



# PIANC INLAND NAVIGATION COMMISSION (INCOM)

PHILIPPE RIGO
(Prof Ulg, BE)
INCOM CHAIRMAN

AZHAR JAIMURZINA ECLAC/ CEPAL

JASNA MUSKATIROVIC
INCOM SECRETARY

LEONEL TEMER
INCOM MEMBER (ARG)

Smart Rivers 2017 - Pittsburg

Argentina

Austria

Austria

Belgium

Belgium

Brazil

Brazil

CCNR

Canada

Spain

Spain

UK

USA

USA

USA

Vietnam

China

Pittsburgh (USA), 18 -21 September 2017



## InCom members



## 32 Active members from Europe, Asia & America



Leonel Temer
Michael Fastenbauer
Jürgen Trögl
Jean-Michel Hiver
Stephen Devocht (YP)
Adalberto Tokarski
Jose Renato Ribas Fialho
Gernot Pauli
Jim Athanasiou
Wu Peng

Chairman Philippe Rigo



Secretary Jasna Muskatirovic



Fabio Zapata
Tero Sikio
Benoit Deleu
Fabrice Daly
Holger Schuttrumpf
Reza Saffari
Takahiro Sugano
Seung-Woo Kim
Otto Koedijk
Ricardo Obregon

Colombia
Finland
France
France
Germany
Iran
Japan
South Korea
The Netherlands
Peru



PIANC Inland Navigation Commission (InCom)

Ton Nu Thi Thanh Yen

Ljubisa Mihajlovic

Jim Sterling

Craig Philip

Jose E. Sanchez

Akula Nidarshan

Brian Ball (YP)

Ignacio Sanchidrian Vidal

Rodrigo Garcia Orera

Fran Littlewood (YP)

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# 12 InCom Active Working Groups



WG	Title	First meeting	Chairman
125	RIS Guidelines	2016	C. Willems
128	Alternative Bank Protection	2016	B. Soehngen
141	Design Guidelines for Inland Waterways (Ready)	2010	B. Soehngen
154	Mitre Gate Design and Operation (Ready)	2013	F. Joers
166	Inflatable Structures in Hydraulic Engineering (Ready)	2013	M. Gebhardt
173	Movable Bridges and Rolling Gates (Ready)	2013	T. Paulus
179	CEMT '92 Classification – Towards a New CEMT	2015	I. Ten Broeke
189	Fatigue of Hydraulic Steel Structures	2016	Dirk-Jan Peters
190	Corrosion Protection of Lock Equipment	2017	R. Wilson
191	<b>Composites for Hydraulic Structures</b>	2016	H. Ranga Rao
192	Automation and Remote Operation of Locks and Bridges	2016	L. Dejonckheere

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# 5 New InCom Working Groups (launched in 2017)



WG	Title	Established	Nominated Experts
197	Small Hydropower Plant in Waterways	2017	18
198	Saltwater Intrusion Mitigations and Technologies for Inland Waterways	2017	10
199	Health Monitoring for Port and Waterway Structures" (Joint InCom-MarCom Group)	2017	18
201	Development of a Proposal of Inland Waterway Classification for South America (Joint PIANC- CEPAL WG)	2017	About 20
203	Sustainable Inland Waterways A Guide for Waterways Managers on Social and Environmental Impacts	2017	Call for members



# WG 201 Development of a Proposal of Inland Waterway Classification for South America (Joint PIANC – CEPAL WG)





Based on the results PIANC-ECLAC-ANTAQ Workshop (Copedec Rio 2016)





#### Objective:

To develop a proposal and implementation strategy for a **common** inland waterway classification for South America, combining the knowledge of South American inland navigation experts, ECLAC and PIANC and taking into account the experience of other regions of the world

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# WG 201- Inland Waterway Classification for South America (Joint PIANC – Cepal Group)



### Pre-meeting questionnaire:

# 1) What are the main applications of a common South American inland waterway classification?

Common language for different stakeholders		Use of new technologies (RIS, AIS,)	?
Vessels design / Naval improvements	?	Facilitated access to financing of infrastructure projects	?
Support inland waterways policies and projects in Infrastructure development: planning, monitoring and identifying missing links and bottlenecks that should be prioritized.	?	Basis for investment decisions and cost estimates by Governments and shipping and transport industry	?
Increasing safety and ease of navigation by ensuring the orderly and efficient control and maintenance of waterways.	?	Planning of regional integration projects	?
Make information available as a guarantee for users that minimum dimensions will be respected		Identifying IWT competitiveness by laying down maximum vessel sizes, affecting navigation and transport costs.	?
Achieving a more sustainable use of inland waterways (and transport in general)	?	Other:	?

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## WG 201- Inland Waterway Classification for South America (Joint PIANC – Cepal Group)



#### Pre-meeting questionnaire:

# 2) What are the parameters that should be considered in inland waterway classification?

Waterway depth (min and average, per month)	?	Air clearance (bridge)	?
Navigability (level of difficulty)		Navigation obstacles/constraints (shallow passage, etc.)	?
Guaranteed a secured navigability all the year (% of time: 50%, 75%, 90%, 99%)	?	Availability of Ports and Terminal facilities with a multimodal platform	?
Guaranteed day and night navigation (with suitable traffic aids) : 24h/day	?	Availability of Vessel support / assistance services	?
Availability (or not) of waterways signs and markings, aids to navigation facilities, and River information services (RIS)	?	Existence flow control infrastructure as navigation weir and navigation locks, which limits ship sizes.	?
Vessel type (barge, convoy, seagoing), the tonnage and the vessel's dimensions (draft, beam, length)	?	Local wind, current & wave characteristics	?
Traffic Volume (tons or passengers) & Number of Vessels/day		Tides / Water level information services	?
Facilities for environment-friendly navigation	?	Other:	?



# InCom WG - Published Reports



WG 139.

Values of Inland Waterways (2016)



WG 156.

E-Navigation for Inland Waterways (2017)

**WG 154** 

Mitre Gate Design and Operation (2017)

→ WORKSHOP 6<sup>th</sup> Nov 2017 in Brussels







# InCom WG - Reports to be Published Soon



WG 141.

Design Guidelines for IW



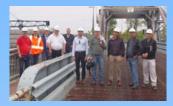
WG 166.

Inflatable Struct. in Hydraulic Engineering



**WG 173** 

Movable Bridges and Rolling Gates



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# InCom WGs on Navigation Locks



# Improved State of Arts in Navigation Locks PIANC proposes a series of integrated reports

- PIANC Report on Locks 1986 (state
- WG 106 Innovations in Navigation Lock Design (2009)
- WG 151 Impacts of seismic loads and ship impact on lock gates
- WG 155 Ship behavior in locks and lock approaches
- WG 173 Movable Bridges and Rolling Gates
- WG 189 Fatigue of Hydraulic Steel Structures
- WG 190 Corrosion Protection of Lock Equipment
- WG 191 Composites for Hydraulic Structures
- WG 192 Automation and remote operation of locks and bridges
- WG 198 Saltwater Intrusion Mitigations and Technologies for Inland Waterways
- WG 199 Health Monitoring for Port and Waterway Structures



# Panama, May 2017 PIANC Short Courses / Workshops



- □ Sustainable Inland Waterways (Values of IW)
- ☐ Innovations in Lock and Gate Design &
- □ Rolling Gates and Operational Machinery Process Design
- □ Salt Water Intrusion Mitigation Techniques
- □ Inflatable Structures in Hydraulic Engineering
- ☐ Transportation Logistic Systems

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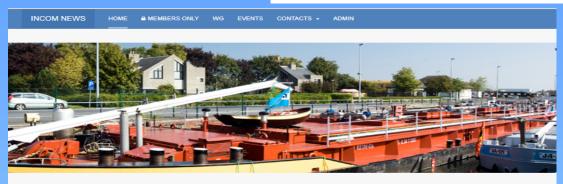
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# InCom Web Page



http://incomnews.org/



Welcome to the PIANC INCOM Commission web site

PIANC -ECLAC-ANTAQ WORKSHOP - COPEDEC 2016

Latest Events

InCom (Inland Navigation Commission) is one of the 4 international technical commissions of PIANC.

The InCom Commission focusses on Inland Navigation, Inland Waterways, River and Port Infrastructures, Inland Waterway transport and Logistics,





# PIANC INLAND NAVIGATION COMMISSION (INCOM) Thank you for your kind attention

PIANC Inland Navigation Commission (InCom)

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#### **Program**



The full program for Smart Rivers can be found at: http://smartrivers2017.busyconf.com/schedule

CONFERENCE PRINTED PROGRAM: PIANC-SMART Rivers Printed Program

Session A1 – AIS, Moderator Patricia DiJoseph

Inland Waterway Travel Time Atlas via AIS Data Analysis – Patricia DiJoseph, USACE

Voyage and Traffic Planning Services and the relevancy of AIS - Rold Hommes, Ensysbv

Using IENC data to support AIS - Daniel McBride, USACE

Using Public US Army Corps of Engineers Data for Waterway Performance Indicators – Steven Riley, USACE

Session A2 - River Information Systems - Moderator, Brian Tetreault

Providing e-Navigation on Inland Rivers with AIS - Gregory Johnson, USACE

Electronic Reporting and advanced River Information Services – Andreas Scherb, viadonau

RIS development in the United States – Juergen Troegl, viadonau

VisuRIS - Visualisation of RIS related information - Piet Creemers, Waterwegen

Session A3 – MTS Performance – Moderator, Marin Kress

Storytelling Big Data with Information Technologies - Forrest Vanderbilt, USACE

Indicators for Port Response and Recovery: A Case Study on Hurricane Matthew in the Southeast - Katherine Touzinsky, USACE

Evaluation of Supervised Learning to Identify Trends in Pittsburgh River Water Quality – Joe Zappitelli, University of Pittsburgh



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Framework for a Port Activities Scoring System – Douglas Scheffler, U.S. Coast Guard

Session A4 - Future eNav Directions - Moderator, Craig Philip

Electronic Navigation: The Future of Waterborne Shipping – Bethany Stich, the University of New Orleans

USACE IENC - An Overview of the IENC Program and Future Technical Directions - Dale Dodson, USACE

Results of PIANC Working Group 156 on e-Navigation for Inland Waterways - Dierik Vermeir, ALSIC

The next generation of the Guidelines for River Information Services (RIS) "PIANC WG125" - Cas Willems, Rijkswaterstatt

Session A5 - Data Collection & Dissemination Frameworks, Moderator, Eddie Wiggins

Analysis and Dissemination of Information in Support of e-Navigation – Joel Box, Gatehouse

eHydro: A USACE Enterprise GIS Navigation Support Program for Standardizing and Processing Hydrographic Surveys – Matthew Staley, USACE

Aiding Navigation through Centralizing information Dissemination – Alexandra Schafer, USACE

River Information Services Enterprise (RISE) – A Framework that Harmonizes the Collection, Integration, Exchange, Presentation, and Analysis of River Information Services within the U.S. Inland Waterways – Joseph Celano, TRABUS Technologies

Session A6 - Cooperation and Regulations, Moderator, Kevin Knight

Incentivizing contractors to deliver value for money and long-term performance leads to optimized designs for waterways - Douwe Hoornstra, Besix

Why Doesn't Anyone Compare Navigation Benefit/Cost Analysis Strategies? - Mark Carr, Channel Design Group

Keeper of the Danube: the facilitating role of the ICPDR – From Joint Statement on Navigation to the "MEETET" Activity – Helene Masliah-Gilkarov International Commission for the Danube River

Who should pay for Sediment Cleanup? - Jason Dittman, TIG Environmental

Session A7 – Recreational Navigation – Denise Soisson

Making The Nation's Largest Waterfront Redevelopment Real – The Trials and Tribulations of "The District Wharf" Project – Jessica McIntyre, Moffa & Nichol, USA

Risk, Reward and Resilience: Engineering Community Waterfronts for Extreme Events and Everyday Success – Margaret Boshek, SmithGroup JJF

Recreational Navigation Infrastructure Working with Nature – Esteban Biondi, Applied Technology & Management, Inc

Session A8 – Freight Flow – Moderator, Jeff Lillycrop

The Nautical Network Puzzle - how to build the (European) waterway network for RIS Corridor Management - Christopher Plasil, Viadonau

Modernization of Navigation Statistics Publishing - Dale Brown, USACE

Fluidity Analysis of Major Inland River Freight Corridors - Ned Mitchell, USACE

Session B1- Climate Change – Moderator, Anne Cann

Global Climate Change Action and the Transportation Sector: What is Happening Now and What to Expect – Leah Dundon, Vanderbilt University

Climate Change Adaptation: Why, What, and When? – Jan Brooke, United Kingdom

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Transboundary Climate Change Adaptation of the Largest European Inland Port Area – Niels Van Steenbergen, de Vlaamse Waterweg

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Carbon Management for Port and Navigation Infrastructure - Douglas Daugherty, Ramboll Environ

Session B2 - Engineering with Nature - Moderator, Todd Bridges

Engineering With Nature in Rivers - Todd Bridges, USACE

Coping with changing river morphology and its effect on navigation and the environment by Hans Piertersen, Rijkswaaterstat

Managing Environmental Risks of Navigation Infrastructure Projects: A PIANC Standard of Practice – Burton Suedel, USACE

Hydraulic Regulation of Canal del Dique, A Proposal of Integral Environmental Restoration – John Michael Polo Rodriguez

Session B3 - Engineering with Nature - Moderator, Todd Bridges

Building a smart river solution for climate adaptation: the room for the river program & Noordwaard case – Mindert de Vries, Deltares

Applying Working with Nature to Navigation Infrastructure Projects – Victor Magar, Ramboll Environ

Environmental Pool Management in the Upper Mississippi River: Managing Water Levels to the Benefit of both Navigation and the Environment – Edward Brauer, USACE

Capturing the Socio-Economic Payoff from Managing Rivers for Environmental Objectives - Kyle McKay, USACE

Session B4 - Regional Sediment Management Session, Moderator, Linda Lillycrop

Regional Sediment Management on Riverine and Reservoir Systems - Katherine Brutsche, USACE

Integrated Channel Maintenance Planning in the Lower Columbia River - John Hayes, USACE

Strategic Shoreline Placement from Coast to Coast, comparing the Kings Bay Entrance Channel, Florida and Georgia with the Columbia River, Oregon and Washington – Jase Ousley, USACE

Session B5 – Waterway Sustainability – Moderator, Emily Vuxton

Sustainable Management of the Upper Sea Scheldt, Self-dredging : Tidal River Training and Nature Conservation Put in Practice – Roeland Adams IMDC

City-wide green stormwater infrastructure sizing, siting, and cost effectiveness analysis – Michael Blackhurst, University of Pittsburgh

French Upper Rhone River Chautagne's double navigation ship lock an essential ecological integration by Franck Pressiat, Compagnie Nationale de Rhône

Sustainability and Resilience: A Methodology to Reduce Service Vulnerability on Inland Waterways – Thomas Wakeman, Stevens Institute of Technology

Session B6 - Environment, Moderator, Leah Dundon

Marine and Inland Waterborne Transportation System Resiliency: Status and Needs – Julie Rosati, USACE

Natural Infrastructure: Take me to the River by Matthew McCarty, McLaren

Connecting the Public to Big Data with Storytelling - Courtney Greenley, USACE

Waterborne Transport, Ports and Waterways: A Review of Climate Change Drivers, Impacts, Responses and Mitigation - Ron Cox, University of N

 $Session \ B7-Environment, \ Moderator, \ Ali \ Mitchell$ 

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Smarter River Management With Natural Decadal Climate Variability (Not Climate Change) - Harvey Hill, USACE

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Asian Carp Establishment in the Great Lakes: Challenges with Evaluating the Full Impacts - Dena Abou-El-Seoud, USACE

River Restoration Combined with Climate Adaptation in Denmark – Jes Kromann Bak, Ramboll Environ

Inundation Impacts of Local Sea Level Rise on the Lower Columbia River Estuary - Gaurav Savant, Dynamic Solutions LLC

Session B8 – Technology Improvements, Moderator, Fred Joers

Systems Analysis of the Behavior and Economic Impacts from the McClennan-Kerr Arkansas River Navigation System - Heather Nachtmann, Univ-

Robust Snapshot Positioning in Multi-Antenna Systems for Inland Water Applications - Christoph Lass, German Aerospace Center

Electronic Nautical Chart (ENC) Adaption in Pilot's Display in Order to Optimize River Navigation Safety and Efficiency - Kelly Hulse, Trelleborg Ma

Low Head hydro power: A UK perspective – Ian White, Ian White Associates

Session C1 - Inland Waterway Transport, Moderator, Juergen Troegl

The Rhone Traffic Management Center, 6 Years of Feedback – Jean-Louis Mathurin, CNR Engineering

Sulina Channel - Danube European Waterway Link to Black Sea - Victor Dumitrescu, Technical University of Bucharest

Assistance Systems for Close Range Navigation on Inland Waterways - Martin Sandler, In-innovative navigation GmbH

Linking Modal Shift to Inland Ports – Bruce Lambert, Institute for Trade and Transportation Studies

Session C2 – Latin American Waterways, Moderator, Ron Coles

Extreme Increase in Water Levels. Effects on the Paraguay – Paraná Inland Waterway – Raul Escalante, Hydrovia

Colombia Fluvial Master Plan – Jorge Enrique Saenz Samper, JESyCA SAS

The Human Factor Relevance in the Decision-making Process for Maneuvering a Vessel when Navigating in Inland Waters – LT Adriana Gom

Taming the Magdalena River: How a State-of-the-Art Model Can Take Common River Engineering Practices to the Next Level – Roeland Adar

Session C3 - Latin American Waterways, Moderator, Pablo Arecco

Incidence of the New Bridge Construction Over the Magdalena River in Barranquilla, Colombia, on the Hydraulic Conditions, – Jorge Enrique Saenz Samper, JESyCA SAS

Adaptive Port Planning for an new multipurpose terminal on the Parana River, Campana, Argentina - Pablo Arecco, Besna

Session C4 – InCom Working Groups, Moderator, Phillipe Rigo

PIANC Inland Navigation Commission: Presentation of New Working Groups - Philippe Rigo, University of Liege

PIANC WG 173 Rolling Gate and Movable Bridge Report - Timothy Paulus, USACE

All about Mitre Gates - PIANC Report No. 154 Overview - Eric Johnson, USACE

PIANC work group 192 'Developments in the Automation and Remote Operation of Locks and Bridges' - Lieven Dejonckheerem, Zeek:



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Session C5 - Inland Waterway Transport, Moderator, Rich Lockwood

Potentials and Barriers of Inland Waterway Transport in the Baltic Region – Lisa-Maria Putz, University of Applied Sciences Upper Austria – Logistikum, Austria

Ohio River Basin Energy Commodity Trends - Marin Kress, USACE

CoVadem, What you measure, you won't improve - Meeuwis van Wirdum, CoVadem at MARIN

LNG, a New Fuel for Inland Waterway Transport – Unmet Expectations, Lessons Learned – Benjamin Boyer, Central Commission for Navigation of the Rhine

Session C6 - Waterway Transportation, Moderator, Jessica McIntyre

Water Depth Prediction for Optimizing the IWT sector- Rollen van der Mark, Deltares

RamS Analyses for the Next Generation of Waterways – Xavier Pascual, SENER Engineering and Systems

Utilization of Marine Highway 95 for Integrated Marine Transportation on the U.S. Atlantic Coast – Brad Pickel, Atlantic Intracoastal Waterway Association

Red River Delta Waterway Modernization (Vietnam) - Frank Pressiat, Compagnie Nationale du Rhone

Session C7 - IWRM, Moderator, Rex Woodward

Computations of Economic Impacts of Coastal Navigation – Forrest Vanderbilt, USACE

Watertruck + - Johan Boonen, Antwerp Management School

Economical Model of inland waterways in European multimodal corridors - Nicolas Bour, Voies Navigables de France

Hydraulic, Morphological and Ecological Effects of Longitudinal Training Dams – Ralph Schielen, Rijkswaterstaat

Session C8 - Lock Maintenance, Moderator, Helene Masliah-Gilkarov

Effects of Quoin Block Deterioration on Quoin Post and Thrust Diaphragm on Horizontally Framed Miter Gates - Guillermo Riveros, USACE

Analyzing Lock Maintenance Needs - Steven Riley, USACE

Extended System Wide Lock Maintenance that Users Can Support – Sheryl Carrubba, USACE

Optihubs - Optimization of container terminals through simulation - Daniel Elias, nast consulting

 $Session \ D1-Structural \ Health \ Monitoring-Moderator, \ Matt \ Smith$ 

USACE SMART Gate: Toward an Automated Damage Detection System for Navigation Locks – Brian Eick, USACE

Nondestructive Evaluation of Aging Lock Monoliths - Robert F. Lindyberg, FDH Velocitel

Utilization of SHM Methodologies to Detect Trunnion Friction in Tainter Gates - Quincy Alexander, USACE

Medium Range Underwater Wireless Communication for USACE Infrastructure – Anton Netchaev, USACE

Session D2 - IWRM - Moderator, Helen Brohl

Sedimentation control behind a multipurpose tidal hydropower dam on the Rance river estuary – Geoffroy Caude, High Council on Sustainable Development and Environment

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Task Group 181 - The State of the World's Waterborne Transport Infrastructure - Nick Pansic, Stantec

The Florida Inland Navigation District: Sustainable Statewide Waterway Management - William Aley, Taylor Engineering

Strategies for waterway management in highly protected areas – Hans-Peter Hasenbichler, viadonau

Session D3 – Structural Health Monitoring – Moderator, Quincy Alexander

Structural Health Monitoring for Water Resources Infrastructure – Matthew Smith, USACE

The Internet of Big Things; Acquiring Data from Vital Infrastructural Assets in a Safe and Uniform Way - Therry van der Burgt, Rijkswaterstaat

How do Riverports Align Actions with Goals? A Smart Approach to River Port Asset Management - Elizabeth Burkhart, Collins Engineers

Smart Waterway Infrastructure - Structural Health Monitoring - Therry van der Burgt, Rijkswaterstaat

Session D4 - Infrastructure and Vessel Interation - Moderator, Liz Burkhart

Intelligent Hands-Free Mooring On the Saint Lawrence Seaway – David Brittain, Bergmann Associates

Improving Performance of Inland Ships with Hull Optimizations, Benefits and Pitfalls – Wytze de Boer, MARIN – Maritime Research Institute

Olmsted Dam Construction Project Innovative Design: Heavy Lift Catamaran Barge – Kyle Beattie, Glosten

Real Time Mooring Line Tension Monitoring at High Current Sites - Rune Iversen, Simpson Gumpertz & Heger

Session D5 – Infrastructure Lock Design Innovations – Moderator, John Clarkson

Use of a Navigation Lock as a barrier against the spread of invasive species – Allen Hammack, USACE

Evaluation of Different Construction Types for Lock Chambers - Claus Kunz, Bundesanstalt fuer Wasserbau (BAW)

Renovation of weirs in the Lower Rhine and Lek computational models as support for weir operations in off-design conditions – Arne van der Hout, Deltares

Numerical Investigation of Salinity Effects in Locks - Carsten Thorenz, Federal Waterways Engineering and Research Institute (BAW)

Session D6 – Infrastructure Design Innovations, Moderator, Denise Soisson

FRP Composite Structures in the U.S. Inland Waterways – Piyush Soti, West Virginia University

Glass Fiber-Reinforced Polymer Composite Wicket Gates for Chanoine Type Wicket Dams - Jonathan Trovillion, USACE

USACE Standardization of Navigation Infrastructure – Andy Harkness, USACE

Current research with navigation lock culvert valves - Allen Hammack, USACE

Session D7 – Infrastructure Design Innovations – Moderator, Andy Harkness

New Lock of IJmuiden - Physical Scale Model of the World's Largest Lock - Arne van der Hout, Deltares

Infrastructure, Innovation and Standardization: A look at How One Lock Closure at Montgomery L&D Led to an Innovation in Standardization of Critical Lock Closure Components – Josh Nickel, USACE

Key Technologies for Reconstruction of Navigation Obstruction Structures –Design Overview of Reconstruction Project of Fuchunjiang Ship Lock – Guoqiang Jin, Zhejiang Provincial Institute of Communications Planning, Design & Research

WG166 "Inflatable Structures in Hydraulic Engineering" – A Successful Application of Inflatable Gates at Waterways – Michael Gebhard Waterways Engineering and Research Institute



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Session D8 - Infrastructure, Moderator, Jim Athanasiou

Simple Lock Operations Improvements – Stuart Foltz, USACE

Expert-System for Automatically Managing High Water Levels with Smart Infrastructure – Jean-Mallory Rousseau, Voies Navigables de France

Miter Gate Embedded Anchorage Soo Locks - Paul Surace, USACE

Reduced Dredging in a Lock Entrance – David Abraham, USACE

#### **Program**

#### **Monday September 18th**

12 noon – 8 PM Registration Opens (Lobby)

8 AM- 12 PM Short Courses (Second Floor)

5-8 PM Exhibit Hall Open (Admiral Room)

1:30 PM - 4:00 PM Carnegie Mellon Technology Tour (buses load at 1:00)

6-8 PM Welcome Reception and Poster Session in Exhibit Hall, Sponsored by Port of Pittsburgh (Reflections, Admiral and Waterf Rooms)

#### **Tuesday September 19th**

7:30- 8:30 AM Continental Breakfast (Exhibit Hall)

7:30-5 PM Exhibit Hall Open

8:30-10 AM Opening Plenary (Grand Station I-II)

Speakers:



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Rear Admiral Paul F. Thomas, Commander, Eighth Coast Guard District, U.S. Coast Guard

Rear Admiral Paul Thomas serves as the Commander, Eighth Coast Guard District headquartered in New Orleans, and is responsil for Coast Guard operations spanning 26 states, including the Gulf of Mexico coastline from Florida to Mexico, the adjacent offshore waters and outer continental shelf, and the inland waterways of the Mississippi, Ohio, Missouri, Illinois and Tennessee River system

His previous Flag assignment was as the Assistant Commandant for Prevention Policy where he was responsible for oversight and program management for all Coast guard navigation services, boating safety, ports and facilities, waterways management, merchar mariner credentialing, vessel documentation, marine casualty investigation, commercial vessel inspections, and port state control.

A specialist in Marine Safety, Security and Environmental Protection he has served at the Marine Safety Center in Washington DC, Marine Safety Office San Francisco Bay, CA., Marine Safety Detachment Port Canaveral, FL, and Marine Safety Office Jacksonville Fl. He has also served as Commanding Officer of Marine Safety Unit Galveston, TX, Commander Coast Guard Sector Jacksonville FL. and as the Director of Inspections and Compliance at Coast Guard Headquarters

His other tours include Fifth Coast Guard District Chief of Staff, Executive Assistant to the Assistant Commandant for Marine Safety Security and Stewardship, Military Assistant to the Director of Net Assessment in the Office of the Secretary of Defense, Commandi Office in USCGC CAPE ROMAIN and Operations Officer in USCGC BLACKHAW.

Rear Admiral Thomas is a graduate of the US Coast Guard Academy and the Massachusetts Institute of Technology. In 2005 he completed a National Security Fellowship at Harvard University's John F. Kennedy School of Government, and in 2010 he served a Senior Fellow to the Chief of Naval Operations Strategic Studies Group (SSG XXIX). He is also an alumnus of Harvard's National Preparedness Leadership Initiative. His military awards include the Legion of Merit, Meritorious Service Medal, Coast Guard Commendation Medal, Transportation 9/11 Medal, Joint Service Commendation Medal and the Coast Guard Achievement Medal.

He and his wife, Dr. Mary Thomas, DVM, have one son, Erik.

Other Morning Plenary Presentations:

PIANC Congress 2018 - Rogelio Gordon, Panama Canal Authority

10-10:30 AM Morning Break (Admiral Room)

10:30 AM-12 PM Technical Breakout Sessions (Lobby Level and Second Floor)

12-1:30 PM Lunch on your own



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1:30-3 PM Technical Breakout Sessions (Lobby Level and Second Floor)

3-3:30 PM Afternoon Break (Admiral Room)

3:30 PM-5 PM Technical Breakout Sessions (Lobby Level and Second Floor)

5-7 PM Young Professional Networking Reception, Sponsored by Viadonau (Texas de Brazil, 240 W. Station Square Drive, Suite D Pittsburgh, PA 15219)

7-10 PM Pittsburgh Pirates Baseball Game (at own expense)

#### Wednesday September 20th

7:30-8:30 AM Continental Breakfast (Exhibit Hall)

7:30-5 PM Exhibit Hall Open

8:30-10 AM Technical Breakout Sessions (Lobby Level and Second Floor)

10-10:30 AM Morning Break (Admiral Room), Sponsored by MarTrec, Maritime Transportation Research & Education Center

10:30 AM-12 PM Technical Breakout Sessions (Lobby Level and Second Floor)

12-1:30 PM Seated Luncheon with Keynote Speaker – Mr. Jorge Duran, Chief of the Secretariat, Inter-American Committee on Porl (CIP), Organization of American States, "Latin America and the Caribbean: Competitiveness, Logistics, Port Infrastructure and Waterways" (Grand Station I-II)



#### Jorge Durán

For close to 30 years, Jorge Duran has worked with the governments and private sector of the Americas in the design and implementation of development projects in Latin America and the Caribbean. Since 2003 Mr. Duran has served at the Organization American States (OAS) as Senior Advisor in Technology for Development, Senior Manager for Municipal Development and Capacit Building, in 2012 as Chief of the Office of Science, Technology and Innovation and, since 2013, as Chief of the Secretariat of the Interior Committee on Ports (CIP) of the Executive Secretariat for Integral Development (SEDI).

Previously, Mr. Duran was Director of Regional Cooperation (1995-2000) and then Vice-President of International Affairs (2000-200 at the Latin American Institute of Educational Communication (ILCE) in Mexico City. Other positions include Advisor in Science and Technology Policy for the Presidency of Mexico (1990-1992) and Special Assistant to the Mexican Ambassador at the U.N. (1994).

Mr. Duran has also been an Associate Professor at the Tecnológico of Monterrey (1997-2000) and the Universidad Iberoamericana (1995-1997) where he designed and taught courses in Latin America's Political Economy and History. Mr. Duran has Masters' Degrees, in International Affairs and Science and Technology Policy, from The George Washington University and a double major in

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Psychology and Latin American Studies from The American University in Washington DC where he currently resides with his two daughters.

1:30-3 PM Technical Breakout Sessions (Lobby Level and Second Floor)

3-3:30 PM Afternoon Break, Sponsored by Stantec (Admiral Room)

3:30-5 PM Technical Breakout Sessions (Lobby Level and Second Floor)

5:30-10 PM Dinner Cruise on the Gateway Clipper to Allegheny Lock 2 and Platypus Demonstration (Meet at Dock next to Hotel)

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#### **Thursday September 21th**

7:30-8:30 AM Continental Breakfast (Exhibit Hall)

7:30 AM-12 PM Exhibit Hall Open

8:30-10 AM Technical Breakout Sessions (Lobby Level and Second Floor)

10-10:30 AM Morning Break (Admiral Room)

10:30-12 PM Closing Plenary with Keynote Speaker

Speakers:

"Inland river transportation in China: Current and Future Trends"



Dr. Ying-En (Ethan) Ge, since December 2013, has been Professor and Dean of the College of Transport & Communications at the Shanghai Maritime University (SMU), China. He was awarded his PhD degree in Tongji University in 1999. Before joining the Daliar University of Technology in the Spring of 2010 as a professor, he was first Research Assistant at The Hong Kong Polytechnic University, then postdoctoral researcher at the University of California at Davis (2000 – 2001) and subsequently research fellow in Tuniversity of Ulster (2001 – 2003), The Queen's University of Belfast (2003 – 2006) and Edinburgh Napier University (200 – 208) worked in transport consulting arena in 2008-2010.

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His primary academic interests include transportation network analysis, transportation & environment, and operations and managen of ports & shipping. His publications appear in Transportation Science, Transportation Research Parts B & D, Networks and Spatial Economics, as so on. He serves as associate editor of Transportmetrica (B, transport dynamics) journals, and is a member of the editorial boards of Transport Policy, Transportation Research Part D: Transport and Environment, Transport, Transportation Information and Safety, and Journal of the Shanghai Maritime University. Over the years he also served as the Executive Chair of the 6th International Symposium on Travel Demand Management (TDM2013), the Chair of the Organizing Committee of the 6th Transporta Research Forum (Shanghai, 2015), and the 16th COTA International Conference of Transportation Professionals (CICTP2016). He also a member of the Executive Committee of the World Transportation Conference to be held in Beijing in June 2017.

Other Closing Plenary Presentations:

Sailing to « SMART RIVERS 2019 », Lyon (France) september 30 to october 03, 2019- Jean-Louis Mathurin, CNR Engineering

SMART Rivers: What did we hear? What were the primary takeaways? - Jeff Lillycrop, USACE

Welcome to Shanghai Maritime University – Youfang Huang, Shanghai Maritime University



