Donaukommission – Commission du Danube – Дунайская Комиссия – Danube Commission

Austria Bulgaria Croatia Germany Hungary Moldova Romania Russia Serbia Slovakia Ukraine

DANUBE COMMISSION

Expert Meeting on Development of Ports and Port Operations

Topic 2.2 – Infrastructure development and impact of climate change

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21 March 2023, Budapest

Port infrastructure development & impact of climate change - main goals of EM Ports

Note: Discussion paper on this topic prepared by Secretariat

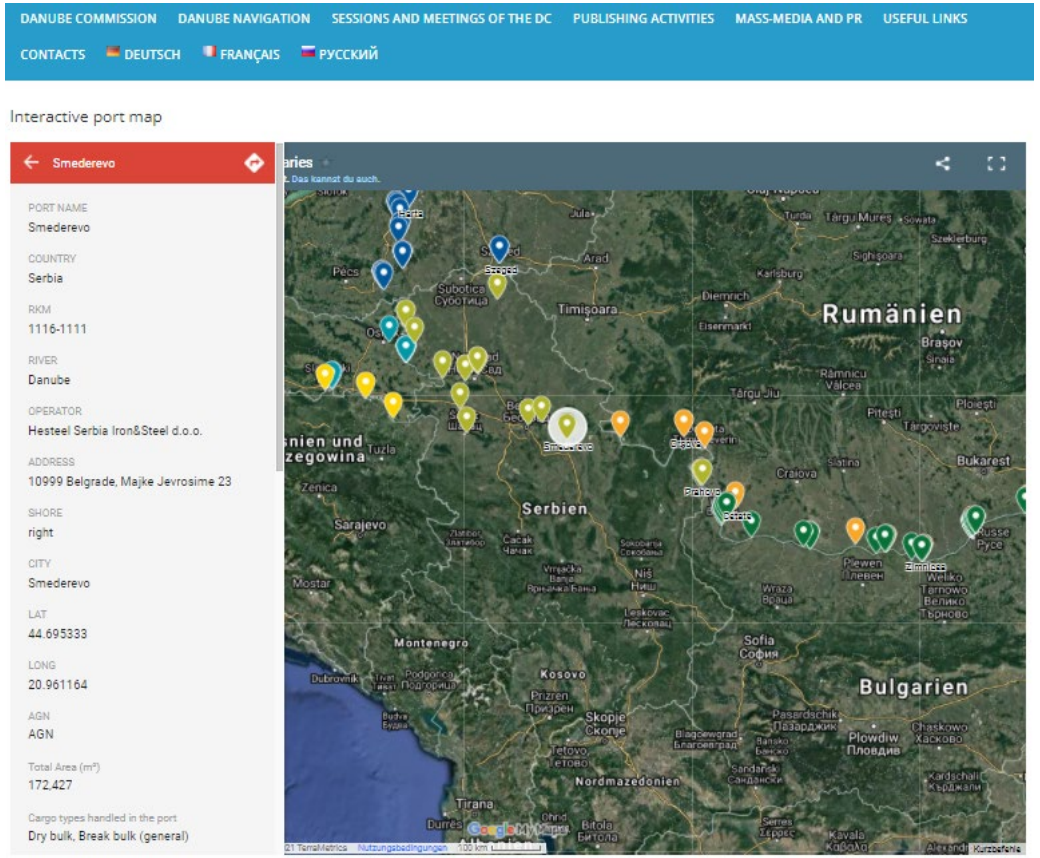
- Monitor the development of port infrastructure on the Danube waterway;
- Identify gaps in infrastructure, superstructure as well as in hinterland connections in order to enable optimal integration of IWT into managed logistics chains;
- Promote and support projects which increase the port infrastructure (physical, digital and environmental) for EU funded programs;
- Raise awareness on information deficits on impact of climate change in the entire course of the Danube;
- Support the development of a Danube-wide climate change adaption strategy for inland navigation and ports;
- Feed into work of Rhine-Danube Core Network/Working Group Ports & Inland Waterways
- Support implementation of NAIADES III through information collection, dissemination, awareness raising, know-how exchange, project facilitation, etc.
  - *Study to support the greening of inland ports*

Building an interactive Danube ports infrastructure database

- DC has established a database on Danube ports with map visualization:
  - http://www.danubecommission.org/dc/en/danube-navigation/danube-ports-map/
  - 75 ports and 198 terminals covered by the dataset, regularly updated, more than 72.000 visits in 7 years;
- Proposal to further develop the existing information into a full GIS based database on port infrastructure;
  - Adding additional port infrastructure parameters (physical, digital and environmental);
  - Upgrading web interface service;
  - Cooperating with via donau to exploit synergies with its Danube Port Portal (https://www.danube-logistics.info/danube-ports/#)
  - Assessing cooperation with TEN Tec database;
- DC SEC prepared a detailed concept for EM PORTS (March 2022)/confirmation in June 2022/implementation in 2023;

The main goal:

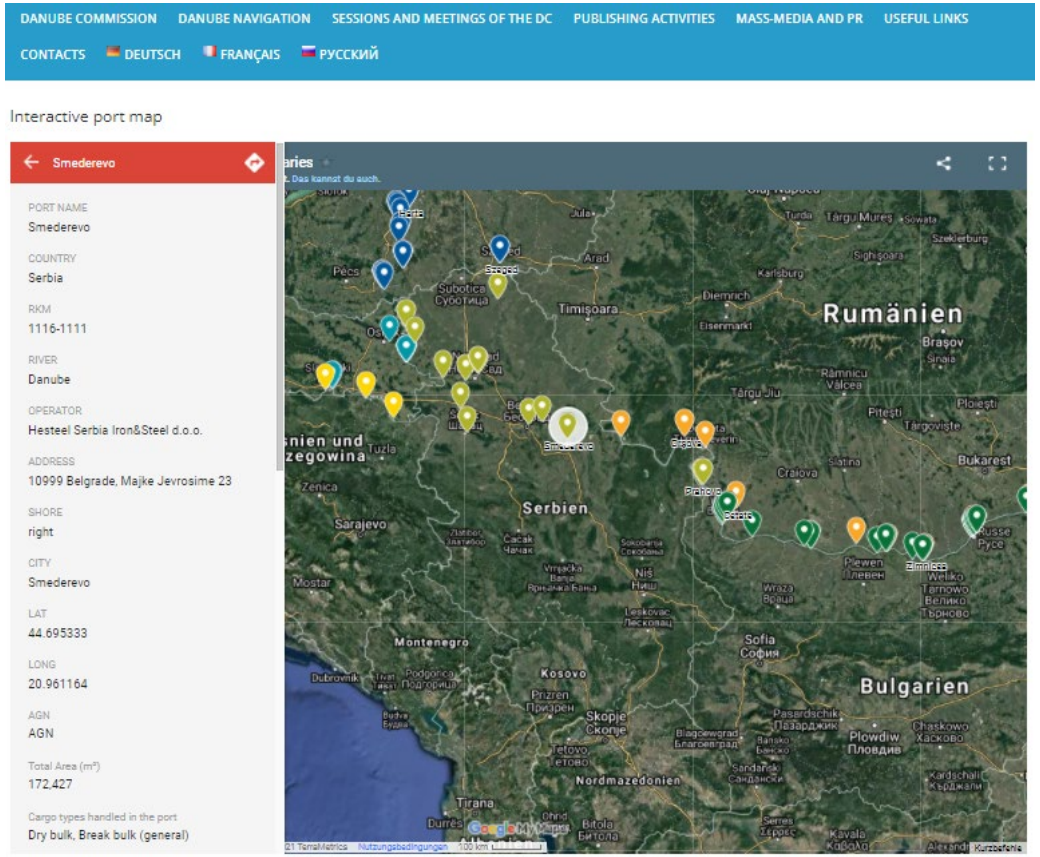
Danube ports infrastructure database could become valuable instrument for promoting & monitoring port development



Building an interactive Danube ports infrastructure database - current status (1)

The current situation: The “Album of Ports” was first released by the DC Secretariat in 2007 in tabular form with a basic dataset and published on the DC website as well as on CD. The album details ports on the Danube, Sava and Tisza Rivers described by 24 parameters and for the first time displayed on an interactive map in 2017:

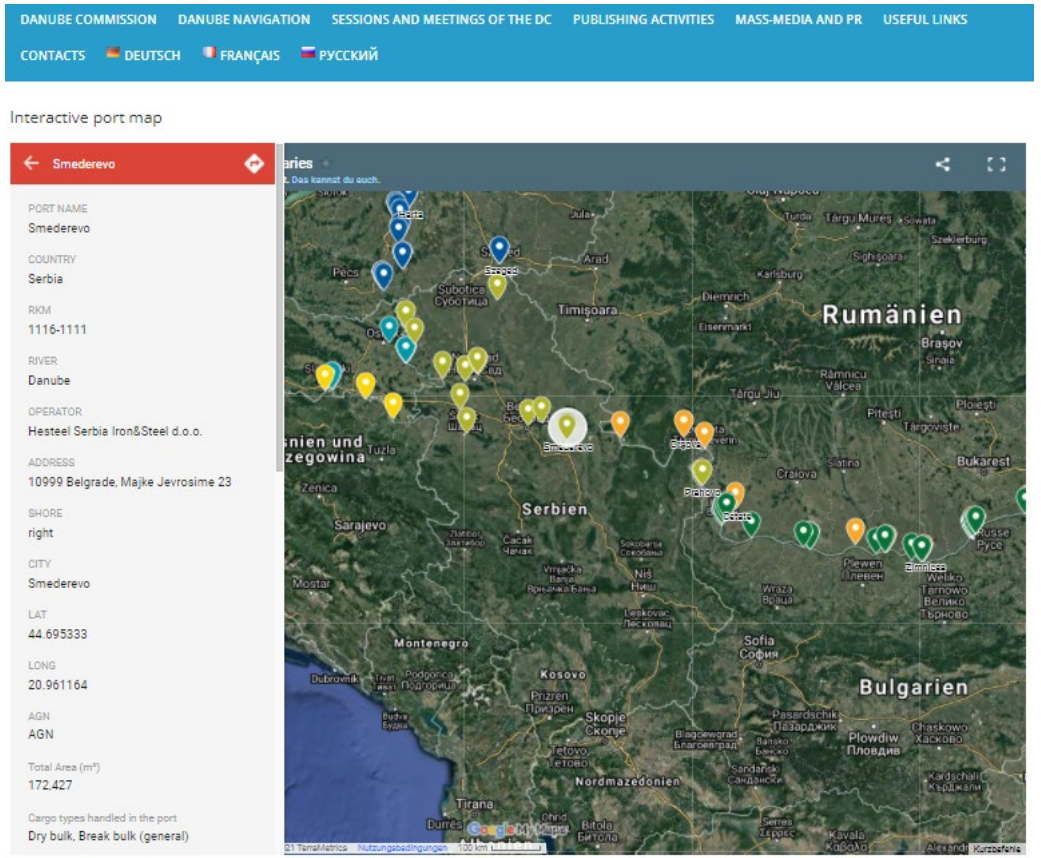
1. Country of the port
2. Port name
3. River name
4. River Km (rkm)
5. Shore side of the port location
6. Address of the port and basic data (phone, fax, e-mail, web)
7. Managing director of the port
8. Contact person
9. Region/City
10. Coordinate of the port: Latitude (Numeric)/ Longitude (Numeric)



Building an interactive Danube ports infrastructure database-the current status (2)

Continuation of the parameters on the current situation: The “Album of Ports”:

11. AGN: Ports of international importance
12. ISRS Location Code
13. Port area (m²)
14. Cargo types handled in the port
15. Port administration
16. Port operator(s)
17. Port harbor master
18. Gantry crane-quantity
    Gantry crane max. lifting capacity in tones
19. Mobile crane-quantity
    Mobile crane max. lifting capacity in tones
20. Floating crane-quantity
    Floating crane max. lifting capacity
21. Storage facilities
    open/covered storage area) (max. projected capacity by type of cargo)
22. Logistics service providers
23. WISKI Station number
24. Maintenance and disposal facilities



Final list of parameters (1)

Final list of parameters related to Danube ports (physical, digital and environmental) using the GIS system, adopted in 2022:

I. General port information (physical infrastructure)

1. Country of the port
2. Regions/Cities
3. Port name
4. River name
5. River Km (rkm)
6. Shore side of the port location
7. Coordinate of the port: Latitude (Numeric)/Longitude (Numeric)
8. AGN[1]: Ports of international importance
9. TEN-T Port Relevance (Core/Comprehensive)

[1.] European Agreement on Main Inland Waterways of International Importance (AGN)

Final list of parameters (2)

Continuation of the proposed parameters:

10. ISRS Location Code of Port (The ISRS Location Code is a unique identifier for each unique part of the infrastructure, which is of importance for RIS. This ISRS Location Code is defined in the "Commission Regulation 2018/2032 concerning the technical specifications for Notices to Skippers)
11. Port area (m^2) (Each port will present the land surface-business area including water area and industrial zones (in m^2) of the entire port area
12. Details of the port structure (water-side area, port area, hinterland) (Please attach a link of the small-scale map or orthophoto)
13. Owner of the port (Please indicate the state, region/province, municipality, private or of other entities. Provide a link of the port website on this issue)
14. Port management model[2]
15. Port administration/authority
16. Port operator(s) (Provide a link of the port website on this issue)
17. Port harbor master (contacts)
18. Basic general contact of the port and basic data (phone, fax, e-mail, web)
19. Managing director(s) of the port

[2] According to the WB port management governance model: Service port model/Tool port model/Landlord port model/Private service port

Final list of parameters (3)

Continuation of the proposed parameters:

II. Port performance (physical infrastructure)

20. Minimum guaranteed draught (in cm)
21. Port opening hours (Monday-Sunday) (ship access to the port /port services)
22. Type of cargo terminals (A terminal is a specific physical, technological, organisational and/or operational area where a certain cargo is handled)
    a) Number of bulk cargo terminals
    b) Number of petrochemical/gas terminals
    c) Number of Ro-Ro terminals, number of Ro-Ro ramps
    d) Number of trimodal container terminals (with water, rail and road access)
    e) Number of rail/road container terminals in the port area
    f) Number of onshore container terminals without rail access
    g) Number of other (specialized/dedicated) terminals (e.g., high and heavy goods)
23. Berth total length (separated in vertical and inclined) (m)
24. Connection to waterways (CEMT class[3])

[3] Inland waterway classification according to CEMT (European Conference of Ministers of Transport)

Final list of parameters (4)

Continuation of the proposed parameters:

II. Port performance (physical infrastructure)

25. Gantry crane-number
    Gantry crane max. lifting loads capacity (in tonnes)
26. Mobile crane-number
    Mobile crane max. lifting loads capacity (in tonnes)
27. Floating crane-number
    Floating crane max. lifting capacity (in tonnes)
28. Storage facilities (open/covered storage area and technical capacity)
29. Logistics service providers (number of entities including transhippers, shipper agencies, custom agency. Please provide a link to the port website on this issue)
30. Bunkering facilities for vessel fuel (yes/no)
31. Type of alternative fuels for vessels (according to the AFIR)
32. Onshore power supply for vessels-OPS (yes/no; number of boxes for electricity; level of amperage)

III. Environmental infrastructure of port (coordinates if available)

33. Waste reception facilities (yes/no; type of waste)
34. Renewable energy production in port (yes/no; type renewable energy production)

IV. Digital infrastructure of port

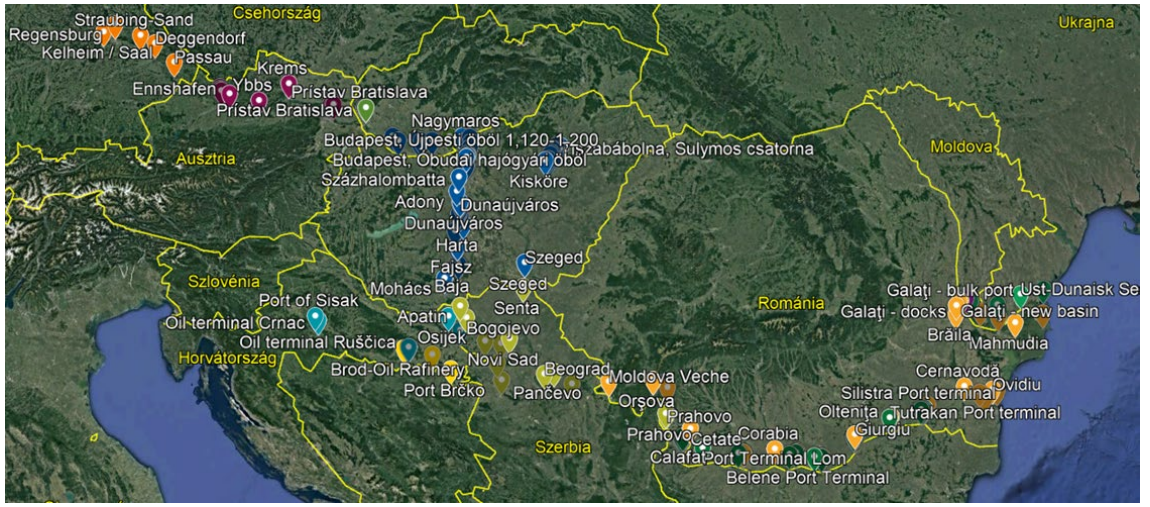
35. Port Community System (in operation/planned)
36. Use of the RIS services (basic and additional services, specify) - under further discussion

Data collection by web interface where each port administration will receive access data and a password and edit and save new parameter information/role of the national contact point

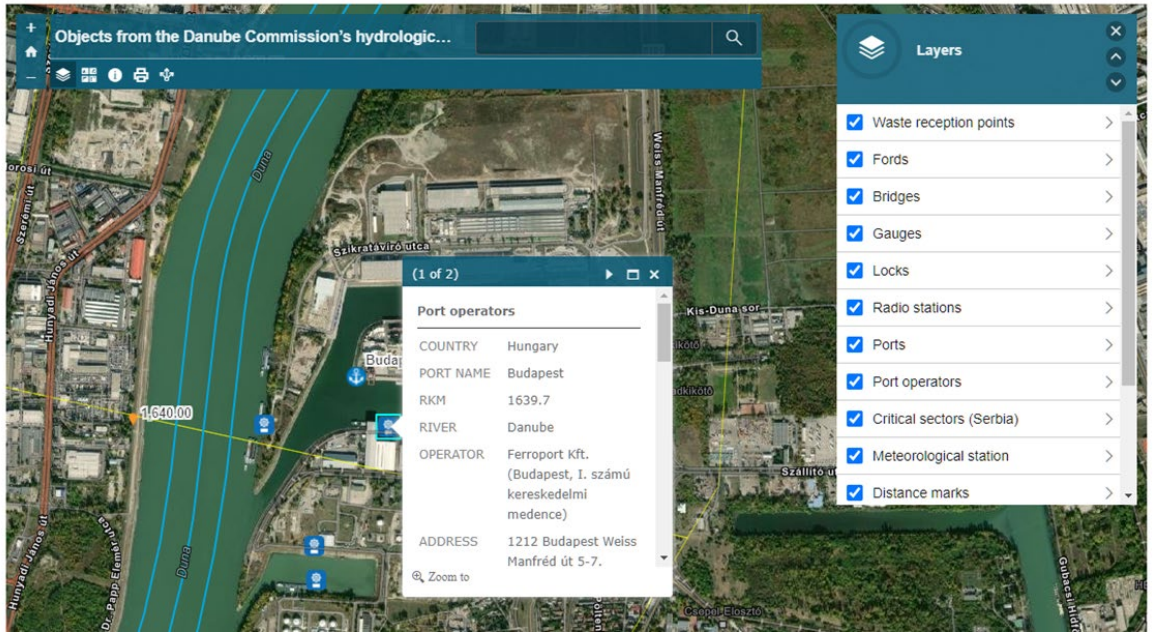
Proposed concept for data collection

Note:

- The collected data will be converted to .shp shape file format and displayed on the DC interactive map on ArcGis online;
- The .shp shape file format is a geospatial vector data format for geographic information system (GIS) software
- The data is stored as .shp shape file attribute format (.dbf) which stores the attributes of the shape. It uses the dBase IV format;
- This layer is already available under the title "Port operators" on the interactive map of the DC;
- There are publishing options - the entire dataset can be published as a responsive data table with filter, search and sort functions and various export formats by using the wpDataTables plugin for WordPress.



Objects from the Danube Commission's hydrological database (Interactive map of the Danube)



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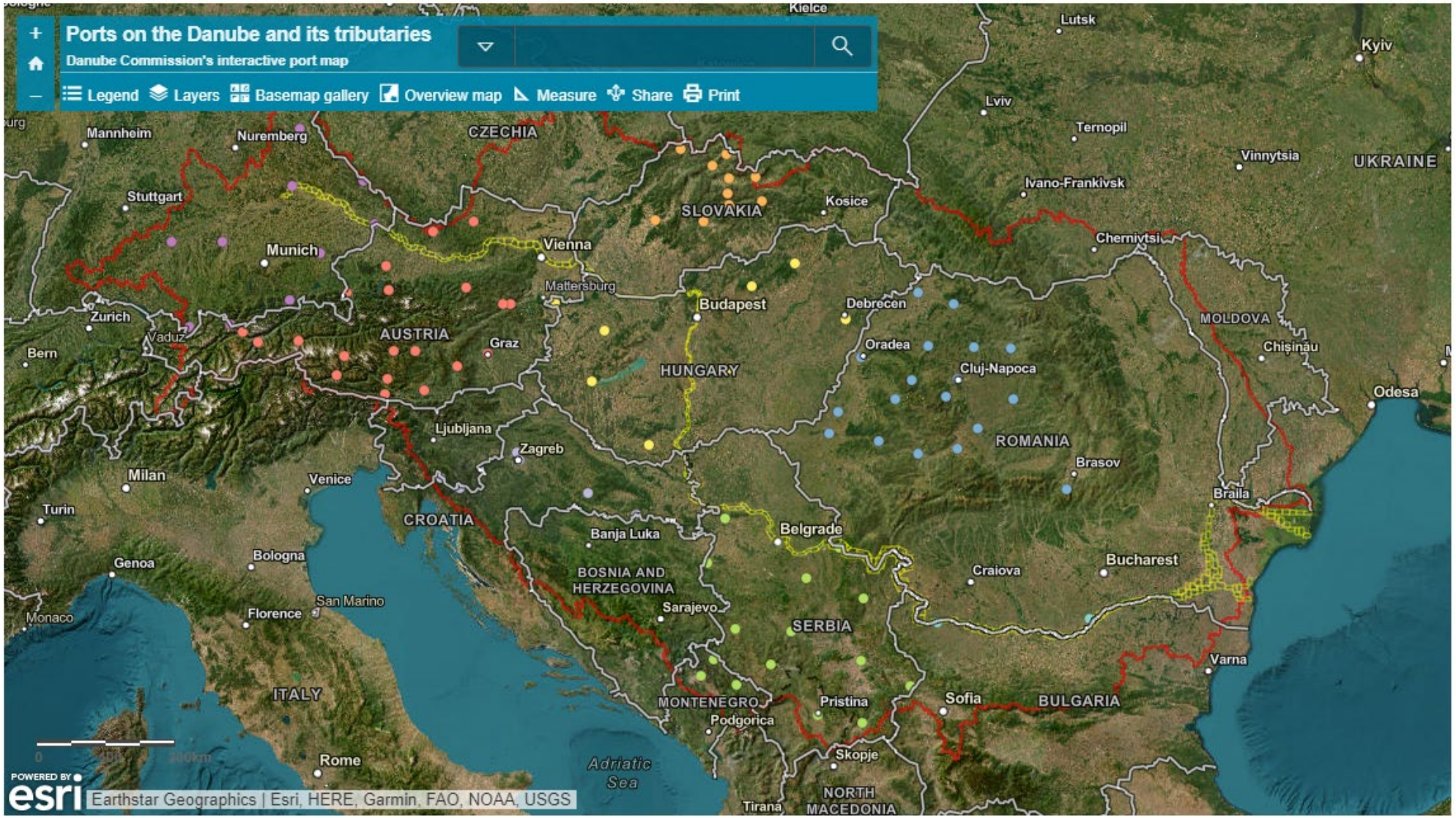
Building an interactive Danube ports infrastructure database

- Proposal to expand the “Album of ports” database using the GIS system with additional port infrastructure parameters (physical, digital and environmental) was agreed by EM PORTS held on 9 March 2023, verified by WG TECH and confirmed by the 97th session of the Danube Commission (15 June 2022).
- DC Secretariat provided a concept for data collection by a web interface.
- **Each DC member state will appoint a representative to act as the main point of contact for that country - by 20 April 2023.**
- Pilot phase will be completed by the end of 2023 and progress will be reviewed at regular EM PORTS in March 2024.
- In order to integrate the Danube ports into logistic chains, shortcomings in port infrastructure and in connecting rail and road infrastructure need to be targeted. The DC infrastructure database will be a monitoring tool and can help identify gaps in port infrastructure development on the Danube.

Interactive port map (Beta version)



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Austria Bulgaria Croatia Germany Hungary Moldova Romania Russia Serbia Slovakia Ukraine

COUNTRY: COUNTRY

RKM: RKM

RIVER: RIVER

SHORE: SHORE

Excel CSV

Show 25 **entries** **Search:**

COUNTRY	PORT NAME	RKM	RIVER	OPERATOR	ADDRESS
Austria	Linz Handelshafen	2.130.700	Danube	Linz Service GmbH	4021 Linz, Wiener Straße 151
Austria	Linz Tankhafen	2.128.100	Danube	Linz Service GmbH	4021 Linz, Wiener Straße 151
Austria	Linz Voestalpine	2.127.160	Danube	Voestalpine Stahl Linz GmbH	4020 Linz, Voestalpine-Straße 3
Austria	Linz Felbermayr	2.124.730	Danube	Felbermayr Transport & Hebetechnik GmbH & Co KG	4031 Linz, Lunzerstraße 97
Austria	Ennshafen	2.112.000	Danube	EHG Ennshafen GmbH	4470 Enns, Donaustraße 3
Austria	Ybbs	2.057.670	Danube	Schaufler GmbH	3370 Ybbs, Am Donauspitz 4
Austria	Krems	1.998.000	Danube	Mierka Donauhafen Krems GmbH & Co. KG	3500 Krems, Karl Mierka Straße 7-9
Austria	Wien Freudenau	1.920.100	Danube	Hafen Wien	1023 Wien, Seitenhafenstraße 15
Austria	Wien Albern	1.918.300	Danube	Hafen Wien	1023 Wien, Seitenhafenstraße 15
Austria	Wien Lobau	1.916.400	Danube	Hafen Wien	1023 Wien, Seitenhafenstraße 15
Bosnia and Herzegovina	Port Brčko	228.400	Sava	Public Company "Luka"	Ul. Lučka bb, 76100 Brčko, Brčko Distrikt, BiH
Bosnia and Herzegovina	Port Šamac	313.000	Sava	AD RTC "Luka" Šamac	Ul. Cara Dušana 2, 76230 Šamac, BiH
Bosnia and Herzegovina	Brod-Oil Rafinery	374.500	Sava	Optima Group d.o.o.	Ul. Svetog Save bb, 74450 Brod, BiH
Bulgaria	Port Terminal Lom	742	Danube	"Port Invest" LTD	7000 Ruse, pl.Otets Paisij No 2
Bulgaria	Port Terminal Oriahovo	678	Danube	"Slunchev Dar" JSK	9000 Varna, region Odesos,Maria Luiza blvd.

Questions & Answers / Discussion

- Additional topics of interest
- Priority should be given to ....
- Next EG PORTS meeting should focus / present / investigate ...
- Any other comments

Thank you for your attention!

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