





NEWADA – Report on analysis of waterway maintenance during the low-water period of 2011

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AGENDA

1. NEWADA project;



- 2. Report about the management of the 2011 low water level period;
- 3. Catalogue of measures regarding short (year 2012) and medium-term (years 2013+) of waterway management;
- 4. Conclusions;





1. NEWADA project





1. NEWADA project

The NEWADA project aims at increasing the efficiency of the Danube as the European Transport Corridor VII by intensifying the cooperation between Waterway Administrations to promote inland navigation as a cost-effective and environmentally friendly mode of Transport.

Total project budget € 2,8 Mio.







1. NEWADA project

Project Start April 2009

Project duration 3 years until March 2012

Project partners12 from 8 countries

Observers10





Hydrology

- •Analysis of water levels/discharge (2003, 2006, 2010 and 2011) – the same period August – December;
- Statistic days with ENR bellow in few location; How many days with water level bellow ENR?
- ■What was the Prediction forecast, in the period August December 2011.?



Hydrology

•Quality information about water level/ discharge / ENR (Low Navigable Water Level);

■Usage for the report from Newada 3.1 — Hydrological activities;

Location of water tide gauge;





Hydrography

■Emergencies management during the low water level period August – December, 2011

- •Measurement of fairway depths, equipment used, single/multi beam etc.;
- •Frequency and quality of surveying activities;
- •Management of critical points;





Hydrography

•Available fairway depths at shallow sections during this period discharge in relation to Low Navigable Water Level (ENR);

■Usage of the final report 3.1 – Hydrography;

 Production of plans and navigation maps, update of inland electronic navigational charts – data used;



Fairway maintenance

•Dredging measures taken (location, frequency, cubature, equipment used, duration of intervention);

•identification of fairway (re)alignment;

signalling during this period;

permanent verification of signalization;





Fairway maintenance

- •Mounting of supplementary (temporary) floating and costal signals;
- •Additional anchoring sites and Maintenance for the anchorage area;
- •How many days the fairway depths bellow 2.5m?
- Data exchange;



Traffic Management

- •Navigation: traffic analyses for various sectors, i.e. traffic density, vessel movements, vessel types (authorities involved in different countries and their cooperation).
- List of arguments...
- •How many ships was affected during the low water level period 2011?
- Geographical disposition of the vessels, where was blocking.
- •How many Days it was navigation blocked?



Information

- •Production of plans and navigation maps, update of inland electronic navigational charts – submit to the users;
- •Actual communication on the current status of shallow sections;

•Traffic conditions to skippers via FIS portal, websites, WLAN etc. (including the frequency and quality of publication, format?)



- 3. Catalogue of measures ST 2012 and MD 2013-2015 of waterway management;
- O1. Acquisition and installation of automatic water gauges in the ports areas (for a continuous acquisition of data level measurements every 30 minutes);
- 02. Development of hydrological activities with information about the flow and speed of water currents
- O3. Publication of a new edition of "Etiage Navigable et de Regularisation et haut niveau navigable sur le Danube" (finalised until mid-2012)



- 3. Catalogue of measures ST 2012 and MD 2013-2015 of waterway management;
- 04. Creation of a denser network of measuring gauges by locating such water gauges in the critical navigation areas (bottlenecks);05. Elaboration of numerical hydraulic model of the Danube
- river;
- 06. Start of project "water level forecast"





- 3. Catalogue of measures ST 2012 and MD 2013-2015 of waterway management;
- 07. Implementation of additional surveying activities on critical sectors;
- 08. Improved display of shallow sections (trackplots) on the Internet (finalised until mid-2012);

Updated internal directive for all surveying activities (finalised until mid-2012);



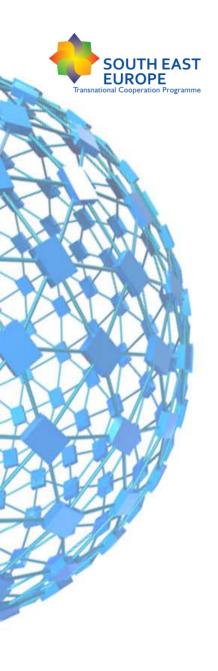


- 3. Catalogue of measures ST 2012 and MD 2013-2015 of waterway management;
- 09. Creation of a data base permitting the processing of the information for the purpose of establishing mathematical models allowing to identify the morphological evolution in the critical navigation areas (bottlenecks);
- 10. Preparation of necessary documentation for river training and dredging works on selected locations along the Danube River.



- 3. Catalogue of measures ST 2012 and MD 2013-2015 of waterway management;
- 11. Publication of data on critical sectors on NEWADA Danube FIS Portal;
- 12. Improvement of the quality of the exchanged data by a more frequent exchange of such information and by the diversification of the communication channels towards all stakeholders.









Thank you for your kind attention!

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