



National status and update of activities in waterway management - Hungary

Danube Commission

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Helyszín: Budapest



General objectives:

- **Survey on riverbed - each critical locations (one or two times per year)**
- Utilizing the results of the survey – GARDA (FAIRway I)
 - Preparing the Bottleneck PDF
 - Creating the Bottleneck webservice
 - hydroinfo
- Provide stable and up-to-date navigation condition (HUMARK)
 - Fairway marking – 3 + 3 marking vessels
 - AtoN – under installation and pilot-operation
- Provide related information for the clearance (RISComex I)
 - Margit bridge – monitoring the under-bridge clearance
 - Creating the waterlevel webservice data

As the result of the continuous riverbed survey, buoys had to be relocated on 2 location:

1. Solt bottleneck – riverbed change due to grounding. Red buoy was relocated from rkm 1554,9 to 1555,0.
2. Above Solt – riverbed change due to anchor dredging. Bottleneck parameters was changed from width 60m and depth 2.5m to width 80m and depth 2.4m



Specific objectives for the future:

1. Upgrade of our survey method and postprocessing
2. Increasing of under-bridge clearance measures
3. **Ensuring year-round navigability information by RIS (webservices & AtoN)**
4. finalisation of ongoing CEF actions & participation new projects (FAIRway II and RISComex II)



Specific objectives for the future:

Preparing **tender designs** needed to achieve stable and improved navigation condition

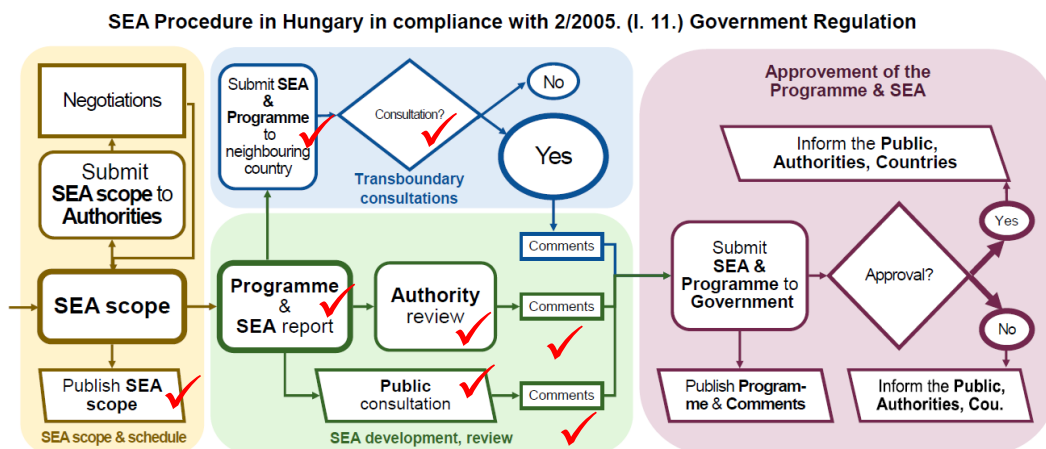
- SEA (strategic environmental procedure) protocol in progress – long time ago
- In the last 18 months – initiated and carried out the requested consultation within ad-hoc committee with Slovak side
- **Environmental impact assessment** of the interventions (removal of critical sections & modification of the riverbed structures) was accepted by the ad-hoc committee
- **Planned navigation condition** (fairway width considering water protection criterias likes drinking water resource, the water supply of side channels, degradation of riverbed) **was accepted by selection of the suggested variant**

This is the second time when Hungary try to complete succesfully the project in this topic...

Specific objectives for the future:

Preparing **tender designs** needed to achieve stable and improved navigation condition

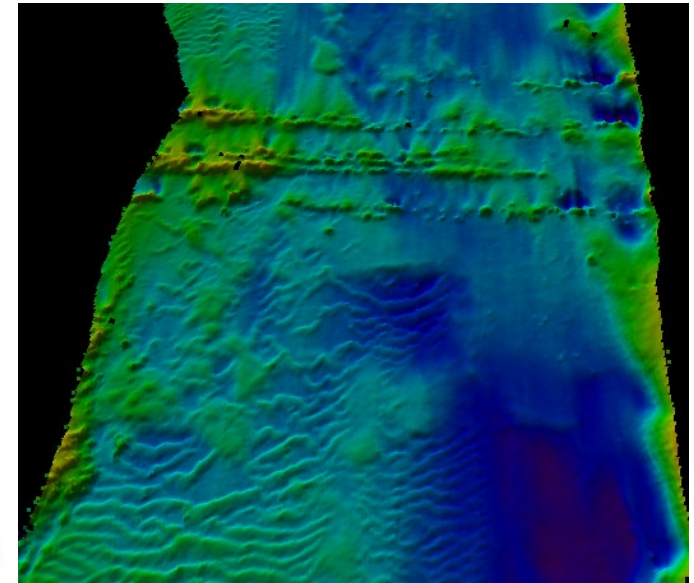
- 21.12. 2022 was sending the final Environmental Report within the SEA documentation to finalized the transboundary consultation related to ESPOO convention
- Without the final opinion of Slovak side we couldn't to submitted to the Government to have approval of the SEA
- Without the SEA approval – preparing the tender design plans is not possible



Specific objectives for the future:

Upgrade of our survey method and postprocessing

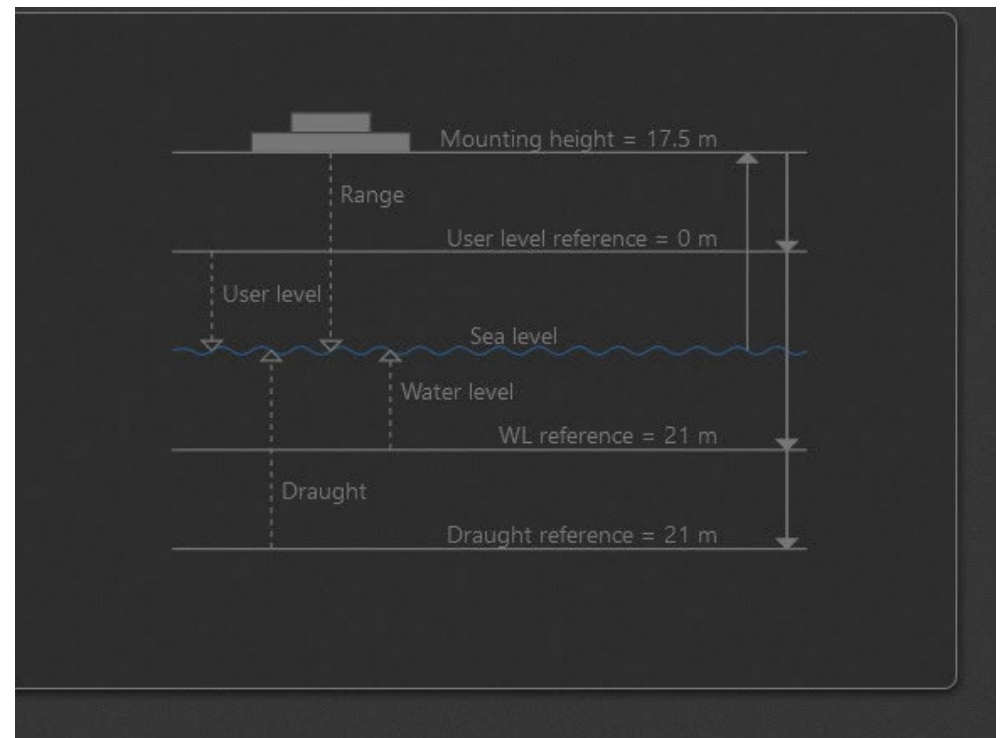
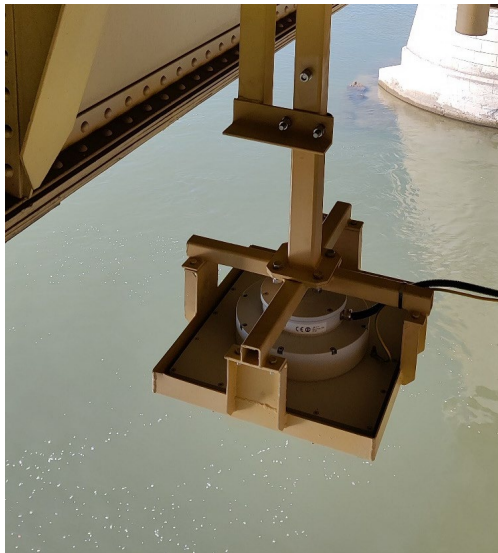
- Aquatic drone
 - to reach the places difficults by surveying vessel like region of groynes
 - better time-management and conduction using drone next to surveying vessels
 - survey the mooring place or riverbed section where a vessel reach the riverbed bottom
- New surveying vessel with multi-beam sensor to increase surveying „capacity” and as backup/decreasing reaction time
- Upgrading the GARDA sensor and softwer



Specific objectives for the future:

Increasing of under-bridge clearance measures

- Calculation are being fine-tuned on Margit bridge
- New sensors for monitoring clearance on most critical bridges -> 6 in entire country

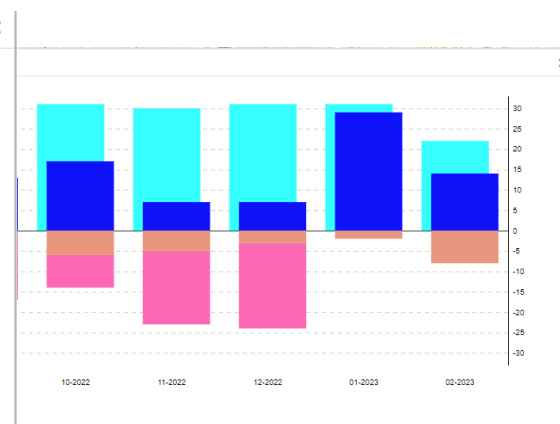
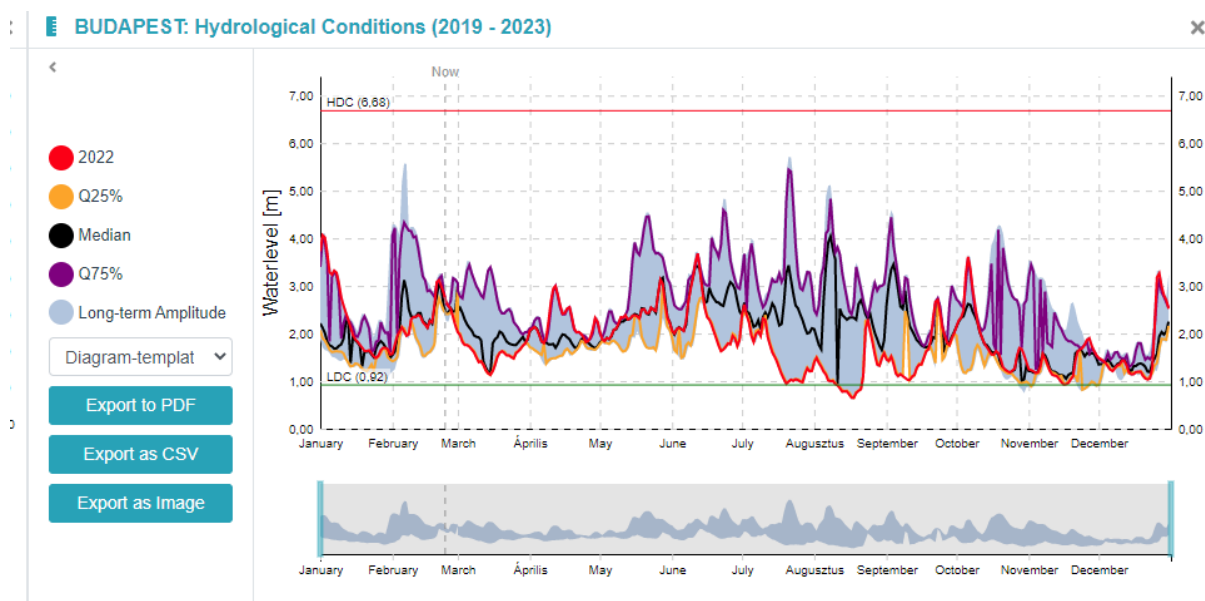


WAMOS 2.:

Not only the actual & forecasted datas but also the historical datas would be displayed to analyse the hidrological & riverbed conditions -> fairway conditions

The knowledge of the change of fairway condition -> bouys in the right place

- Bridge Clearance (historical/actual/forecasted information)
- Discharge (historical/actual/forecasted information)
- Inventory and status monitoring of hydraulic structures
- Integration of AIS Aids to Navigation (AIS AtoNs)



Specific objectives for the future:

Ensuring year-round and up-to-date navigability information by RIS with RSOE

Better planning of inland navigation:

- Reduce downtime and travel time
- Optimal use of infrastructure
- Increase the efficiency of river transport
- Reducing administrative burdens

Development of the EURIS and CEERIS platforms:

- RIS network in the route planner – EURIS
- Actual and forecasted waterlevel data publishing via NtS webservice to EURIS and other systems
- Enhancement of Vertical Bridge Clearance data processing and publishing via NtS webservice to EURIS and other systems
- Enhancement of RIS GNSS services
- Better interconnect with EURIS and CEERIS interfaces (e.g. API connection)
- Investigation of blockchain technology use in RIS, especially in electronic reporting
- Enhancement of WASDIS services for waste management controls



We have submitted (in January 2023) the applications with the other countries – partners and are waiting for the results

The core budget comes from projects (EU funding), only the basic maintenance fee comes from the national budget

Until then:
the finalisation of ongoing CEF actions like AtoN pilot

Call: **CEF-T-2022-CORECOEN**
(CEF 2 Transport - Projects on the Core Network – Cohesion envelope)
Topic: **CEF-T-2022-CORECOEN-IWWP-WORKS**
Type of Action: **CEF-INFRA**
(CEF Infrastructure Projects)
Proposal number: **SEP-210909257**
Proposal acronym: **FAIRway Danube II**

Type of Model Grant Agreement: CEF Action Grant Budget-Based

Table of contents

Section	Title	Actions
1	General information	Show
2	Participants	Show
3	Budget	Show
4	Other questions	Show

- » AtoN actual positions will be appear on ECDIS
- » Marking vessel's crew use an android application to check and set up the buoys
- » Buoys have a special ID which shown the following datas
 - MMSI, Riverkm Red, Green, Flashing or not, off position or not for Captains
 - Battery condition for marking crew



Thank you for your attention!

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