

Editorial



Problems of Sustainable Development of the Baltic Sea Coastal Zone

Prof. dr. habil. Brunonas Gailiušis

Lithuanian Energy Institute

crossref http://dx.doi.org/10.5755/j01.erem.61.3.1759

The use of the Baltic States tourism potential cannot be imagined without marine tourism. Sustainable development requires coordination of corresponding infrastructure developments with both nature protection and urban - regional development.

The INTERREG is the Community Initiative of the European Union programme. Main objective of the INTERREG Initiative is to support transnational co-operation in enhancing the balanced and sustainable development of the European territory. The INTERREG project SuPortNet (SUstainable Spatial Development with a NETwork of PORT's for Boat Tourism in the Baltic Sea Region) aims to improve the network of pleasure boat harbours in the Baltic Sea Region.

The objectives of this Project are:

- contribute to integrated management of coastal zones with a potential for boat tourism;
- initiate a learning process through exchange of experience;
- improve conditions for private investors (in public-private partnership);
- strengthen municipalities' position when negotiating with private investors;
- enhance inter-sector co-operation for development at the municipal and regional levels;
- promote networking among different ports;
- promote sustainable boat tourism (particularly in small harbour communities which have lost traditional functions);
- integrate boat harbour development into the urban and regional planning;
- promote public-private partnership.

SuPortNet 1 was successfully completed in June 2001. Phase 2 was completed with success in January 2005. During these phases the framework plans for an improved physical network of boat harbours integrated into the nature environment and regional infrastructures, as well as the plans for improvement of specific harbours and their integration into urban structures, have been prepared. The idea of installation of the IT-based information networks among harbours open for a wider number of ports has been realised. In addition, the Internet information system for boat tourism, including digital maps, has been developed.

The partner municipalities and harbours want to continue their co-operation with the objective to support implementation of the planned projects and to initiate a common marketing strategy.

In Lithuania with the only Klaipeda seaport, an increased attention is being paid to the reconstruction of Šventoji seaport. Šventoji seaport is going to be classified as a small boat port whose objectives differ from those of big commercial seaports.

Šventoji was an old fishermen settlement. The first records about the port on the mouth of the Šventoji river (then called Heligaw or Heiligen) in the written sources were dated in the XVI-XVII centuries. The port that operated in Šventoji up to the 18th century successfully competed with the other ones at the Baltic Sea. The first

port construction work according to the J. Šimoliūnas project was started in 1923. Before the World War II breakwaters and some quays were built. However, the present conditions of Šventoji port require its major reconstruction.

Šventoji state seaport is situated close to the Lithuanian northern state border with Latvia. In 1973 Šventoji became part of Palanga. The recreation zone of Šventoji and Palanga has a real potential to develop rapidly water sport popular in the Baltic States. Restoration of the port could accommodate small leisure boats and yachts, thereby giving a boost to tourism development in Šventoji. The port could also be used by local fishermen; it will have quays of specialised vessels for: rescue, oil spillage containment, fire-fighting, marine environment, fish breeding, state border guard services.

In 2006 the Parliament of the Republic of Lithuania adopted the Law on Šventoji state seaport, on the basis of which it was intended to restore Šventoji port. Šventoji state seaport is the property of the Republic of Lithuania and the Government of the Republic of Lithuania is its founder.

- The port operation purposes are blueprinted in the Law:
- attend recreational, small and sports boats;
- attend fishing boats;
- attend small sea cruise and ro-ro passenger vessels;
- attend vessels of the State Border Guard Service of the Republic of Lithuania as well as the
- vessels intended for rescue, spilled oil collection, fire fighting and sea environment protection,
- shipping and fishery control and other state entities;
- attend Būtingė oil terminal ancillary fleet and accident liquidation measures;
- perform initial fish processing, develop trade.

By assessing the blueprinted port infrastructure and navigation purposes, Šventoji port has been allocated to a port type for small recreational boats. The major and the most important services for small recreational boats at harbours are boat and crew attendance.

Šventoji port would have a considerable significance in the national context. Construction of a new stateoff-the-art port with capabilities to develop all mandatory and additional services (it often having been a complicated business in the existing harbours) would be of great importance for improvement of the infrastructure of recreational navigation (quantitatively and qualitatively).. Besides, the construction of such a unique and specific facility may essentially change the Šventoji nature and image as a resort. Recreational navigation being a prestigious hobby requiring a lot of investments, the major port contingent would be well-off people. Undoubtedly, it would mean higher requirements for the infrastructure of services and entertainment. For this reason, to turn the opened opportunities to advantage, the level of accommodation, entertainment and other services in Šventoji should be improved, or, at least, a good communication infrastructure with larger tourism centres similar to Palanga and Klaipėda should be ensured.

Significance of Šventoji port has also been of utmost importance to the network of recreational boats in the Baltic region. According to the SuPortNet, to make good use of boat tourism potentials, a network view is required to allow tourists to travel across the regions and national borders. Pursuant to the EU requirements, the Baltic and Nordic Sea states must capacitate recreational boats to hide near the coast from storms at the distance of 50 nautical miles (about 100 km). Currently Lithuania has not met the above-mentioned requirement. But, after the construction of Šventoji port this requirement would be carried out. Besides, Šventoji port would be more convenient to inbound small boats than the Klaipėda one, where navigation of small recreational boats has been highly restricted due to intensive traffic.

In 2010 the Spanish engineering, consulting and architectural company "Alatec" prepared the feasibility study of Šventoji seaport reconstruction. Five potential options of Šventoji port reconstruction were presented to Lithuanian society. The main objective of the planned EIA is to evaluate the possible environmental impact, to mitigate the impact on the environment components as well as on public health, and to justify environmental protection measures.

According to the selected optimal alternative for the port reconstruction, the breakwater has a length of approximately 645 metres in two alignments. The first alignment departs from the coast in a north-westerly direction and has an approximate length of 400 metres. The second forms a 126° angle in relation to the previous one, and has a length of 245 metres in a northerly direction. The counter-breakwater is of single alignment and departs from the coast in a westerly direction and is 426 metres long. The depth in the inner harbour part is suggested to be 3-6 m and in the entrance channel -7 m.

- During the port reconstruction period the following large-scale work is going to be accomplished:
- destruction of the old port quays,
- construction of new breakwaters of stones and boulders,
- construction of new quays and berths,
- dredging of the sea part of the harbour and the inner water territory.

In the report on the environmental impact assessment, the impact of different options of Šventoji seaport reconstruction is analysed. It is estimated that the impact on public health, biota, water and air pollution, activity risk, social-economic environment and cultural heritage is insignificant if the mitigating and compensating

measures are applied. Results of sediment transport modelling confirm that the reconstruction of Šventoji port meets the minimal requirements of port and makes the least impact on hydrodynamic and lithodynamic processes in the Baltic Sea shore.

Due to the fact that the reconstructed Šventoji port is going to be located almost in the same place, and its planned parameters (breakwater length, aquatory depth, etc.) resemble the ones of the old port, the tendencies of the coastline dynamics in adjacent regions should be similar to the ones discussed in the paper (i.e. they should resemble the ones that were prevalent previously). The intensity of the coastline dynamics may differ in different alternatives of the port reconstruction. To stop the intensity of coastline shrinkage on the northern side of Šventoji port, a compensating measure - supplementing of the coastline sediment flow with sand during the annual dredging of the port entrance channel is proposed.

The performed studies and analyses are the first steps in implementation of the objectives of regional sustainable development in the Baltic Sea coastal zone of Lithuania.