



*Favorable wind for Your business*

# Investment proposal «Organization of a shipyard in the Sheksna water area»

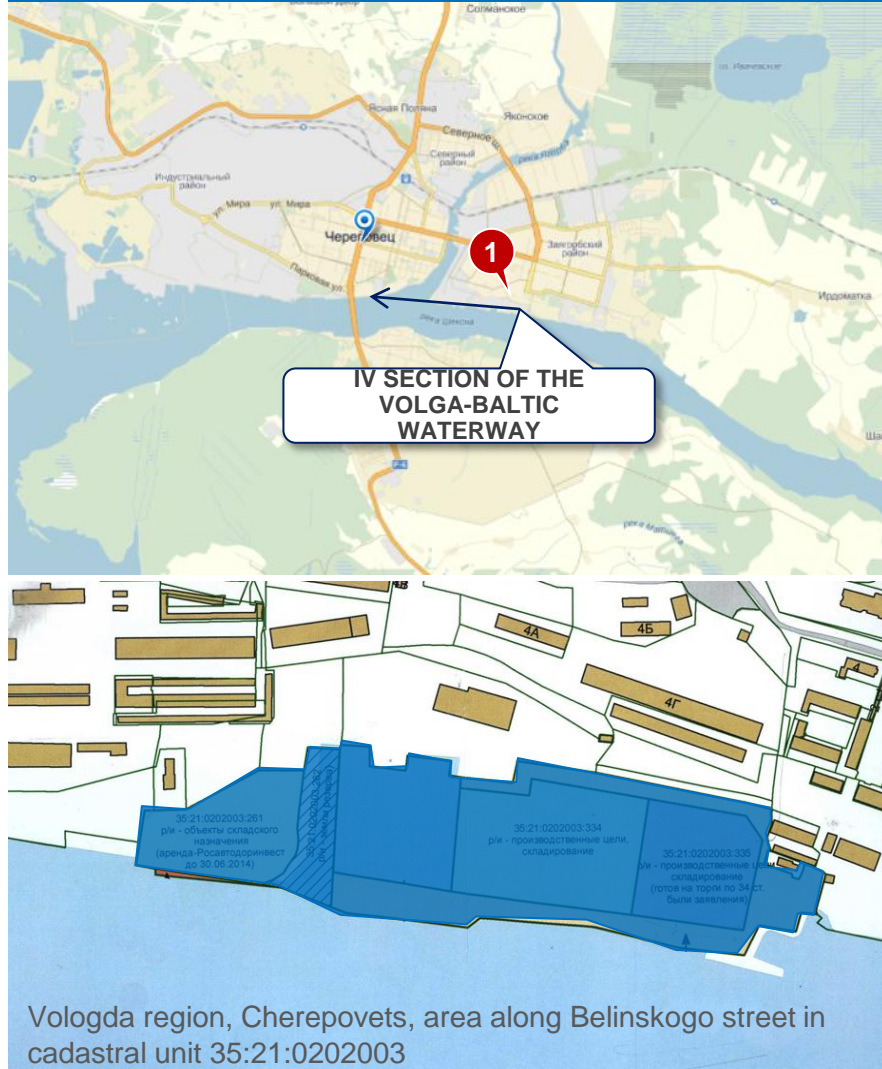
|  |  |   |   |              |
|--|--|---|---|--------------|
| <b>Idea</b>  | assistance in economic diversity of a single-industry municipality by means of creating a shipyard and developing interregional cooperation in a new segment of regional economics   |   |   |              |
| <b>Content</b>   | construction of a repair facility in Cherepovets for river and river-sea going vessels cruising in inland waterways with a lightship weight of up to 2600 tons, length of up to 140 m, width of up to 18 m, with prospects for further development of shipbuilding   |   |   |              |
| <b>Product</b>   | vessel repair services including: slipway services, vessel hull inspection, deck machinery dismantling, pump dismantling and repair, dismantling and complete repair of propeller-rudder system, disassembly and assembly of main engine and diesel generator, partial and complete replacement of ship system conduit, vessel renovation, modernization, propeller drive shaft repair, conversion and major repairs of internal-combustion engine, assembly, repair, adjusting and testing of shipboard electrical and radio-navigation equipment, as well as means of communication. |   |   |              |
| <b>Consumer segmentation</b>                               | shipowners near homeports of St.-Petersburg-Cherepovets-Moscow-Nizhny Novgorod   |   |   |              |
| <b>Preliminary pattern of investments*, million rouble</b> | <b>OCI</b>   | <b>Engineering and transport infrastructure</b> | <b>Construction and installation activities, equipment, pre-commissioning</b> | <b>TOTAL</b> |
| <b>Financial indicators*</b>                               | <b>NPV</b>   | <b>PI</b>                                       | <b>IRR</b>  | <b>DPP</b>   |
|  | 161,6 million rouble   | 0,38  | 12,81 %   | 19 years     |

\* Based on expert estimation of market players and JSC "Promexpertiza"

\*\* Based on preliminary estimation of a financial model

## An investment site of 8,9 Ha on Belinskogo street was reserved by the Mayor's regulation for project implementation in Cherepovets

### Investment site



### Advantages of the geographic location

According to shipyard organization Cherepovets has a strategic location – through the Volga-Baltic waterway system the city has access to the Baltic Sea, the North Sea, the Black Sea, the Azov Sea and the Mediterranean Sea. Therefore Cherepovets is connected with the northern, southern and western regions of Russia and especially has access to material supply of the Baltic Fleet taking into account its extremely limited territorial influence.

A large industrial port on Rybinsk Reservoir and passenger port on the Sheksna river are located here which can provide the shipyard partial load. Furthermore, the geographic location of Cherepovets allows to attract customers of the North-West and the Central part of Russia.

The shipbuilding sector was being historically developed in the city. Since 1947 the Cherepovets Shipyard has been in the delta of the Yagorba and Sheksna rivers. Technical capacity of the shipyard allowed to build and repair vessels with a lightship weight of up to 1200 tons. Since 1950 until its closure due to operational administration problems over 200 vessels of different class and purpose had been built.

## Background for project implementation

### Increase in usage of inland waterways for cargo carriage



Inland water transport provides 10 - 15% of cargo and about 5% of passenger domestic carriage. The main advantage of this type of transport is low costs of carriage, the main disadvantage is seasonal operation. In 2010 – 2014 there was a heavy increase of orders from Russian shipowning companies for cargo ships of inland and combined navigation. But increase in carriage is behind demand due to absence of required quantity of vessels.

### Requirement strengthening in Russian River Register rules



Ship lift repair for river vessels with the age of over 20 years should be carried out every 5 years, for sea-going ships – every 2 years. Active inland navigation fleet of Russia numbers over 9 thousand vessels. The average age of inland water transport vessels is 28 years, the wear factor of inland water transport vessels is 66%.

### Overload of production capacity of operating shipyards



Repair time of one vessel is from 1 to 4 months. The waiting list of ship repair facilities is formed one year or more in advance. Shipowners face even larger problems when they need emergency repairs without which there is a severe loss.

### High comparative costs of repairs



Cost of repairs is specific for each order and can vary from 2,3 million rouble (light repair) to 50 million rouble (for steamboats of Volga-Don type). Furthermore, cost for materials and parts is a bit more than 30% of the total order value which allows to predict payback of key investment.

### Advantageous geographic location of a shipyard



Customer volume of a ship repair facility is not in direct relationship to the vessel traffic flow going through its water area. A vessel goes to the place of planned repair out of working route schedule. Key criteria which influence the place of repair are: quality and cost of service, reputation of an enterprise, space availability.

## The most promising market share of ship repairing service consumers is nonpassenger river transport

The total amount of vessels registered in the area of home ports of St.-Petersburg-Cherepovets-Moscow-Nizhny Novgorod is **22 583**. (according to the Russian River Register).

The most promising market share for the project due to regional specifics is 19 vessels of cargo and support service river transport type.

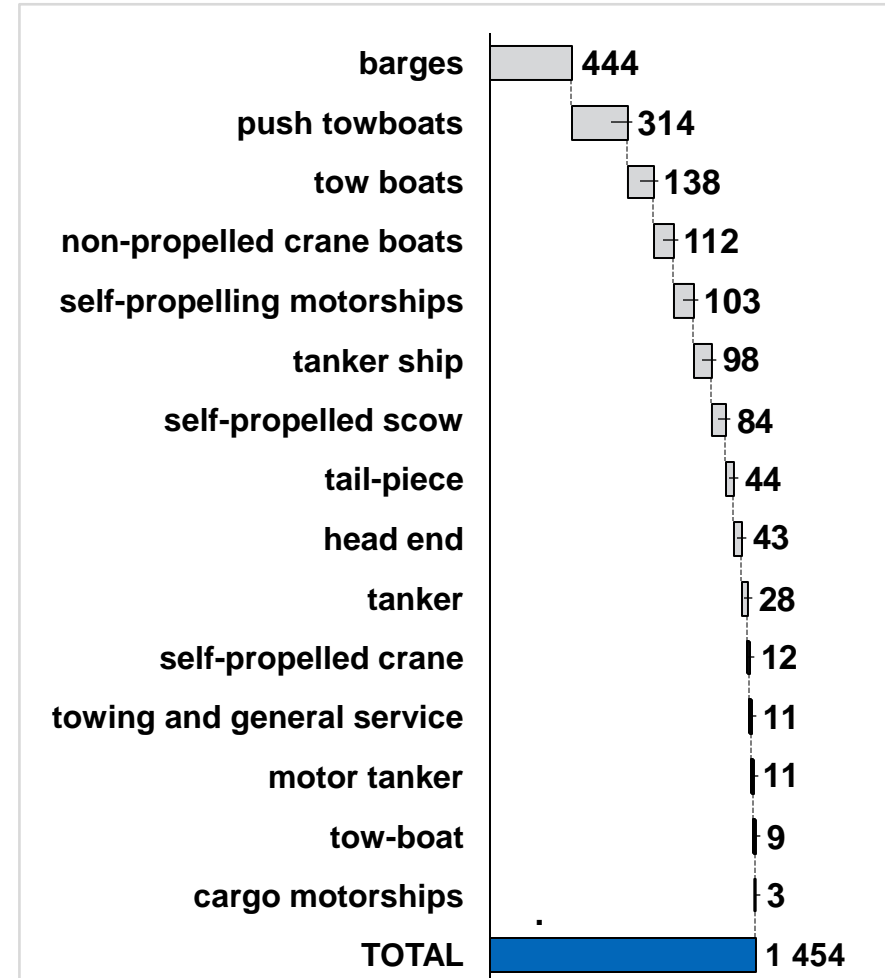
Their quantity in the area of home ports of St.-Petersburg-Cherepovets-Moscow-Nizhny Novgorod is **1 454**.

60% of them are barges, push towboats and tow boats.

Regarding life cycle vessels can be divided into:

- **over 96% are older than 20 years (1 389 vessels);**
- over 71% are older than 30 years (1 030 vessels);
- over 37% are older than 40 years (539 vessels);
- over 11% are older than 50 years (161 vessels).

Due to low rate of new ship building a steady demand of market for ship repairing services is expected – current and major repairs, development of forms of transport renewal such as renovation and conversion.



Type distribution of vessels, units

## Evaluated market segment capacity calculated based on requirements of the Russian River Register can amount to over 700 million rouble in 2015

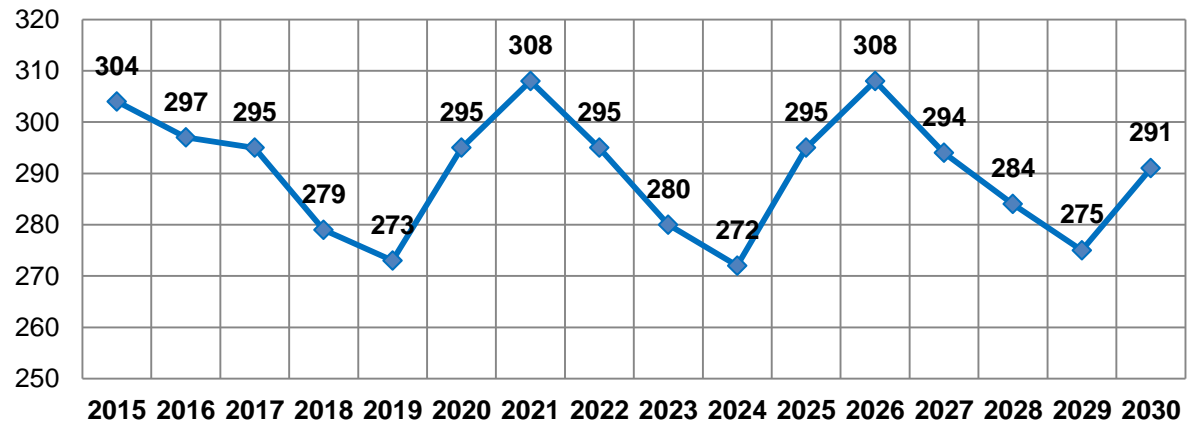
According to requirements of the Russian River Register **the total average amount** of vessels which need scheduled, classified and dock maintenance is **275 units per year** within the forecast period of 2015 - 2030.

The minimum requirement is 272 units (2024), the maximum requirement is 308 units (2021, 2026).

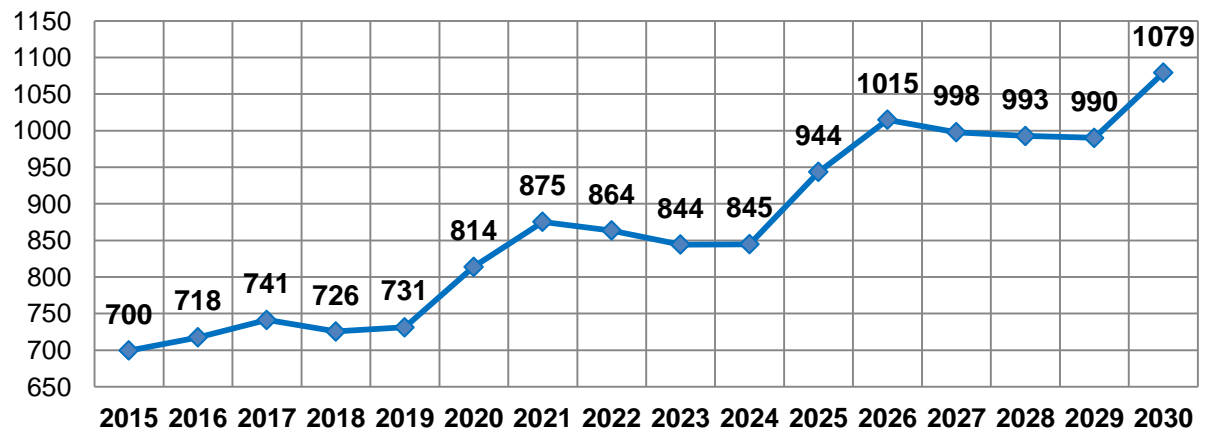
Dock repairs of mixed river-sea-going ships amount to nearly 43% of the total quantity of annual repairs.

**The cost of an average repair** starts from **2,3 million rouble** in 2015. (arithmetic mean value of 6 respondent shipyards).

Assuming these values as a basis the **capacity** of evaluated market segment can amount to over **700 million rouble** in 2015.



Necessity of the considered selection of vessels in scheduled, classified and dock maintenance, units



Capacity of evaluated market segment (total price of scheduled, classified and dock maintenance), million rouble

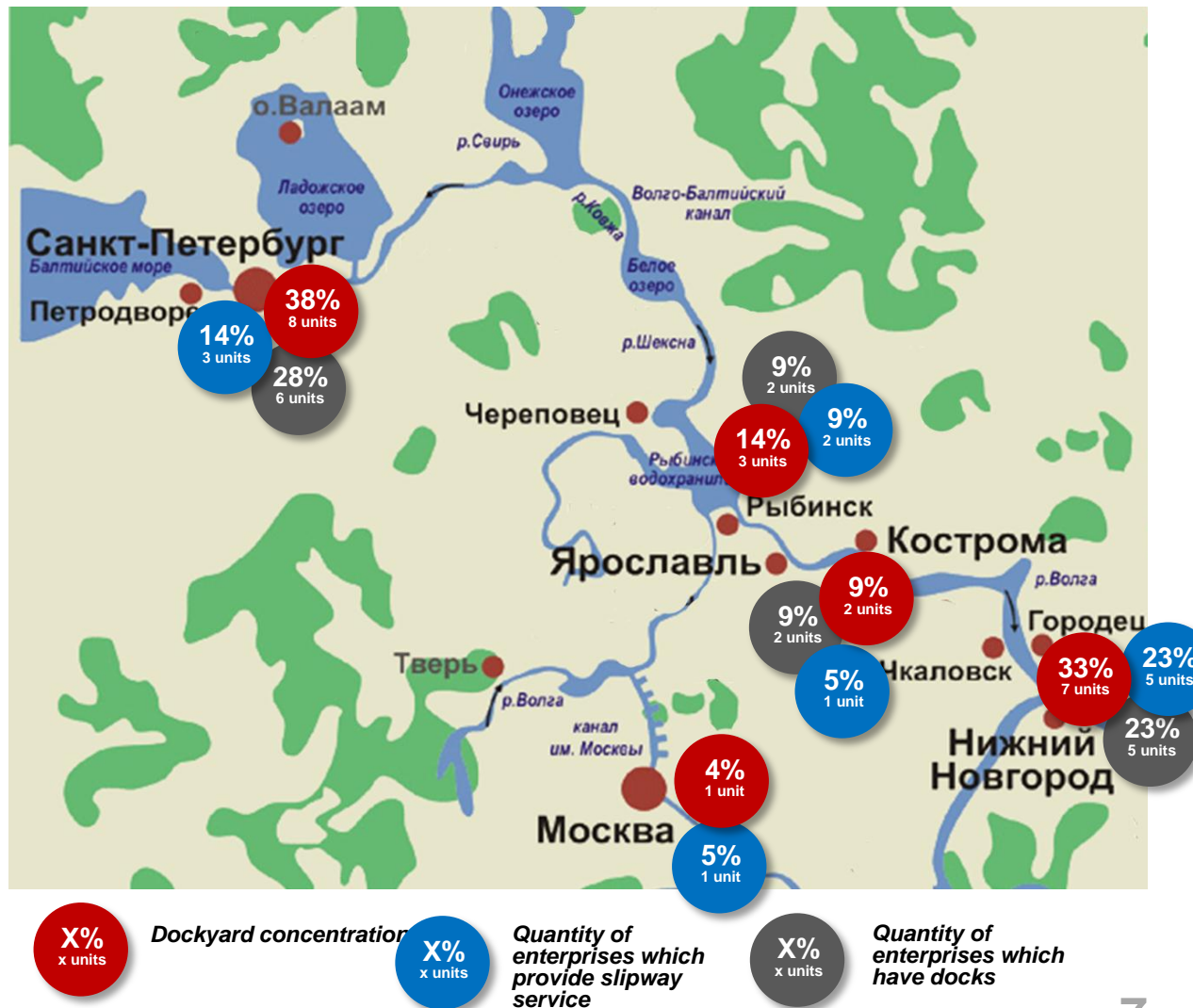
Currently 21 dockyards are acting in the area of ports of St.-Petersburg, Cherepovets, Moscow and Nizhny Novgorod, there are no ship building enterprises in Vologda region

Acting dockyards are located in 6 constituent territories of the Russian Federation including Nizhny Novgorod, Kostroma, Yaroslavl and Leningrad regions, as well as Moscow and St.-Petersburg.

The quantity of acting dockyards accepting orders from private enterprises in the considered geographical segment is 21 units.

More than half of the enterprises (57%, 12 companies) have a possibility to render slipway services and over 70% (15 companies) offer dock repairs.

There are no shipyards in Vologda region, the nearest facilities are located in Rybinsk and Novaya Ladoga.





## NONPROFIT ORGANIZATION “INVESTMENT AGENCY “CHEREPOVETS” realization of turn-key investment projects

### Key business lines of the Agency



**Investment project administration at the stages of:**

- designing,
- concessionaire agreement formation process,
- movable objects allocation agreement,
- construction,
- commissioning.



**Press relations service for business**



**Marketing research and business planning**



**Preparation of all the paperwork necessary to apply for a grant or financing under Federal Targeted Programmes, to take part in competitions, etc.**



**Legal services, labour and accounting outsourcing**

### Contact details



**Address** : 162600, Russia, Vologda region, Cherepovets,  
prospekt Stroiteley, 6, office 210



**Tel.:** (8202) 57-02-55



**e-mail:** [invest@ia-cher.ru](mailto:invest@ia-cher.ru)



[www.ia-cher.ru](http://www.ia-cher.ru)

