## COMPREHENSIVE DEVELOPMENT OF INLAND WATERWAYS IN THE LIGHT OF SUSTAINABLE DEVELOPMENT WITH PARTICULAR EMPHASIS ON POMORSKIE VOIVODESHIP

## **Doctorate thesis summary**

The development of inland water transport requires properly developed waterways that guarantee the navigation parameters specified in the classification. However, in the process of developing inland waterways, a lot of controversy and objections arise due to the misunderstanding of the role of waterways in water management.

Most of the objections raised against the need to develop the waterways network result from a one-sided approach to this investment as each entity assesses the investment only through the prism of its own needs. The uneven distribution of needs in time and space means that investments carried out on inland waterways do not always take into account the needs of all entities, and inland waterway transport is often perceived as a difficulty. Therefore the need to develop inland waterways network needs is underestimated in some countries.

Controversies arising in connection with investments carried out on inland waterways prove that there is a need for the research on the effects of comprehensive management of inland waterways for society, environment and the economy. The aim of this dissertation is to demonstrate the importance of comprehensive management of inland waterways for sustainable development. Two main research hypotheses have been formulated for this purpose of the work:

- 1) comprehensive development of inland waterways is consistent with the idea of sustainable development,
- 2) comprehensive development of the lower Vistula may bring benefits in the regions located along this waterway.

In order to test and verify the first main hypothesis, three detailed hypotheses were formulated:

- an integral element of sustainable development is sustainable transport development,
- the development of inland water transport ensures social, ecological and economic effects
- development of inland waterways should be comprehensive.

In order to prove the second main hypothesis, two detailed hypotheses were formulated:

- there are social, economic and ecological conditions for the development of inland waterways in the Pomeranian Voivodeship,
- comprehensive management of the lower Vistula may contribute to alleviating social and environmental problems as well as the economic development of the Pomeranian Voivodeship.

The work consists of five chapters. Chapter five proposes an original method of examining the partial effects of comprehensive waterway development that can be achieved in a selected area associated with the waterway.

The topic of the dissertation has an interdisciplinary dimension. It covers many fields of science and economy related to water and inland waterway management. The presented hypotheses were verified in the course of studies of domestic and foreign literature and professional journals in the field of: environmental protection, water management, hydropower, flood protection, transport. An important source of information were also analysis published by Eurostat and the Central Statistical Office, as well as reports and studies by the European Commission and the European Parliament. The considerations made were largely based on foreign experiences. The existing controversy over the development of inland waterways means that the discussed topic is important and topical.

**Keywords:** inland waterways, inland waterway transport, water management, environmental protection