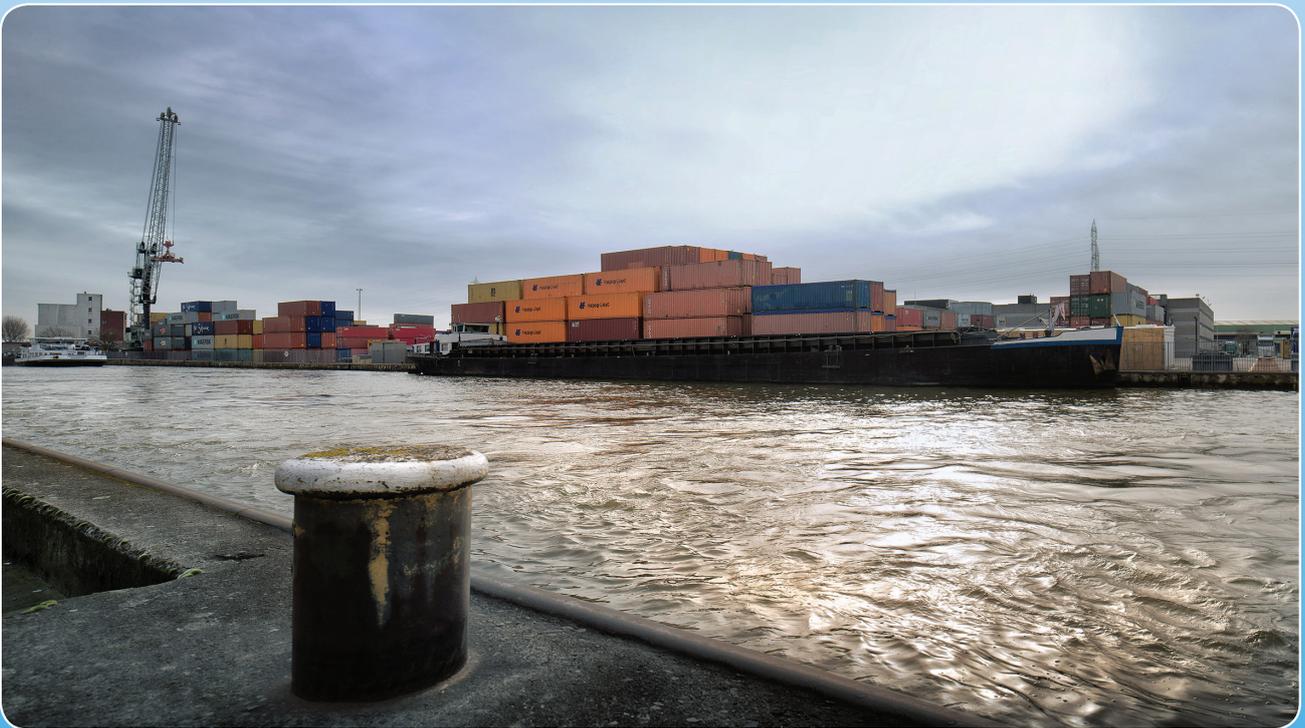




PIANC

InCom WG Report
n° 125/I - 2019



GUIDELINES AND RECOMMENDATIONS FOR RIVER INFORMATION SERVICES

The World Association for Waterborne Transport Infrastructure



PIANC
The World Association for
Waterborne Transport Infrastructure

PIANC REPORT N° 125/I
INLAND NAVIGATION COMMISSION

**GUIDELINES AND RECOMMENDATIONS
FOR RIVER INFORMATION SERVICES**

2019

PIANC has Technical Commissions concerned with inland waterways and ports (InCom), coastal and ocean waterways (including ports and harbours) (MarCom), environmental aspects (EnviCom) and sport and pleasure navigation (RecCom).

This report has been produced by an international Working Group convened by the Inland Navigation Commission (InCom). Members of the Working Group represent several countries and are acknowledged experts in their profession.

The objective of this report is to provide information and recommendations on good practice. Conformity is not obligatory and engineering judgement should be used in its application, especially in special circumstances. This report should be seen as an expert guidance and state-of-the-art on this particular subject. PIANC disclaims all responsibility in the event that this report should be presented as an official standard.

PIANC Secrétariat Général
Boulevard du Roi Albert II 20, B 3
B-1000 Bruxelles
Belgique

<http://www.pianc.org>

VAT BE 408-287-945

ISBN 978-2-87223-265-9

© All rights reserved

PIANC Permanent Working Group 125

The RIS Guidelines 2019 have been produced in meetings of Working Group 125 between 2016 and 2019 in Brussels, Barcelona, Budapest, Pittsburgh, Szczecin, Rotterdam, and the final meeting in Brussels. The contributors to the PIANC RIS Guidelines 2019 are: Mr Piotr Durajczyk (Poland), Mr Jan Bukovsky (Czech Republic), Mr Dierik Vermeir, Mr Piet Creemers (both from Belgium), Mr Alaric Blakeway (France), Mrs Birgitta Schäfer (Germany), Mr Robert Rafael, Mr Mario Sattler, Mr Jürgen Trögl (all Austria), Mr Csaba Kovacs (Hungary), Mr Giang Hoáng Hông (Vietnam), Mr Pedro Vila (Spain), Mr Peter Stuurman, Mr Jeffrey van Gils (both the Netherlands), Mr Evgeny Brodsky (Russia), Mr Richard Lockwood, Mr Brian Tetreault (both USA), and Mr Cas Willems (the Netherlands and Chairman).

The PIANC RIS Guidelines 2019 – Edition 4 have been adopted by the PIANC Inland Navigation Committee in January 2019.

CONTENT

1	INTRODUCTION.....	2
1.1	Historical Development of River Information Services.....	2
1.2	The Evolution of the PIANC RIS Guidelines.....	2
1.3	The PIANC RIS Guidelines 2019	3
1.4	Reading Guide for this Document.....	4
2	RIVER INFORMATION SERVICES, OBJECTIVES, STAKEHOLDERS AND INFORMATION NEEDS	5
2.1	River Information Services and its Objectives.....	5
2.2	RIS Stakeholders.....	6
2.3	RIS Information Needs	6
3	RIS OPERATIONAL SERVICES AND FUNCTIONS;.....	8
3.1	Functional Decomposition of the RIS Concept.....	8
3.2	RIS Operational Services	8
3.3	RIS Functions	10
4	RECOMMENDATIONS FOR THE IMPLEMENTATION OF RIS OPERATIONAL SERVICES.....	14
4.1	General	14
4.2	Legal Considerations.....	14
4.3	Training Considerations.....	14
4.4	Technical Considerations	15
4.5	Fairway Information Services	15
4.6	Traffic Information Services.....	15
4.7	Traffic Management Information.....	16
4.8	Information to Support Calamity Abatement.....	17
4.9	Information for Transport Logistics	17
4.10	Information for Law Compliance.....	17
4.11	Information for Statistics	18
4.12	Information for Waterway Charges and Harbour Dues	18
4.13	RIS enabled Corridor Management.....	18
4.14	Operational Services Architecture	19
5	RECOMMENDATIONS FOR THE IMPLEMENTATION OF RIS TECHNICAL SERVICES	20
5.1	General	20
5.2	Technical Services to Support the Provision of Static Fairway and Infrastructure Information.....	21
5.3	Technical Services to Support the Provision of Dynamic Fairway and Infrastructure Information.....	22
5.4	Technical Services to Support the Provision of Vessel Information.....	22
5.5	Technical Services to Support the Provision of Voyage and Cargo Information.....	23
5.6	Reference Data Supporting RIS Operational and Technical Services	24
6	RECOMENDATIONS ON INTEGRATION OF e-NAVIGATION IN THE RIS DOMAIN.....	25
6.1	General Policy Recommendations on the Mid-Term Development of e-Navigation in Relation to RIS.....	25
6.2	Specific Recommendations on the Use of e-Navigation in a RIS Domain.....	26
7	CONSIDERATIONS ON MID-TERM RIS-RELATED DEVELOPMENTS.....	27
7.1	Evaluation of the RIS Directive.....	27
7.2	The Digital Inland Waterway Area (DINA).....	27
7.3	Smart Shipping	29
7.4	Cybersecurity.....	29

7.5 The RIS COMEX Project	30
8 CONSIDERATIONS AND RECOMMENDATIONS ON THE STRUCTURED APPROACH OF THE IMPLEMENTATION OF RIS.....	31
8.1 General	31
8.2 Mission Statement	31
8.3 Steps in a Structured Approach for the Implementation of RIS.....	32
8.4 Consideration on Quality of River Information Services.....	33
ANNEX 1: Abbreviations	36
ANNEX 2: Standards and Information on Technical Services for the Provision of Static Fairway and Infrastructure Information	37
ANNEX 3: Standards on Technical Services for the Provision of Dynamic Fairway and Infrastructure Information.....	39
ANNEX 4: Standards and Information on Technical Services for the Provision of Vessel Information	40
ANNEX 5: Standards and Information on Technical Services for the Provision of Voyage and Cargo Information.....	42
ANNEX 6: Information on Reference Data.....	43