of the requirements.

With Anna-Lena Pahl, Marketing Manager at one of PIANC’s Platinum Partners, an ideal candidate was found, and she was appointed at the occasion of the 2019 PIANC Annual General Assembly (AGA) in Kobe, Japan. Being an active member of ProCom since 2018, Anna-Lena Pahl had the opportunity to get a deeper understanding of PIANC as an organisation and the crucial work its members do for the waterborne transport infrastructure. She will be sharing her marketing and communication skills, as well as her market insights both with PIANC and the ProCom team. “I am honoured that PIANC accepted my application to this position and would like to thank the Executive Committee, as well as the Council for their trust in my abilities. It is my ambition to further develop my responsibilities and to closer support the work of PIANC”.

8.1.2 A Giant Leap for PIANC

With ProCom being a full Commission with all its rights and duties, new members, new spirit within the team and a dedicated Chairperson, PIANC will benefit a lot from this step. The Commission members can now go ahead full steam.

ProCom’s objective is to increase the PIANC membership but at the same time to also improve the experience for our existing members. The extensive Promotional Programme will help to achieve the vision, mission and goals of the Association by, amongst others, improving the visibility of PIANC as an association and the networking among our members.

Besides others, our main tasks at the moment circulate around a closer co-operation with National Sections and the Technical Commissions to offer assistance and advice with individual marketing activities and to guarantee a uniform branding. Apart from print material, such as a flyer, we deal with the PIANC website, its social media accounts and membership benefits. Our Strategic Marketing Plan which is currently reviewed and updated guides our activities.

8.2 Our Crew

The ProCom team has changed throughout 2019:

• With Egbert van der Wal having been appointed as the new Chairperson for MarCom, he can no longer keep up his duties within ProCom. The Dutch Section is looking for a replacement.
• Reinhard Pfliegl from Austria has changed his research area and therefore resigned from his membership within ProCom.
• Laurent Luchez was welcomed as the new representative from France. He is replacing Mr Olivier Piet.
• Trelleborg sent in a new member: Paul Welling as intermediate and MeiLeng Lim as the current representative.
In total, we had seventeen members in 2019, including three members from PIANC Platinum Partners which allows a close co-operation with these partners, and three members from PIANC HQ, which is an absolute necessity for the work of the Commission.

These members are:

- Anna-Lena Pahl – **Chairperson** and Representative of ShibataFenderTeam
- Geert Van Cappellen – Belgium – Member and Secretary-General of PIANC
- Leen Weltens – Belgium – Member and Secretary at PIANC HQ
- An Van Schel – Belgium – Member and Secretary at PIANC HQ
- Neil Lawson – Australia – Member
- Hélène Masliah-Gilkarov – Austria – Member
- Hubert Fiers – Belgium – Member and Secretary of DEME
- Xiao Lei Liu – China – Member
- Olli Holm – Finland – Member
- Laurent Luchez – France – Member
- Hartmut Brühl – Germany – Member
- Sahar Mokhtari – Iran – Member/YP
- René Kolman – the Netherlands – Member and Representative of EnviCom
- Onno Musch – Norway – Member/YP
- Paul Welling/Meileng Lim – Singapore – Member and Representative of Trelleborg
- Christian De Meyer – UK – Member
- Rachel Grandpre – USA – Member/YP

### 8.3 Meetings

ProCom held two physical meetings during 2019: 2019-1 in January led by Co-Chairman Geert van Cappellen and 2019-2 in September, the first meeting led by newly appointed Chair Anna-Lena Pahl. 2019-1 focused on the progress of the Strategic Marketing Plan and various promotional topics.

2019-2 was held under the motto ‘Promotional Material – Decide and Move Forward’. The clear push forward was a good sign for the members to not get lost in details, but to come to a consent and decisions. The outcome was successful: a Code of Conduct will be established to guide our members through the right ethics of using our name and logo, but also to fight against the misuse by non-members. We furthermore reviewed the benefits of the different membership categories and currently work on an update and an extension. The co-operation with a PR agency was agreed to assist with several promotional texts.
8.4 Achievements

8.4.1 Flyer

The greatest achievement of the ProCom members was the launch of a new promotional flyer. The long-known ‘7 Reasons to Join PIANC’ have been restructured, rephrased, and adjusted to current developments such as climate change. Both ProCom members and ExCom members were very satisfied with the new material. It will be provided as a Word Document making it easy for National Sections to translate the document and use the flyer for local events. The flyer will only be printed when needed, a sustainable and forward-looking decision.

8.4.2 Online Figures

PIANC is active on different social media platforms, please see an overview below.

2040 followers on LinkedIn
https://www.linkedin.com/company/pianc-international/

619 followers on Twitter
https://twitter.com/PIANC1

899 followers on Facebook

In order to support each other, a list with social media accounts of our different Commissions and National Sections was created and shared within our community. It can be found on the PIANC SharePoint environment.
8.5 Where Does 2020 Lead Us?

The list of tasks is long and the ProCom team awaits a busy year. The Technical Commissions already signalled their need of assistance with several promotional tasks. Many activities which had to be postponed due to a lack of time or manpower, can now be approached. As active as 2019 ended, as active 2020 continues:

• closer co-operation with the Technical Commissions to be aware of their needs and to define supporting strategies
• closer co-operation with the Young Professionals to integrate their thoughts
• revision of existing material and evaluation of digital activities

All of our activities and initiatives do not work without assistance and implementation. National Sections are in most cases a direct and frequent contact to most of our members. Having active National Sections giving benefits to their local members, organising conferences and events, initiating networking sessions are a great leap for satisfied members which in return attract new members.

If you as a National Section/Qualifying Member seek advice, the ProCom Team is there to help you.

All the above would not have been possible without the excellent leading of ProCom during the last years by Co-Chairmen Geert van Cappellen and Hubert Fiers and by all the committed and motivated members of our Commission.

A great thank you goes out to you. Let’s keep up with our good spirit and confidently steer through the challenges of the future.

Anna-Lena Pahl
Chairperson of ProCom