



Application of ecosystem principles for the location and management of offshore dumping sites in SE Baltic Region (ECODUMP)

Cross-border Dissemination Event I & Project Steering Committee meeting

2013-06-03/04 Svetlogorsk, Kaliningrad region, Russia Hotel "Universal" Conference Hall, Nekrasova str. 3

Minutes

The first cross-border dissemination event of the ECODUMP project was organized by the Atlantic Branch of P.P. Shirshov Institute of Oceanology of RAS (ABIORAS) in the Conference Hall of "Universal" hotel (Nekrasova str. 3, Svetlogorsk, Russia). The main idea of the meeting was to involve relevant Russian authorities into the process of scientific knowledge and experience exchange and to discuss possibilities of further cooperation. As a result the event was mainly focused on dissemination of the "EU approach" of management of dumping sites to non-EU audience of Baltic Sea Region – Russian stakeholders. Dissemination event was held on 3rd of June 2013, while next day was dedicated for the scientific field trip to the most problematic coastal areas of Sambian peninsula with regard to coastal erosion as well as the meeting of Project Steering Committee, comprising from the coordinators of project partners and representatives of interested associated organizations, in order to highlight the progress of project implementation, discuss further activities and budget spending, identify any project management problems.

June 3, 2013. 14:00 – 19:00. Cross-border dissemination event

The meeting was attended by 40 participants, representing broad range of stakeholders working with dumping related issues: scientific organizations, decision making authorities, port authorities and other practicioners (participants list is attached).

Welcome and opening

The event was opened by ABIORAS Deputy Director for Science Mr. Boris Chubarenko, who welcomed the participants and emphasized the importance of the meeting to Russian participants. The agenda was briefly presented, participants introduced themselves.

Introduction to the project

Brief introduction to the project was given by Sergej Suzdalev (KU CORPI) in order to familiarise new participants, especially Russian stakeholders with ECODUMP idea, its necessity, addressed issues, project activities and planned outputs.

Current state of the dumping sites in SE Baltic

Grazyna Dembska from the Maritime Institute in Gdansk highlighted the state of dumping sites in SE Baltic region, based on the information collected from Lithuania, Poland and Russia (Kaliningrad region). Details included the facts about start of operation, dumping area, distance from port areas, depths of the sites, types and amounts of sediments dumped. Main problems of existing dumping sites were presented and possible solutions shortly introduced.

Legal base for existing dumping sites location in SE Baltic

Following the presentation of MIG on current state of the dumping sites main legislative issues were introduced by scientists from KU CORPI (dr. Saulius Gulbinskas and Rosita Mileriene). The presentation covered most important aspects of dumping place selection, as mentioned in regional agreements (Conventions) including the existing guiding documents, which were created in order to provide guidance to national regulatory authorities on how to minimise the effects on the environment of dredging and disposal operations. Nevertheless it seems that currently applied guidelines lacks detailed guiding principles of dumping site location and its further management as was explained by presenters. Further on results of the national legislation comparative analysis were introduced, showing no uniformity between legislative documents regulating dumping procedures in Lithuania, Poland and Russia and stressing the need of standardized procedures for the location and management (monitoring) of the offshore dumping sites in the region.

Application of MSP principles for the location of new dumping sites - Lithuanian case study

The discussion continued after the coffee brake with detailed input by dr. Nerijus Blažauskas (KU CORPI) on possibilities to apply maritime spatial planning principles when locating new dumping places. Lithuanian pilot study dealing with the reconstruction of small port in Sventoji settlement was used as an example. Ecosystem based approach, which will be used during the implementation of pilot study in Lithuania was briefly introduced and explained to participants, further on most important principles of maritime spatial planning were highlighted and their applicability demonstrated on the real example from Lithuanian part of the Baltic Sea. Finally, next steps covering evaluation of hydrodynamic conditions using modeling methods as well as environmental impact assessment process were presented.

Scientific experiments for the re-location of dumping site in Russia

Next part of the event was dedicated to presentation of practical scientific results to stakeholders. It started with detailed presentation by Viktoria Topchaya (ABIORAS) on some scientific experiments, which were carried in the Russian part of the Baltic Sea close to the port of Baltiysk. The main aim of the experiments was to provide solutions on possible re-location of existing dumping site in order to ensure additional feeding of erosional coastal sectors with dumped sand. Results of the investigations showed that experimental dumping place will not contribute to feeding of needed coastal sector, thus other options should be considered.

Dumping of dredged material in modelling - Case study Gdynia site

Representatives from the Maritime Institute in Gdansk (MIG) Tomasz Marcinkowski and Tomasz Olszewski made an interactive presentation on the application of two dimensional model for the assessment of potential spreading of dumped material from the dumping place. Spreading simulation was done by applying different scenarios of weather conditions in the area.

Modelling of sediment spread by dredged material dumping

Modelling approach for the Lithuanian case study was presented by dr. Petras Zemlys (KU CORPI). For modelling purposes 3D finite element model SHYFEM, developed by ISMAR-CNR experts was applied. This modelling tool allows follow precisely the bottom morphology and bathymetry using variable resolution. The model was applied using real data from the year 2010, knowing precisely the number of dumping events, amount and types of dumped sediments. Following results were presented: average currents (surface and bottom) for the year 2010, maximum suspended sediment concentration (SSC) in both dumping areas, sediment spreading patterns and impact zones.

Sediment transport simulation in the coastal zone of Kaliningrad oblast

Final modelling related report was done by Andrei Sokolov (ABIORAS), who presented the results of sediment transport simulation from two dumping sites (main and experimental). Main idea of modelling works was to choose an appropriate strategy for the use of dredged material in order to protect particular coastal sectors from the intensified erosion processes. This was done by examining the potential spreading of dumped material at the experimental dumping site. Numerical simulations were done using different MIKE 21 modules with wind friction being the only driving force and closed boundaries of the simulation area. Based on the simulation results it was concluded that currently used dumping locations in the Kaliningrad region cannot protect the coast from erosion.

Guidelines and monitoring programme

Final presentation of the event was done by Grazyna Sapota, representing Maritime Institute in Gdansk, who made a comprehensive presentation on possible approaches of guideline and monitoring programme development, using ready examples and experience.

June 4, 2013. 9:00 – 17:00. Field trip to the coastal area of Sambian peninsula

One of the main goals of the field trip was to draw attention of different stakeholder groups on the extreme sensitivity of south-eastern Baltic region, which suffers from the lack of sediments, participating in natural exchange, especially in the coastal zones. Correct location of the new offshore dumping areas could contribute to the improvement of sediment balance in the coastal areas and reduce the rates of coastal erosion.

During the excursion project participants visited northern part of Sambian peninsula from Lesnoy settlement (southern part of the Curonian spit suffering from coastal erosion) until Filino settlement (artificially terraced coastal slope), with short stops in Zelenogradsk and Pionersk cities.

The excursion was guided by experienced experts, working in the field of coastal management (O. Ryabkova and E. Burnashov). Each coastal sector was introduced in details, including historical facts, major storm events, rates of erosion and applied coastal protection measures (mainly hard structures). Participants had an opportunity to examine applied measures of coastal protection and evaluate their effectiveness.

June 4, 2013. 17:00 – 19:00. ECODUMP project Steering Committee meeting

The chairman of this meeting part was Sergej Suzdalev (KU CORPI). The meeting was mainly focused on the discussion of main project deliverables, e.g. guideline and monitoring programme. The input was made by Grazyna Sapota (MIG), who presented the preliminary content of both documents as well as proposed the reviewers. Nerijus Blažauskas (KU CORPI) suggested to agree on documents structure before going to the content issues. It was agreed that structure of both documents will be pre-developed by project partners and harmonized until 2013 September 15th. Another suggestion was to develop guiding principles for monitoring, which can be applied in specific dumping sites, rather than define general monitoring programme. The idea is to use Lithuanian monitoring experience and approach as a backbone.

Due to the different modelling approaches used in project partners countries it was agreed to report the results as separate case studies. Another idea was to specify list of questions, which can be answered by applying different modelling methods.

MIG representatives proposed the preliminary dates of next dissemination event in Poland - **20-21 November 2013**. This date was suggested considering Polish FLC intention to participate in the event.

MIG staff also informed that they are planning to make several changes in budget by moving finances between components. This will considered and agreed with the JTS in the next reporting period.

Sergej Suzdalev summed up and closed the meeting.

2013-06-17

Date, Signature of the Organiser (responsible project partner organisation)

NERIJUS BLAŽAUSKAS, project manager

Name and Position of the Signatory (in CAPITAL letters)