



Advanced and automated operation of locks and bridges



PTC1
Report of Working Group 11
"Supplement to Bulletin n° 92
(1996)

PERMANENT INTERNATIONAL ASSOCIATION OF NAVIGATION CONGRESSES

1. **INTRODUCTION**
2. **GENERAL ITEMS AND DEFINITIONS**
 - 2.1 Terms of Reference
 - 2.2 Definitions
 - 2.3 Summary of the Questionnaire
 - 2.4 General Operating Principles
 - 2.5 Signalling and Signage
 - 2.6 Mooring Considerations
 - 2.7 Lock Filling Considerations

2.8	Detection Systems
2.9	Data Transmission Systems
2.10	Data Processing Systems
3.	LOCKS
3.1	Keeper Operation
3.2	Manual Self Operation
3.3	Remote Operation
3.4	Self Operation Semi-automatic
3.5	Fully Automatic Operation
4.	MOVEABLE BRIDGES
4.1	Keeper Operation
4.2	Manual Self Operation
4.3	Remote Operation
4.4	Self Operation Semi-automatic
4.5	Fully Automatic Operation
5.	CONCLUSIONS AND RECOMMENDATIONS
5.1	Locks
5.2	Moveable bridges
5.3	General
6.	APPENDICES
6.1	Description of the Fully Automated Bridges Steenbrugge-Bridge and Moerbrugge-Bridge on the Canal Gent-Brugge
6.2	Summary of Statistics arising from the Questionnaire