# PROGRAM OF ACTIONS FOR PREPARING OF INLAND WATERWAYS OF EUROPEAN PART OF RUSSIA FOR INTERNATIONAL SHIPPING

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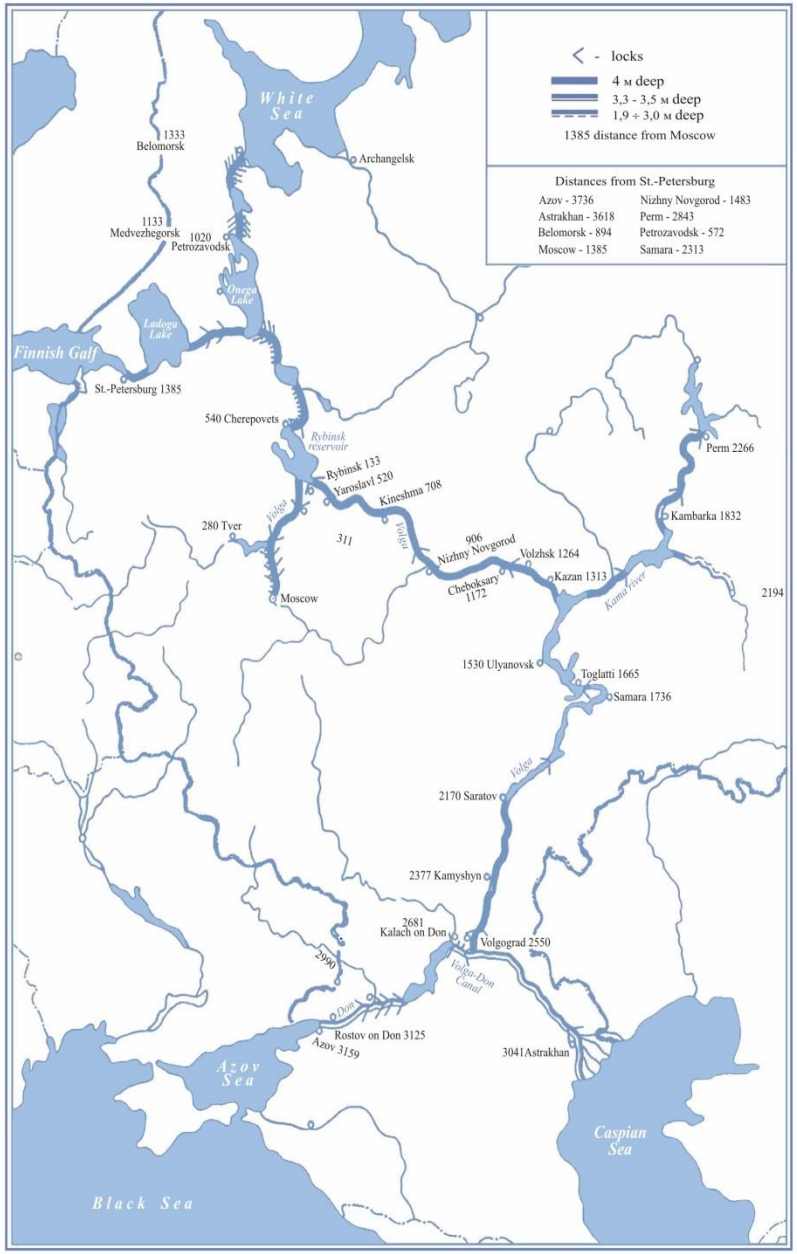



# United Deep Inland Waterways System of European part of Russian Federation

- Total length of the system is more than 5000 km
  - distance between St.-Petersburg (Baltic Sea) and Azov (Azov Sea) is 3736 km
- Warranted depth of the system waterways is 4.0 m
  - the only part of the system below Volgograd (Volga river and Don river) is with 3.5 m depth

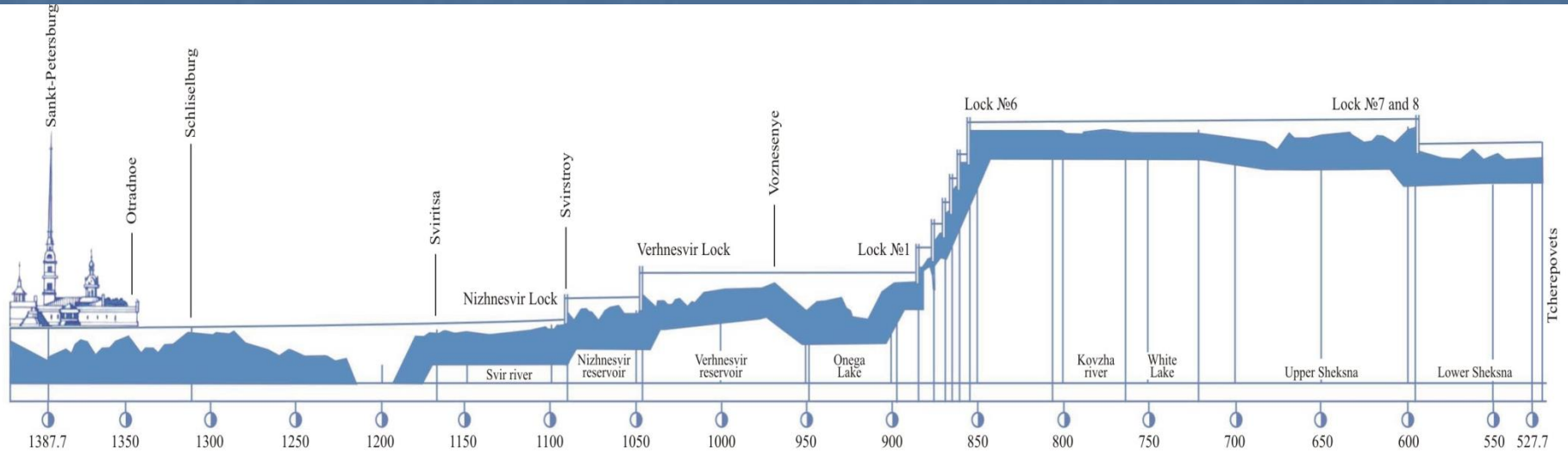
# Volga-Balt Waterway

Named after Volga-Baltic canal which is located between Onega lake and Rybinsk reservoir of Volga river

Route of the Volga-Balt Waterway (St.Peterburg-Cherepovetz) goes upon the Neva River, Ladoga Lake, Svir River, Onega Lake, Vytegra and Kovzha Rivers, Beloye Lake and the Sheksna River


Overall length of Volga-Balt system is about 4926 km

# Longitudinal profile of the Volga-Baltic waterway




On the Volga-Baltic canal is located:

- 6 (six) locks (No.1-6) on the North slope of the canal (heights difference – 80 m)
- 1 (one) lock on South slope of the canal (heights difference – 13 m)

# Volga River is the principal waterway of the Russian Federation

The total length of the river is 3745 km

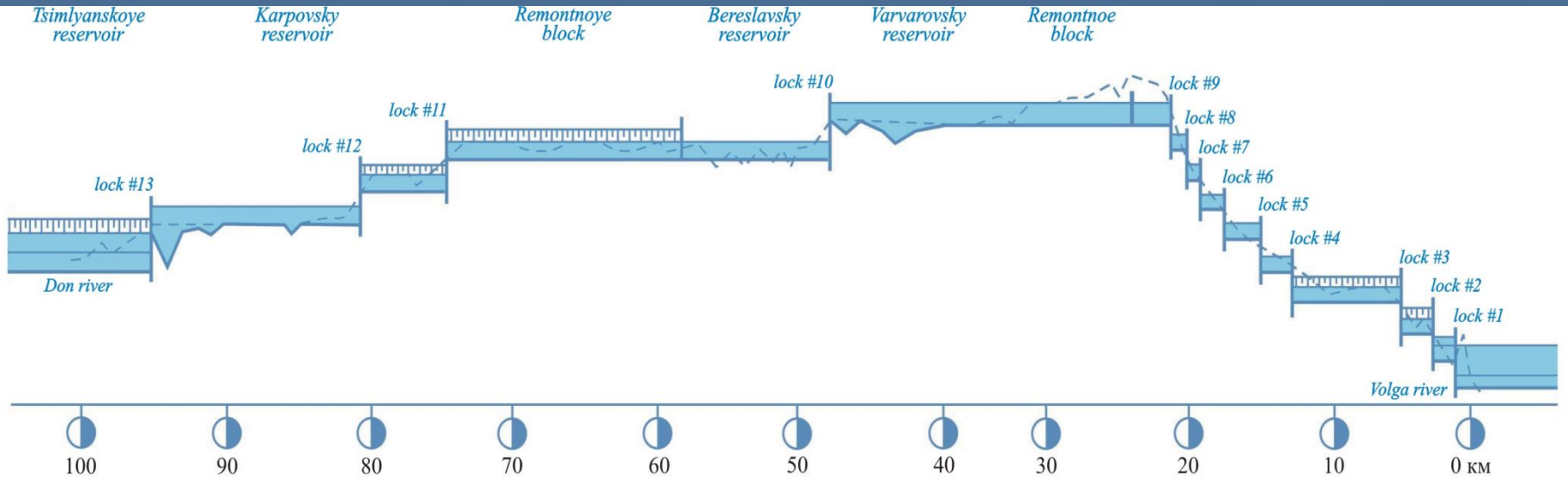
- River basin occupies a territory of 1380 thousand sq. km
  - populated by more than 40 million people

## Volga waterway infrastructure:

➢Ivankovsky, Uglich, Rybinsk, Nizhny Novgorod, Samara, Saratov, Volgograd and Cheboksary hydrotechnical sites

➢all of which have for their disposal double-lane locks, and are well capable to provide for a passage of modern cargo and passenger fleet

# Longitudinal profile of the Volga-Don canal




- Total length is 101 km, including lower Don up to Azov harbour with Kochetovsky lock and dam facilities.
- Volga slope length is 21 km (9 locks with heights difference – 88 m)
- Don slope length is 80 km (4 locks with heights difference – 43 m)
- Canal has the longest annual navigation period – 275 days

# PROGRAM ACTIONS:

- Program aim is to open Russian European inland waterways in two phases:
  - First phase: It is planning to open the passage between Azov and Kaspian Seas (beginning from Rostov-on-Don, Don river, Volgo-Don Canal, Volgograd, Lower Volga down to Astrakhan) – from 2007
  - Second phase: Inland waterway between St. Petersburg and Astrakhan will be opened for international shipping from 2010

- The draft of the program had been completed on October 2005 and is under study of Russian Federation Transport Ministry specialists.

# PROGRAM DIVISIONS

- Waterways infrastructure
- Sailing of foreign flag ships organization
- Meeting of requirements of inspectorial government organizations
- Legislative and commercial law basis

# Proposing actions for waterways infrastructure

Section "Waterway E-90 Azov-Astrakhan" :

- Increasing depth
  - on Lower Don path (with 5 locks) by dredging by volume around 7 ml $m^3$
  - on Lower Volga by dredging by volume around 10 ml $m^3$
- Completing the construction of second parallel chamber of Kochetov lock, new lock's chamber have size 150 x 18 m with depth on entrances 550 cm
- Completing renovation and reconstruction works on mechanical and electrical equipment and lock's gates on Volgo-Don Canal

# Proposing actions for waterways infrastructure

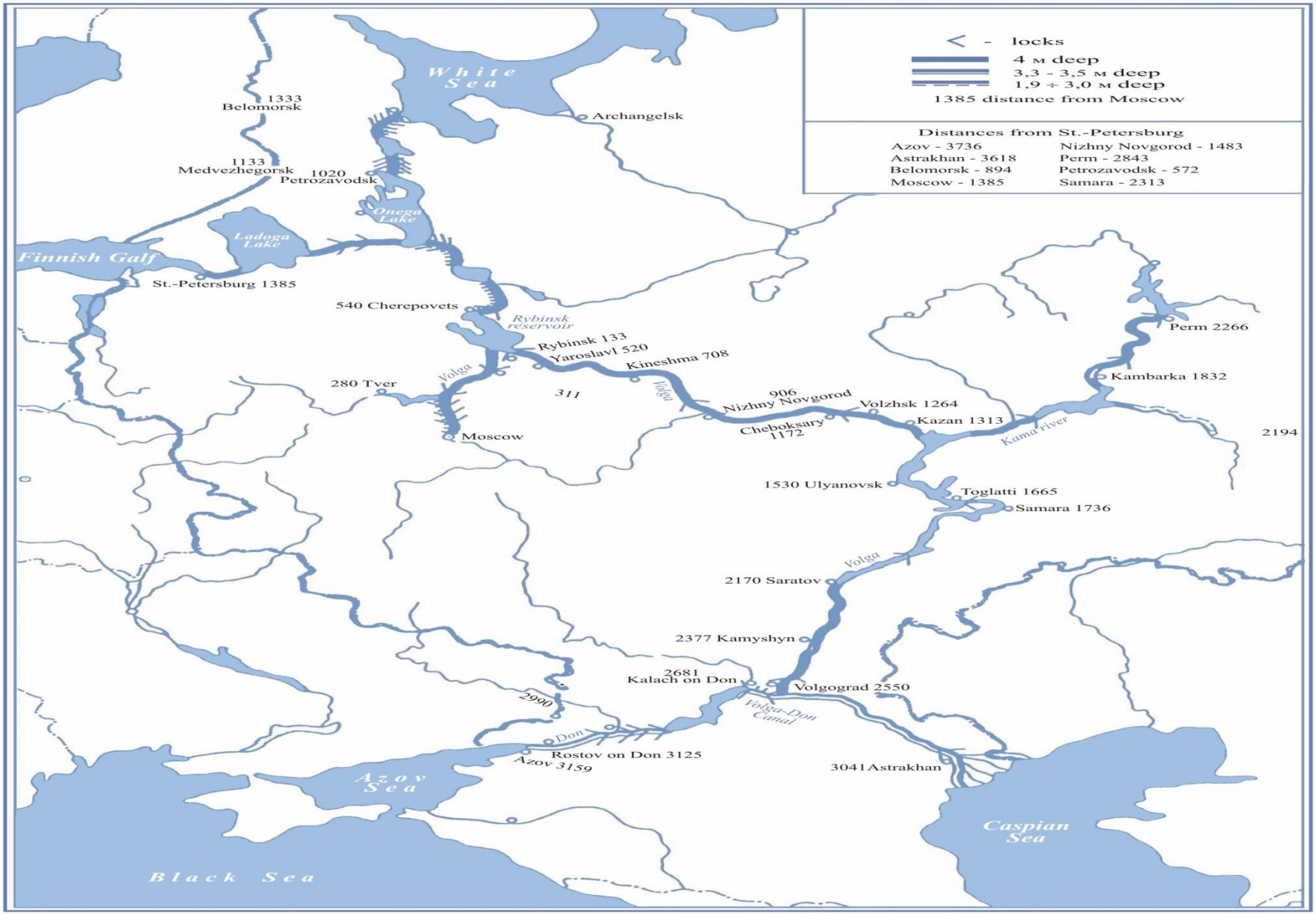
Section "Waterway E-50 Saint-Petersburg – Astrakhan":

- Increasing depth
  - construction of new lock-and-dam is planned on path from Gorodetz lock down to Nizhny Novgorod (length 54 km)
- Construction of 2 (two) second parallel locks on Svir River
- Construction of parallel 6 locks on the North Slope is planned at the second phase of Volgo-Baltic waterways reconstruction

# Additional proposing actions for waterways infrastructure

- Improvement of inland waterways port facilities for servicing of foreign ships
- Improvement of communication systems
  - introduction of European conception of River Information System
  - introduction of Automated Identification System
  - constructing new stations of GPS along the European Russian Inland Waterways for full coverage by GPS all United Deep Waterways System of European Part of Russia
- Introduction of navigation electronic charts

**Thanks and welcome any comments or questions**

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