

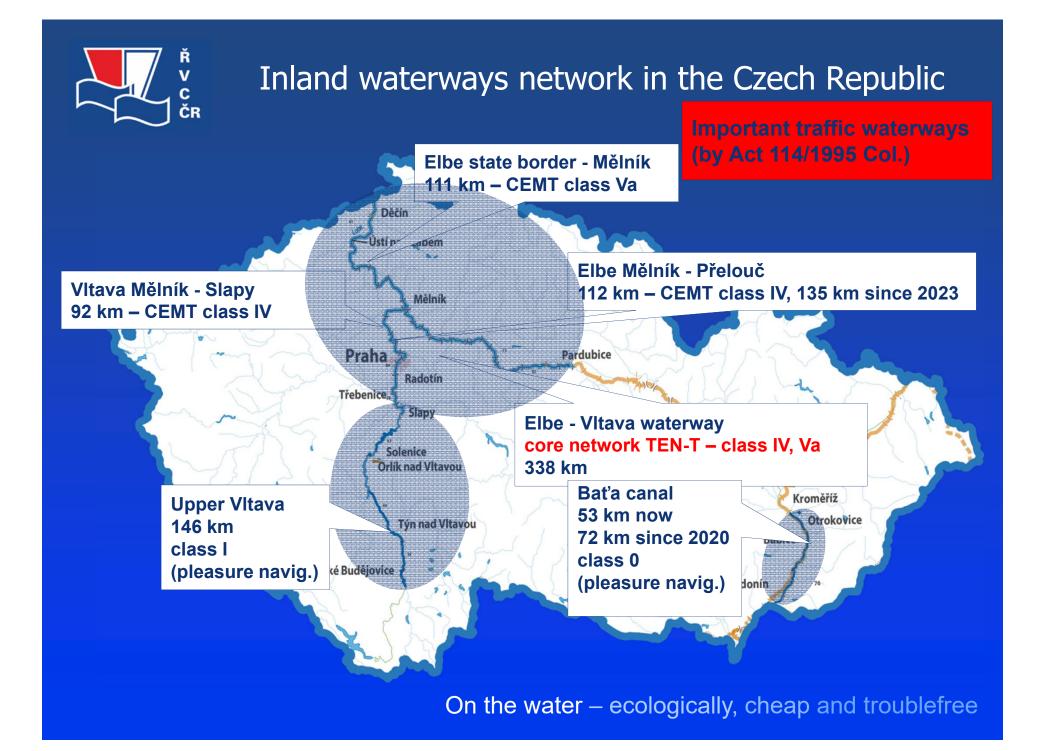


# **Public berths in the Czech Republic**

Lubomír Fojtů Waterways Directorate of the Czech Republic

On the water – ecologically, cheap and troublefree

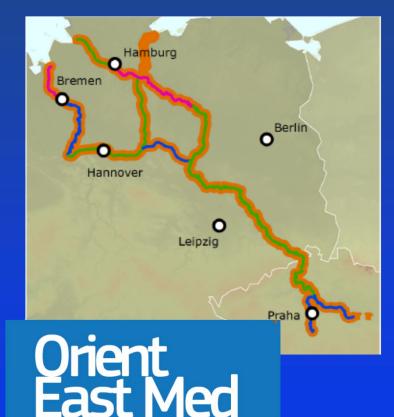
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## Orient – East Mediteranean corridor of the core TEN-T network



Defined by Directive of European Parliament and Council (EU) No 1316/2013 from 11/12/2013





Work Plan of the European Coordinator **Mathieu Grosch** 

## **Strategic corridor bottlenecks:**

- Unstabile draughts on Elbe, as crossborder issue CZ/BRD

#### Other bottlenecks:

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



# **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.



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





Development of waterways in the Czech republic in 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

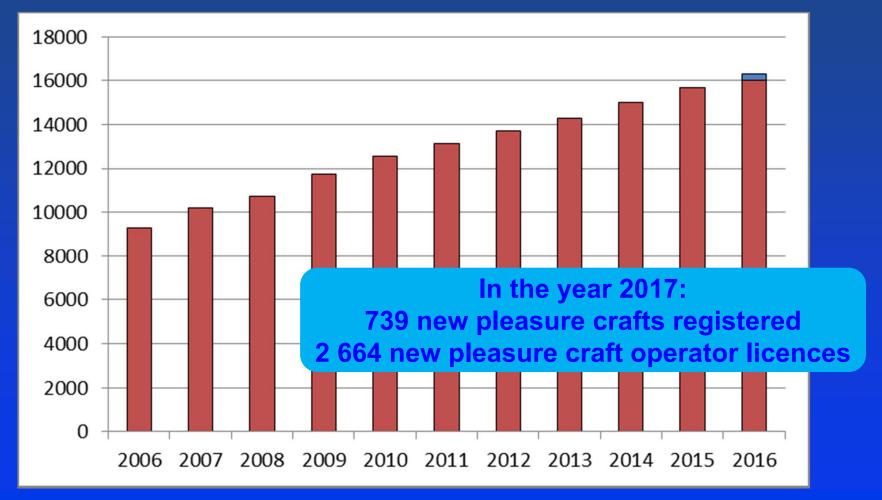
# Continuing decline of freight transportation

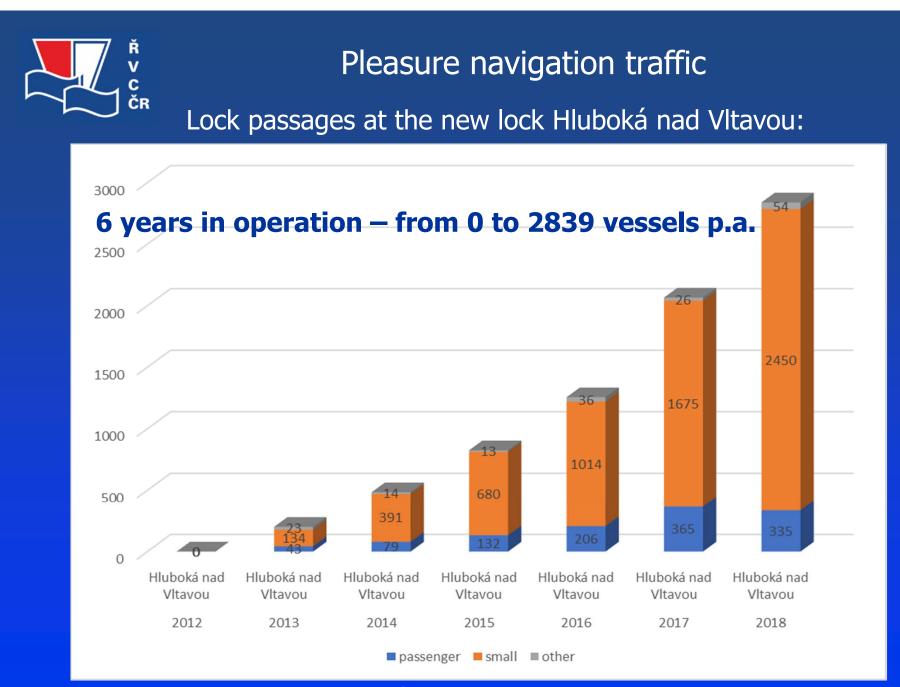
• Basic reason is unstability of navigation conditions on free-flowing Elbe





# Pleasure craft number in the Czech Republic – in 10 years an increase of 80 %!







# Who are the users of public waterways ?





## Sightseeing and liner passenger ships

Freight traffic





Cruise ships

**Pleasure navigation** 



# Public berth needs



### Freight traffic

- over-night berthing
- general supply for crews



## Sightseeing and liner passenger ships

- Public berths with public access and supply (water, power, waste disposal)
- Public jetties like stops on the line



#### Pleasure navigation

- Long-time berthing
- Short-time berths for day or over-night berthing
- 10 with access to shore



## Cruise ships

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



# 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



# Infrastructure funding structure in CZ

## **Basic infrastructure (locks, fairway, canals etc.):**

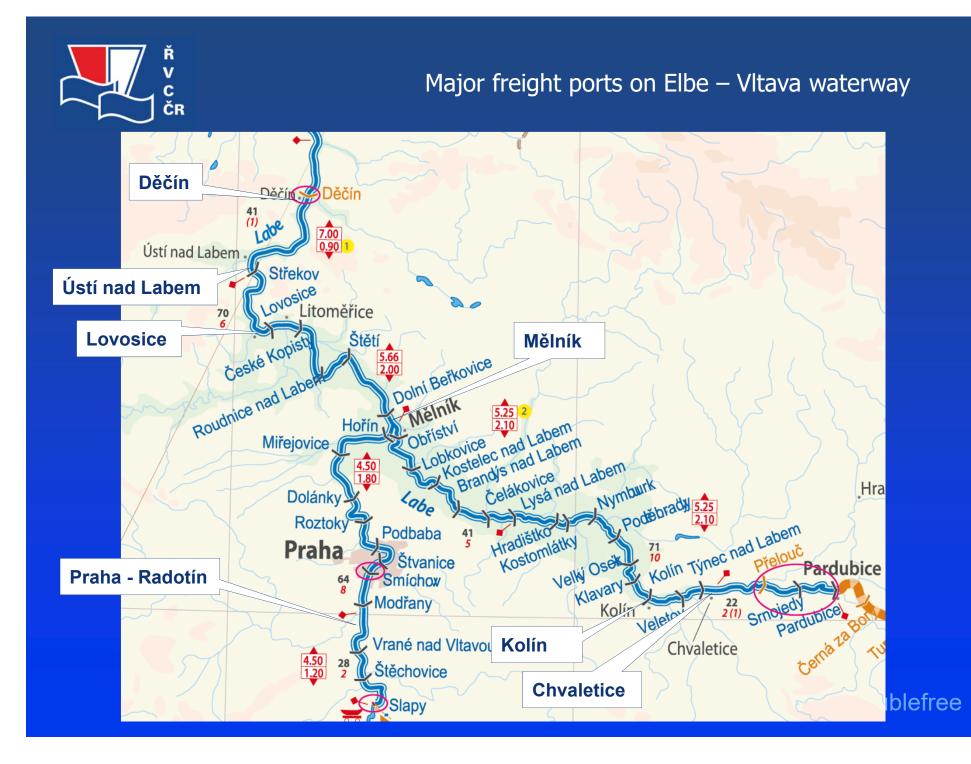
- Owned by the state
- Navigation is open and free of charge
- Operation and maintenance in the responsibility of Ministry of agriculture, done by state enterprices Povodí (state owned river basin management companies)
  - Financed by charges for water consumption
  - For transport infrastructure from 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



# Infrastructure funding structure in CZ

#### **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)





# Public berths for freight transport

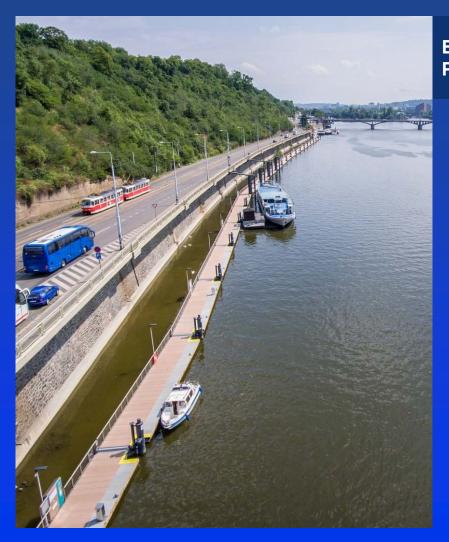
- Limited traffic volumes
  - Over-night mooring especially at lock chamber approaches (equipped by dolphins or quay walls)
  - Other mooring places and anchorages with shore mooring on an inclined bank
- On locks with higher traffic and pleasure navigation
  - Construction of separated berths on approaches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



# **Public berths for passenger ships**



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#### Example: Prague - Edvard Beneš embankment berth

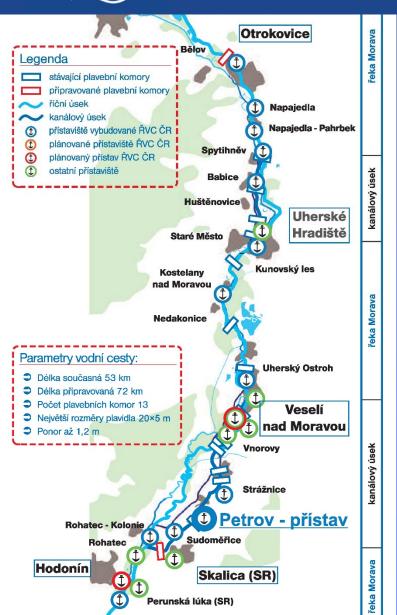
- Floating berth 480 m long
- For passenger and cruise ships for shorttime and long-time mooring
- Access of passengers to the city centre and to the coach bus stop close-by
- Shore power supply (400 V / 16 A, 32 A, 64 A, 125 A, 250 A Powerlock)
- Drinking water shore supply in preparation



# Finished public jetties for passenger vessels on the Elbe



# Berth infrastructure on small waterways



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 Mixed utilisation for passenger ships (up to 20 m length on Bat'a canal) and pleasure crafts

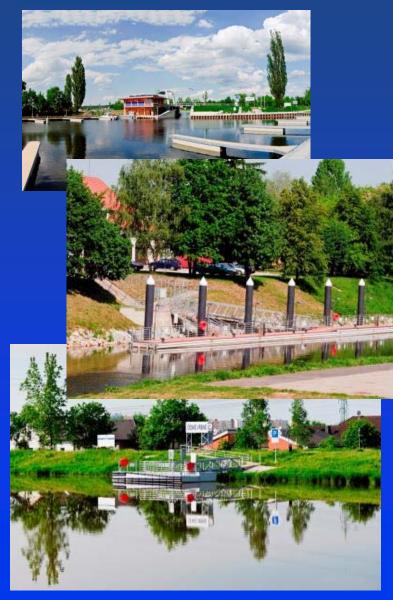
#### **Best practice:**

- Complete network of public berths on Bat'a 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
- Acces for the disabled
- Shore power supply





# Public pleasure port Hluboká nad Vltavou



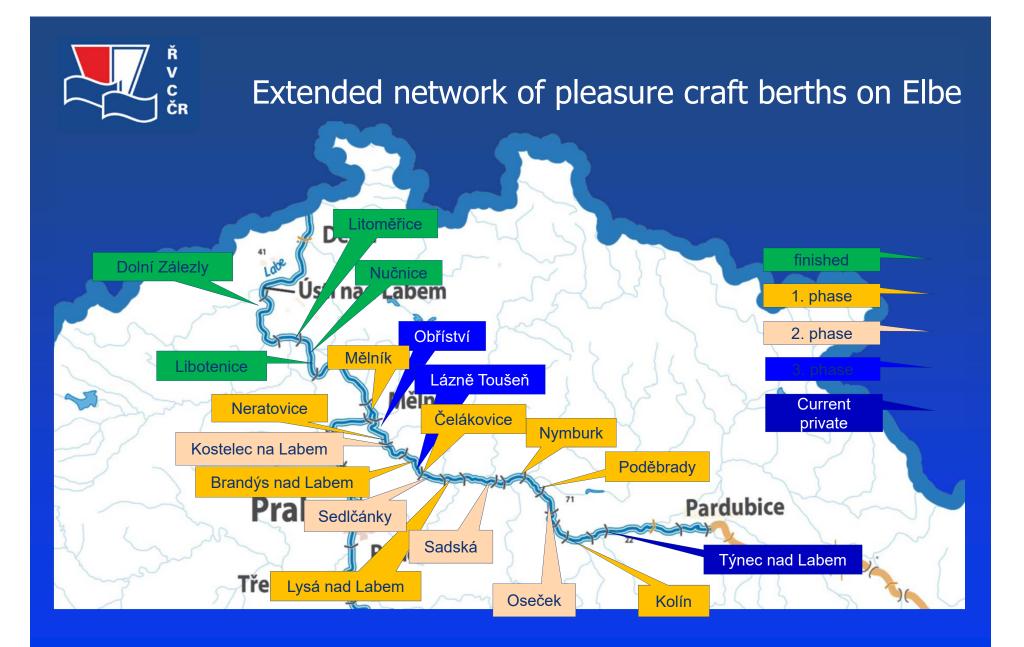
- 73 lots of small vessels
- 1 space design of the vessel in port
- parking for passenger shipping
- the maximum draft 1,3 m
- lifting bridge from 2,5 m to 5,25 m
- Information centre with sanitary facilities
- slope for small vessels



in operation since 2015

cheap and troublefree



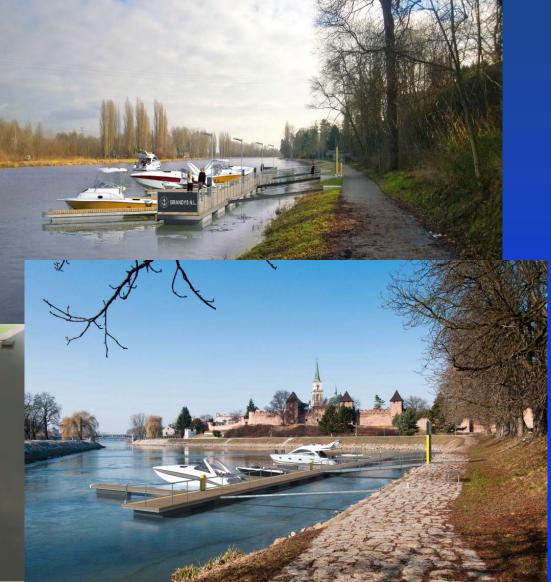




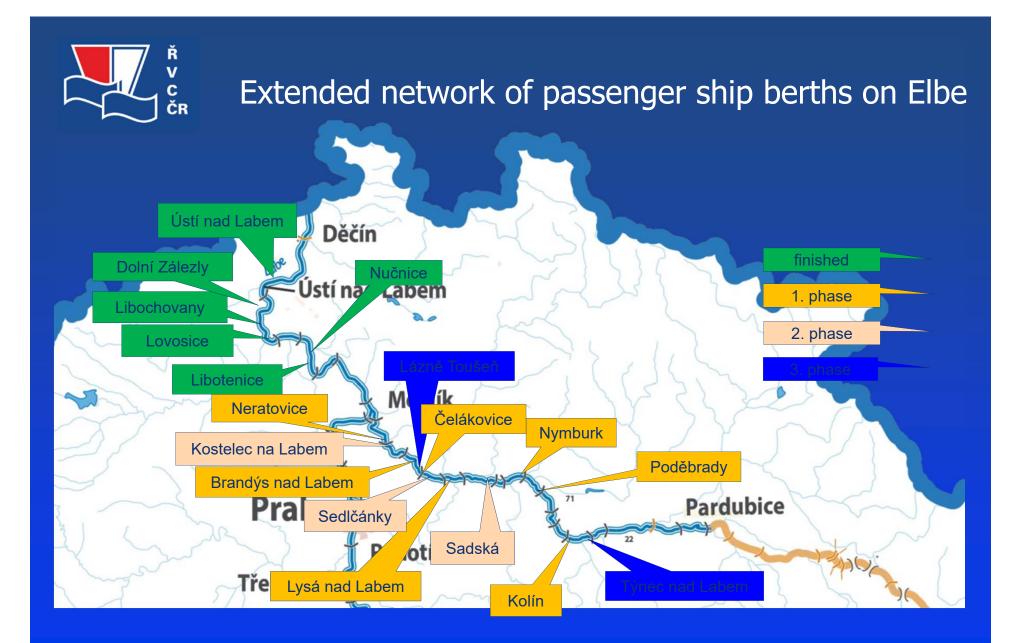
# Extended network of pleasure craft berths on Elbe

#### Examples:

- Floating berth for pleasure crafts
- Capacity 8 20 crafts
- Mooring up to 48 houres
- 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

#### Examples:

- Floating berths for passenger ships up to 84m (110 m) length
- Wheelchair accessible access
- Mooring 15 min up to 48 houres
- 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





# Public environmental service and bunkering centres for vessels

#### Objectives:

- Water and land protection against polution
- 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)



# Waterways Directorate of the Czech republic

Lubomír Fojtů

WWW.rvccr.cz