



KEY ELEMENTS AND BEST PRACTICES TO IMPROVE THE GOVERNANCE OF INLAND WATERWAYS

PROPOSED TECHNICAL WORKING GROUP

TERMS OF REFERENCE (V11)

1. Historical Background Definition of the Problem

One of the inherent issues about Inland Waterways (IW) is the management approach – and its variability - adopted by countries, regions or communities. Comprehensive management of a transport system involves a set of procedures and techniques aimed at maximizing positive actions and creating an environment that boosts operational efficiency. As a result, managers are expected to implement practices that improve or maintain the smooth operation of these transportation systems.

In the context of inland navigation, the objective is to identify good management strategies that optimize the navigability of the waterways, thereby facilitating the reliable operation of commercial shipping. It is, therefore, imperative that the governance of transportation systems considers the crucial role that inland navigation plays in the socio-economic development of nations and regions.

Each country seeks to develop its own system to meet its specific transportation needs. Typically, governance and management approaches are determined according to geographical boundaries. Depending on the goals of the transportation management program, those boundaries may be political borders of countries and states, or frontiers of economic blocks, or limits of river basins, transport corridors, and development axes.

An efficient involvement of national governments, even indirectly, is paramount. However, procedures for state actions (public administration) may be very contrasted, encompassing different perspectives and often involving the private sector.

In regional and multilateral arrangements, collaboration and coordination are essential for defining integrated proposals and practices of management, particularly when IW, rivers, and lakes are shared by multiple countries. In these instances, it is common practice to transfer the governing authority (in whole or in part) to international organizations or committees. River commissions have been established on certain international waterways (for example, Central Commission for the Navigation on the Rhine, Danube Commission, Mekong River Commission, International Commission of the Congo Basin, etc.). In this case, the governance of the transport system takes place in a network of institutions, within a multilevel framework, and these commissions perform joint governance despite possible political or social difficulties between member countries.



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Today, important challenges are faced, such as finding alternatives to reduce the environmental impacts considering the entire ecosystem of inland navigation without hindering the scale and pace of international trade, implementing information systems and automation of infrastructures' operations, fostering new technologies and fuels. Integration into global markets is essential for the effective functioning of the economic systems of countries and regions. The establishment of appropriate operational standards is likely to generate more reliability in the transportation system, which in turn encourages its use.

Obviously, the governance and management of IW infrastructure do not necessarily occur in the same way everywhere, even if the objectives are globally the same. However, given the current global context as outlined above, it seems important to compare and identify the desirable/essential elements of inland waterway governance programs, to promote the best possible governance of inland transport infrastructure.

2. Objectives of the Working Group (WG)

One must acknowledge the lack of consolidated and comparative information on the practices and circumstances of different countries, provinces, and regional blocs. This WG will accordingly be able to minimize this gap by collecting data and carrying out analyses from a wide range of countries.

The first objective of the WG is to discuss and compare the management practices of waterway infrastructures in different countries and regions around the world: different forms of inland waterway infrastructure, respective practices and measures adopted.

The WG will seek to conduct a comparative analysis to understand how different countries, regions, or groups of countries manage their waterways in relation to the key elements of governance. This analysis will assess specific elements adopted, whether they are recurrent or occasional and other relevant nuances.

Ultimately, while evaluating the applicability of strategies employed by various international commissions (such as the MRC, CCNR, Danube Commission, CICOS, OMVS, NBA, NEPAD, among others...), the WG aims at identifying and categorizing patterns of governance and finding out possible standards for each type of IW structure.

3. Earlier Reports to be Reviewed

- PIANC InCom WG 246: Guidelines and Recommendations for River Information Services
- PIANC InCom WG 241: Crisis Management of Accidents in Navigation Hydraulic Structures
- PIANC InCom WG 234 : Infrastructure for the Decarbonisation of IW Transportation
- PIANC InCom WG 229 : Guidelines for Air Pollutants and Carbon Emissions Performance Indicators for IW
- PIANC InCom WG 216: Best Practices in Planning and Management of Multimodal Logistics Platforms along Inland Waterway
- PIANC InCom WG 203: Sustainable Inland Waterways – A Guide for Inland Waterway Managers on Social and Environmental Impacts
- PIANC InCom WG 210: Smart Shipping on Inland Waterways
- PIANC InCom WG 201: Framework for an Inland Waterway Classification in South America
- PIANC InCom WG 179: Standardisation of Inland Waterways – Proposal for the Revision of the ECMT 1992 Classification
- PIANC InCom WG 141: Design Guidelines for Inland Waterway Dimension



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- PIANC InCom WG 156: E-Navigation for Inland Waterways 2017
- PIANC InCom WG 139: Values of Inland Waterways
- PIANC InCom WG 111: Performance Indicators for Inland Waterways Transport? User Guideline
- PIANC InCom WG 110: Governance Organisation and Management of River Ports
- PIANC InCom WG 021: Economic aspects of inland waterways
- PIANC InCom WG 011: Analysis of cost of operating vessels on inland waterways

4. Scope of Work

The proposed steps are :

- Theoretical literature review on waterway governance, including the analysis/review of the reports already published by PIANC; identification of general aspects of governance transportation - technical and economic management;
- Discussion on which elements should be considered essential for waterway governance in the current era;
- Questionnaires sent to countries/representatives about the governance /management's practices and routine;
- Compilation and clustering of responses; categorizing waterway governance/management; evaluation of adherence to public transport policy, water management practices, maintenance program for navigable channels; traffic monitoring, strategy's priority, and commercial monitoring (fleet and cargo);
- Identification of best practices and good governance standards, with classes and subclasses (whenever possible).

5. Intended Product

The WG report will frame the current technical vision of PIANC on the governance/management of waterway transportation, specifically listing the practices considered essential for setting up a management program. It should be noted that the practices of each country reflect the perceived scale of its waterway infrastructure. Thus, the aim is not to criticize any particular model, but to provide a framework for the development of waterway management projects for those that are considered themselves as incipient or for the improvement of existing programs.

The output should be useful in formulating new waterway policies, helping governments and managers change existing practices, or welcoming different ways of dealing with the waterway system.



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6. Working Group Membership

Members of the WG will be familiar with aspects of public management of waterways, on one hand, have access to information from the countries targeted, on the other hand. Engineers, economists, political science experts, lawyers, public administrators, social scientists and other professionals will be welcomed to contribute to the work.

The WG should ideally consist of members from as many countries as possible, covering all continents. In certain cases, considering the configuration of integrated public and regulatory policies, such as in common markets or bilateral agreements, it may be desirable to ask for the participation of members from institutions such as regional commissions¹ or groups of countries.

7. Target Audience

Public managers, public authorities, sector operators, public-private partners, political science researchers, representatives of intergovernmental and bi- or multilateral bodies, engaged in fluvial transport issues, especially with planning and regulation of waterways.

8. Relevance

8.1 Relevance to Countries in Transition, etc.

The report will serve as a resource for policy makers, public authorities and private sector stakeholders, providing insights into best practices and adaptable strategies for different waterway systems. It is hoped that the results obtained will serve as a reference and evaluation mechanism for the practices carried out by the countries themselves, or as a tool for discussing new models, resources, or trends in the sector.

8.2 Climate Change and Adaptation

Climate change and adaptation are clearly important issues for waterway management. The report will address that point.

8.3 Working with Nature

WwN issues will be addressed when comparing the environmental measures and construction/maintenance strategies, including dredging, set up by IW management bodies.

8.4 UN Sustainable Development Goals

This WG-report will contribute to the achievement of some UN Sustainable Development Goals:

- **SDG 9 – Industry Innovation and Infrastructure**

The report will provide significant value to private sector stakeholders and international trade organizations. By providing a clear set of best practices and governance standards, the framework can help these stakeholders ensure compliance with international regulations, improve operational efficiency, and contribute to the sustainability of waterborne transport

¹ The Mekong River Commission (<https://www.mrcmekong.org/>) and The Central Commission for the Navigation of the Rhine (<https://www.ccr-zkr.org/>) are examples.



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systems. The adoption of good governance principles can also reduce logistical bottlenecks, improve supply chain reliability and foster stronger public-private partnerships, ultimately facilitating smoother international trade and economic integration.

• **SDG 17 – Partnerships for the Goals**

Understanding how each country or group of countries deals with the issues inherent to the waterway transport system is useful to create an atmosphere of reflection for each one, and can be used as a tool for making its own technical comparisons, for establishing partnerships among entities and for cooperation projects.

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