PIANC InCom/EnviCom/ReCom Joint Working Group

WG 219 – Guidelines to develop and operate sustainable inland waterway tourism and recreation infrastructure.

Terms of Reference

(Drafted by N. Akula, InCom - 25th Mar 2019)

Background

Recreational navigation is a growing activity, also in the managed inland waterway systems. The increase in demand for these type of activities has led to development of infrastructure and vessels that have not always been sustainable or well integrated with transportation systems.

A sustainable model*, a model for nautical tourism and recreation infrastructure aiming to encourage sustainable initiatives and measures in the natural spaces where fluvial tourism activities take place*, should not only be technically advanced and economical feasible one but also something that is environment friendly and has a positive social impact.

Management measures not only include immediate actions in these places such as efficient waste management or responsible use of resources or fuels, but also those other initiatives to generate awareness among all actors involved in river and fluvial tourism activities (SMEs, managers and owners of river ports, professionals, local community, etc.).

Tourism and recreation navigation have the potential to develop synergies with ecosystem restoration, natural protection, and urban waterfront redevelopment providing also social benefits and promoting cultural and historical heritage.

Objectives

The work group will focus on developing guidelines to build a sustainable model for recreational navigation and nautical tourism in managed inland waterway systems.

This includes summarizing relevant guidelines for planning and design of sustainable recreational navigation infrastructure, available in other RecCom reports, as well as identifying waterway operation systems. By evaluating case studies, the proposed guidelines will address sustainability in a comprehensive manner and encourage all stakeholders to share good practices.

Moreover, these guidelines should encourage new business opportunities, innovative initiatives and cooperation between entrepreneurs. Recreation and tourism business are based on leisure and guest experiences, which are concepts not commonly addressed in transportation.

Scope

Provide the target group with a set of skills, which allows them to develop sustainable initiatives and measures in their recreational activities, businesses and natural spaces where these are developed.

- Analyse case studies of managed inland waterways with recreational and tourism uses.
- Develop diagnosis of the performance of those waterways, from an operational and sustainability point of view, and propose solutions based on local requirements.
- Study of current fluvial tourism system and possibility/need to promote multipurpose fluvial tourism model.

Purpose	Layout Design	Location
- Single use (tourism only) - Multiple use (recreation/tourism)	- Single Docks - Marinas	- Rivers - Deltas - Lakes - Canals

- Study the challenges and propose solutions based on local requirements
    - Developing countries – New projects under development, A-Z approach.
    - Developed countries – Extending Accessibility of current system.

- Focus on flexible and resilient adaptation - Design so it can provide ecological functions and USE for recreation and tourism.
    - Operations (terminal location, dock configuration, route selection, vessel/craft profiles).
    - Maintenance point of view – constraints and challenges from waterside.
    - Landside accessibility with other modes of transport (Multi Modal) including vehicle/bike parking.
    - Facilities – Berthing and Boarding (tourism and recreational), eco-sports, recreational fishing hubs etc.
    - Extended facilities - Cruise and Walks/Bicycling concepts (RAVel, Belgium; Waterfront Model, France, UK, Netherlands etc.).
    - Extended services (Fuel/Water/Spares/Repair/Maintenance) for Vessels of future (Eg. Dan Fluvial, Netherlands).

- Working with Nature applied to recreational navigation infrastructure – summarize relevant planning and design criteria that foster economic, social and environmental sustainability:
    - Proactive inclusion of environmental features - “Environmental Design”
    - Community benefits create authentic destinations - “Social Sustainability”

- Climate Change Adaptation – identify ways in which redevelopment of waterfront areas for tourism and recreation can be implemented as part of comprehensive infrastructure adaptation projects.

- Climate Change Mitigation – identify ways in which recreational and tourism infrastructure and vessels can achieve both lower emissions and less energy consumption.
    - The Working Group can consider different ways improvements can be achieved, such as:

- A system approach that promotes sustainable use of Natural Areas. Contribute to satisfy the need of sustainability of the natural spaces and water ecosystems where these activities are developed.
- Lay the foundations for new business opportunities, innovative professional initiatives, cooperation between entrepreneurs.
- Help users reduce operating costs by using more sustainable processes and equipment.

Existing Documents to be reviewed

- WG149 : Guidelines for Marina Design, RecCom
- WG139 : Values of IW, InCom
- WG148 - Environmental Impact Aspects of Recreational Navigation Infrastructures

Running WGs to seek for collaboration:

- WG203 : Sustainable IW - Social Environmental Impact
- Task Group 193 - Resilience of the Maritime and Inland Waterborne Transport System
- WG176 - A Guide for Applying Working with Nature to Navigation Infrastructure Projects
- Sustainable Recreational Navigation Infrastructure (Re-launch ToR RecCom Working Group 148)

Intended product

The first task is to define the target groups and stakeholders, to develop a library of different fluvial tourism models that currently exists and the practices followed with pros and cons, to gather their contributions and opinions about how fluvial tourism is being developed in these areas.

- Guidelines for developing a sustainable fluvial tourism model and ideas/methodology to help existing low or average sustainability models to develop towards a high efficiency model, to improve their footprint. The guidelines will be defined in accordance with the indicators as mentioned in methodology for measuring the fluvial footprint and so will offer solutions and good practices which intend to improve the values obtained.
- Develop guidelines for preliminary design for landside access, vehicle/bike parking, terminal location and dock configuration.
- Process to analyse and determine locations at which speed/traffic would need to be reduced in order to avoid wave impacts (created by vessels) on sensitive areas like river banks and habitats.
- To clearly establish and address the concerns and conflict between fluvial tourism and other members of fluvial system, some of the mentioned below
    a) Professional barging
    b) Anglers (fishing)
    c) House boats along waterways
    d) Noise issues caused
- Suggestive guidelines for selection of additional/alternate harbours, mooring location.
- Methodology for measuring the fluvial footprint.
- Define the regulatory framework for obtaining environmental clearance and permits.
- Guides and Policy briefs. A set of supporting manuals targeted to different stakeholders.

Working Group Membership

The work group should ideally include:

- Traffic managers,
- IW port managers,
- Recreational marina owners, designers/developers,
- Tourism facility designer/developers and operators,
- Tourism operators and tour boat owners
- Transportation vessel owners, managers and operators,
- Local government representatives
- Waterway policy makers and
- Organisations responsible for the planning and development of water transport in local communities.

Target Audience

All stakeholders that are typically found in a managed inland waterway

Relevance to Countries in Transition

The report will be developed with focus on both developed and countries in transition but the fluvial tourism industry/business exists in all countries in small or large scale and is growing rapidly all over the globe.

The report will prove extremely beneficial to countries in transition to develop a sustainable model/business from start which is much easier that having to alter an existing system which might be the case with developed countries.

Climate Change and Adaptation Implications

The inland waterway sector in general will play a critical role in achieving climate objectives. While air and water pollution are usually the main topics of concern, the report will focus on all environmental concerns as listed below:

- Water Landscape protection
- Biodiversity conservation in water areas
- Impact of inland navigation on Water, Air and Soil
- Noise disturbance in work areas
- Energy efficiency in inland navigation
- Waste management in inland navigation
- Adaptation of infrastructure to climate change.

Relevance to Implementation of WwN Philosophy

The environmental relevance of the inland waterway system makes the WwN approach an excellent tool for addressing plans and projects.

Case Studies (as examples)

1) France – VNF in numbers (https://www.french-waterways.com/management/economics/)
    a. 330,000 guests enjoy a holiday/vacation cruising the French Waterways – on a hire boat, hotel barge or river cruise ship,
    b. Total of 352m€ spent paying for the cruise,
    c. Sector of the French economy has grown consistently at 4% p.a,
    d. 20,000 active private boats on the inland waterways.

2) Belgium (Liege) – Marina and a boarding point for shuttle at less than 20m apart.

3) Belgium (Antwerp) – Hydroville (CMB) www.hydroville.be/en/ - Used as passenger transport shuttle between two ports/stops that are at 100 km but no stops in between due to lack of infrastructure.

4) Australia Eco Tourism 2016 - Multi-purpose Inland waters (Recreational, non-powered boats) - water sports, kayak, canoe, stand up paddleboard or recreational activities, and Development of recreational fishing hubs.

5) Myanmar - Inle Lake, Tourism opportunity and a threat to aquatic Eco-System. (Note: Increase in Eco Tourists from 300,000 in 2010 to 2 Million+ in 2013);

6) Iran – Sustainable development UN, Inland Water Ecotourism, 50 Inland lakes and 22 wetlands identified for development.