



## Inland Navigation Commission (InCom)

Year	WG Number	Title
1984	InCom WG 1	Economic implications of inland waterway development
1987	InCom WG 4	Guidelines for the design and construction of flexible revetments incorporating geotextiles for inland waterways
1987	InCom WG 3	Risk consideration when determining bank protection requirements
1989	InCom WG lifts	Ship lifts – Study Commission
1990	InCom WG 10	Supervision and control of long lateral embankments
1990	InCom WG 7	Management of dredged material from inland waterways
1990	InCom WG 8	Automatic management of canalised waterways and its hydraulic problems
1990	InCom WG 9	Standardization of inland waterway's dimensions
1991	InCom WG 11	Analysis of cost of operating vessels on inland waterways
1992	InCom WG 5	Container transport with inland vessels
1993	InCom WG 6	Problems created by saltwater infiltration
1996	InCom WG 17	Handling and treatment of contaminated dredged material from ports and inland waterways <b>Vol. 1</b>
1996	InCom WG 16	Standardization of ships and inland waterways for river/sea navigation
1996	InCom WG 12	Reinforced vegetative bank protections utilising geotextiles
1996	InCom WG 18	Advanced and automated operation of locks and bridges
1998	InCom WG 17	Handling and treatment of contaminated dredged material from ports and inland waterways <b>Vol 1 and 2</b>
1999	InCom WG 20	Factors involved in standardising the dimensions of class Vb inland waterways (canals)
1999	InCom WG 14	Inland waterways vessels and pollution
2001	InCom WG 19	Ship Collisions due to the presence of bridges
2002	InCom WG 24	Vessel Traffic and Transport Management in the Inland Waterways and Modern Information Systems
2004	InCom WG 24-2004	Guidelines and Recommendations for River Information Services
2004	InCom WG 23	Technical and Economic Problems of Channel Icing
2005	InCom WG 21	Economic Aspects of Inland Waterways
2006	InCom WG 26	Design of Movable Weirs and Storm Surge Barriers
2006	InCom WG 25	Maintenance and Renovation of Navigation Infrastructure
2008	InCom WG 96	Developments in the automation and remote operation of locks and bridges
2008	InCom WG 99	Considerations to reduce environmental impacts of vessels
2009	InCom WG 106	Innovations in navigation lock design

2010	InCom WG 110	Governance Organisation and Management of River Ports
2010	InCom WG 111	Performance Indicators for Inland Waterways Transport – User Guideline
2012	InCom WG 125/I-2012	The Implementation Status of River Information Services status 2010
2012	InCom WG 125/II-2012	RIS Related Definitions
2012	InCom WG 125/III-2012	Guidelines and Recommendations for River Information Services
2013	InCom WG 127	Fish Passage
2013	InCom WG 119	Inventory of inspection and repair techniques of navigation structures
2013	InCom WG 129	Waterway Infrastructure Asset Maintenance Management
2014	InCom WG 151/I	Design of Lock Gates for Ship Collision
2014	InCom WG 137	Navigation Structures: Their Role within Flood Defence Systems - Resilience and Performance under Overloading Conditions
2014	InCom WG 138	Mechanical and Electrical Engineering Lessons Learnt from Navigation Structures
2014	InCom WG 155	Ship Behaviour in Locks and Lock Approaches
2015	InCom WG 140	Semi-Probabilistic Design Concept for Inland Hydraulic Structures
2016	InCom WG 151/II	Design of Lock Gates under Seismic Actions
2016	InCom WG 139	Values for Inland Waterways
2017	InCom WG 156	E-Navigation for Inland Waterways 2017
2017	InCom WG 154	Mitre Gate Design and Operation
2017	InCom WG 173	Movable Bridges and Rolling Gates Design, Maintenance and Operation – Lessons learnt
2018	InCom WG 166	Inflatable Structures in Hydraulic Engineering
2019	InCom WG 141	Design Guidelines for Inland Waterway Dimensions
2019	InCom TG 204	Awareness Paper on Cybersecurity in Inland Navigation
2019	InCom PWG 125/I-2019	Guidelines and Recommendations for River Information Services
2019	InCom PWG 125/II-2019	Technical report on the status of River Information Services
2019	InCom PWG 125/III-2019	RIS Related Definitions
2019	InCom WG 192	Report on the Developments in the Automation and Remote Operation of Locks and Bridges
2020	InCom WG 189	Fatigue of Hydraulic Steel Structures
2020	InCom WG 191	Composites for Hydraulic Structures
2020	InCom WG 179	Standardisation of Inland Waterways - Proposal for the Revision of the ECMT 1992 Classification
2020	InCom WG 201	Framework for an Inland Waterway Classification in South America
2021	InCom WG 197	Small Hydro Power Plant in Waterways
2021	InCom WG 198	Saltwater Intrusion Mitigation in Inland Waterways
2022	InCom WG 210	Smart Shipping on Inland Waterways
2023	InCom TG 234	Infrastructure for the Decarbonisation of Inland Waterway Transport
2023	InCom WG 203	Sustainable Inland Waterways - A Guide for Inland Waterway Managers on Social and Environmental Impacts
2023	InCom WG 199	Health and Monitoring of Port and Waterways Structures

2023	InCom WG 203	Sustainable Inland Waterways – A Guide for Inland Waterway Managers on Social and Environmental Impacts
2023	InCom WG 246	Guidelines and Recommendations for River Information Services
2023	InCom WG 207	Innovations in Ship Lift Navigation Concepts
2023	InCom WG 216	Best Practices in Planning and Management of Multimodal Logistics Platforms along Inland Waterways
2024	InCom WG 241	Crisis Management of Accidents in Navigation Hydraulic Structures
2024	InCom WG 229	Guidelines for Air Pollutants and Carbon Emissions Performance Indicators for Inland Waterways
2024	InCom WG 190	Coating Based Corrosion Mitigation for Hydraulic Steel Gates
2024	InCom WG 236	Sustainable Management of the Navigability of Natural Rivers
2025	InCom WG 128/1	Technical-Biological Bank Protections for Inland Waterways – Part 1: Basics of a Best Practice Approach
2025	InCom WG 128/2	Technical-Biological Bank Protections for Inland Waterways – Part 2: Library of Measures
2025	InCom WG 128/3	Technical-Biological Bank Protections for Inland Waterways – Part 3: Decision Support Advice
2025	InCom WG 219	Guidelines for Inland Waterways Infrastructure to Facilitate Tourism
2025	InCom WG 228	Extended Values of 'Low-Use' Inland Waterways
2025	InCom WG 237	Bottlenecks and Best Practices of Transport of Containers on Inland Waterways
2025	InCom WG 206	Design of Navigation Locks

## Maritime Navigation Commission (MarCom)

Year	WG Number	Title
1983	MarCom WG 3a	Navigation in muddy areas
1984	MarCom WG 3	Ice navigation
1984	MarCom WG 6	Classification of soils and rocks to be dredged
1985	MarCom WG 2	The stability of rubble mound breakwaters in deeper water
1985	MarCom WG 4	Dangerous goods in ports – Recommendations for port designers and port operators
1985	MarCom WG 5	Underkeel clearance for large ships in maritime fairways with hard bottom
1986	MarCom WG 10	Disposal of dredged material at sea
1987	MarCom WG 9	Development of modern marine terminals
1988	MarCom WG 15	Dry docks
1989	MarCom WG 14	Economic methods of channel maintenance
1990	MarCom WG 8	The damage inflicted by ships with bulbous bows on underwater structures
1990	MarCom WG 17	Inspection, maintenance and repair of maritime structures exposed to material degradation caused by a salt water environment
2003	MarCom WG 17-2004	Inspection, maintenance and repair of maritime structures exposed to material degradation caused by a salt water environment – revision MarCom 17

1992	MarCom WG 19	Beneficial uses of dredged material – A practical guide
1992	MarCom WG 20	Capability of ship manoeuvring simulation models for approach channels and fairways in harbours
1992	MarCom WG 12	Analysis of rubble mound breakwaters
	MarCom WG 12 AF	Reports of subgroups A to F of W.G. 12 report (7 vol.)
1992	MarCom WG 21	Guidelines for the design and construction of flexible revetments incorporating geotextiles in marine environment
1994	MarCom WG 13	Floating breakwaters – A practical guide for design and construction
1995	MarCom WG 11	Port facilities for ferries – Practical guide
1995	MarCom WG 30 (1)	Approach channels – Preliminary guidelines – JOINT PIANC-IAPH REP.
1995	MarCom WG 24	Criteria for movements of moored ships in harbours – A practical guide
1997	MarCom WG 30 (2)	Approach Channels – A Guide for Design – JOINT PIANC-IAPH REPORT
1997	MarCom WG 22	Guidelines for the design of armoured slopes under open piled quay walls
1998	MarCom WG 18	Planning of fishing ports
1998	MarCom WG 31	Life Cycle Management of Port Structures-General Principles
2000	MarCom WG 23	Site investigation requirements for dredging works
2000	MarCom WG 35	Dangerous cargoes in ports
2001	MarCom WG 34	Seismic Design Guidelines for port structures
2002	MarCom WG 33	Guidelines for the Design of Fenders Systems: 2002
2003	MarCom WG 40	State-of-the-Art of designing and constructing berm breakwaters
2003	MarCom WG 28	Breakwaters with vertical and inclined concrete walls
2003	MarCom WG 41	Guidelines for Managing Wake Wash from high-speed Vessels
2005	MarCom WG 36	Catalogue of Prefabricated Elements
2005	MarCom WG 44	Accelerated Low Water Corrosion
2008	MarCom WG 102	Minimising Siltation in Harbours
2008	MarCom WG 103	Life Cycle Management of Port Structures; recommended practice for implementation
2010	MarCom WG 112	Mitigation of tsunami disasters in Ports
2011	MarCom WG 113	The Application of Geosynthetics in Waterfront Areas
2011	MarCom WG 114	The Stability of Pattern Placed Revetment Blocks
2012	MarCom WG 115	Criteria for the (un)loading of container ships
2012	MarCom WG 116	Safety aspects of berthing operations of oil and gas tankers
2012	MarCom WG 117	Use of hydro/meteo information to optimize safe ports access
2013	MarCom WG 118	Direct access to maritime ports by adapted inland waterway vessels
2013	MarCom WG 120	Water injection dredging
2014	MarCom WG 121	Harbour Approach Channels Design Guidelines
2014	MarCom WG 122	Tsunami Disasters in Ports due to the Great East Japan Earthquake
2014	MarCom WG 135	Design Principles for Small and Medium Marine Container Terminals

2014	MarCom WG 158	Masterplans for the development of existing ports
2014	MarCom WG 144	Classification of Soils and Rocks for the Maritime Dredging Process
2014	MarCom WG 180	Guidelines for Port Constructions Related to Bow Thrusters
2015	MarCom WG 165	Design and Maintenance of Container Terminal Pavements
2016	MarCom WG 144	Classification of Soils and Rocks for the Maritime Dredging Process
2016	MarCom WG 152	Guidelines for Cruise Terminals
2016	MarCom WG 153	Recommendations for the Design and Assessment of Marine Oil and Petrochemical Terminals
2016	MarCom WG 172	Design of Small to Mid-Scale Marine LNG Terminals including Bunkering
2016	MarCom WG 162	Recommendations for Increased Durability and Service Life of New Marine Concrete Infrastructure
2016	MarCom WG 196	Criteria for the Selection of Breakwater Types and their Related Optimum Safety Levels
2017	MarCom WG 144	Classification for Soils and Rocks for the Maritime Dredging Process
2018	MarCom WG 161	Interaction Between Offshore Wind Farms and Maritime Navigation
2019	MarCom WG 184	Design Principles for Dry Bulk Marine Terminals
2019	MarCom WG 159	Renewals and Energy Efficiency for Maritime Ports
2019	MarCom WG 185	Ports on Greenfield Sites – Guidelines for Site Selection and Masterplanning
2020	MarCom WG 145	Berthing velocity analysis of seagoing vessels over 30,000 dwt
2021	MarCom WG 208	Planning for Automation of Container Terminals
2022	MarCom WG 194	A Framework for Early Contractor Involvement In Infrastructure Projects
2022	MarCom WG 153B	Recommendations for the Design and Assessment of Marine Oil, Gas and Petrochemical Terminals.
2022	MarCom WG 235	Ship Dimensions and Data for Design of Marine Infrastructure
2022	MarCom WG 235	Ship Dimensions and Data for Design of Marine Infrastructure' - Appendix A: Vessel Data Spreadsheet Tables
2023	MarCom WG 200	Recommendations for the Design and Assessment of Single Point (SPM) and Multi Point Mooring (MPM) Facilities
2023	MarCom WG 212	Criteria for Acceptable Movement of Ships at Berths
2023	MarCom WG 167	The Design of Terminals for RoRo and RoPax Vessels
2024	MarCom WG 211	PIANC Fender Guidelines 2024
2025	MarCom WG 186	Mooring of large ships at quay walls
2025	MarCom WG 224	Planning of Fishing Ports
2025	MarCom WG 213	Design Guidelines for Marine Multipurpose Terminals
2025	MarCom WG 153 C	Recommendations for the Design and Assessment of Liquid and Gas Marine Terminals Handling Fossil-Based and Clean Alternative Fuels and Cargoes
2026	MarCom WG 215	Accidental Impacts from Ships on Fixed Structures

## Environmental Commission (EnviCom)

Year	WG Number	Title
1997	DMMG	Dredged material management guide
1999	EnviCom WG 1	Management of aquatic disposal of dredged material
1999	DTF	Dredging: the facts – JOINT PIANC-IADC-CEDA-IAPH-WODA BROCHURE
1999	EnviCom WG 4	Environmental management framework for ports and related industries
2000	EnviCom WG 3	Glossary of environmental terms and terminology as related to PIANC activities
2001	DTEF	Dredging: The environmental facts
2005	EnviCom WG 2	Bird Management in Ports and Waterways
2002	EnviCom WG 5	Environmental Guidelines for Aquatic, Nearshore and Upland Confined Disposal Facilities for Contaminated Dredged Material
2003	EnviCom WG 6	Guidelines for Sustainable Inland Waterways and Navigation
2003	EnviCom WG 7	Ecological and Engineering Guidelines for Wetlands Restoration in relation tot the Development, Operation and Maintenance of Navigation Infrastructures
2006	EnviCom WG 8	Biological Assessment Guidance for Dredged Material
2006	EnviCom WG 10	Environmental Risk Assessment of Dredging and Disposal Operations
2009	EnviCom WG 100	Dredging, management practices for the environment – A structured selection approach
2009	EnviCom WG 104	Dredged material as a resource – Options and Constraints
2009	EnviCom WG 107	Sustainable waterways within the context of navigation and flood management
2009	EnviCom WG 109	Long-term management of Confined Disposal Facilities for Dredged Material
2010	EnviCom WG 108	Dredging and Port Construction around coral reefs
2013	EnviCom WG 136	Sustainable maritime navigation
2014	EnviCom WG 143	Initial Assessment of Environmental Effects of Navigation and Infrastructure Projects
2014	EnviCom WG 150	Sustainable Ports – A Guide for Port Authorities
2014	EnviCom WG 124	Dredging & Port Construction: Interactions with Features of Archaeological or Heritage Interest
2018	EnviCom WG 176	Guide for Applying Working with Nature to Navigation Infrastructure Projects
2019	EnviCom WG 188	Carbon Management for Port and Navigation Infrastructure
2019	EnviCom WG 175	A Practical Guide to Environmental Risk Management (ERM) for Navigation Infrastructure Projects
2020	EnviCom WG 178	Climate Change Adaptation Planning for Ports and Inland Waterways
2020	EnviCom TG 193	Resilience of the Maritime and Inland Waterborne Transport System
2021	EnviCom WG 195	An Introduction to Applying Ecosystem Services for Waterborne Transport Infrastructure Projects
2022	EnviCom PTGCC 1	Managing Climate Change Uncertainties in Selecting, Designing and Evaluating Options for Resilient Navigation Infrastructure
2023	EnviCom WG 214	Beneficial Use for Sustainable Waterborne Transport Infrastructure Projects

2023	EnviCom TG 3	Waterborne Transport, Ports and Waterways: A 2023 Update of Climate Change Drivers and Impacts
2023	EnviCom WG 157	Environmental Aspects of Dredging, Port and Waterway Construction around Coastal Plant Habitats
2024	EnviCom PTGCC 2	Climate Change Costs to Ports and Waterways: Scoping the Business Case Assessment for Investment in Adaptation
2025	EnviCom WG 230	Green Financing of Nature-Based Navigation Infrastructure
2025	EnviCom WG 226	A Guide for Assessing and Managing Effects of Underwater Sounds from Navigation Infrastructure Activities

## Recreational Navigation Commission (RecCom)

Year	WG Number	Title
1976	RecCom WG 1	Final report of the International Commission for sport and pleasure navigation
1979	RecCom WG 2	Standards for the construction, equipment and operation of yacht harbours and marinas, with special reference to the environment
1980	RecCom WG 3	Dry berthing of pleasure boats either for maintenance or complementary to wet berthing – both the technical and financial aspects
1981	RecCom WG 4	Design of breakwaters for yacht harbours
1988	NAV-AIDS	The provision of navigation aids for pleasure craft – JOINT IALA/PIANC REPORT
1991	RecCom WG 5	Guidance on facility and management specification for marine yacht harbours and inland waterway marinas with respect to user requirements
1995	RecCom WG 6	Guidelines for the use of certain powered craft, such as waterscooter, personal watercraft, waterbike, jetski, waverunner, Seadoo, on controlled waters
1996	RecCom WG PICTO	Pictograms for pleasure navigation – JOINT ICOMIA-PIANC-EUROMARINA PUBLICATION
1997	RecCom WG Special 97	Review of selected standards for floating dock designs
1997	RecCom WG 7	Guidance on marine sanitation pumpouts
2000	RecCom WG 8	Standards for the use of inland waterways by recreational craft
2001	RecCom WG Special 01	Marina service connections
2002	RecCom WG 12	Recreational Navigation and Nature
2002	RecCom WG 10	Mooring systems for recreational craft
2003	RecCom WG 13	Dredging of Marinas / Dragage de marinas
2004	RecCom WG 14	Disability Access Guidelines for Recreational Boating Facilities
2008	RecCom WG 98	Protecting Water Quality in Marinas
2009	RecCom WG 105	The use of alternative materials in marine structure construction
2013	RecCom WG 132	Dry stack storage
2013	RecCom WG 134	Design and operational guidelines for super yacht facilities
2015	RecCom WG 130	Anti-sedimentation systems for Marinas and Yacht Harbours
2016	RecCom WG 149/1	Guidelines for Marina Design – part I

2016	RecCom WG 149/2	Guidelines for Marina Design – part II
2017	RecCom WG 149/4	Guidelines for Marina Design – part IV
2017	RecCom WG 177	10 Years of the Marina Excellence Design 'Jack Nichol' Award (MEDA)
2020	RecCom WG 147	Guidelines for Managing the Relationship between Recreational Navigation and Commercial Ports
2020	RecCom WG 168	Single Point Yacht Moorings
2023	RecCom WG 148	Guidelines for Sustainable Recreational Navigation Infrastructure

## International Co-Operation Commission (CoCom)

Year	WG Number	Title
2008	CoCom WG 97	Ports located in small islands
2014	CoCom WG 123	Countries in Transition (CiT): Coastal Erosion Mitigation Guidelines

## Other Publications

Year	Reference	Title
1986	PMH3	Port Maintenance Handbook – Chapter 3: "Roads and storage areas"
1991	PMH4	Port Maintenance Handbook – Chapter 4-Section 2: "Railways"
1985	PMH5	Port Maintenance Handbook – Chapter 5: " Mechanical equipment"
1987	AGA	Seminar Agadir, 9-12 June 1987
1992	SURguide	Guide to inland water transport development" – 2 <sup>nd</sup> Seminar Surabaya, 1992
1992	SURpro	PIANC PCDC 2 <sup>nd</sup> Seminar on ports and inland waterways, Surabaya (1992) "Proceedings"
1995	GOA	PIANC PCDC 3 <sup>rd</sup> Seminar on ports and inland waterways, Goa-India (1995) "Proceedings"
1977	DREDG	Final Report of the International Commission for the Study of Environmental Effects of Dredging and Disposal of Dredged Materials
1986	LOCKS	Final Report of the International Commission for the Study of Locks
1973	TANK	Big tankers and their reception (data-fairways-berths)
1979	ICORELS I	Availability of Ports and Terminals, W.G. I
1978	ICORELS II	Desirable co-ordination and international agreement on compatibility of ship and shore-based navigational aid equipment, W.G. II
1977	ICORELS III	Installations and equipment for the reception and treatment of oily wastes. Equipment and methods for minimizing of oil pollution - including associated fire risks - in harbours, at sea and along the coast by collecting and removing polluting substances, W.G. III
1980	ICORELS IV	Optimal lay-out and dimensions for the adjustment to large ships of maritime fairways in shallow seas, sea straits and maritime waterways, W.G. IV (out of print – photocopies available)
1977	ICORELS V	Technical and economic aspects of artificial offshore islands for the reception of large ships, W.G. V

1979	ROLL	Report of the International Study Commission for the standardisation of roll-on/roll-off ships and berths
1976	WAVES FIN	Final report of the International Commission for the study of waves
1980	WAVES 3	Final report of the 3 <sup>rd</sup> International Commission for the Study of Waves
1986	SSP	List of Sea State Parameters - JOINT IAHR-PIANC REPORT
2018	TG 181	The State and Perspectives of Waterborne Transport Infrastructure Worldwide