Public berths in the Czech Republic

Lubomír Fojtů
Waterways Directorate of the Czech Republic

On the water – ecologically, cheap and troublefree
Inland waterways network in the Czech Republic

Important traffic waterways (by Act 114/1995 Col.)

- **Upper Vltava**: 146 km, class I (pleasure navig.)
- **Elbe state border - Mělník**: 111 km, CEMT class Va
- **Elbe Mělník - Přelouč**: 112 km, CEMT class IV, 135 km since 2023
- **Elbe - Vltava waterway core network TEN-T**: 338 km, class IV, Va
- **Baťa canal**: 53 km now, 72 km since 2020, class 0 (pleasure navig.)
- **Vltava Mělník - Slapy**: 92 km, CEMT class IV

On the water – ecologically, cheap and troublefree
Orient – East Mediterranean corridor of the core TEN-T network


**Strategic corridor bottlenecks:**
- Unstabile draughts on Elbe, as cross-border issue CZ/BRD

Other bottlenecks:
- Connection to Pardubice and Hradec Králové agglomeration and improvement of waterway to Prague
- Low navigation draughts and clearances under bridges on Vltava to Prague
- Unsatisfactory performance of lock chambers
- Unfinished implementation of RIS and cross border data exchange with BRD

On the water – ecologically, cheap and troublefree
Development of waterways in the Czech Republic

**Strategic framework**

- **Transport policy for the period 2014-2020**
  - Approved by government by Decree No 449 from 12/6/2013
  - The objective is improvement of conditions for competitiveness by modernisation of transport infrastructure including waterways

- **Waterborne Transport Strategy**
  - Strategy taken into account by government by Decree No 685 from 25/09/2017
  - National implementation tool for action programme NAIADES II tools and requirements of the TEN-T core network
  - Waterways infrastructure is necessary for provision of good conditions for waterway transport
  - Government should fulfill transparent support services for all users like environmental services, tow service, information support etc.
  - Waterways should provide user oriented services
  - Modern port infrastructure is necessary for efficient approach to the waterway transport, including innovative solutions:
    - New logistic services like citylogistic
    - Alternative fuels
    - Etc.

*On the water – ecologically, cheap and troublefree*
Development of waterways in the Czech republic in last 20 years

What has been achieved?

- **Flood protection for vessels finalised**
  - Elbe-Vltava waterway covered by basic network of protective harbours and berths
  - Flood 2013 confirmed right functionality
  - Only minor additions necessary

- **Modernisation of locks on Elbe finalised**
  - All 26 lock chambers modernised (till 12/2015)

- **On the whole Elbe available clearance under bridges 5,25 m**

- **New navigable Vltava waterway to České Budějovice**
  - 33 km new waterway with 4 locks, 2 public ports and 5 jetties

- **Bat’a canal at Moravia modernised**
  - All lock chambers modernised
  - Consistent network of public berths build

On the water – ecologically, cheap and troublefree
Development of waterways in the Czech Republic in the last 20 years

What are the impacts on the use of waterways?

- **Increase of pleasure navigation**
  - Significant increase of traffic on Bat’a canal, among others as a result of systematic infrastructure construction
  - Development of navigation on Vltava, esp. on reservoirs, and also on a new waterway stretch
  - Some increase on Elbe, limited by poor berth network

- **Continuing decline of freight transportation**
  - Basic reason is instability of navigation conditions on free-flowing Elbe

On the water – ecologically, cheap and troublefree
Pleasure craft number in the Czech Republic – in 10 years an increase of 80%!

In the year 2017:
- 739 new pleasure crafts registered
- 2,664 new pleasure craft operator licences

On the water – ecologically, cheap and troublefree
Pleasure navigation traffic

Lock passages at the new lock Hluboká nad Vltavou:

6 years in operation – from 0 to 2839 vessels p.a.

On the water – ecologically, cheap and troublefree
Who are the users of public waterways?

- Freight traffic
- Pleasure navigation
- Cruise ships

On the water – ecologically, cheap and troublefree
Public berth needs

Freight traffic
• over-night berthing
• general supply for crews

Pleasure navigation
• Long-time berthing
• Short-time berths for day or over-night berthing
  with access to shore

Sightseeing and liner passenger ships
• Public berths with public access and supply
  (water, power, waste disposal)
• Public jetties like stops on the line

Cruise ships
• Public berths with high capacity public access and supply
  (water, power, waste disposal)

On the water – ecologically, cheap and troublefree
Waterborne Transport Strategy - ports and berths

Freight ports on TEN-T network:
- Extension of the state port network
- Grants scheme for private ports modernisation
- Environmental and support service centres

Pleasure and passenger ship port infrastructure
- Waiting berths in lock approaches
- Fulfillment of complete public berths network for the short-time berthing
- Provision of the capacity and complete network for middle-time and long-time berthing
- Environmental and support service centres

On the water – ecologically, cheap and troublefree
Basic infrastructure (locks, fairway, canals etc.):

- Owned by the state
- Navigation is open and free of charge
- Operation and maintenance in the responsibility of Ministry of agriculture, done by state enterprises Povodí (state owned river basin management companies)
  - Financed by charges for water consumption
  - For transport infrastructure from 2016 new funding scheme from State Fund for Transport Infrastructure
  - On important traffic waterways there is a requirement for ensuring of waterway parameters
- Development of infrastructure on important traffic waterways in the responsibility of Ministry of Transport, done by the state organisation Directorate of Waterways
Ports:

- The most number of ports – land area **owned by private companies**
- Quay walls, basins, dolphins owned by the state
- Some major ports in „public“ regime, with undiscriminated access for all vessels
- Utilisation of ports is in general charged
- Private infrastructure financed by private owners, with some grant programmes
  - Major limite is a long payback period and unstable waterway functionality (unstable port utilisation)
- **State owned ports and berths** (especially for pleasure navigation) financed by the state budget operated by the state organisation Directorate of Waterways
- Utilisation of ports are in general also charged (income covers operation costs)

On the water – ecologically, cheap and troublefree
On the water—ecologically, cheap and troublefree

Major freight ports on Elbe – Vltava waterway

- Děčín
- Ústí nad Labem
- Lovosice
- Mělník
- Praha - Radotín
- Kolín
- Chvaletice
Public berths for freight transport

- Limited traffic volumes
  - Over-night mooring especially at lock chamber approaches (equipped by dolphins or quay walls)
  - Other mooring places and anchorages with shore mooring on an inclined bank
- On locks with higher traffic and pleasure navigation
  - Construction of separated berths on approaches for large ships and pleasure crafts

Example:
- Modernization of lock chamber Štvanice approaches project in Prague, cofinanced by CEF
  - Construction works started 11/2018, finished 12/2019

On the water – ecologically, cheap and troublefree
Public berths for passenger ships

Example:
Prague - Edvard Beneš embankment berth

- Floating berth 480 m long
- For passenger and cruise ships for short-time and long-time mooring
- Access of passengers to the city centre and to the coach bus stop close-by
- Shore power supply (400 V / 16 A, 32 A, 64 A, 125 A, 250 A Powerlock)
- Drinking water shore supply in preparation

On the water – ecologically, cheap and troublefree
Finished public jetties for passenger vessels on the Elbe

Libotenice

Lovosice

Ústí nad Labem-centrum

Dolní Zálezly

On the water – ecologically, cheap and troublefree
Berth infrastructure on small waterways

- Mixed utilisation for passenger ships (up to 20 m length on Baťa canal) and pleasure crafts

**Best practice:**
- Complete network of public berths on Baťa canal waterway (53 km long)
- => 90 000 visitors per year
- Fixed berths with shore power supply (230 V 16A) and drinking water shore supply
Berth infrastructure on small waterways

- Mixed utilisation for passenger ships (up to 44 m length on Vltava) and pleasure crafts

**Best practice:**
- Complete network of public berths on the new Vltava waterway towards České Budějovice (33 km long)
- Floating concrete berths
- Access for the disabled
- Shore power supply

On the water – ecologically, cheap and troublefree
Public pleasure port Hluboká nad Vltavou

- 73 lots of small vessels
- 1 space design of the vessel in port
- parking for passenger shipping
- the maximum draft 1,3 m
- lifting bridge from 2,5 m to 5,25 m
- Information centre with sanitary facilities
- slope for small vessels

in operation since 2015
Finished jetties for pleasure boats on the Elbe

On the water – ecologically, cheap and troublefree
Extended network of pleasure craft berths on Elbe

On the water – ecologically, cheap and troublefree
Extended network of pleasure craft berths on Elbe

Examples:
- Floating berth for pleasure crafts
- Capacity 8 - 20 crafts
- Mooring up to 48 hours
- Shore power supply 230 V
- Drinking water shore supply
- Walking and cycle access for the surroundings visit
Extended network of passenger ship berths on Elbe

On the water – ecologically, cheap and troublefree
Extended network of passenger ship berths on Elbe

Examples:
• Floating berths for passenger ships up to 84m (110 m) length
• Wheelchair accessible access
• Mooring 15 min up to 48 hours
• On major places (cities):
  • Shore power supply 400 V
  • Drinking water shore supply
• Walking and cycle access for the surroundings visit
• sanitary facilities
Payment system for port services
port card

Objectives:
- unattended use of port services
- minimal staff requirements
- unlimited operating time

Functions:
- Chip card for port services in the whole Czech Republic in state public ports and berths:
  - Shore power supply of vessels
  - Water shore supply
  - Sewage water collection from vessels
- Connection equipment installed on new ports and berths
- Chip card purchase as subscription card for service utilisation
- Recharging the card and list of transactions available digitally on pristavnikarta.rvccr.cz

On the water – ecologically, cheap and troublefree
Public environmental service and bunkering centres for vessels

Objectives:
- Water and land protection against pollution
- Safe manipulation with dangerous things (fuel)
- Support from the tourist use of waterways on the wider range
- Better maintenance quality → higher sustainability of vessels operation

Functions:
- Recharging of power supply
- Refilling of water tanks (drinking/non-drinking)
- Bunkering of fuel and other operation liquids (fuel, LPG, engine oil)
- Pumping out sewage water
- Collection of waste (general, selected, dangerous)

On the water – ecologically, cheap and troublefree
Waterways Directorate of the Czech republic

Lubomír Fojtů

www.rvccr.cz

On the water – ecologically, cheap and troublefree