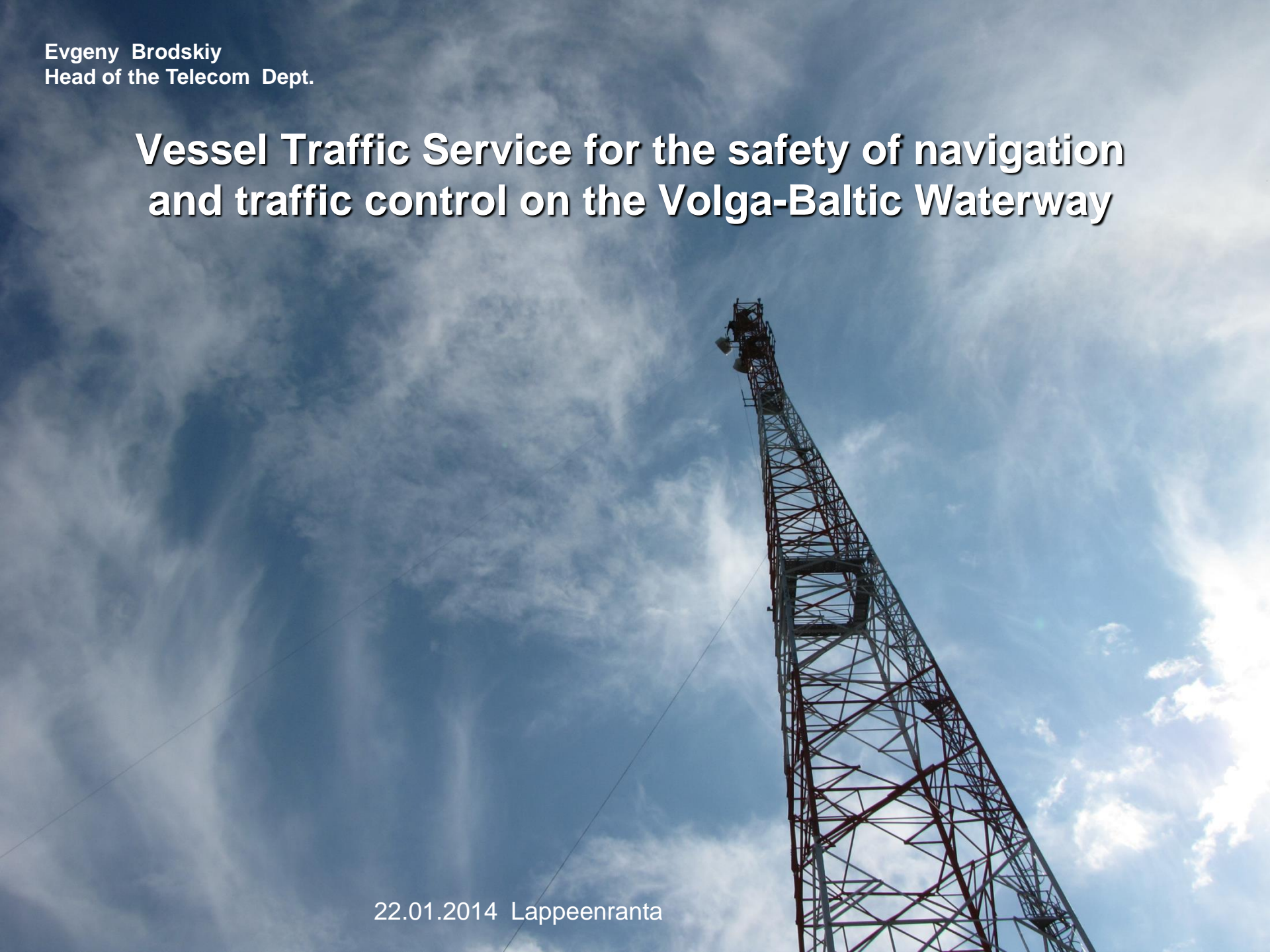


Evgeny Brodskiy  
Head of the Telecom Dept.

# Vessel Traffic Service for the safety of navigation and traffic control on the Volga-Baltic Waterway

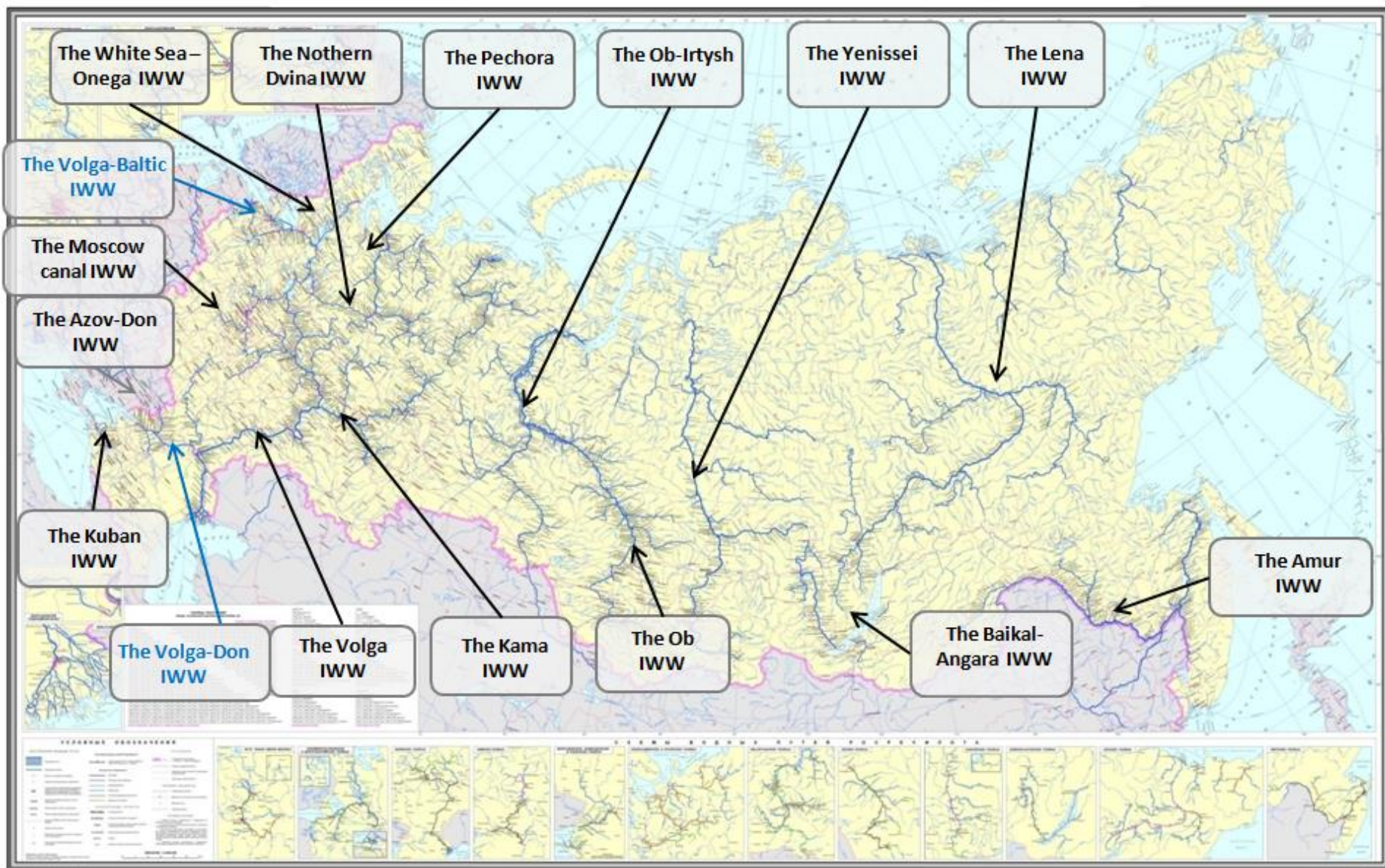
22.01.2014 Lappeenranta



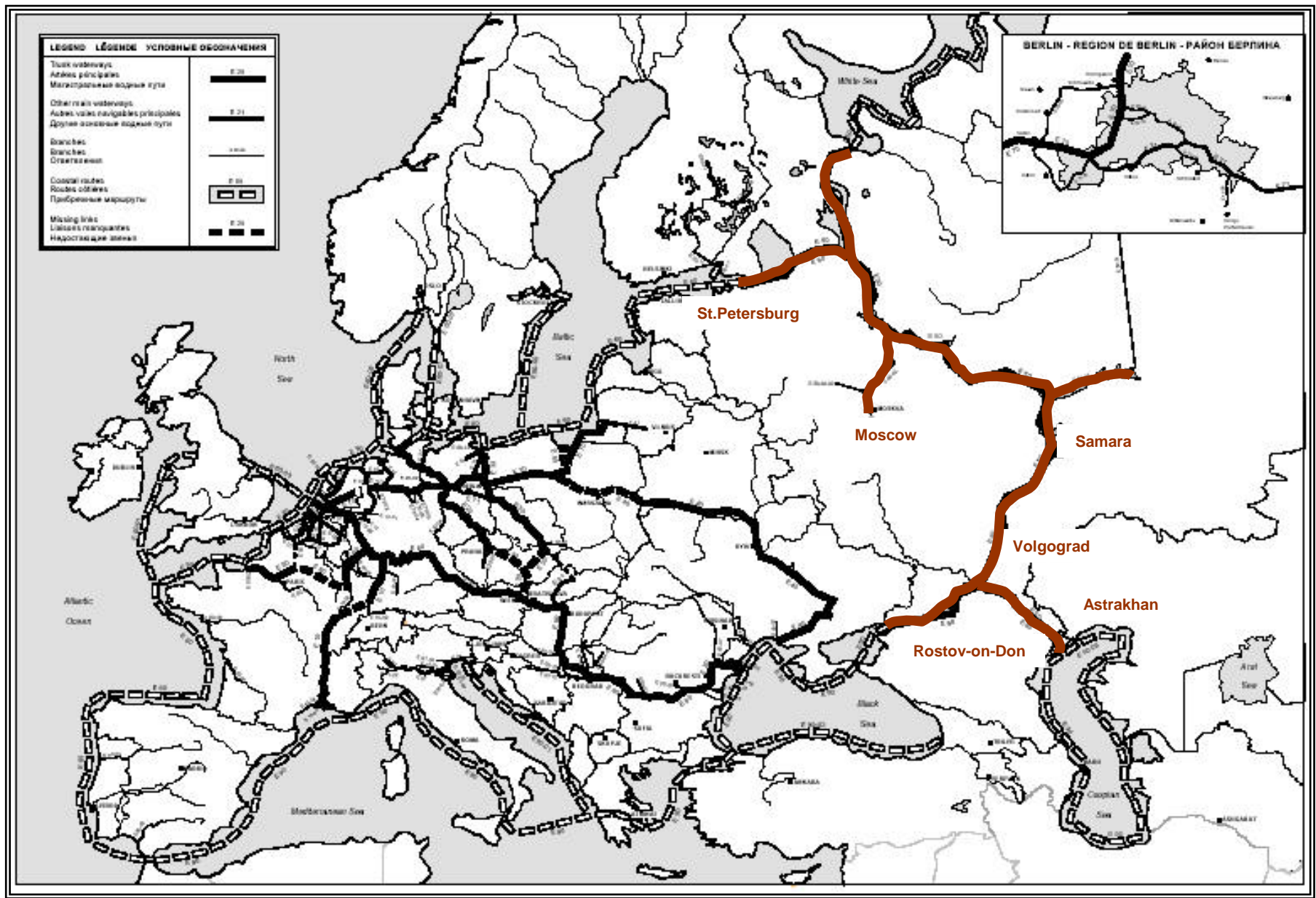


# INLAND WATERWAYS OF THE RUSSIAN FEDERATION

## 16 inland waterway districts







**Inland waterway network of the European part of Russia  
in connection with all-European waterways**

# UN ECE Basic Regulations for RIS

UNECE

IMO

IALA

DK

CCNR

PIANC



## **GUIDELINES AND RECOMMENDATIONS FOR RIVER INFORMATION SERVICES (RIS)**

Resolution No. 57 (adopted by the Working Party on Inland Water Transport on 21 October 2004 )

## **GUIDELINES AND CRITERIA FOR VESSEL TRAFFIC SERVICES ON INLAND WATERWAYS**

Resolution No. 58 (adopted by the Working Party on Inland Water Transport on 21 October 2004 )

## **INTERNATIONAL STANDARDS FOR NOTICES TO SKIPPERS AND FOR ELECTRONIC SHIP REPORTING IN INLAND NAVIGATION**

Resolution No. 60 (adopted by the Working Party on Inland Water Transport on 20 October 2005 )

## **INTERNATIONAL STANDARD FOR TRACKING AND TRACING ON INLAND WATERWAYS (VTT)**

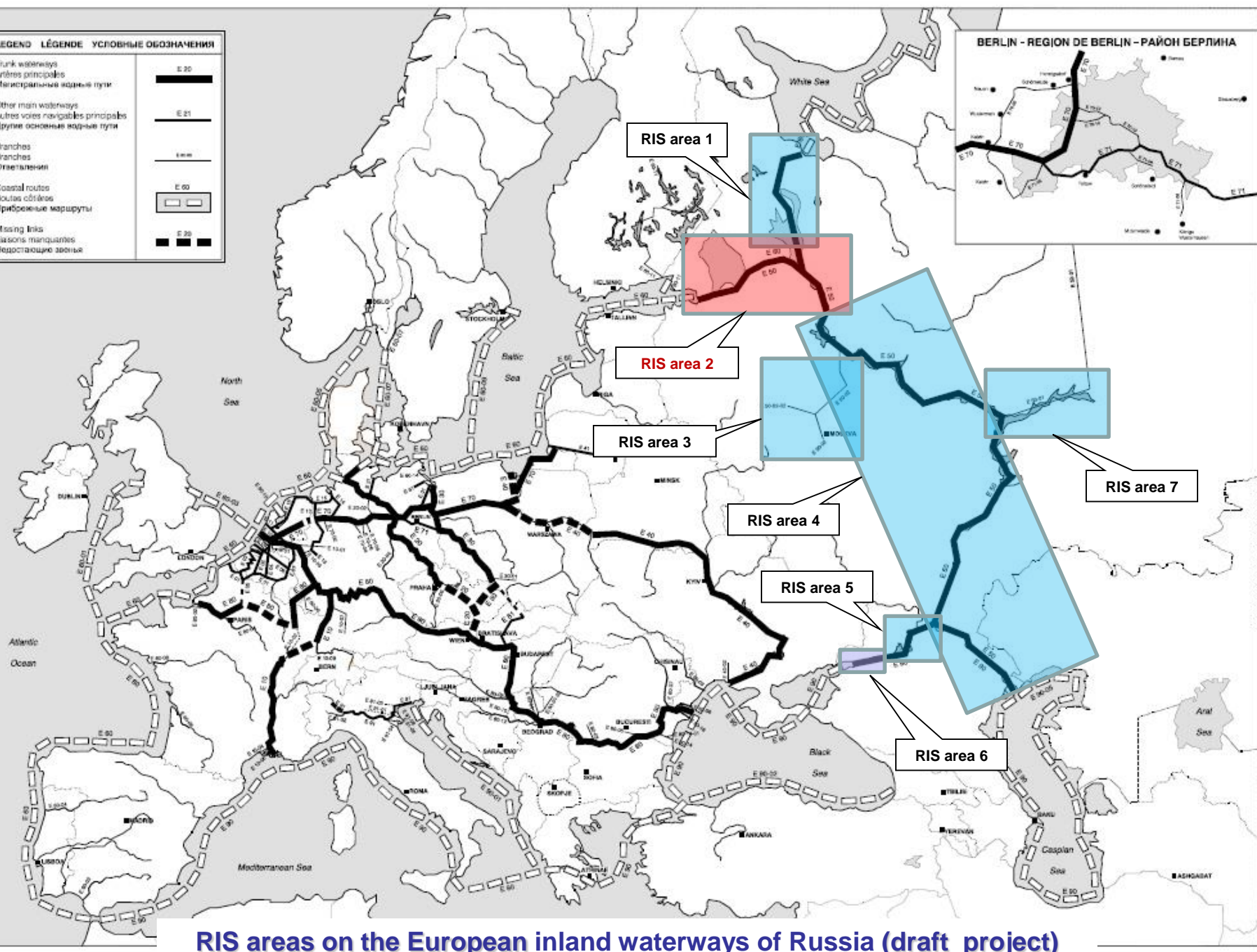
Resolution No. 63 (adopted by the Working Party on Inland Water Transport on 13 October 2006 )

## **RECOMMENDATION ON ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM FOR INLAND NAVIGATION ( INLAND ECDIS )**

Resolution No. 48 (adopted by the Working Party on Inland Water Transport on 25 October 2001)

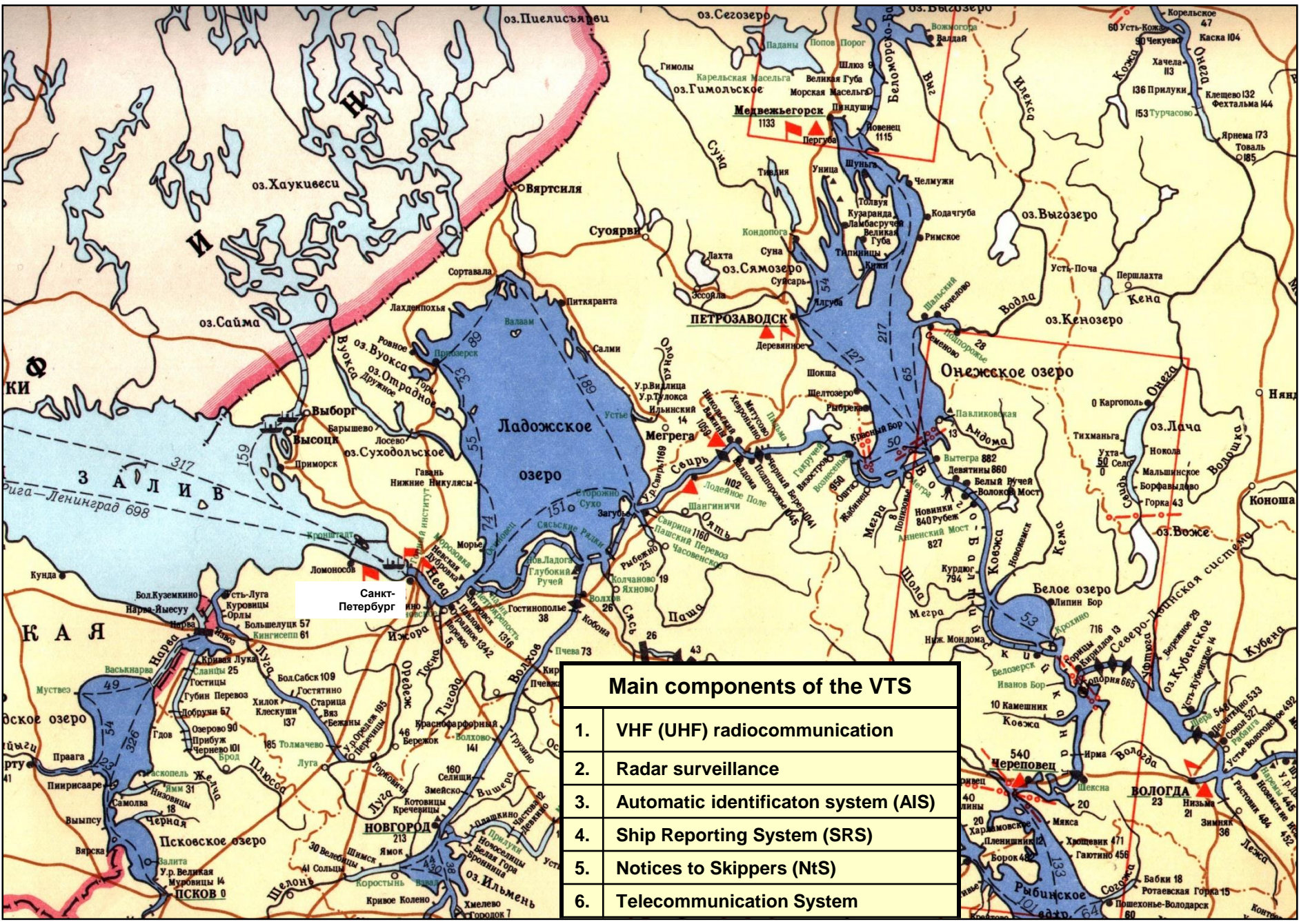
River Information services	Relevant Information systems
<b>Fairway Information service (FIS)</b>	<b>Radiocommunication / Notices to Skippers</b>
	<b>Electronic navigational charts (ENC)</b>
	<b>Internet ( including wireless access )</b>
	<b>Visual aids-to-navigation</b>
<b>Traffic information (TI)</b>	<b>Radiocommunication / Ship reporting system</b>
	<b>Electronic navigational charts (ENC)</b>
	<b>DGNSS GLONASS/GPS reference stations (IALA beacons)</b>
	<b>Shore-based radar sites</b>
	<b>Shore-based AIS network</b>
	<b>Shore-based CCTV cameras</b>
	<b>Internet ( including wireless access )</b>
<b>Traffic management (TM), including:</b>  <b>a) Local traffic management - (vessel traffic services-VTS);</b>  <b>b) Navigational support (NS);</b>  <b>c) Lock and bridge management (LBM)</b>	<b>Radiocommunication</b>
	<b>Electronic navigational charts (ENC)</b>
	<b>DGNSS GLONASS/GPS reference stations (IALA beacons)</b>
	<b>Shore-based radar sites</b>
	<b>Shore-based AIS network</b>
	<b>Shore-based CCTV cameras</b>

LEGEND	LÉGENDE	УСЛОВНЫЕ ОБОЗНАЧЕНИЯ
Trunk waterways	Arteries principales	Магистральные водные пути
Other main waterways	Autres voies navigables principales	Другие основные водные пути
Branches	Branches	Ответвления
Coastal routes	Routes côtières	Прибрежные маршруты
Missing links	Liaisons manquantes	Недостающие звенья
		E 20
		E 21
		E 60
		E 20



**RIS areas on the European inland waterways of Russia (draft project)**





Main components of the VTS	
1.	VHF (UHF) radiocommunication
2.	Radar surveillance
3.	Automatic identification system (AIS)
4.	Ship Reporting System (SRS)
5.	Notices to Skippers (NtS)
6.	Telecommunication System

RIS area 2: the Volgo-Baltic Waterway





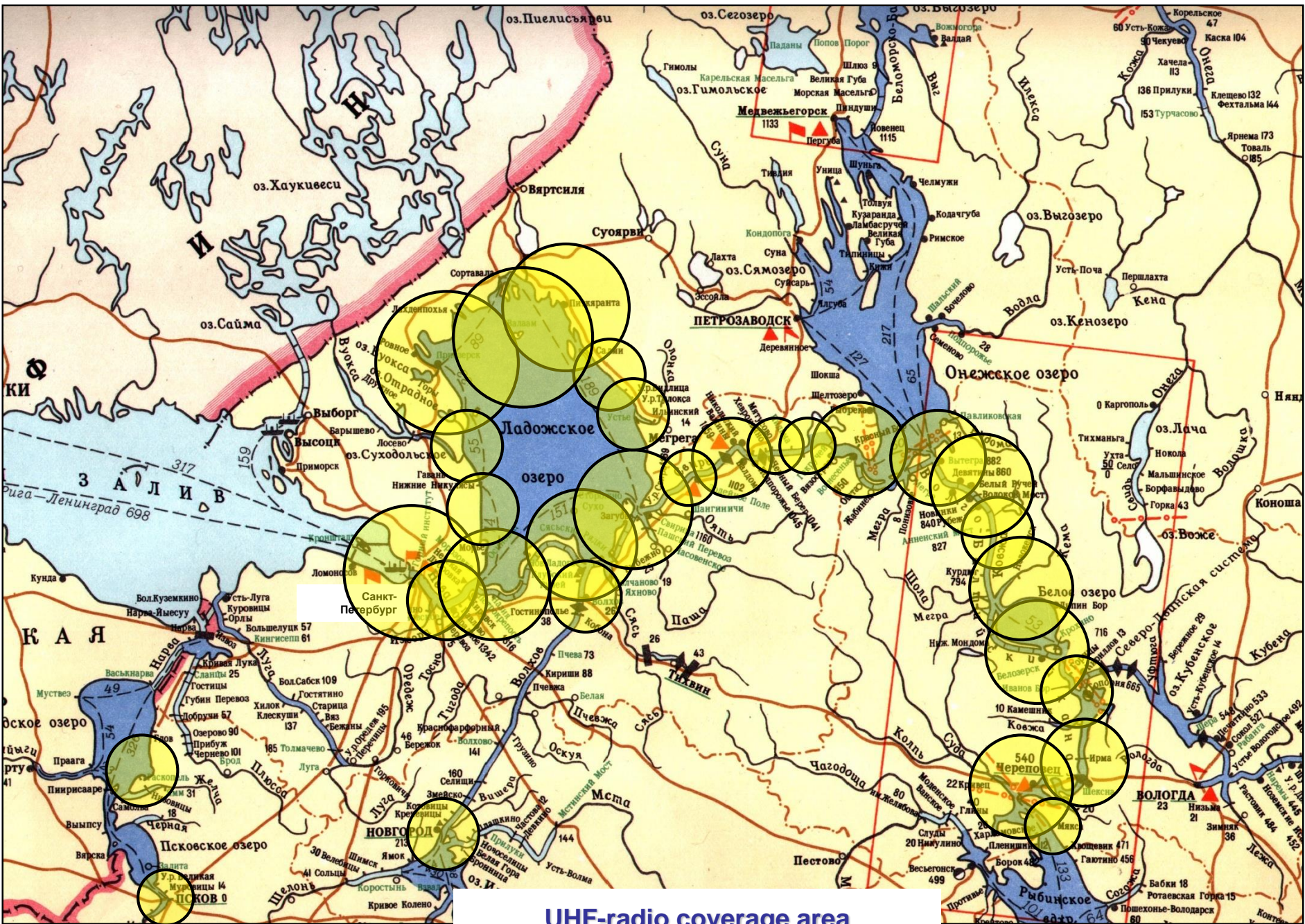
Microwave relay link – 640 km total





**Antenna tower in Lodeynoye Pole, at Svir river**





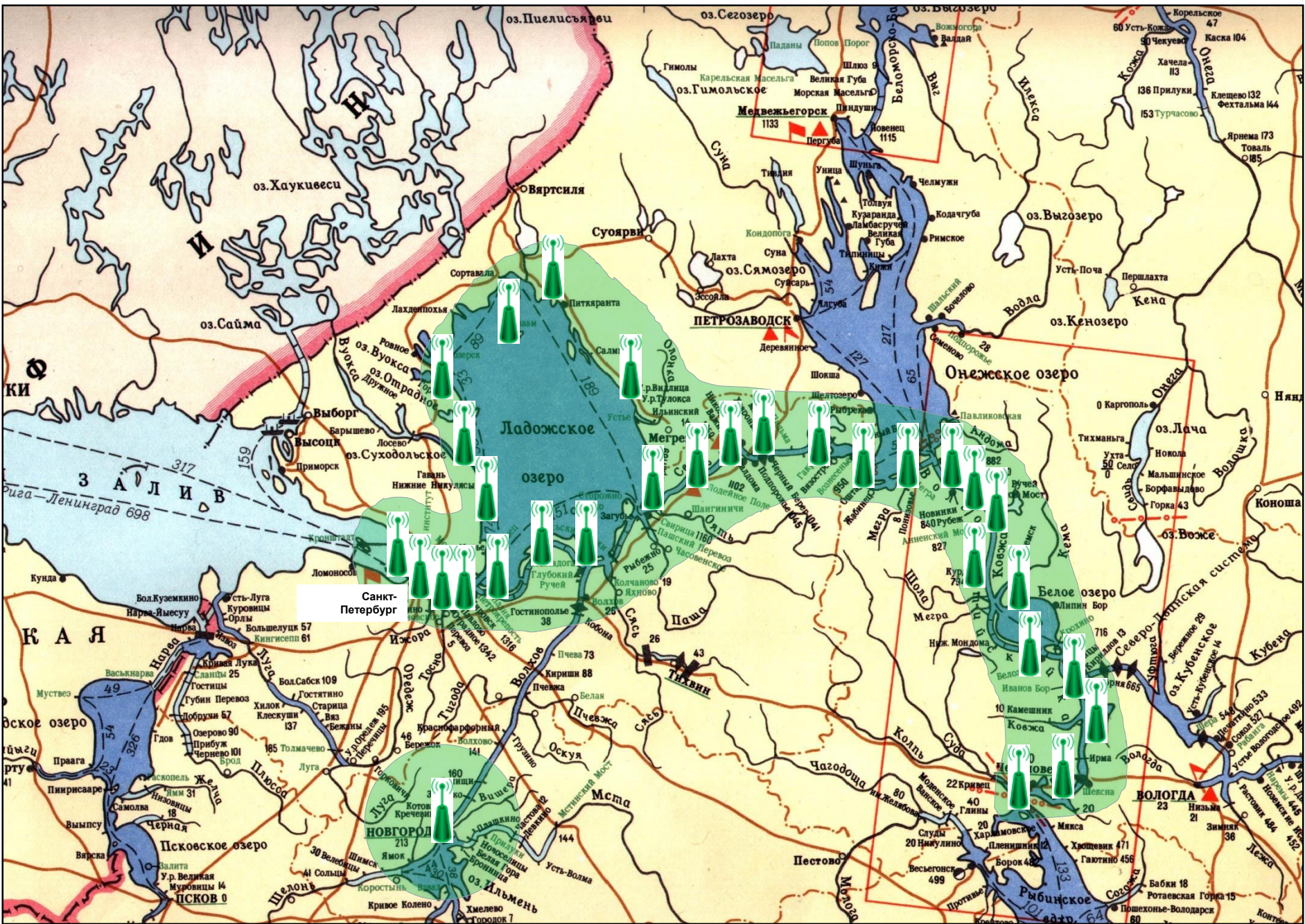
UHF-radio coverage area  
( 115 shore-based radiostations)





Radar coverage areas (15 shore-based radars )





AIS shore station network : 31 base stations





1 : 750 000

По Норду

АИС: соединено

Мониторинг

Фильтрация выкл.

Фильтрация выкл.





## О предприятии

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[Ставки сборов](#)  
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[Дислокация](#)

## Информационный бюллетень (2010-10-03)

В связи со сложившимися гидрометеорологическими условиями, с 21.09.2010 г. отменяется проход судов с повышенной осадкой до 370 см.

### Состояние уровней

Наименование каналов и постов	рек, озёр, водомерных уровень, м	Проектный уровень, м	Фактический уровень, м	Температура воздуха	Температура воды	Ледовые явления	Дата
Горный институт	-0.15	0.13	0.0	0.0	-	2010-10-03 00:00:00	
Ивановское	1.5	2.4	0.0	11.0	-	2010-10-01 00:00:00	
Шлиссельбург	3.15	4.35	2.3	0.0	-	2010-10-01 00:00:00	
Свирица	4.1	4.91	3.5	9.6	-	2010-10-03 00:00:00	
Новая Ладога	4.2	4.8	0.0	0.0	-	2010-10-01 00:00:00	
Валаам	4.25	4.81	0.0	0.0	-	2010-10-01 00:00:00	
Лодейное Поле	4.45	5.08	1.2	0.0	-	2010-10-03 00:00:00	
Н. Свирский шлюз. Н. бьеф	4.7	5.25	0.0	0.0	-	2010-10-03 00:00:00	
Н. Свирский шлюз. В. бьеф	17.25	17.53	0.0	0.0	-	2010-10-03 00:00:00	
В. Свирский шлюз. Н. бьеф	17.3	17.6	0.0	0.0	-	2010-10-03 00:00:00	
В. Свирский шлюз. В. бьеф	31.45	33.4	0.0	0.0	-	2010-10-03 00:00:00	
Вознесенье	32.6	33.16	-2.5	8.2	-	2010-10-03 00:00:00	
Вытегра	32.6	33.1	4.0	0.0	-	2010-10-01 00:00:00	

## Авторизация

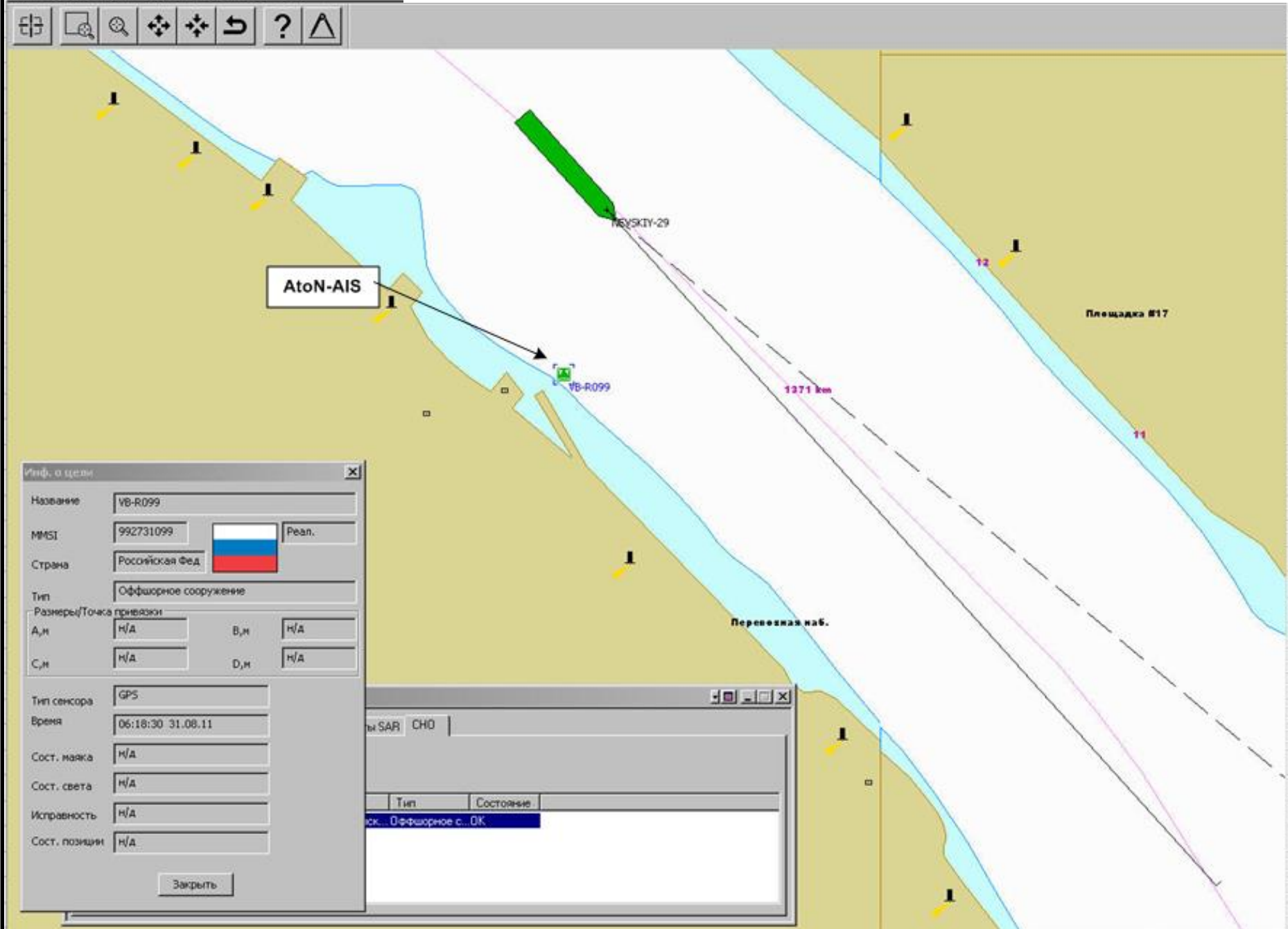
Пользователь

Пароль

Fairway Information service:

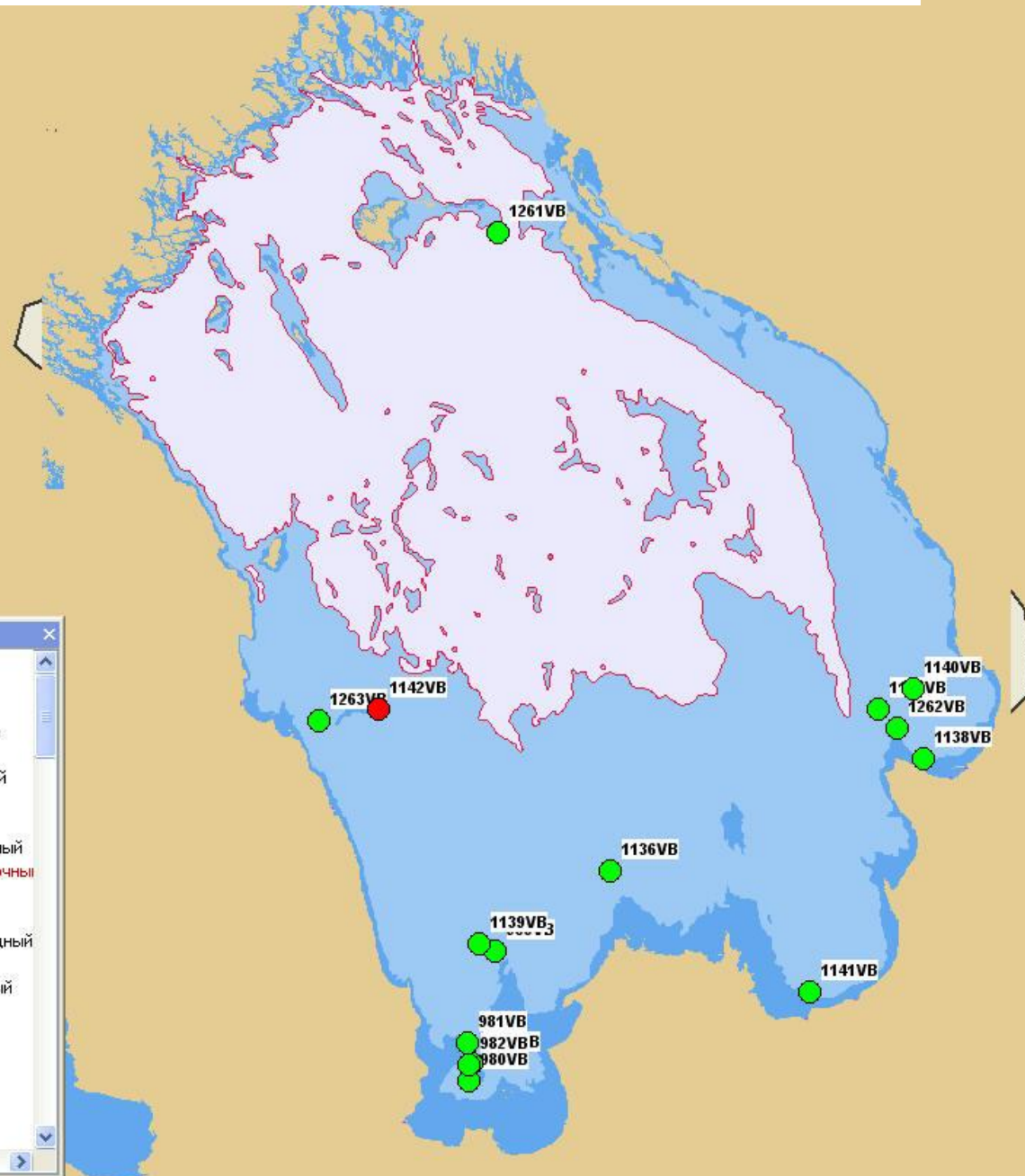
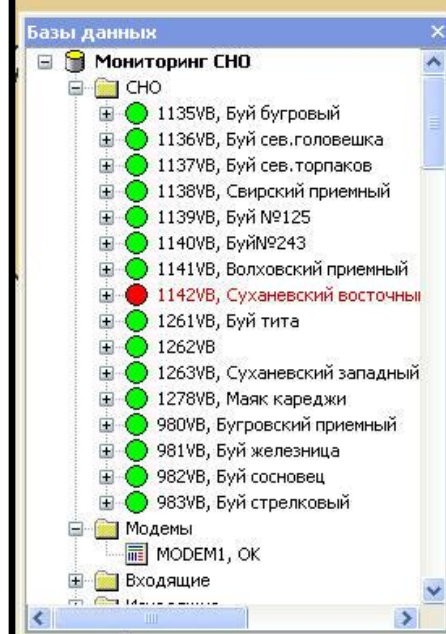
Notices to skippers, water levels, weather forecast etc. on [www.volgo-balt.ru](http://www.volgo-balt.ru)



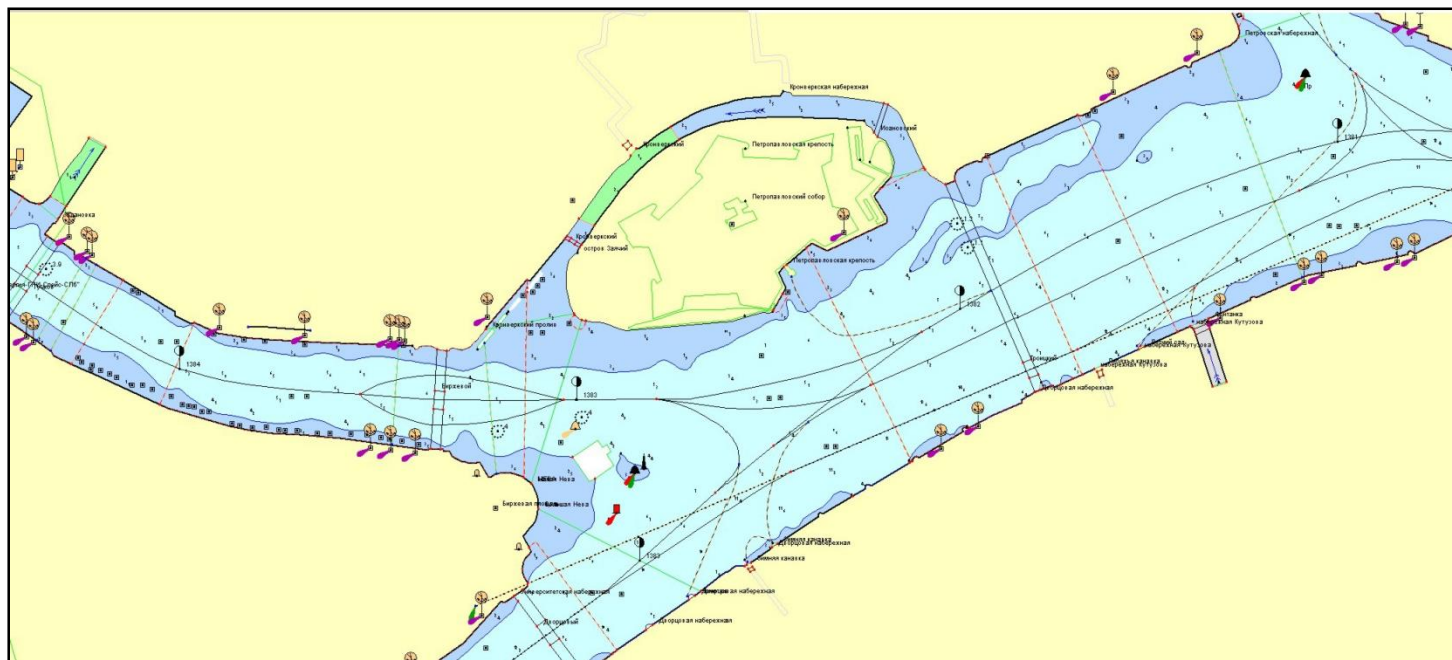




## Aids-to-Navigation monitoring and control system ( GSM technology)

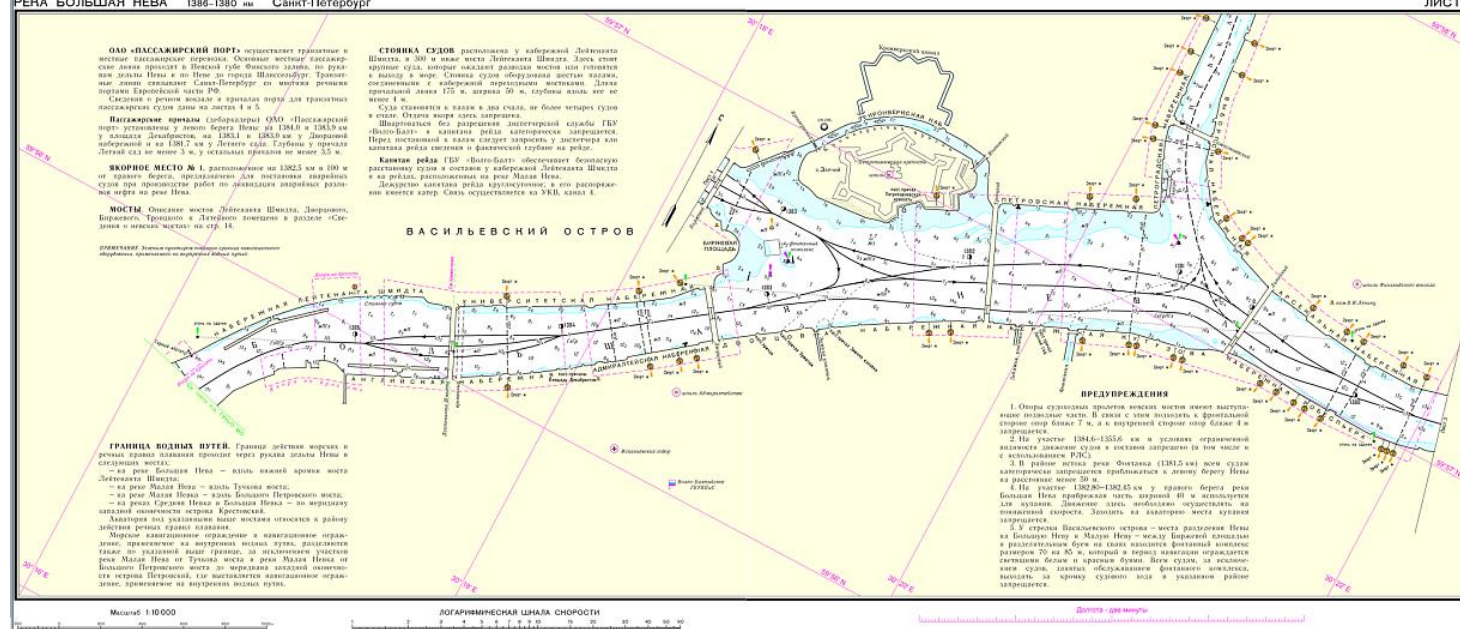






РЕКА БОЛЬШАЯ НЕВА 1386-1390 км Санкт-Петербург

ЛИСТ 2



A stretch of river Neva on paper chart and electronic navigation chart





**GPS/GLONASS reference station ( IALA beacon), near river Sheksna**





**VTS centre in Saint-Petersburg**





VTS centre Otradnoye ( on Neva river )





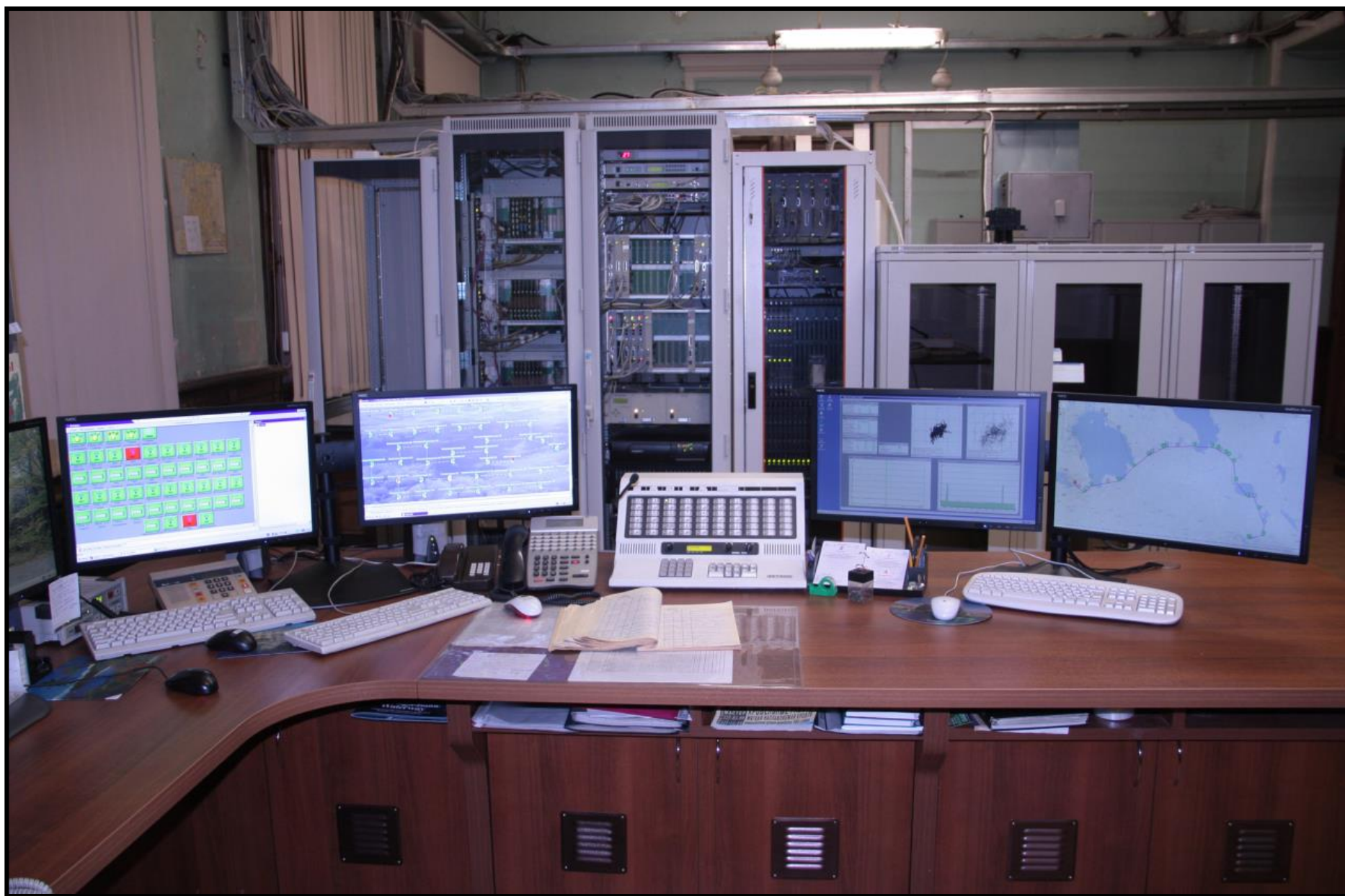
**VTs centre Belozersk (near Lake Beloye )**



## VTs centre Vytegra ( Volga-Baltic canal )







**Central control desk of the Volga-Baltic telecommunication network**



## The Volga-Baltic comprehensive plan of development (2014-2018)



**Thank you for your  
kind attention !**