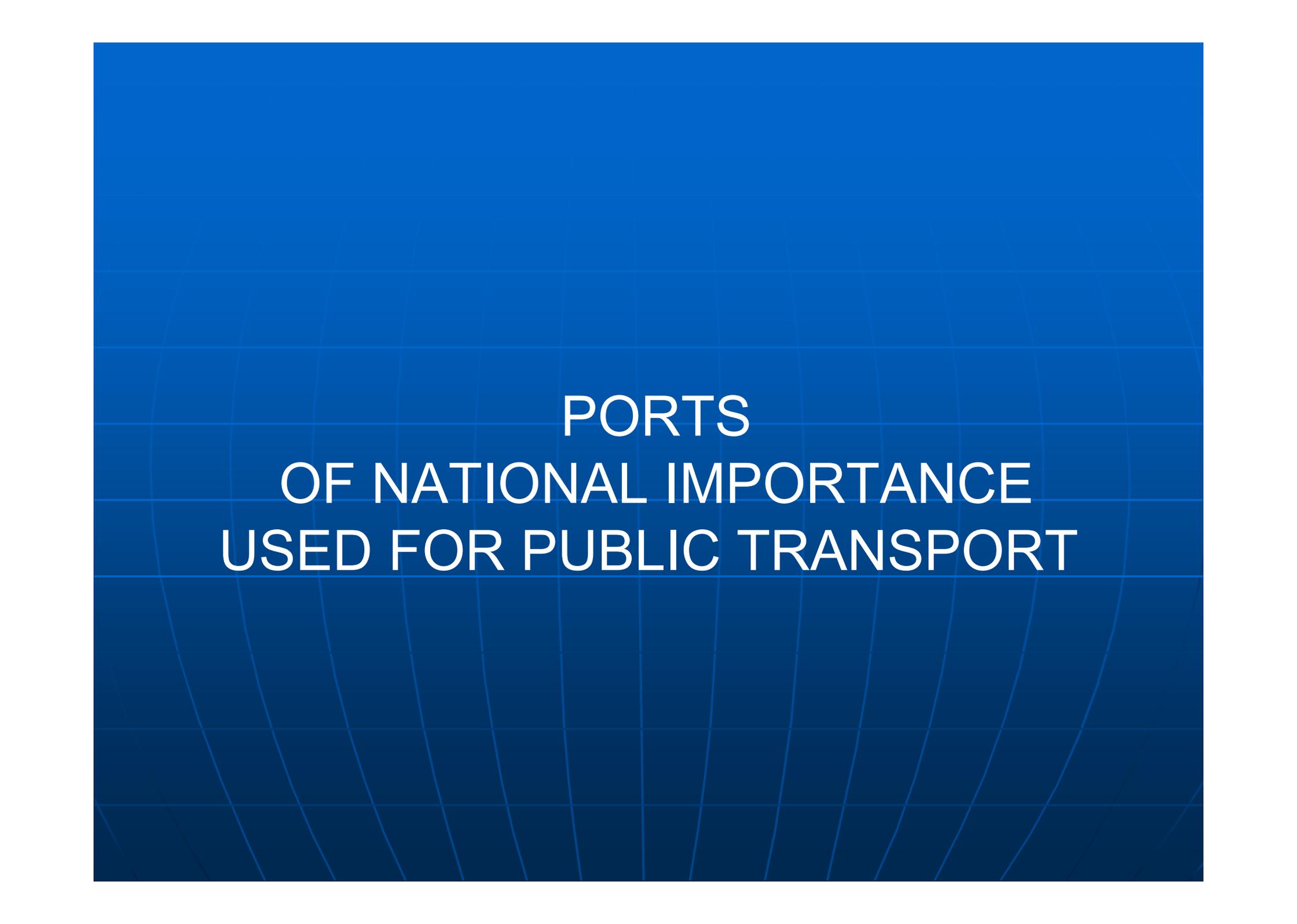


THE MINISTRY OF TRANSPORT,  
INFORMATION TECHNOLOGIES AND  
COMMUNICATIONS OF  
THE REPUBLIC OF BULGARIA

*Envisages, by awarding concessions as a form of  
public-private partnership:  
to develop a new transport infrastructure and to  
modernize and maintain the existing transport  
infrastructure*

*PRESENTATION  
OF  
BULGARIAN PORTS  
AND  
AIRPORTS,*

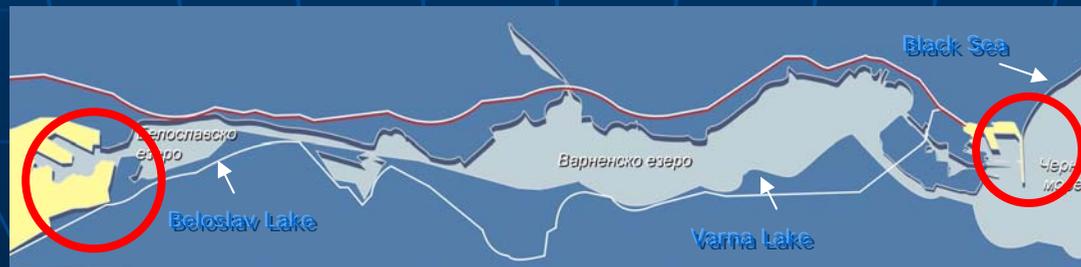
*WHICH THE MINISTRY OF TRANSPORT, INFORMATION  
TECHNOLOGIES AND COMMUNICATIONS  
will offer on concession*



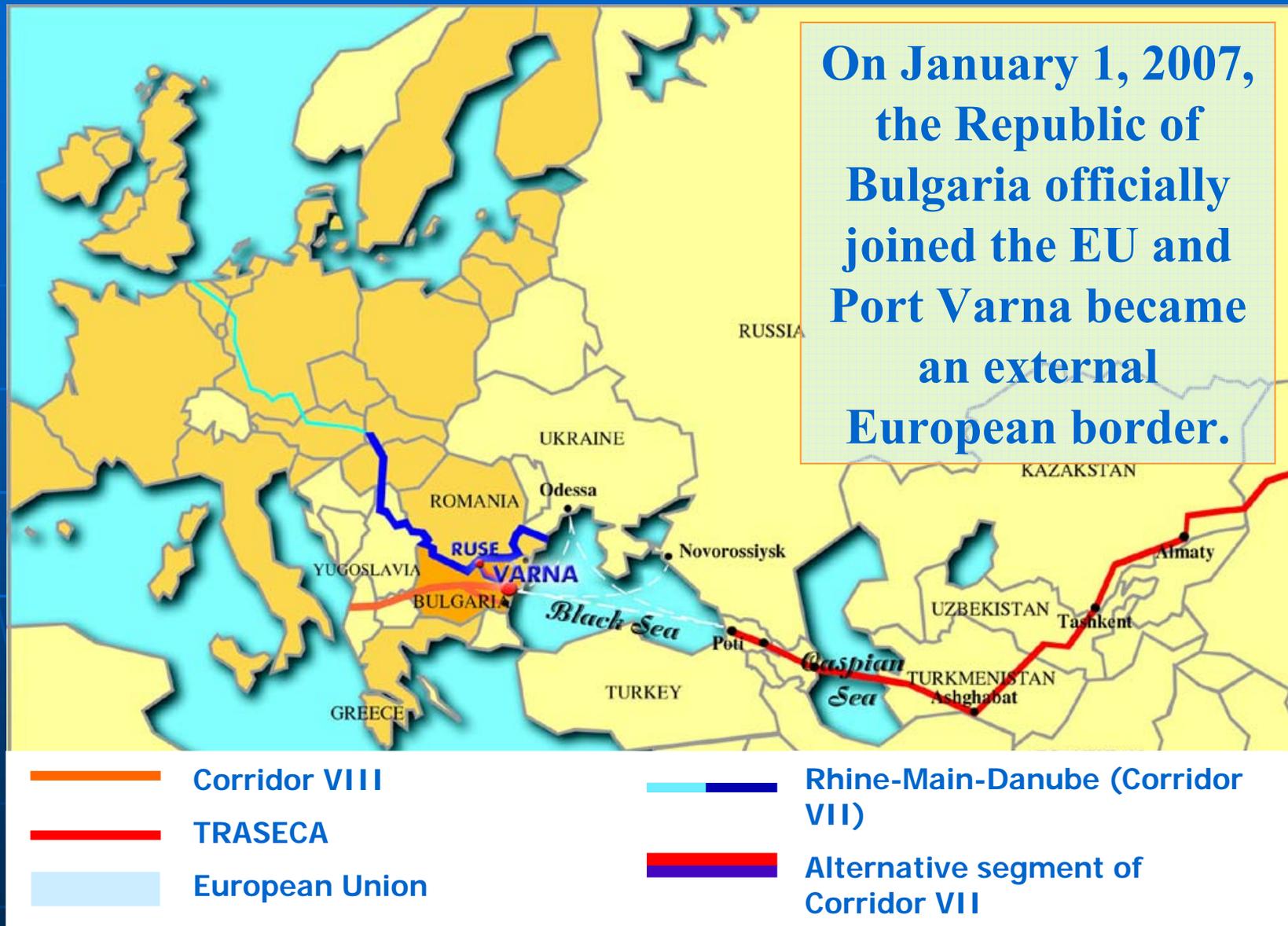
**PORTS  
OF NATIONAL IMPORTANCE  
USED FOR PUBLIC TRANSPORT**

SEA PORTS OF  
NATIONAL IMPORTANCE  
USED FOR  
PUBLIC TRANSPORT

# PORT OF VARNA



# FAVOURABLE LOCATION



# Location of the Port of Varna

43.12 N, 27.57 E

- Port terminal Varna-East is located at the south end of the City of Varna.
- Port terminal Varna-West is located at the west end of the Beloslav Lake, to the south of the town of Devnya
- Both terminals are easily accessible via a network of highways, roads and railway connections.



## ■ Port Terminal Varna-East

- Accessible from the North-South axis via Highway A5 and Road E-87
- Connected to the East-West axis via Highway A2, Road 2008 and Railway section 202.

## ■ Port Terminal Varna-West

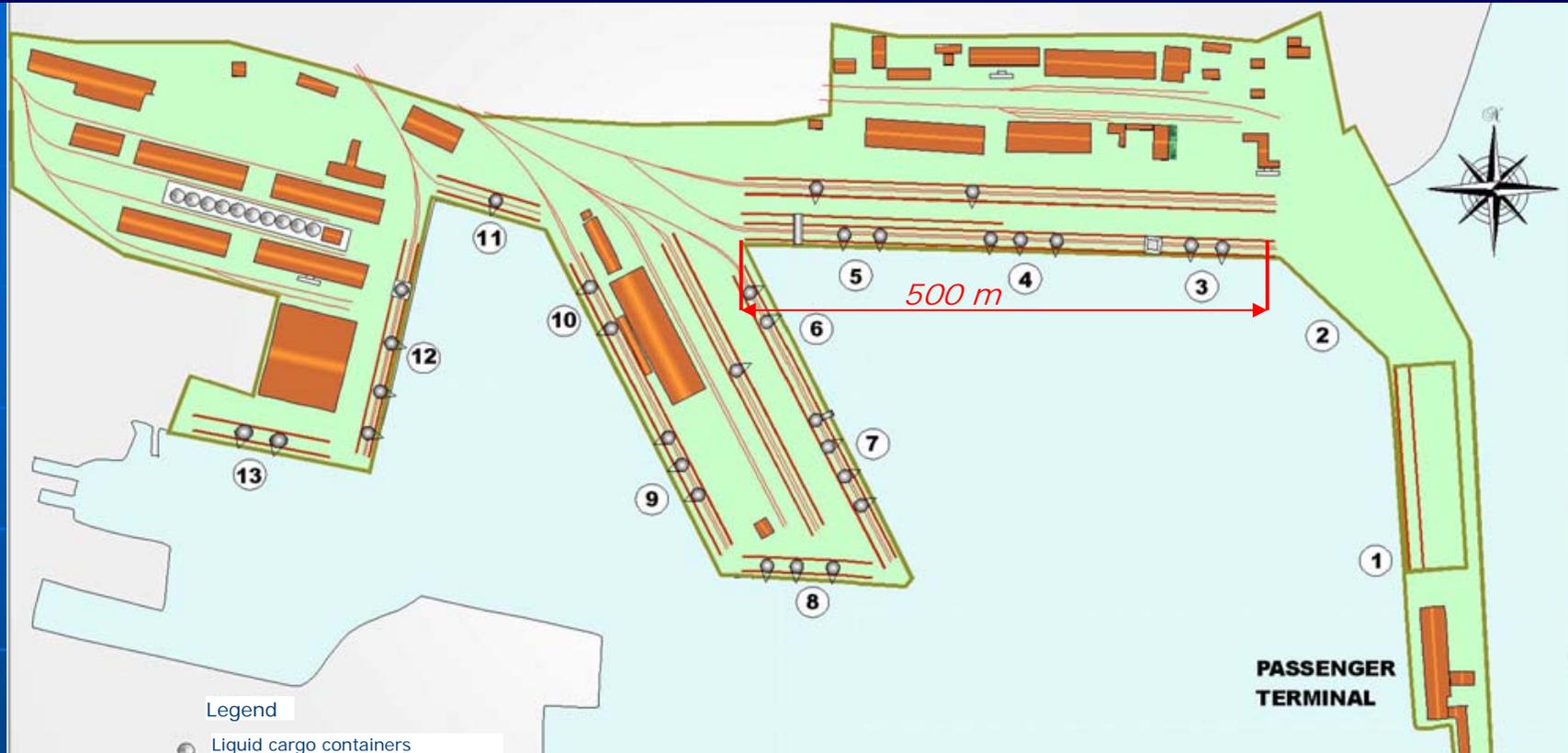
- Accessible from the North-South axis via Highway A5 and Road E-87
- Connected to the East-West axis via Railway section 202, and to Highway A2 via Road 2008.



# “Port of Varna” EAD is the port operator of the Port of Varna

## *Legal status*

- **“Port of Varna” is a sole-owner joint-stock company, whose capital is 100% owned by the State;**
- **The property rights** of the State are vested with the Minister of Transport, Information Technologies and Communications;
- **Company object:** Port operations and related agency, commercial and technical services, forwarding, investments and engineering, research and development (R & D), personnel training, domestic and foreign trade.



Legend

- Liquid cargo containers
- Bridge crane for grain loading
- Electric bridge crane
- Container handling crane
- Molasses loading equipment
- Hopper

**PASSENGER  
TERMINAL**

# PORT VARNA-EAST

Docking places	Length m	Depth m	Main use	Wharf mechanization (number of units)
1n	177	8,00/8,60	Passengers	-
1	153	8,00/8,60		-
2	129	5,80/6,10		-
3	180	6,20/6,80	bulk containers	1
4	130	7,00/7,50		3
5	200	7,40/7,80	bulk, grain	3
6	143	7,00/8,40		2 + 1 jib
7	179	11,00		3 + bridge crane
8	145	9,80	general cargo	2
9	204	9,70		3
10	145	9,20	general cargo	2
11	110	7,60		1
12	241	7,40		3
13	208	7,00	general cargo	1
<b>Total</b>	<b>2 344</b>			<b>24</b>

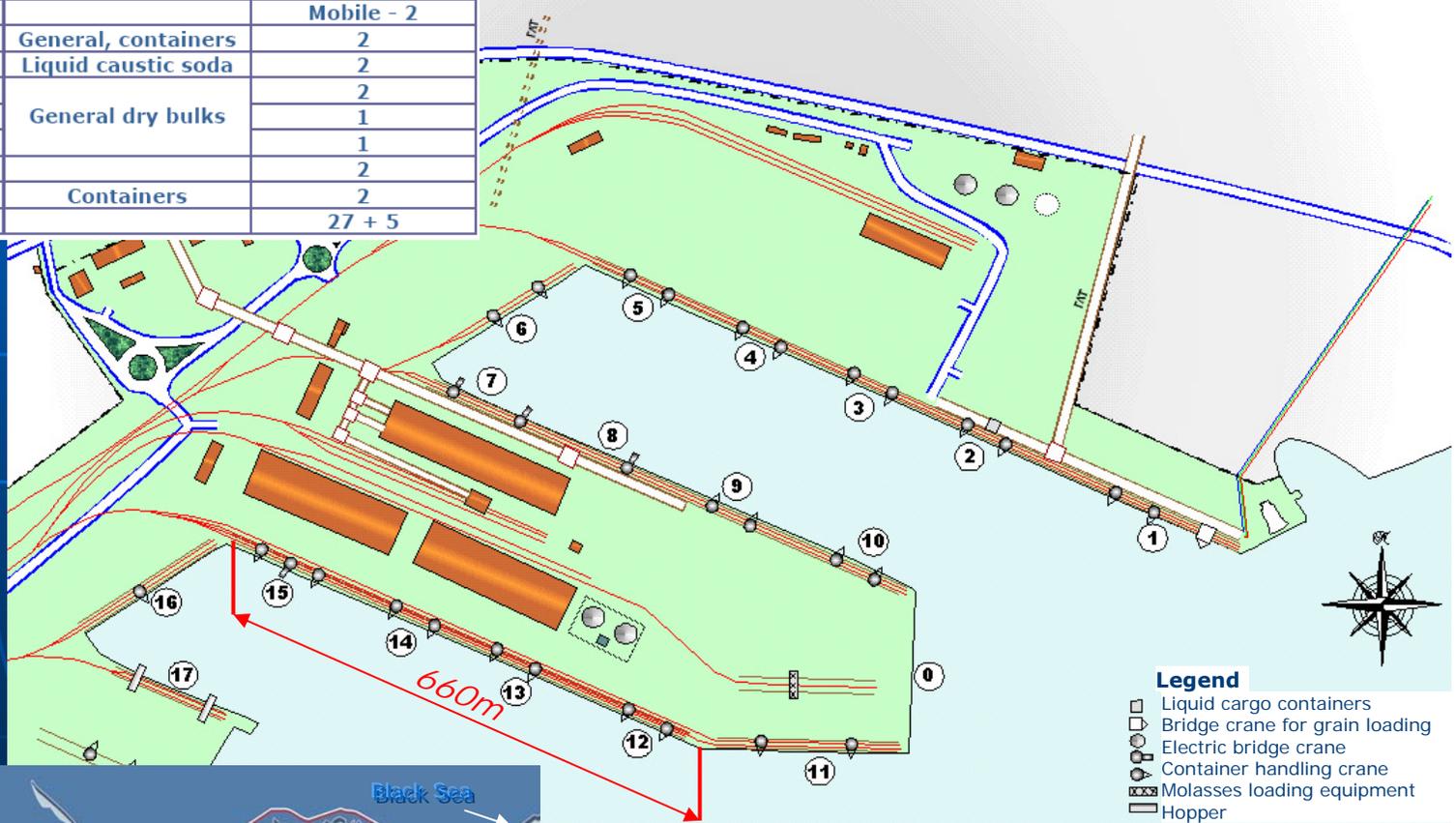


# PORT of VARNA-EAST

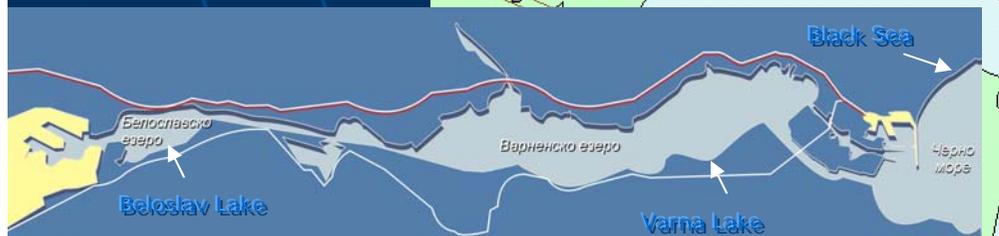


# PORT of VARNA- WEST

Docking places	Length m	Depth m	Main use	Existing cranes number of units
1	240	10.6	Liquid bulks	1
2	200	10.6		2
3	135	10.6		2
4	140	10.6	Dry bulks	2
5	155	10.6		2
6	210	6.8/10.3	General dry bulks	2
7	153	10.6	Bulk soda	RBC - 2
8	160	10.6	Bulk fertilizers	WRM - 1
9	160	10.6	General	2
10	179	10.6	Bulk cement	2
0	179	9.6		Mobile - 2
11	215	9.8	General, containers	2
12	165	9.8/10.2	Liquid caustic soda	2
13	165	9.9/10.4	General dry bulks	2
14	165	10.0/10.2		1
15	165	10.2		1
16	210	10.2		2
17	230	10.2	Containers	2
<b>Total</b>	<b>3 226</b>			<b>27 + 5</b>



- Legend**
- Liquid cargo containers
  - Bridge crane for grain loading
  - Electric bridge crane
  - Container handling crane
  - Molasses loading equipment
  - Hopper



# PORT of VARNA-WEST



## Types of port services

- **Basic services, related to handling general, bulk, liquid and Ro-Ro cargo, containers and passengers**
  - **Reloading services**
  - **Cargo storage**
- **Auxiliary services**
  - **Use of port technical equipment**
  - **Services provided at the port marina to sports and tourist vessels.**
  - **Use of port stocks.**

# Port of Varna



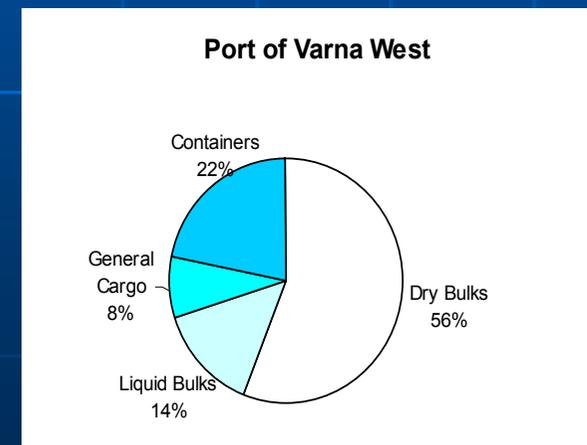
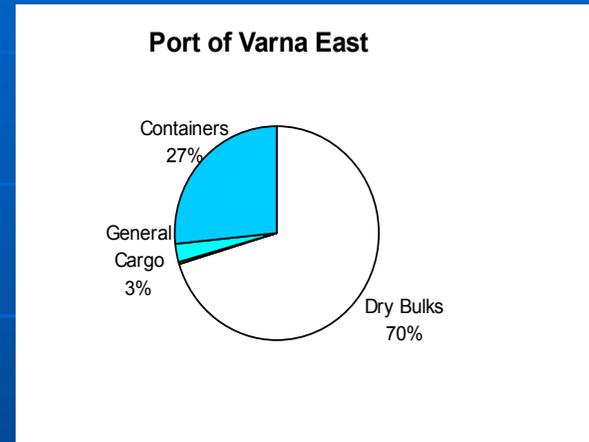
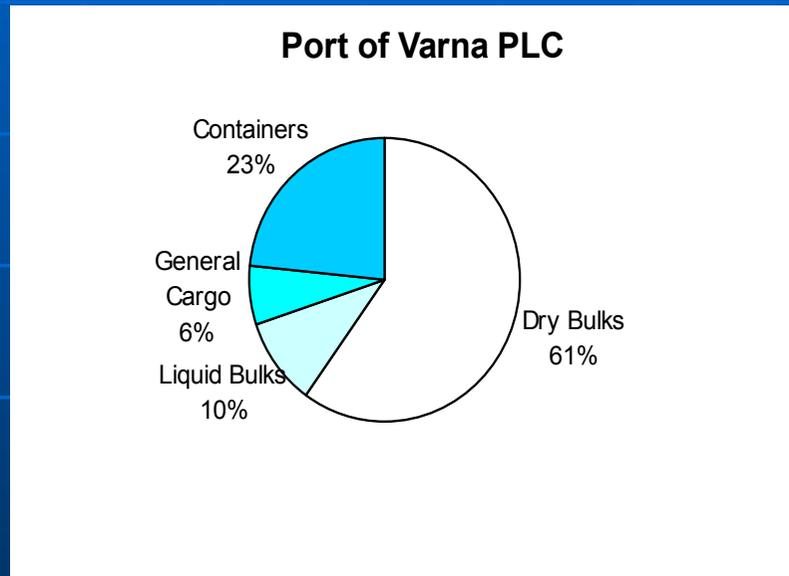
# PORT of VARNA **PORT of VARNA**



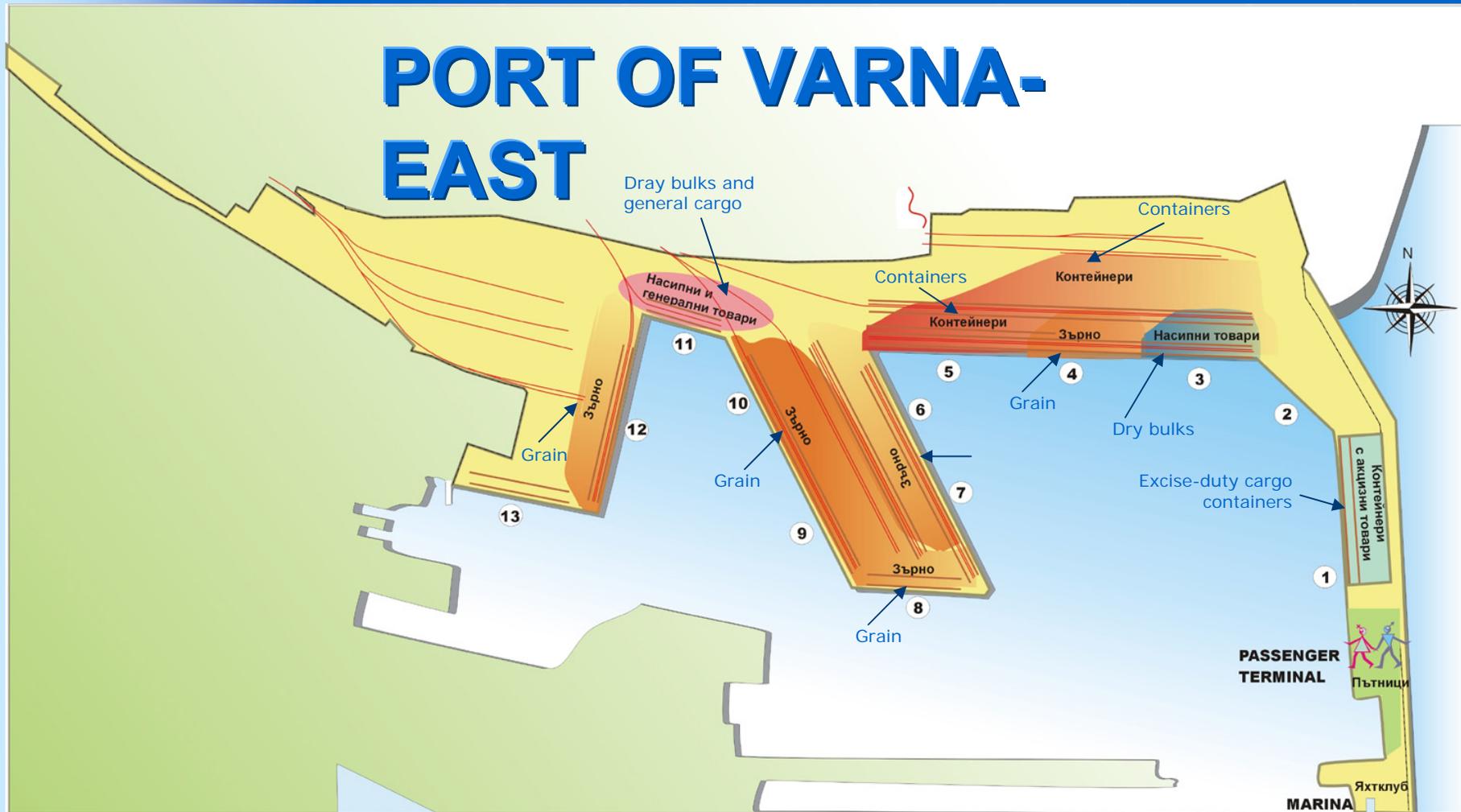
Port Varna serves as the container,  
grain and passenger gate to the  
Republic of Bulgaria



# STRUCTURE OF THE CARGO HANDLES IN 2008 AT THE PORT OF VARNA



# PORT OF VARNA-EAST





PORT TERMINAL VARNA-EAST



# PORT OF VARNA PASSENGER TERMINAL



# At roadstead to Port Terminal Varna-East



# PORT OF VARNNA-WEST





HEAVY CARGO IS HANDLED



BY USING TWO CRANES





LARGE-SIZE CARGO IS HANDLED



BY USING 2 CRANES



## Varna-East

### Cranes and wharf mechanization

Main groups	Load capacity (t)	Number	Average age (years)
I	II	III	IV
Electric bridge cranes	10-32	25	38
Container cranes	30.5	1	34
Grain reloading machine (GRM)	250 t/h 300 m <sup>3</sup> /h	1	8
Molasses trestle	200 t/h	1	10
Traveling bridge cranes	10	2	25

### Operations support mechanization

I	II	III	IV
Reach-stackers and container hoists	28-45	4	13
Forklifts for container loading and unloading	2.8 - 8	5	14
General cargo forklifts	2.5 - 20	37	20
Front and hold bucket loaders for dry bulks	0.9 - 5.4 m <sup>3</sup>	18	15
Container trucks		17	16
Truck and diesel-engine mobile cranes	7 - 40	7	28
Others (tractors, dumpers, trailers and semi-trailers)		120	31

## Varna-West

### Cranes and wharf mechanization

Main groups	Load capacity (t)	Number	Average age (years)
I	II	III	IV
Electric bridge cranes	10-32	25	31
Container cranes	35	2	28
Multi-purpose mobile cranes	up to 100	2	2.5
Molasses trestle	200 t/h	1	10
Traveling bridge cranes	10	2	25

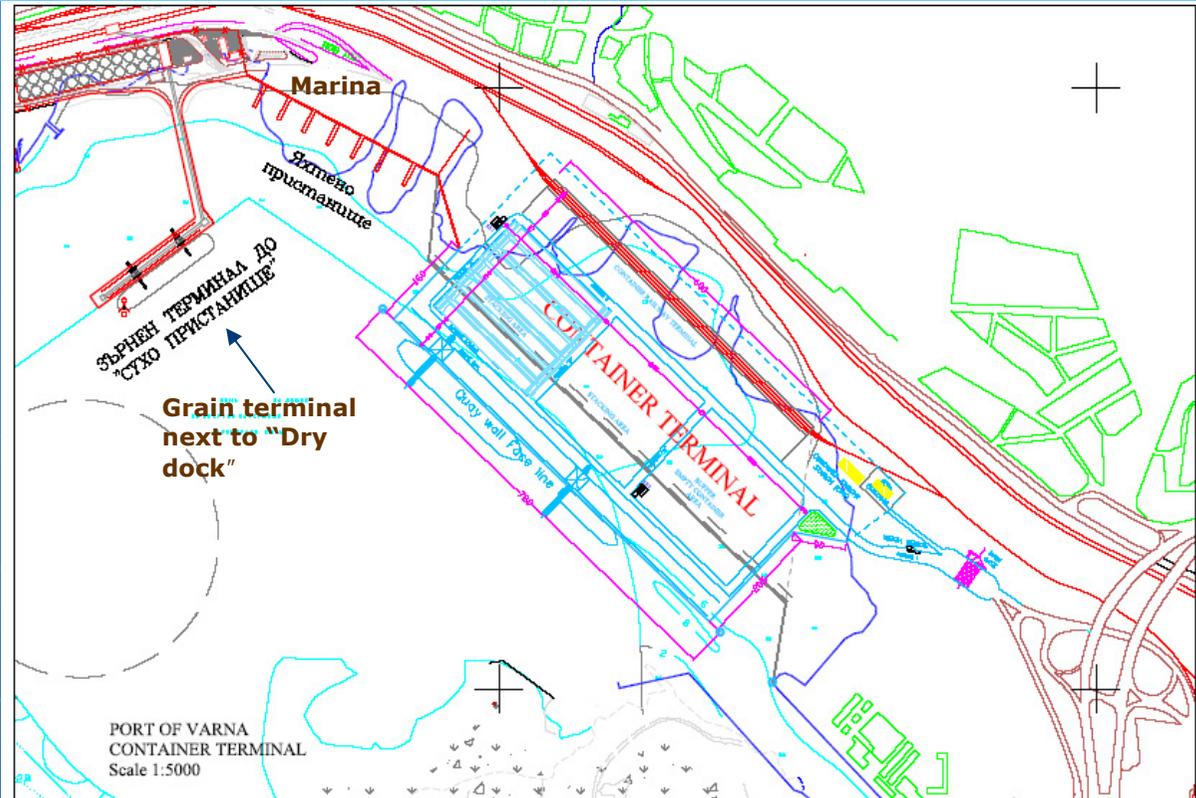
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I	II	III	IV
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Forklifts for container loading and unloading	2.5	2	3
General cargo forklifts	2.5 - 20	16	16
Front and hold bucket loaders for dry bulks	0.9 - 5.4 m <sup>3</sup>	20	9
Container trucks		17	16
Truck and diesel-engine mobile cranes	16 - 25	2	24.5
Others (tractors, dumpers, trailers and semi-trailers)		39	20

### Specialized systems for liquid and dry bulks loading

I	II	III	IV
Wharf reloading machine (WRM)	400 t/h	2	20
Rubber-belt conveyor (RBC)	300 t/h	2 + 6	9
Liquid tap installation	300 - 600 t/h	2	10

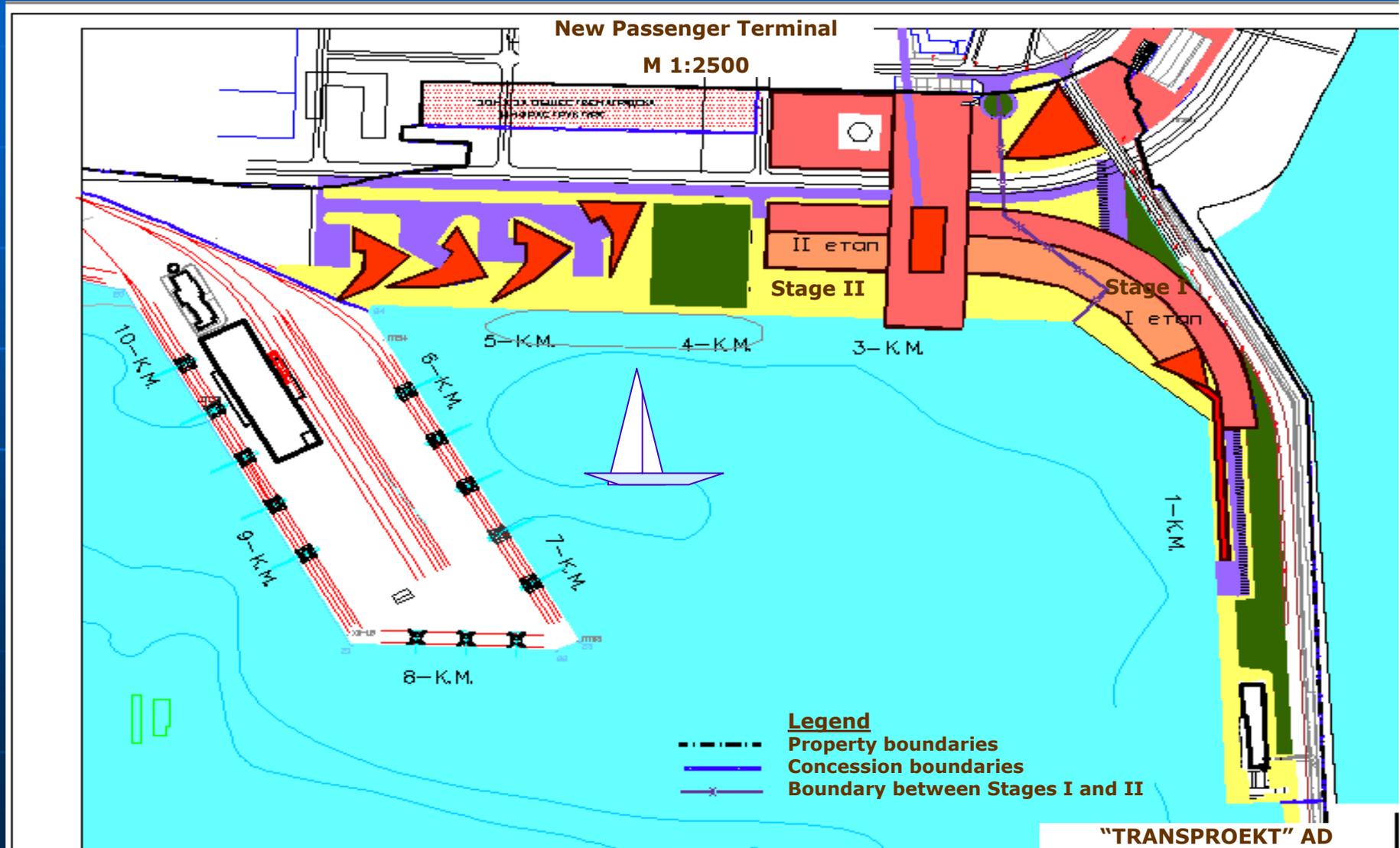
# Project for a new container terminal at Varna Lake



**Project for a deep container terminal for processing *mother vessels*.**



The implementation of the project for construction of a new container terminal will provide options also for the construction of a modern Passenger/Yacht Terminal.



# Varna-East Strengths

- **Good connections** with the national road and railway networks
- **Qualified workforce and management personnel** (including certification after training by foreign experts)
- **Closeness to roadstead** (open sea)
- Own **training centre** (at the port)
- **Closeness** to large clients for the port's services
- **Low transport costs** and time of transfer for employees (within the city limits)
- More than 100 years of **good image** history and experience in port operations and services

# Varna-East Weaknesses

- **Lack of options** for extensive development (located within the city limits)
- **Urban transport** creates obstacles to the access to the port
- **Insufficient depth** for modern container and passenger vessels, no options for deepening (see the table and pictures above)
- **Weak wharf wall**, which cannot bear the weight of modern reloading machines
- **Old cranes** (see the table above)
- **Pollution of the sound background** of the downtown area by reloading operations
- **No on-site State veterinary and sanitary control facilities.**

# Varna East

## Opportunities

- The port is located at the external EU border:
  - Opportunities for participation in projects, financed by the EC of the EU and by the EES
  - Opportunities for the development of an alternative section Varna-Russe from Corridor VII (Rhine – Main – Danube) – organizing block-trains etc.
- Enhanced interest in Bulgaria as a sea tourism destination;
- Existing interest in delivering cargo in relation to the construction of the infrastructure project for the Olympic Games in Sochi;
- Interest displayed by Far East investors in the manufacturing of projects and their transportation to the EU.

# Varna East

## Threats

- Delayed investments
- Strong competition
- Closeness to Natura 2000 protected territories
- Absence of an on-site State Veterinary and Sanitary Authority office

# Varna West Strengths

- Availability of free areas for development;
- Closeness to major clients;
- Good connections with the national road and railway networks;
- Availability of a deep-water wharf;
- Special-purpose high-output equipment;
- Qualified workforce and management personnel (including certification after training by foreign experts);
- Availability of an on-site State Veterinary and Sanitary Authority office;
- More than 35 years of good image history and experience in port operations and services

# Varna West

## Weaknesses

- Located far from roadstead (14 nmi from Varna East);
- Limited air-draft under the Asparuhov Bridge (41.72 m);
- Manoeuvring restricted at night (for vessels with  $L > 200$  m);
- Poor meteorological conditions (fogs and winds);
- Abrasive and polluted environment;
- High personnel commuting cost;
- Poor wharf surfaces;
- Old equipment (see the table above)

# Varna West Opportunities

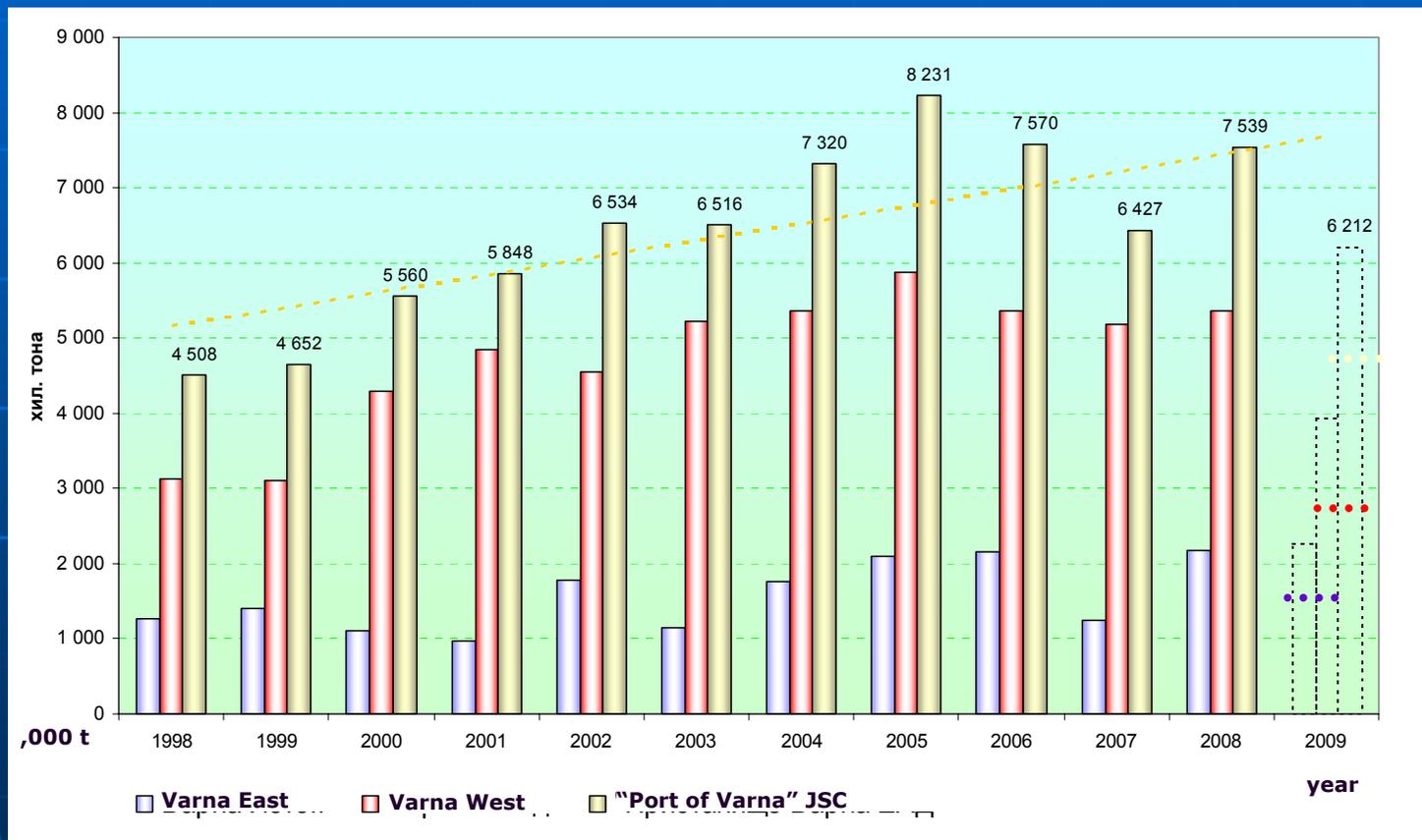
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# Varna West

## Threats

- Delayed investments
- Strong competition
- Closeness to Natura 2000 protected territories

# CARGO VOLUMES at the Port of Varna and its terminals



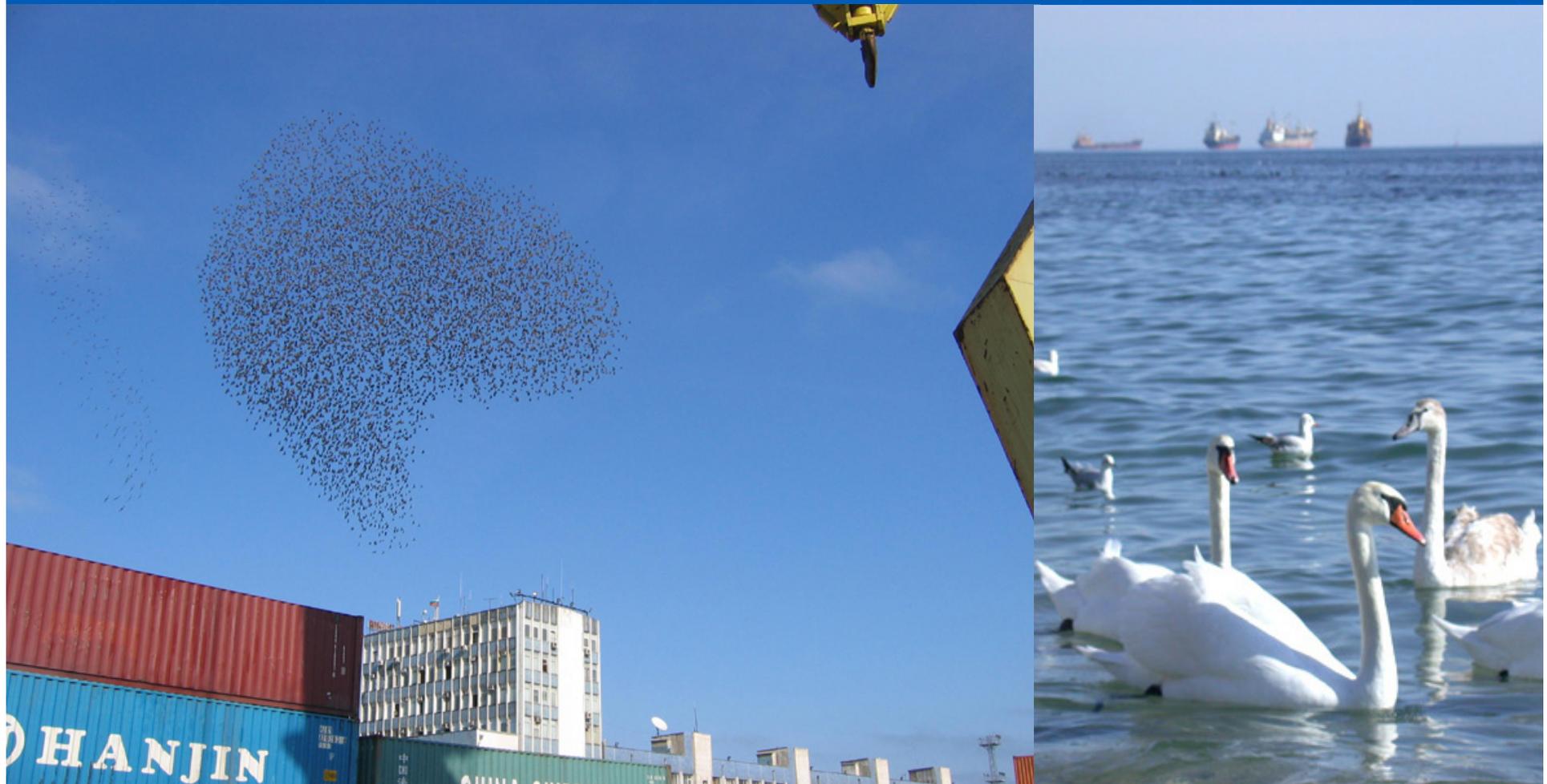
 Cargo volumes for the first 9 months of the year

# ISPS-code Security

As of July 1, 2004, the “Port of Varna” JSC complies with the requirements of the ISPS code



# THE PROTECTION OF THE ENVIRONMENT IS AMONG THE TOP PRIORITIES OF THE PORT OF VARNA OPERATOR





**THE PORT OF VARNA IS NOT THREATENED BY FLOODS**



# FERRYBOAT TERMINAL VARNA

# FERRYBOAT TERMINAL VARNA



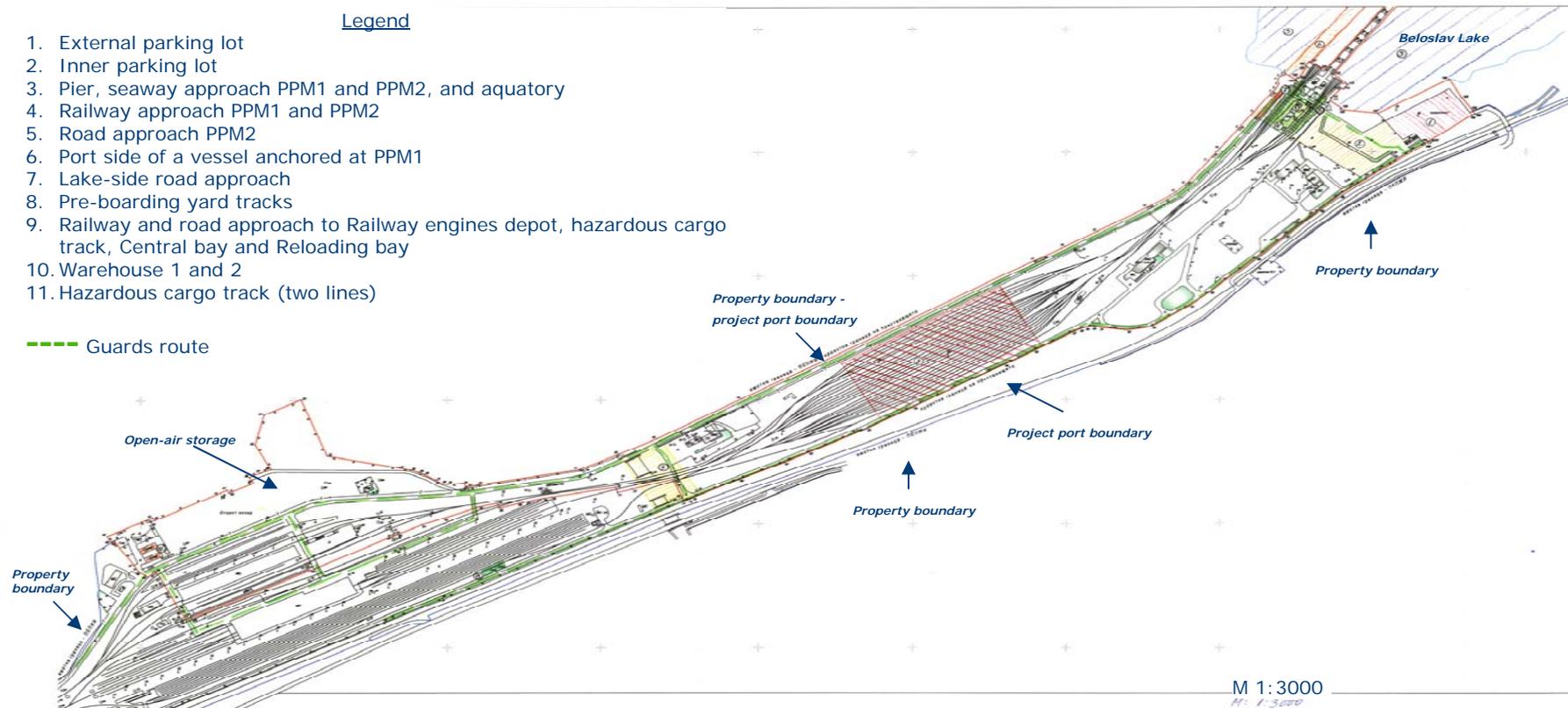
The Ferryboat terminal Varna was constructed in 1978 on the right-hand shore of the Beloslav Lake. The terminal occupies a total of 1,007 dca. The distance between the port aquatory and the sign “Terminal border” is 5 km. The terminal is located 22 km to the west of Varna, with the junction to Highway A5 – Bourgas – Turkey located on the south end of the Asparuhov Bridge. The junction to Highway A2 is located 10 km away from the western side of the terminal.

# FERRYBOAT TERMINAL VARNA

Legend

1. External parking lot
2. Inner parking lot
3. Pier, seaway approach PPM1 and PPM2, and aquatory
4. Railway approach PPM1 and PPM2
5. Road approach PPM2
6. Port side of a vessel anchored at PPM1
7. Lake-side road approach
8. Pre-boarding yard tracks
9. Railway and road approach to Railway engines depot, hazardous cargo track, Central bay and Reloading bay
10. Warehouse 1 and 2
11. Hazardous cargo track (two lines)

--- Guards route



**The Ferryboat Terminal Varna is a unique transport facility – a ferryboat railway terminal – and is one of the shortest and cheapest junctions for a direct railway link between Europe and the states in Central and South Asia.**

**The Ferryboat terminal – Varna, with its capability to transport motor vehicles by the ferryboats operated along the Varna – Ilichevsk – Poti/Batumi line, represents a section of the European Highway E70 – La Coruna (Spain) – Poti (Georgia). The link to the railway network on the territory of Bulgaria is made at the Sindel – Razpredelitelna (Marshalling) and Razdelna (Shunting) yards.**

## FERRYBOAT TERMINAL VARNA

The Port ferryboat terminal – Varna is a component of the public-transport national-importance Port of Varna, and as such it is a public state property, managed by the “Port Infrastructure” state-owned company.

„BDZh” (Bulgarian State Railways) JSC performs the functions of port operator and provides port services, which require the use of the port territory and/or port installations and equipment.

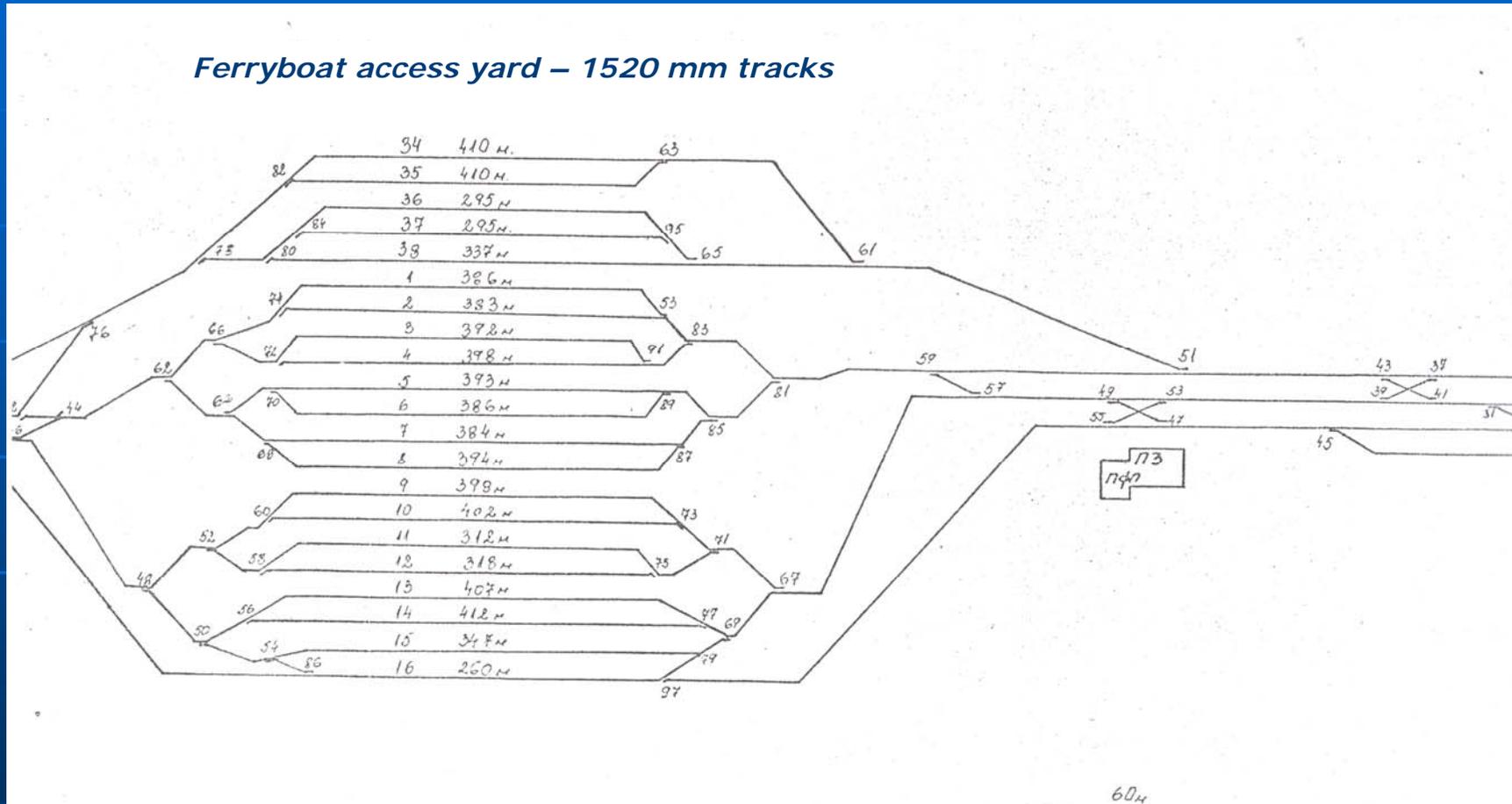
# FERRYBOAT TERMINAL VARNA



**The Ferryboat Terminal Varna has two berths,** equipped with bridge gantries with five 1520 mm railway tracks each. The ferryboat terminal has the capacity to handle a ferryboat carrying 108 railway cars for 10 hours, and a ferryboat carrying 45 railway cars for 2 hours. The berths can accommodate two ferryboat vessels, 26 m and 22 m wide, respectively.

# FERRYBOAT TERMINAL VARNA

Ferryboat access yard – 1520 mm tracks



Ferryboat access yard -  
with 21 1520 mm railway tracks in operation

## FERRYBOAT TERMINAL VARNA



**Bogie replacement yard – 2 multi-purpose tracks with 12 stations each. The yard's capacity allows to replace the undercarriages of 280 railway cars in 24 hours.**

# FERRYBOAT TERMINAL VARNA

## RELOADING YARD

The available technical facilities allow for the reloading of 80 railway cars for 24 hours.

- Open yard with two 1435 mm and two 1520 mm tracks, serviced by a bridge gantry with a load capacity of 20 t;
- Sheltered bay with one 1435 mm track and one 1520 mm track;
- Open-air bay with one 1435 mm track and one 1520 mm track;
- Open-air and covered storage areas – registered as storage facilities under customs supervision.



## FERRYBOAT TERMINAL VARNA



Track for replacing the undercarriage of railway cars with hazardous cargo – with standard-gauge tracks, and two stations fitted with explosion-proof jacks. The yard can handle up to 20 railway cars in 24 hours.

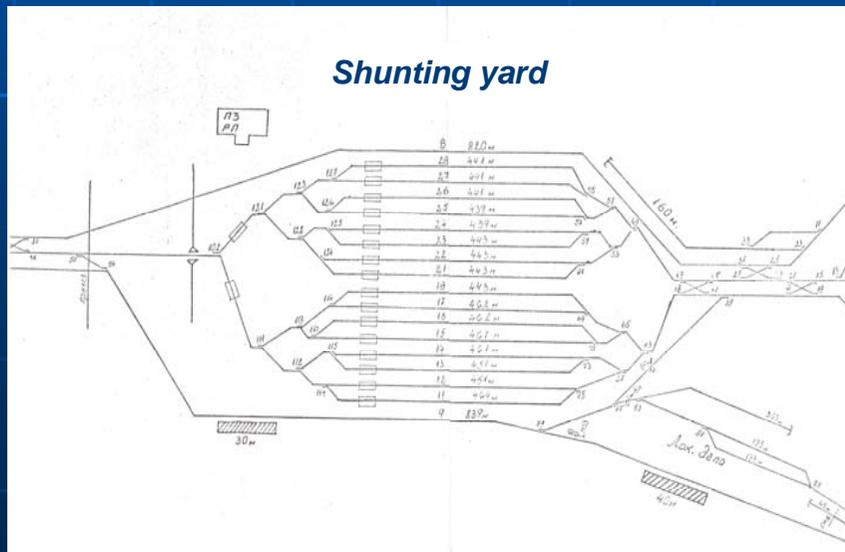
Railway cars and bogie repair yard – in-place repairs of railway cars and 1435-gauge car bogies. The yard's capacity is 40 bogies per month.



# FERRYBOAT TERMINAL VARNA



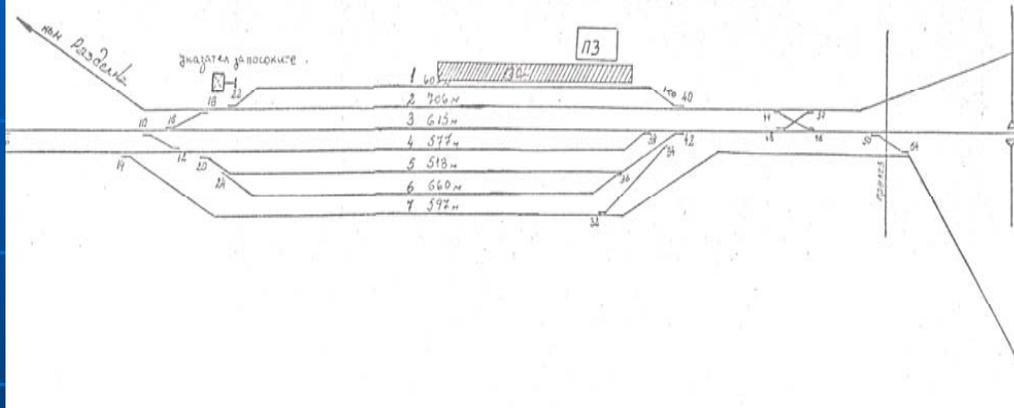
Engine yard – with facilities for maintenance and repairs of 1520 and 1435 gauge railway engines.



Shunting yard - 16  
1435-gauge tracks.

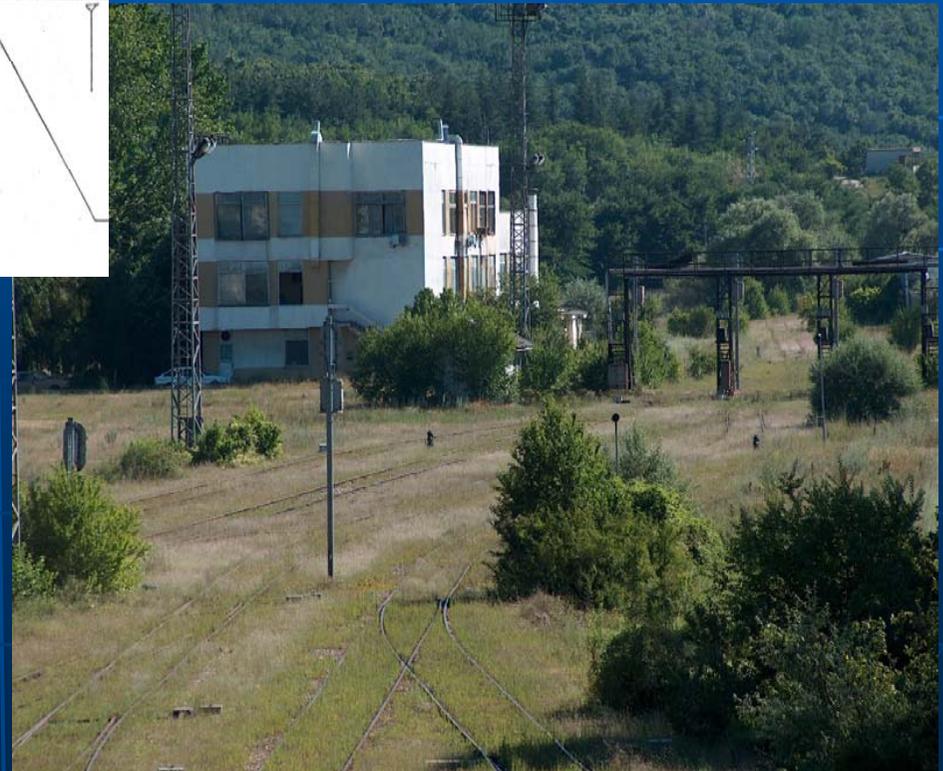
# FERRYBOAT TERMINAL VARNA

Ferryboat railway station  
Varna – marshalling yard



Marshalling yard – with seven 1435 mm railway tracks.

Railway cars revision section – technical inspection, on-site repairs and disinfection of railway cars in both directions.



## **FERRYBOAT TERMINAL VARNA**

**The services provided at the Ferryboat terminal Varna are as follows:**

- **Mooring and unmooring of ferryboat vessels and related port services, performed by the port operator and required for normal loading and unloading of railway cars and motor vehicles;**
- **Unloading of motor vehicles and railway cars from the ferryboat vessel;**
- **Loading of railway cars according to a cargo plan drafted in advance by a port official;**
- **Drive-in loading of motor vehicles;**
- **Processing of transit papers and establishing contacts with border, customs, sanitary and other authorities in compliance with the effective international freight regulations;**

## FERRYBOAT TERMINAL VARNA

- Replacement of railway car undercarriage in compliance with the standards of the respective railway administration – from 1520 mm to 1435 mm for railway cars for import and from 1435 mm to 1520 mm for export;
- Reloading, loading and unloading of railway cars using various technologies: car to car, truck to car, loading bay to car, car to loading bay;
- Storage of goods under customs supervision;
- Marshalling and de-marshalling of trains to and from the Bulgarian State Railways network;
- In-place repairs of railway cars owned by foreign railway administrations, repairs of 1435 mm rolling-stock bogies.
- The service fees are defined by the effective approved tariffs for railway transport or by contracts for cases, not included in the tariff schedules.

# FERRYBOAT TERMINAL VARNA

The ferryboat lines operated from the railway ferryboat terminal Varna are as follows:

- **Varna – Ilichevsk – Varna**  
Varna – Ilichevsk – Poti/Batumi – Varna  
Railway cars and motor vehicles are ferried by four ferryboats with a capacity of 108 railway cars. The lines are used as a direct link to the railway networks in Ukraine and Georgia and for transit to neighbouring states.
- **Varna – Caucasus – Varna**  
Railway cars ferrying started in March 2009 by using a single-deck ferryboat with a capacity of 40 railway cars. A second vessel of the same capacity is scheduled for commissioning in April 2010. The line is used as a direct link to the railway network in Russia.  
The Bulgarian State Railways JSC was licensed in March 2009 as the port operator of the ferryboat lines Varna – Ilichevsk – Poti/Batumi – Varna and Varna – Caucasus – Varna.



# FERRYBOAT TERMINAL VARNA

## SWOT analysis

### STRENGTHS

- Unutilized capacity available
- Highly qualified personnel
- Existing road and railway links to the national road and railway networks.

### WEAKNESSES

- Unsatisfactory technical state of the port installations, reloading machines and building stock.
- The separation of the infrastructure among the “Port Infrastructure” State-owned Company and the “Railway Infrastructure” National Company does not allow separating in a similar manner the internal communications (electricity supply, water and sewerage utilities, telephones). Such a separation was not provided for in the initial project.

### OPPORTUNITIES

- Development of a modern multi-modal terminal

### THREATS

- Competition of the ports in Constantza

# FERRYBOAT TERMINAL VARNA

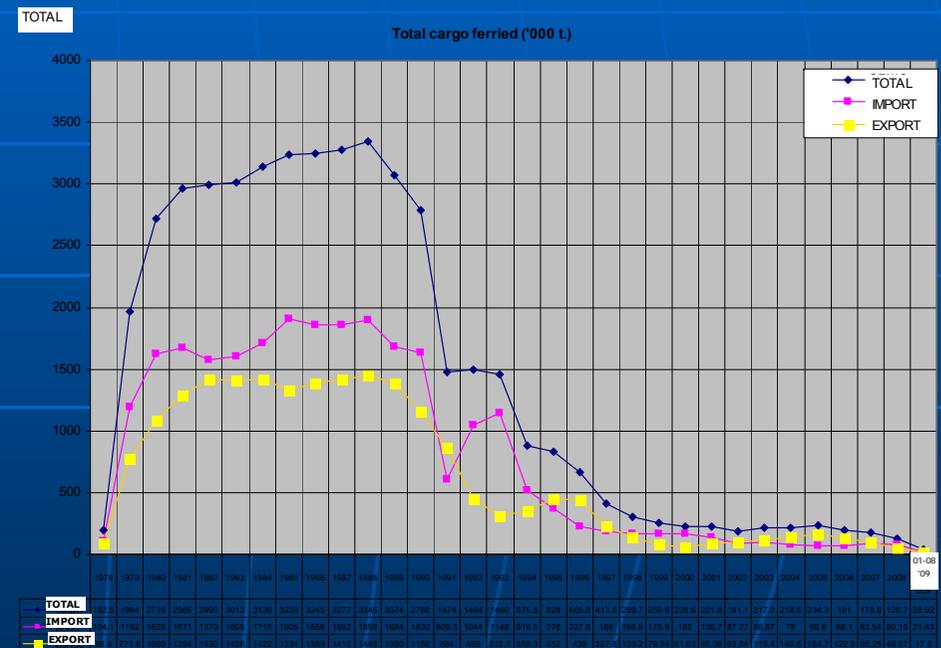
## CARGO TURNOVER

The largest amount of cargo was processed in 1988 – 3,345 million t, including:

- 1,898 million t of import, and
- 1,447 million t of export,

which amounted to almost the full capacity of 3,400 million t per annum.

A total of 875,000 were processed in 1994, 226,000 t in 2000, and 126,000 t in 2008.

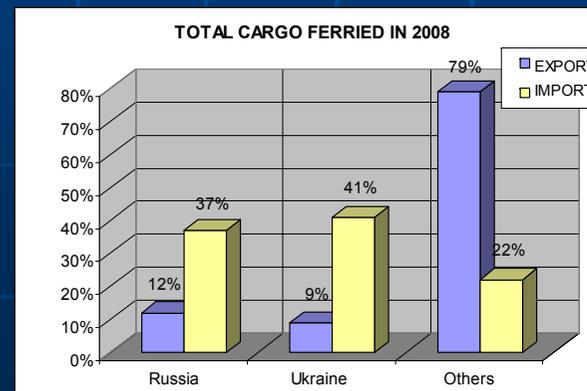
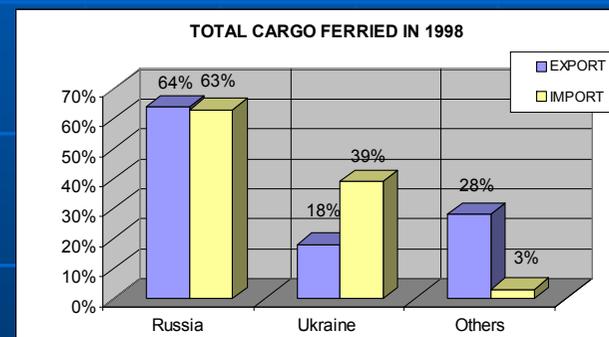
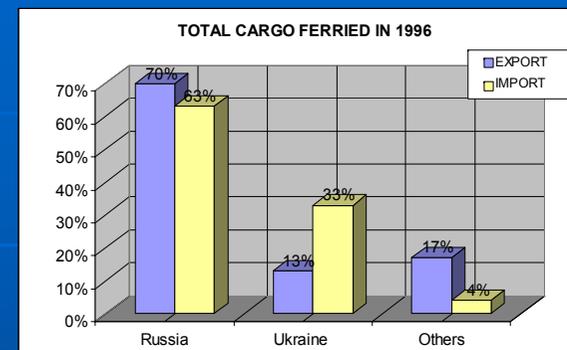


# FERRYBOAT TERMINAL VARNA

There are no records before 1996 concerning the structure of cargo turnover in terms of CIS states; however approx. 80% of the cargo went to or came from Russia.

Bulgaria's export to Russia via the ferryboat line amounted to 70 % of total exports in 1996, and imports from Russia amounted to 63 % of the total.

The respective data for 1998 were 64 % of exports and 69 % of imports; by 2008 imports from Russia stood at 11.8 %, and exports at 37 %, of the total.



# PORT OF BURGAS



**PORT** *of* **BURGAS**

# PORT OF BURGAS TERMINALS:

EAST,  
TERMINAL 2A for BULK CARGOES,  
WEST  
and  
IN-SEASON PASSENGER TERMINAL  
in the town of Nessebar



**PORT** *of* **BURGAS**

# The Port of national importance in Burgas is used for public transport



# The Port of national importance in Burgas, used for public transport



- Terminal WEST
- Bulk cargoes terminal – TERMINAL 2A
- Terminal EAST

# The Port of national importance in Burgas, used for public transport

<b>Total wharf length</b>	<b>4 800 m</b>	<b>Total port area</b>	<b>1,294,000 m<sup>2</sup></b>
<b>Number of wharfs</b>	<b>28</b>	<b>Total storage area</b>	<b>508,500 m<sup>2</sup></b>
<b>Total road network</b>	<b>29,400 m</b>	<b>Open-air storage area</b>	<b>419,600 m<sup>2</sup></b>
<b>Total rail network</b>	<b>19,400 m</b>	<b>Covered storage area</b>	<b>74,900 m<sup>2</sup></b>
<b>Max. admissible draft</b>	<b>15.50 m</b>	<b>Refrigerating storage area</b>	<b>5,280 m<sup>2</sup></b>
<b>Max. vessel length</b>	<b>275.00 m</b>	<b>Container storage area</b>	<b>60,000 m<sup>2</sup></b>
<b>Max. load capacity</b>	<b>125,000 t</b>	<b>Container spots</b>	<b>1,500 (3 high)</b>
<b>Max loading rate</b>	<b>40,000 t/day</b>	<b>Cranes</b>	<b>75</b>
<b>Annual volume of cargoes</b>	<b>6,000,000 t</b>	<b>Machines and equipment</b>	<b>158 units</b>
<b>Largest vessel ever handled</b>		<b>100-t mobile crane</b>	<b>1</b>
<b>*M/v Zetland</b>	<b>GT 74,003</b>	<b>Max. load capacity</b>	<b>100 t</b>

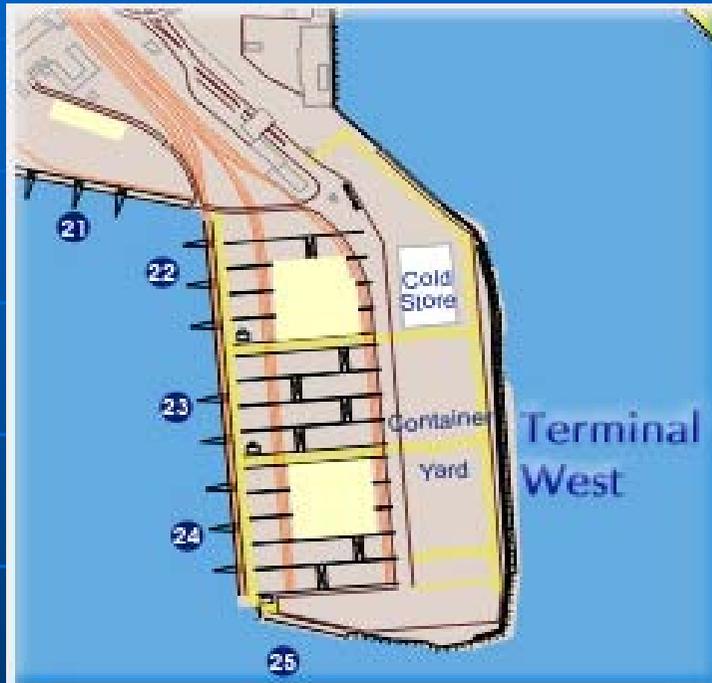
**Cargo – iron ore – 143 000 t; draft - 17.60 m**

# “Port of Burgas” JSC is the operator of the Port of Burgas

*Legal status*

- **“Port of Burgas” is a sole-owner joint-stock company, whose capital is 100% owned by the State;**
- **The property rights** of the State are vested with the Minister of Transport, Information Technologies and Communications;
- **Company object:** Port operations and related agency, commercial and technical services, forwarding, investments and engineering, research and development (R & D), personnel training, domestic and foreign trade.

# TERMINAL WEST



Berths	6
Total wharf length	<b>890 m</b>
Max. admissible draft	11,00 m
Open-air storage area	191,000 sq. m.
Covered storage area	24,000 sq. m.
Refrigerating storage area	7,000 sq. m.



## TERMINAL WEST

- Terminal West is the busiest terminal, with a maximum depth of 11.00 m.
- The terminal has a direct link to the national road and railway network.
- The terminal provides excellent opportunities for combined transport.

# TERMINAL WEST



# TERMINAL WEST



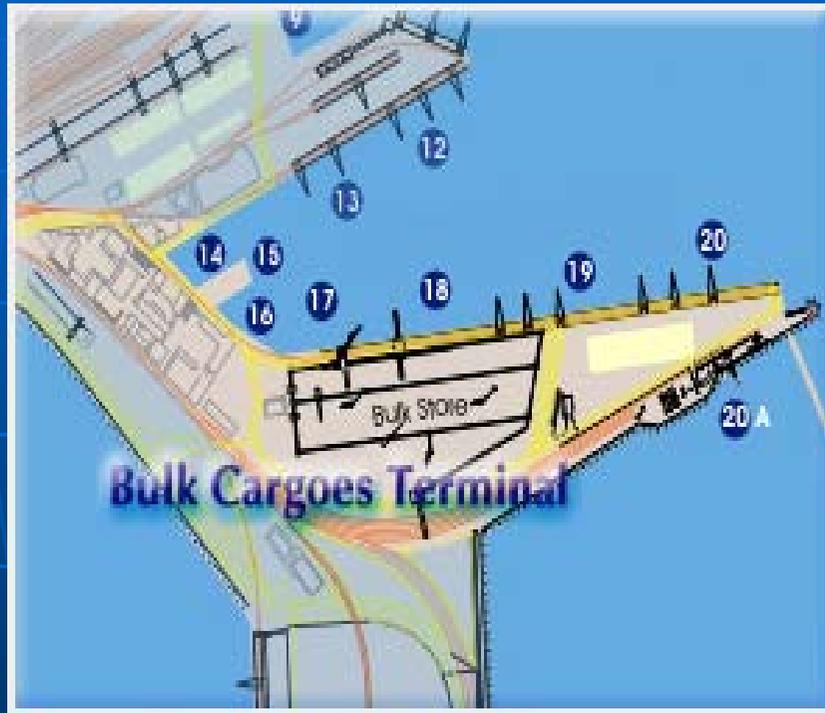
Metals, Ro-Ro and containers are the most frequently handled cargoes.

# TERMINAL WEST



The terminal is equipped with a new latest-generation container loader model RDF450-60S5X, manufactured in Sweden by “Kalmar Industries”. The terminal allows stacking of full 42-tonne containers up to a height of 5 m.

# BULK CARGOES TERMINAL



Berths	5
Total wharf length	<b>750 m</b>
Maximum draft	11,00 m
Open-air storage area	49,000 sq. m.
Covered storage area	6,000 sq. m.



## **BULK CARGOES TERMINAL**

- The “Bulk cargoes” Terminal is used to handle coal, coke, ores and ore concentrates, clinker, and grain by using the existing covered storage No. 22, and others.
- An on-shore installation for handling liquid bulk cargoes – mainly fuels, chemicals and ethyl alcohol, has been constructed at Berth No. 20A. The installation is linked by a pipeline to the Naphtex storage facility located close to Terminal West. Chemicals are processed by means of a railway loading bay. Ethyl alcohol may be stored at a special storage facility located on the berth premises.

# BULK CARGOES TERMINAL



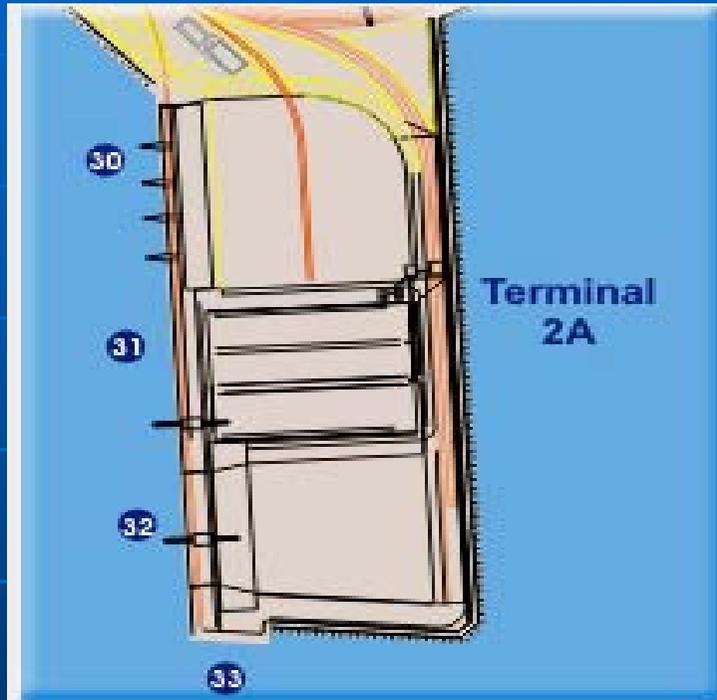
Bulk grain, as well as pig-iron ingots and timber are the most frequently handled types of cargo.

# **BULK CARGOES TERMINAL**

The terminal is equipped with the following hoisting and transport machines:

- Bridge cranes – 6
- Coal unloader type “SIWERTEL” – 1
- Coal and ore and unloader type “Ceretti Tanfani” – 1
- Forklifts – 3
- Bucket loaders – 10
- Telescopic front loaders – 2
- Rubber-belt conveyor – 9
- Wheel excavators – 3
- Spreaders – 2
- Train car loading station – 1
- Truck weigh bridge – 2

# TERMINAL 2A



Berths	4
Total wharf length	817 m
Maximum draft	15,50 m
Open-air storage area	108,000 sq. m.
Total area	268,000 sq. m.



## TERMINAL 2A

- The new Terminal 2A was constructed within the framework of the project for the expansion of the Port of Burgas



# TERMINAL 2A



2001



2005

# TERMINAL 2A



The terminal was commissioned in November 2005.  
It is equipped with modern and reliable handling and transfer machines and has a large storage area.

# TERMINAL 2A

- Terminal 2A is designed for handling mainly bulk cargoes – coal, coke, ores and ore concentrates, clinker, and others. The terminal is equipped with high-efficiency state-of-the-art reloading machines.



## TERMINAL 2A

The terminal is equipped with the following hoisting and transport machines :

- Bridge cranes – 4
- Grapple unloaders type “VASU” – 2
- Coal and ore unloader type “Ceretti Tanfani” – 1
- Combined wheel excavator / spreader - 1
- Bucket loaders – 10
- Rubber-belt conveyors – 14
- Wheel excavator – 1
- Spreaders – 2
- Train car loading station – 1
- Railway car weigh bridge – 1

# TERMINAL EAST



Berths	14
Total wharf length	1,965 m
Maximum draft	9,75 m
Open-air storage area	50,000 sq. m.
Total area	35,000 sq. m.



## TERMINAL EAST

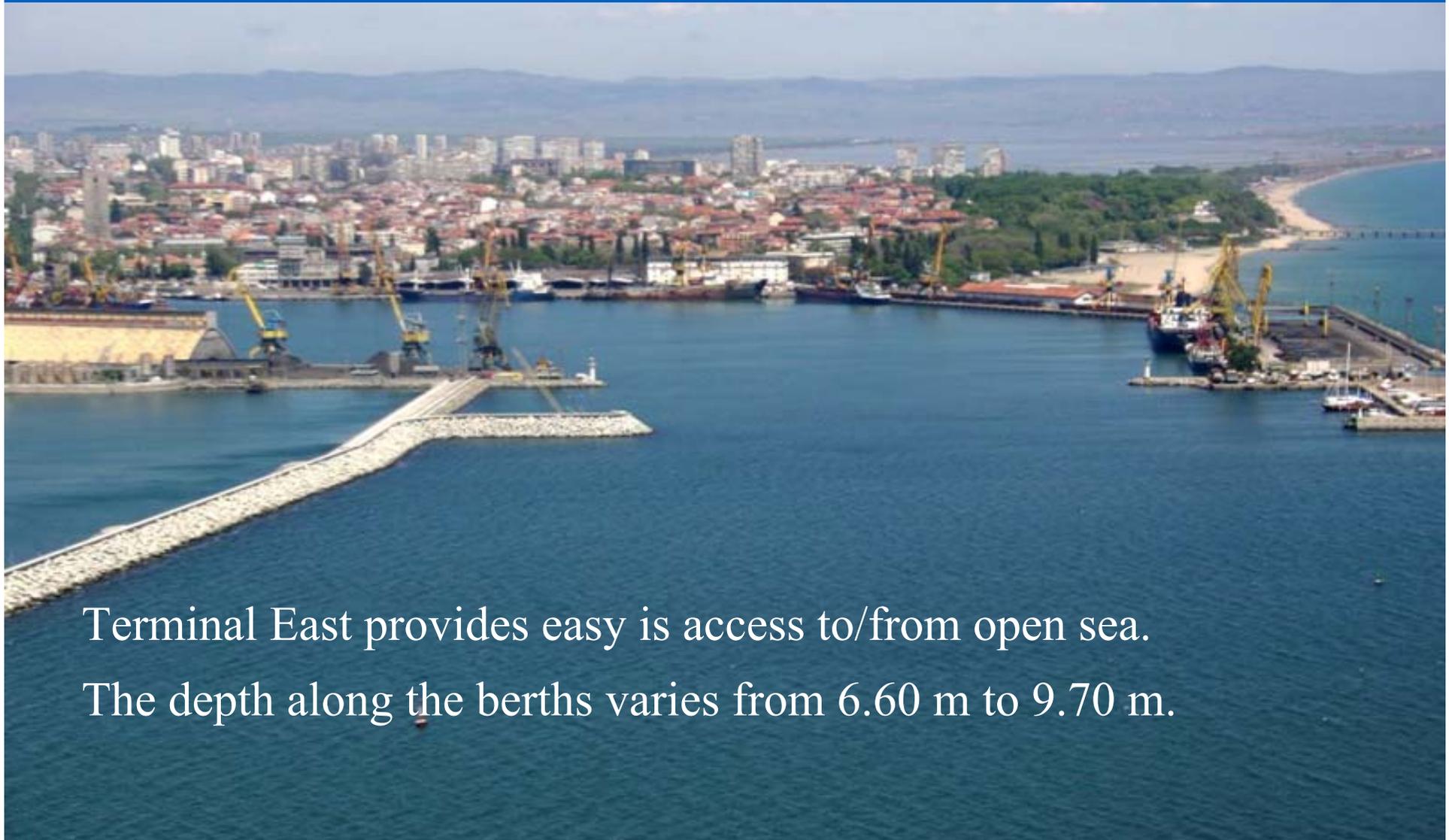
- Terminal East is used mainly for handling general cargoes – metals, timber, paper, foodstuffs, metal scrap, machines, and others.
- Due to operational considerations, the terminal is frequently used also for handling bulks – coal, sulphur, kaolin, sugar, ammonium nitrate and small batches of concentrates.

## TERMINAL EAST

The terminal is equipped with the following hoisting and transport machines:

- Bridge jib cranes – 23
- Traveling gantry cranes – 6
- Mobile cranes – 4
- Tractors – 35
- Forklifts – 38
- Bucket loaders – 5
- Trailers – 52
- Truck weigh bridges – 2

# TERMINAL EAST



Terminal East provides easy is access to/from open sea.  
The depth along the berths varies from 6.60 m to 9.70 m.

# TERMINAL EAST



The terminal is used for handling general cargo and metals.

# TERMINAL EAST



The terminal is used also for handling bulks: sulphur, sugar, fertilizers, kaolin, and others.

# PASSENGER TERMINAL - NESSEBAR



# PASSENGER TERMINAL - NESSEBAR



“Port of Burgas” JSC operates the passenger terminal in the ancient town of Nessebar, which is intensively used during the tourist season.

# PASSENGER TERMINAL - NESSEBAR



Year	Ships	Passengers
2003	16	3,050
2004	25	7,890
2005	27	10,274
2006	28	7,849
2007	35	9,641
2008	41	13,134
2009	46	13,797

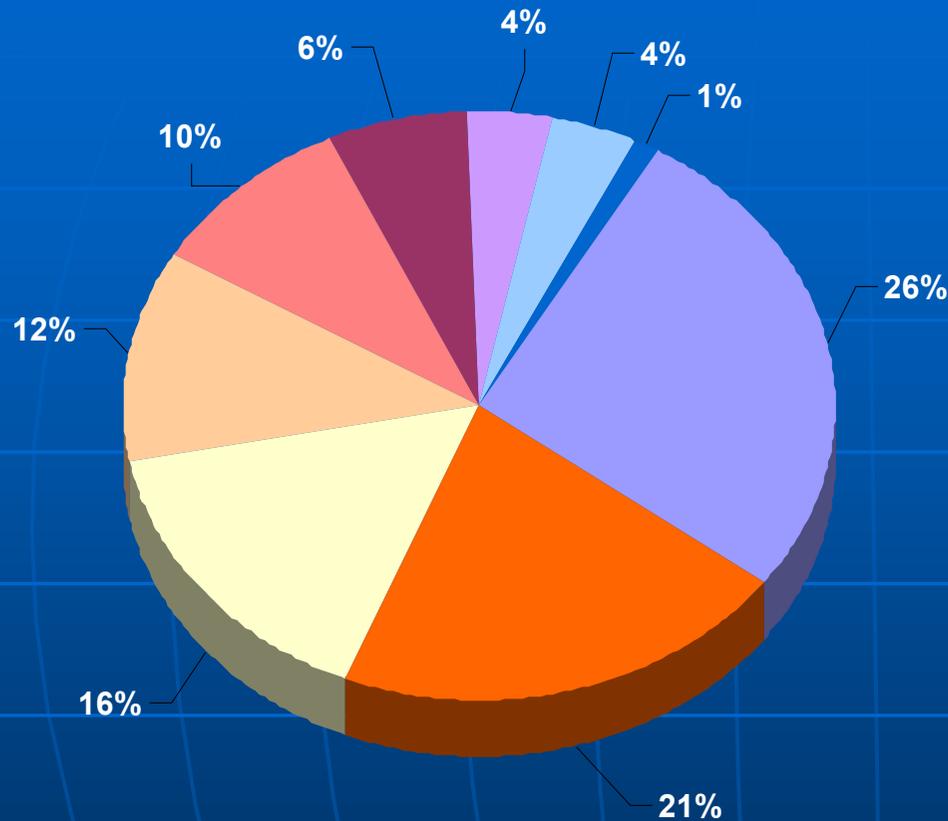
# Types of port services

- **Basic services related to handling of general, bulk, liquid and Ro-Ro cargoes, containers and passengers**
  - **Reloading services**
  - **Cargo storage**
- **Auxiliary services**
  - **The use of port equipment**
  - **Services, provided at the passenger terminal in the town of Nessebar to sports and tourist vessels**
  - **Use of port stocks**

# PORT of BURGAS



## Cargo volumes 2008



Metals	1,238
Coal, coke	963
Concentrates	733
Containers	538
Grain and sugar	441
Iron ore	298
Fertilizers	177
Other	171
Liquid products	57

Total 4,616

Tones x 1,000



## Master plan for the development of the Port of Burgas

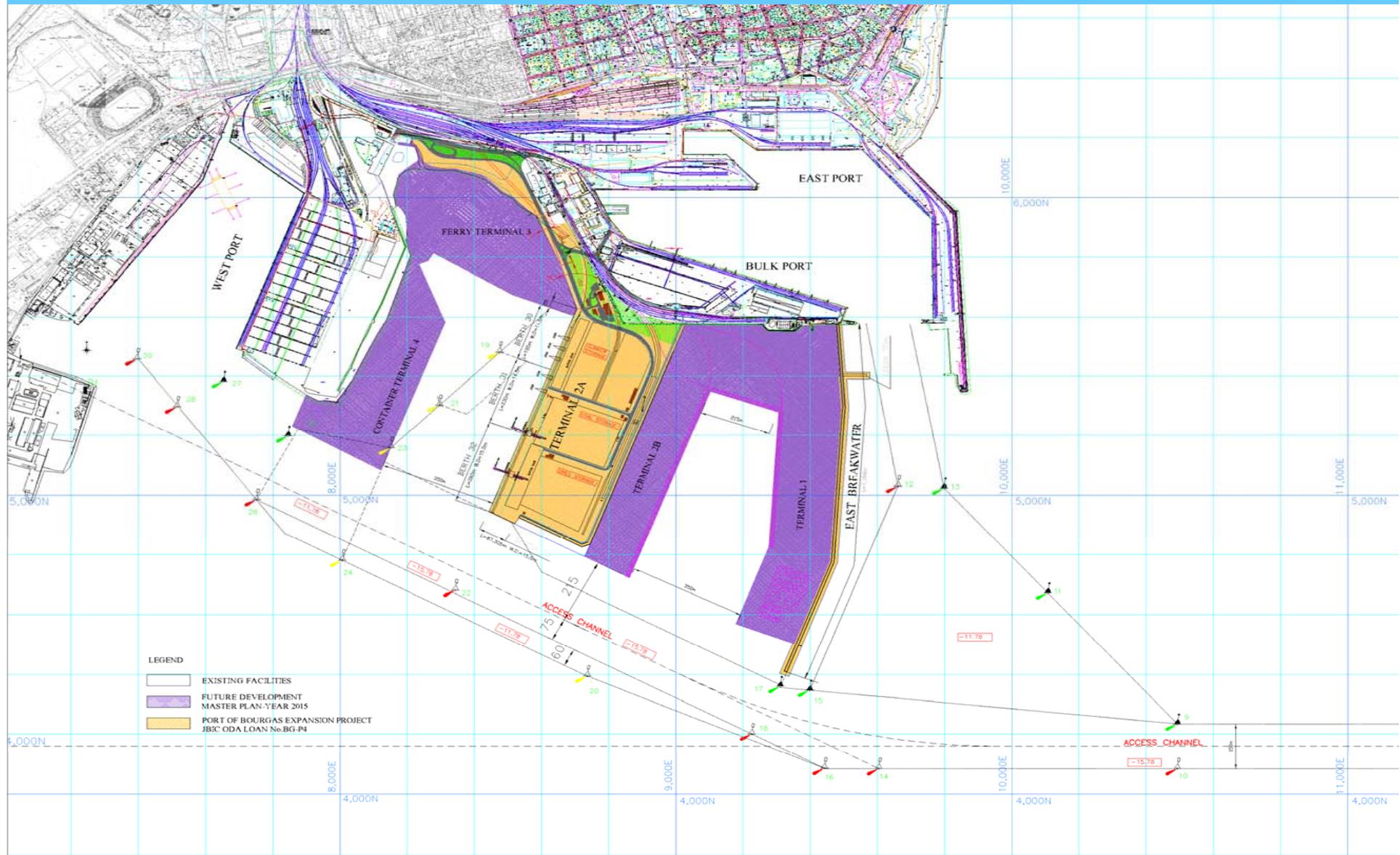
Includes the construction of 4 terminals, namely:

- Terminal 4 – a new container terminal next to the existing one
- Terminal 3 – a Ro-Ro terminal
- Terminal 2B – for bulk cargoes
- Terminal 1 – for liquid bulks and general cargoes

The implementation of the project for the construction of Terminals 3 & 4 will allow the port to absorb the increasing container and Ro-Ro traffic in the region.

The construction of Terminal 4 is a priority task and its design stage is in progress.

# Master plan for the development of the Port of Burgas



## Port of Burgas Strengths

- Favourable geographic location – within a short distance to the industrial zone in the southern part of the country
- Favourable climate and hydro-meteorological conditions, allowing for a full-year use of the port
- Easy access from the sea
- Availability of multi-functional berths and specialized terminals
- Increased throughput capacity after the commissioning of the new bulk cargoes terminal

## Port of Burgas Strengths

- Existing developed industrial branches in South Bulgaria and in the region
- A relatively well developed infrastructure in the region – road and railway network
- Availability of qualified workforce and flexible employment schemes
- Well organized security system, assuring order, security and protection
- Developed tariff strategy and policy, resulting in an enhanced competitiveness

## Port of Burgas Weaknesses

- Absence of a specialized container terminal
- Insufficiently developed port and railway infrastructure, limited capability to absorb additional cargo flows
- Physically and morally depreciation of the available production and technical facilities
- Lack of a sufficient free cash assets for the maintenance and replacement of machines and equipment

# Port of Burgas Opportunities

- Logistics and transport node within the framework of the transport concept developed by the European Union as a major asset along Corridor VIII
- Attracting foreign investments to Bulgaria and the region and enhancing clients' foreign trade operations
- Favourable trends on the ferrous and non-ferrous metals market
- Attracting re-export and transit cargo flows

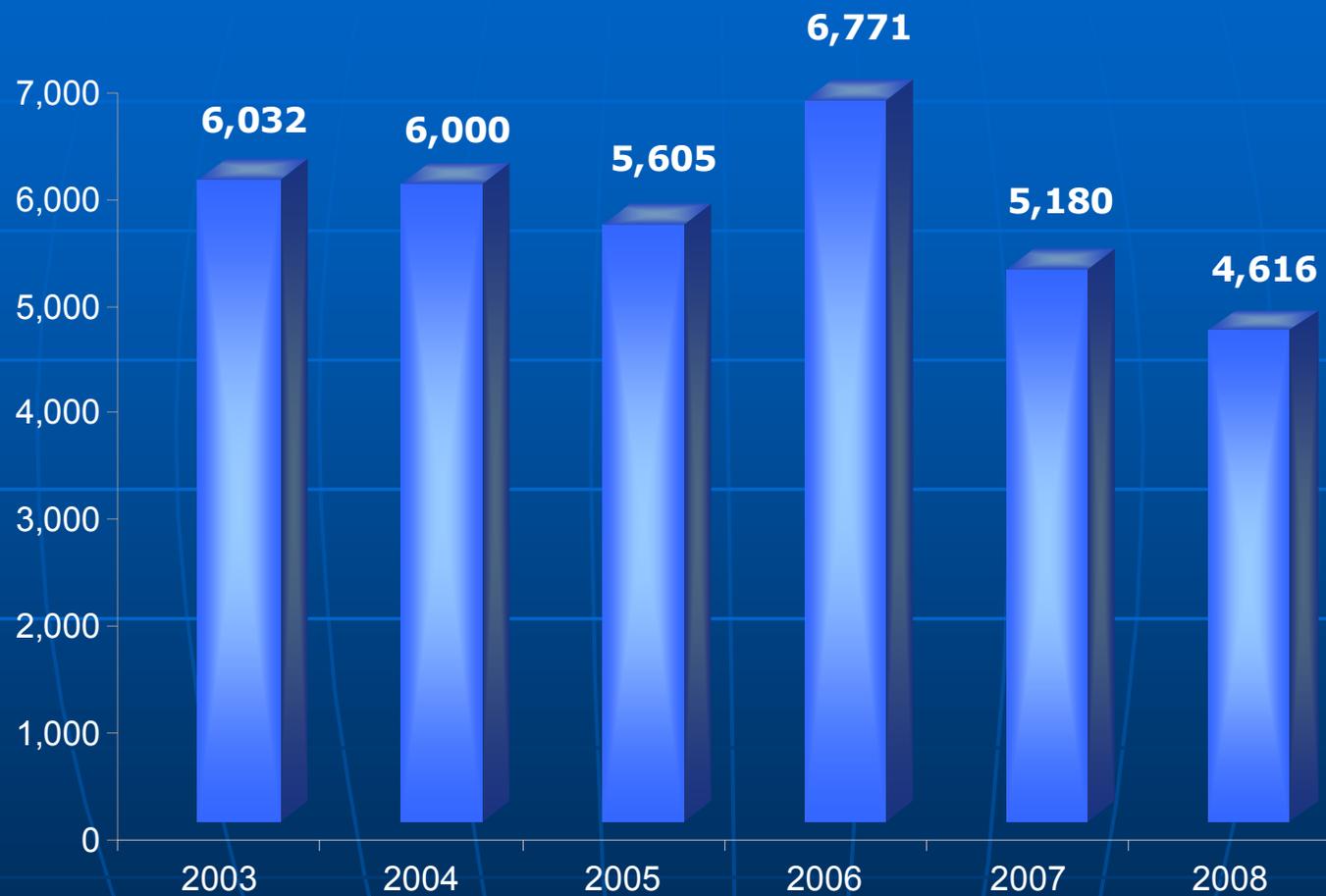
## Port of Burgas Opportunities

- Favourable conditions for customs storage of large products batches
- Opportunity for the creation of a logistics centre for handling military cargoes related to the creation of NATO military bases in the region.
- Emergence of new cargo flows to the states in the Caucasus
- Opportunity for increasing the utilization of the existing refrigerating storage facilities
- Readiness for the introduction of modern methods of organization and management.

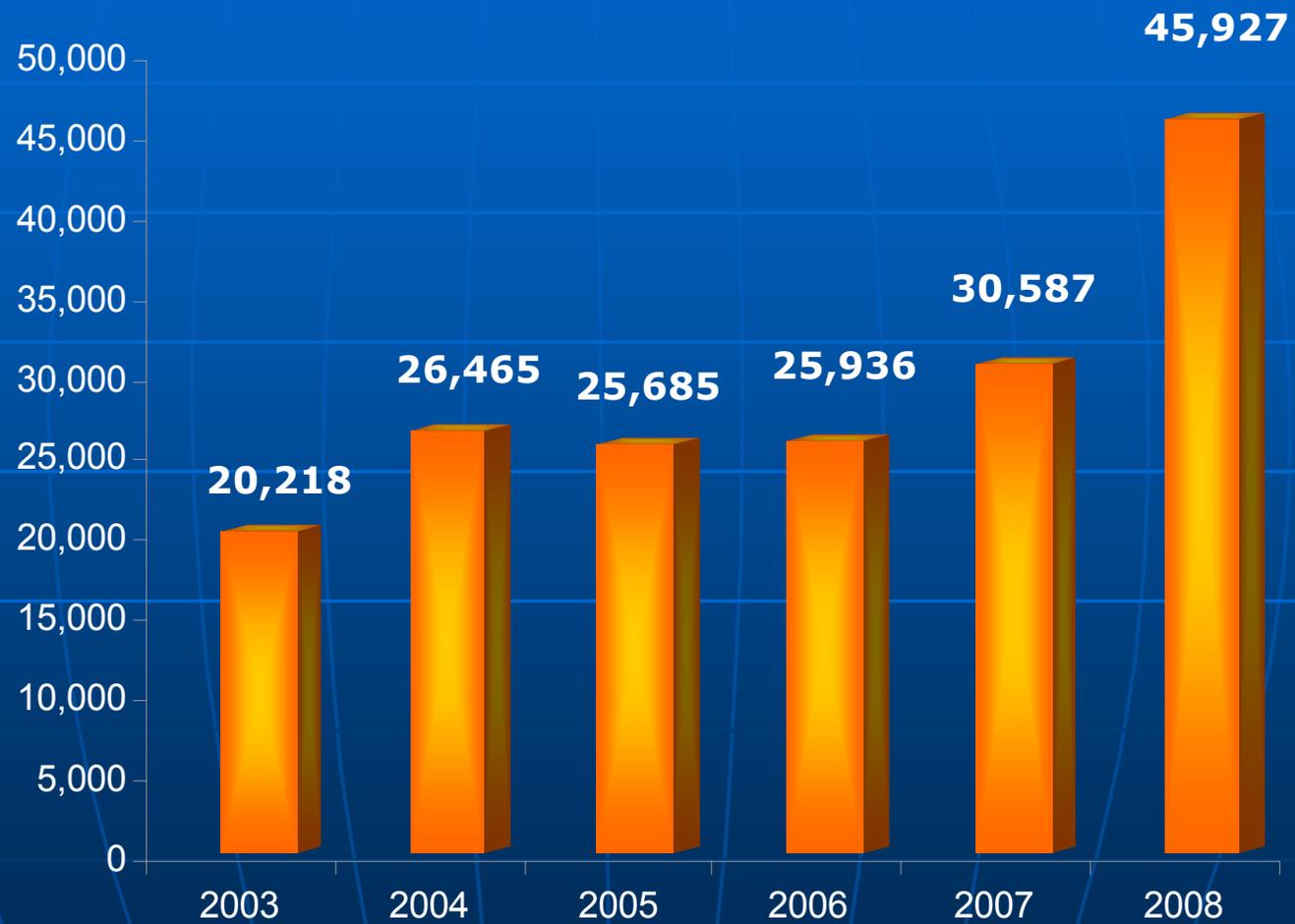
# Port of Burgas Threats

- High level of dependence on a sole major consignor
- Delay in the legislative settlement of the possibility to offer port services by force of a concession contract
- Delay in the implementation of the Terminal No. 4 project for container cargoes within the framework of the Master plan for the expansion of the Port of Burgas
- Possibility for the emergence of unfair competition by private operators

# CARGO VOLUMES



# CONTAINER CARGO VOLUMES



# ISPS-code security

As of 2005, the “Port of Burgas” JSC complies with the requirements of the ISPS code



# THE PROTECTION OF THE ENVIRONMENT IS AMONG THE TOP PRIORITIES



A modern fully computerized bilge water treatment station has been installed.

RIVER PORTS OF  
NATIONAL IMPORTANCE  
USED FOR  
PUBLIC TRANSPORT

THE PORT OF RUSSE –  
A PORT OF NATIONAL-IMPORTANCE  
USED FOR PUBLIC TRANSPORT



# THE PORT OF RUSSE – A PORT OF NATIONAL-IMPORTANCE USED FOR PUBLIC TRANSPORT

## TERMINALS:

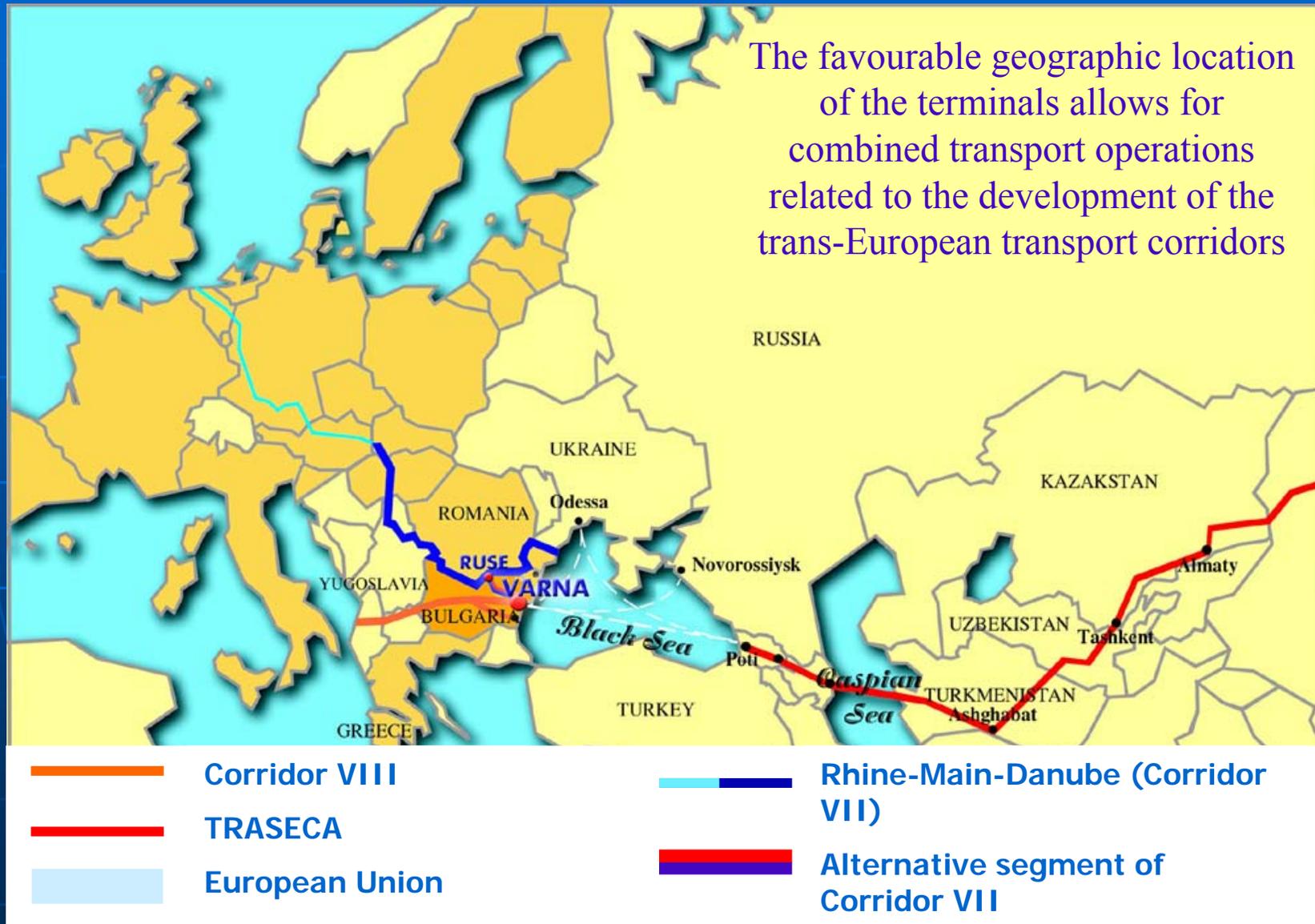
Russe-East, Russe-West,  
Russe-Centre, Tutrakan, Passenger  
Terminal Silistra, Ferry boat terminal  
Nikopol



# Favourable location



# Favourable location



# THE RUSSE-VARNA RAILWAY SECTION IS AN ALTERNATIVE CORRIDOR VII SEGMENT



## Location of the Port of Russe

- The cargo port terminals in Russe are well developed multi-modal centres. They link the three basic types of transport:
  - water
  - road
  - railway
  
- The following traffic junctions are located on the territory of the port terminals:
  - To Bulgaria's national road network
  - To the national railway network



# “Port Complex Russe” JSC is the port operator of the Port of Russe

## *Legal status*

- **“Port Complex Russe” is a sole-owner joint-stock company**, whose capital is 100 % owned by the state.
- **The property rights** of the State are vested with the Minister of Transport, Information Technologies and Communications;
- **Company object:** Port operations and related agency, commercial and technical services, forwarding, investments and engineering, research and development (R & D), personnel training, domestic and foreign trade.

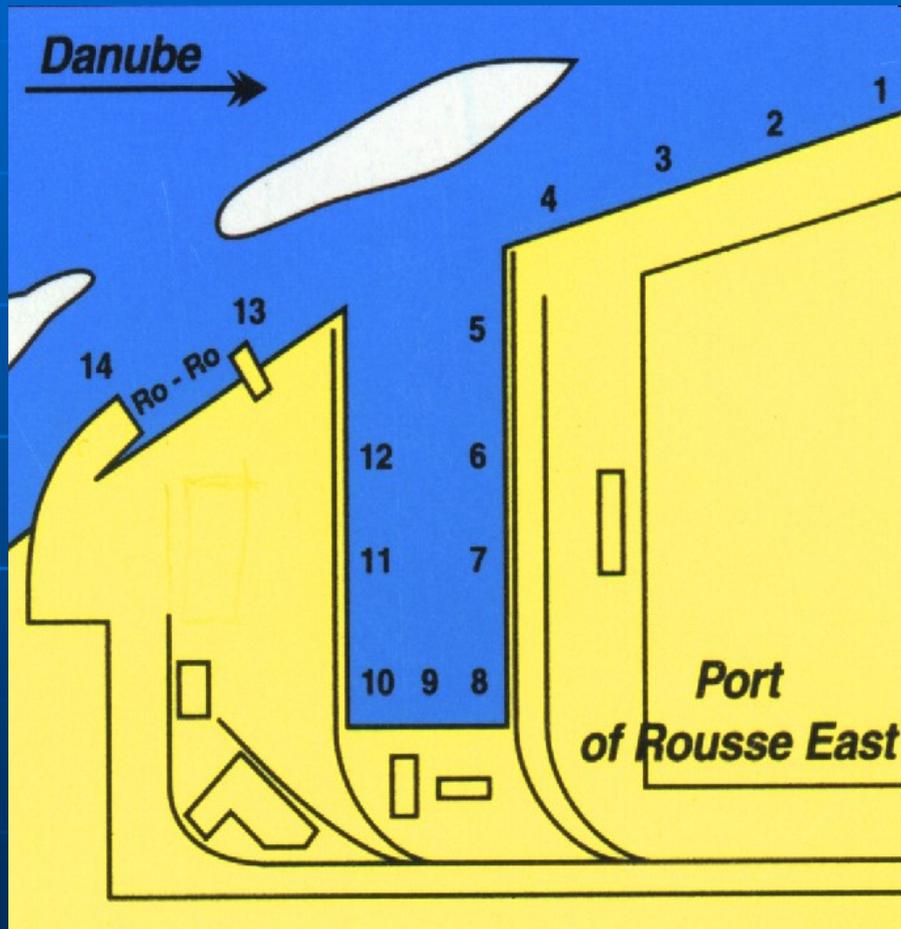


*Technical parameters and equipment of the port terminals*

# PORT TERMINAL RUSSE-EAST



# PORT TERMINAL RUSSE-EAST



The terminal includes:

- A total area 835,000 sq. m., of which about 470,000 sq. m. are currently utilized;
- Northern wharf – a sloped stone wall;
- Firth – a vertical reinforced-concrete structure with dimensions 400 /150/450 m.;
- Firth depth at elevation 0 – 2.5 m. average;
- 14 berths;
- 164,000 sq. m. of storage facilities, including:
  - 15,800 sq. m. covered storage area;
  - 148,200 sq. m open-air storage area.

# PORT TERMINAL RUSSE-EAST

**Ro-Ro terminal** for horizontal handling of road vehicles – located on the territory of Port terminal Russe-East



The Ro-Ro terminal consists of:

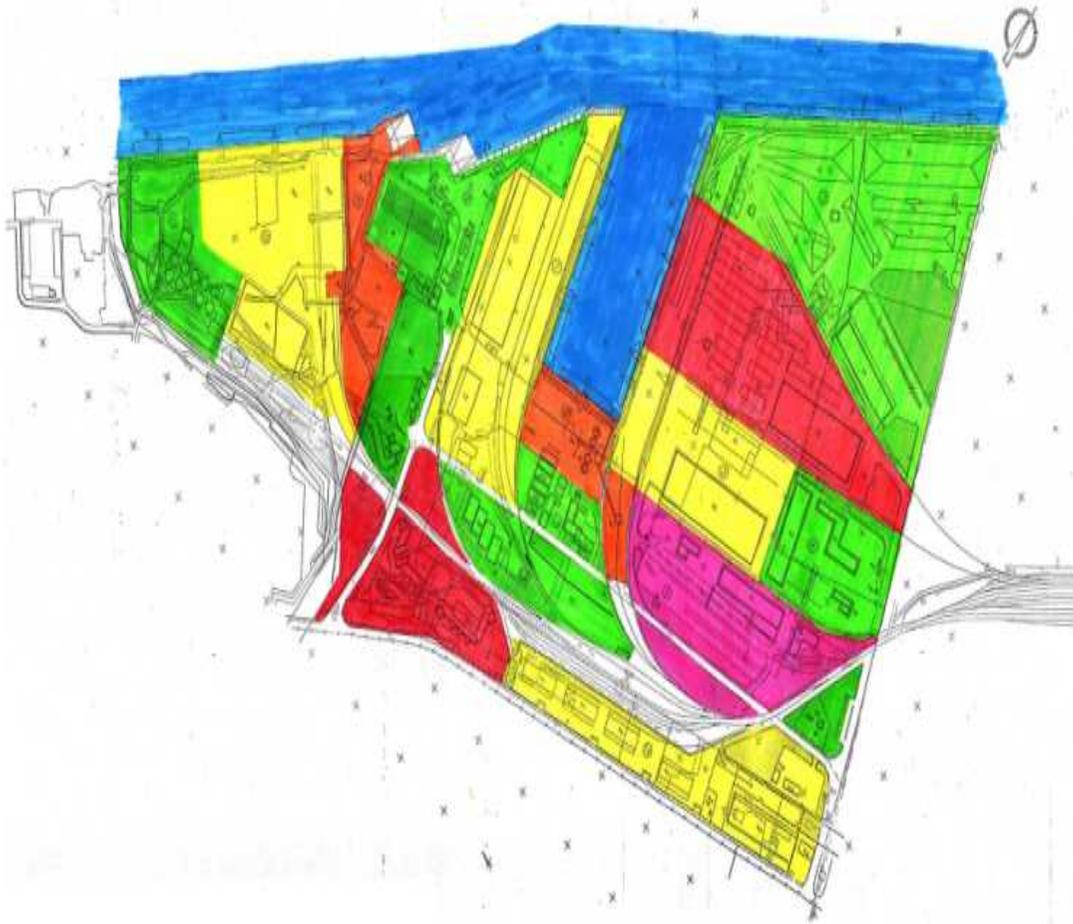
- A 112 m /32 m ramp with a slope of 1:8;
- Depth at elevation 0 – 2.5 m.;
- 2 parking lots, total area 27,483 sq. m. (covered and open-air) with a capacity of 80 TIR-type trucks each;
- Link to the national road network – 8 m. wide asphalt-concrete
- Customs office building;
- Border check point, buildings housing the offices of the veterinary and phyto-sanitary control authorities;



## Port terminal Russe East can be expanded



**Master plan for the expansion of Terminal Russe-East**



A total area of 835,000 sq. m. has been reserved for the development of the Russe-East port terminal, of which 470,000 have already been commissioned. .

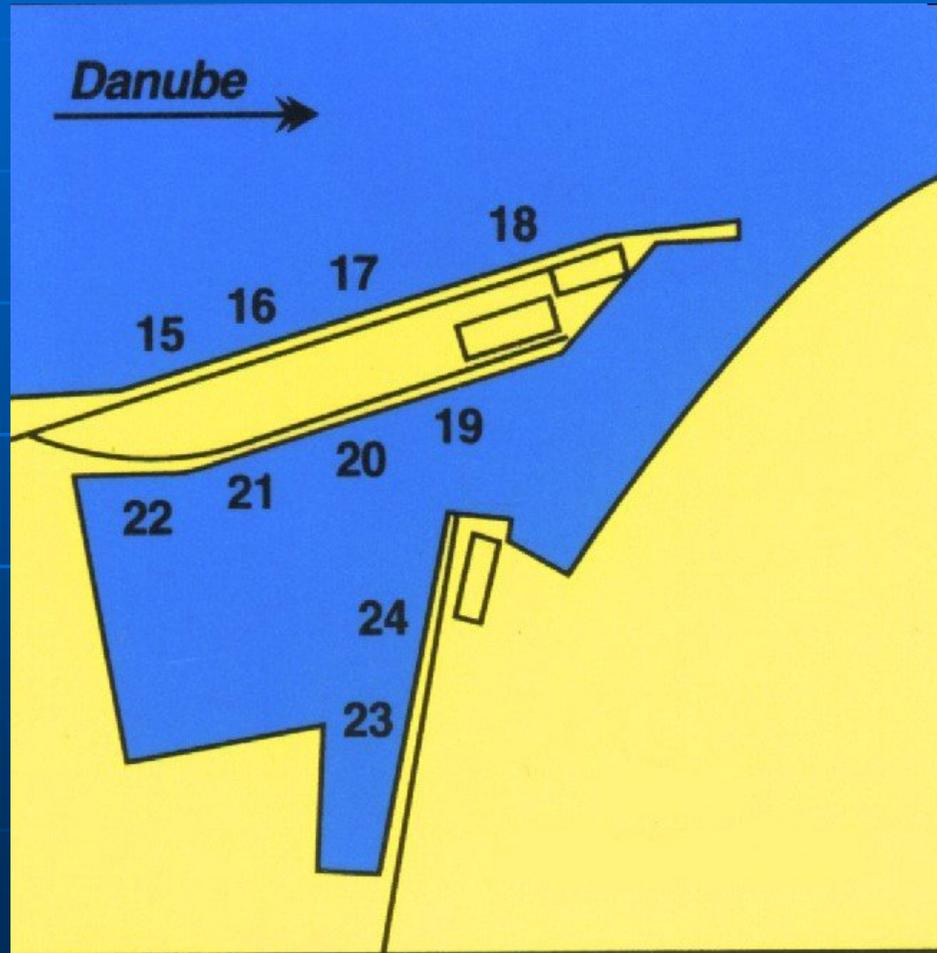
- The **Master plan** for the development of the port (updated in September 1998) provides for areas for the construction of :
  - Grain terminal
  - Container terminal
- There are option for the construction of additional storage facilities.



# PORT TERMINAL RUSSE-WEST



## PORT TERMINAL RUSSE-WEST



The technical parameters of the terminal are as follows:

- A total area 116,000 sq. m. (two land lots located on both sides of the firth)
- Northern wharf – a sloped stone wall;
- Southern wharf – partially sloped reinforced-concrete construction mounted on piles
- Firth – a vertical reinforced-concrete structure with dimensions 400 /150/450 m.;
- Depth of the external wharf at elevation 0 – 2.5 m. average;
- 10 berths;
- 34,500 sq. m. of storage facilities, including:
  - 6,900 sq. m. covered storage area;
  - 27,600 sq. m open-air storage area.
- Local railway section with four branches and a total length of more than 1800 m.

# PORT TERMINAL RUSSE-WEST



## Main types of cargoes:

### Bulk cargoes:

- Grain and grain products
- Pig-iron
- Chemicals, and others



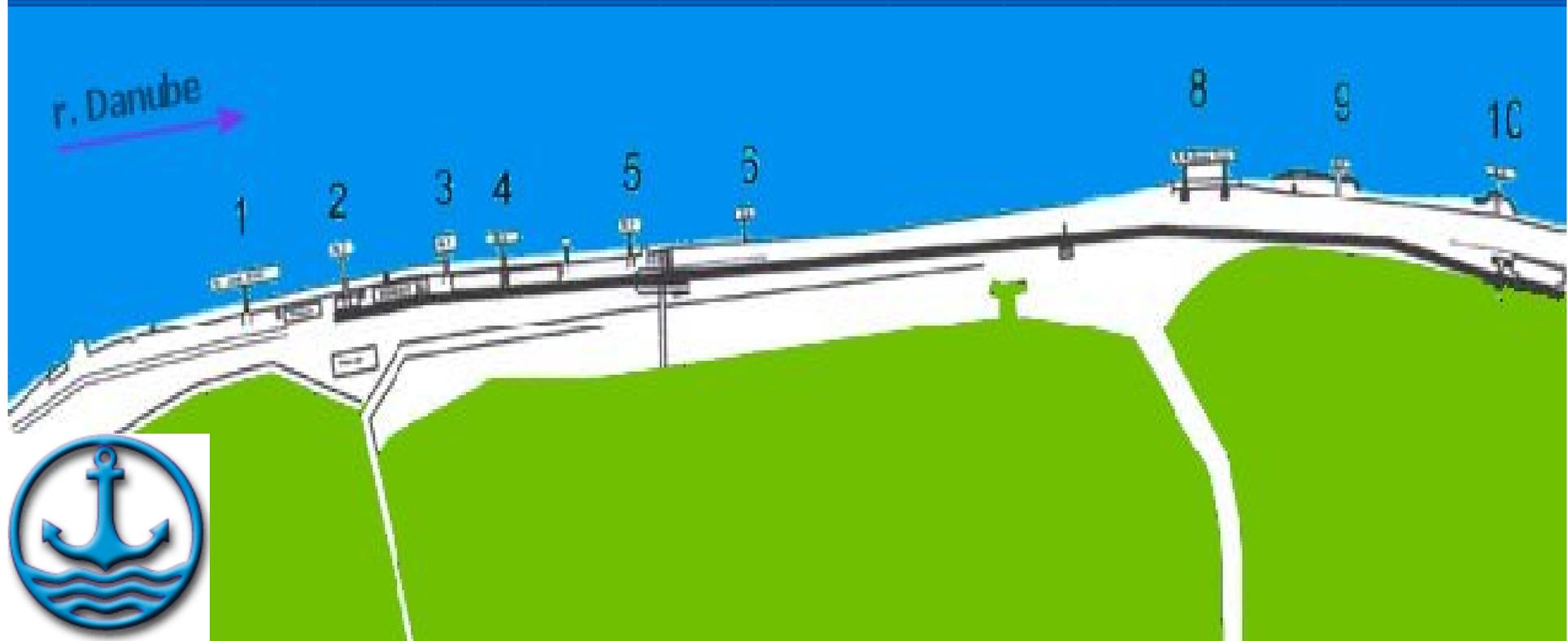
### General cargoes:

- Metals and metal products (metal sheet, rolled rods, sections, rolls, pipes, and others);
- Palletized cargoes (wine, canned foods, detergents)
- Big-bag cargoes, and others.



## PORT TERMINAL RUSSE-CENTRE

- The Russe-Centre port terminal is located in the central section of the City of Russe.
- “Port Complex - Russe” JSC is responsible for the management of the operations at three of the pontoons (**No. 2, No. 5 and No. 6**), at the terminal. The pontoons managed by the company are suitable for mooring of cargo and passenger vessels.



## PORT TERMINAL RUSSE-CENTRE



The Russe-Centre port terminal has the following characteristics:

- Depth at elevation 0 – 2.5 m;
- Sloped quay – hewn stone facing;
- Length of berths between 60 and 110 m;
- Links to the city and to the national road network – a 4 m wide asphalt-concrete road;
- Links to the city water and electricity utilities..



# TUTRAKAN PORT TERMINAL



## The technical parameters of the terminal are as follows:

- Area – 4,414 sq. m.;
- Open-air storage area – 3,500 sq. m.;
- Sloped concrete quay wall;
- Depth at elevation 0 – 2.5 m;
- 2 berths;
- 1 crane with a load capacity of 5 t;
- truck weigh bridge – up to 50 t;;
- Links to the city and the national road network – a 7 m wide asphalt road .



## Main types of cargoes:

- Coal
- Grain
- Aggregates, and others.

# THE SILISTRA PORT TERMINAL

The technical parameters of the terminal are as follows:

- Total area – about 4,500 sq. m.;
- 1 pontoon (owned by the port operator);
- A passenger terminal building;
- Length of the berth - 100 m.;
- Sloped stone quay wall;
- Depth at elevation 0 – 2 m.;
- Link to the city and national road network – a 7 m. wide asphalt approach road



The port operator is managing one of the pontoons, suitable for mooring of merchant and passenger vessels, at the Silistra Terminal.



# THE NIKOPOL FERRYBOAT TERMINAL



**The Nikopol Ferryboat terminal is the newest terminal within the Port of Russe.**

As of 05.08.2009, in compliance with Decision No. 184/24.03.09 of the Council of Ministers, the new terminal was granted for management by the port operator - «Port complex Russe» JSC.



# THE NIKOPOL FERRY BOAT TERMINAL



The Nikopol Ferryboat terminal has been designed for horizontal handling of road vehicles.

## The terminal has:

- A Ro-Ro vessels ramp, 114 m. long and 30 m. wide, with a slope of 1:8;
- Fully developed infrastructure for receiving, control and processing of passengers and motor vehicles.



# Types of port services provided by the port operator

- **Basic services, related to the handling of general, bulk, liquid and Ro-Ro cargoes, containers and passengers**
  - **Reloading services**
  - **Cargo storage**
- **Auxiliary services**
  - **Use of the ports technical stocks**



- **Manoeuvring**
- **Use of the port's machines and equipment**



# The Port of Russe

## Strengths

- Favourable geographic location;
- Certified ISO 9001:2000 Standard quality management system;
- Established name and image, stable market position;
- Large capacity – more than 230,000 sq. m. of storage area, 25 berths for loading-unloading operations, Ro-Ro and passenger terminals;
- Experienced and highly qualified personnel.
- Multi-modality – the ports are linked to the railway and road networks;
- Broad range of port services, access to customs and forwarding services.

# The Port of Russe

## Weaknesses

- Outdated and depreciated front-line equipment;
- Dependence on the general state of the economy and the economic activity in the country;
- High average age of the personnel;
- Dependence on climatic conditions (ice-break, fogs, strong winds, the Danube water level etc.);
- Dependence on the capacity of the fleet used to carry cargoes.

## The Port of Russe Opportunities

- The use of the ISO certificate as a guarantee for the high quality of the services;
- Available free capacity;
- Closeness to Bucharest and two large sea ports (Constanza and Varna).

# The Port of Russe

## Threats

- A global economic crisis, resulting in a slow-down of the activities of the port's clients;
- Clients pull out due to the competition and price dumping of private river ports;
- Deficit of qualified personnel – unfavourable age structure of the personnel; lack of qualified personnel in the region and in the country.

# PORT OF VIDIN

# PORT OF VIDIN

## TERMINALS:

Vidin Centre  
Vidin-South

# Favourable location



# Location of the Port of Vidin



## **Location of the Port of Vidin**

- The Port of Vidin is located in the region of the town of Vidin on the right-hand shore of the Danube between Km. 781.500 and 795.000.
- The port of Vidin is a port of a national importance, and includes four port terminals, namely:

## Location of the port terminals

- ***A. Port terminal Vidin-North*** – located in the northern industrial zone along the Danube between Km. 793.200 and 793.600;
- ***B. Ferryboat terminal Vidin*** – located in the northern industrial zone at Km. 792.800 along the Danube;
- ***C. Port terminal Vidin-Centre*** – located in the central city sector along the Danube between Km. 789.900 and 791.300 on an area of 17,000 sq. m.;
- ***D. Port terminal Vidin-South*** – located in the southern industrial zone between Km. 785.000 and 785.200 along the Danube on an area of 48,000 sq. m.

“Port of Vidin” Ltd. is the port operator  
of the Port of Vidin

*Legal status*

- **“Port of Vidin” Ltd.** is a sole-owner company with state-owned assets.
- **The property rights** of the State are vested with the Minister of Transport, Information Technologies and Communications.

# PORT TERMINAL VIDIN-CENTRE (passenger)



## **PORT TERMINAL VIDIN-CENTRE (passenger)**

- The port quay wall is 1,440 m long and is of the sloped type with stone facing.
- Four pontoon structures are moored in front of the quay wall for mooring and fuelling of Bulgarian and foreign vessels for the purpose of inbound and outbound controls.

## **PORT TERMINAL VIDIN-CENTRE (passenger)**

The existing passenger terminal building, owned by the Vidin Municipality, is situated at a location with a good functionality in terms of the communication links between the three passenger transport facilities in the city – the railway station, the bus station and the river port passenger terminal, to the convenience of incoming and outgoing passengers without the need of additional transport.



# PORT TERMINAL VIDIN-SOUTH



## **PORT TERMINAL VIDIN-SOUTH**

- The port quay wall is 200 m. long, of the sloped type, with a crushed-stone facing.
- The port terminal is designed to receive and store bulk cargoes, which do not require and special handling conditions.
- Ship loading and unloading operations are performed by using the available electric bridge cranes, fitted with the attachments, required for a specific task.

## PORT TERMINAL VIDIN-SOUTH



The port terminal has the following equipment required for performing its basic operations:

- Electric bridge crane type “Kirovets” 10 t (decommissioned);
- Electric bridge port crane type “Albatros” 10-16 t;
- Front loader “Bobcat”.

## Types of port services

- **Basic services, related to handling of general and bulk cargoes, and passengers**
  - **Reloading services**
  - **Cargo storage**
- **Auxiliary services**
  - **Pontoon services;**
  - **Winter quarters for vessels;**
  - **Electricity and water utilities**

# Port of Vidin Strengths

- Favourable geographic location;
- Authorized port operator of a port of national importance used for public transport;
- ISO certified port operator;
- Highly qualified and experienced personnel;
- Established long-term partnership relations with tour operators and other companies, which assure a high level of occupancy;
- Traditional cargo flows, which cannot be attracted by competitors.

# Port of Vidin Weaknesses

- No links to the national railway network;
- Poor state of the access road to port terminal Vidin-South (2 km);
- Frontline mechanization is outdated and requires a lot of additional expenses for maintenance;
- Lack of sufficiently powerful cranes for handling large-size cargo;
- No covered storage facilities;
- Dependence on tour operators and enterprises, providing most of the work and income.

# Port of Vidin Opportunities

- Bulgaria's integration into the EU;
- The integration of trans-border regions;
- Opportunities for developing investors' interest (awarding concessions for the port terminals);
- The existence of free port areas (land lots) suitable for the construction of terminals in line with the Master plan for development until 2020;
- The construction of European transport corridors through Bulgaria (the second Danube bridge between Vidin and Calafat);
- Investments in regional and local infrastructure with the objective to create links to European transport networks;
- Upgrading of the safety and security systems at the ports.

# Port of Vidin Threats

- Unfavourable macro-economic factors (the global economic recession, affecting also the EU);
- Unfavourable natural conditions (high/low water level, ice break etc.);
- Strengthening competition;
- Obvious negative trends in the demographic and economic development of north-western Bulgaria.

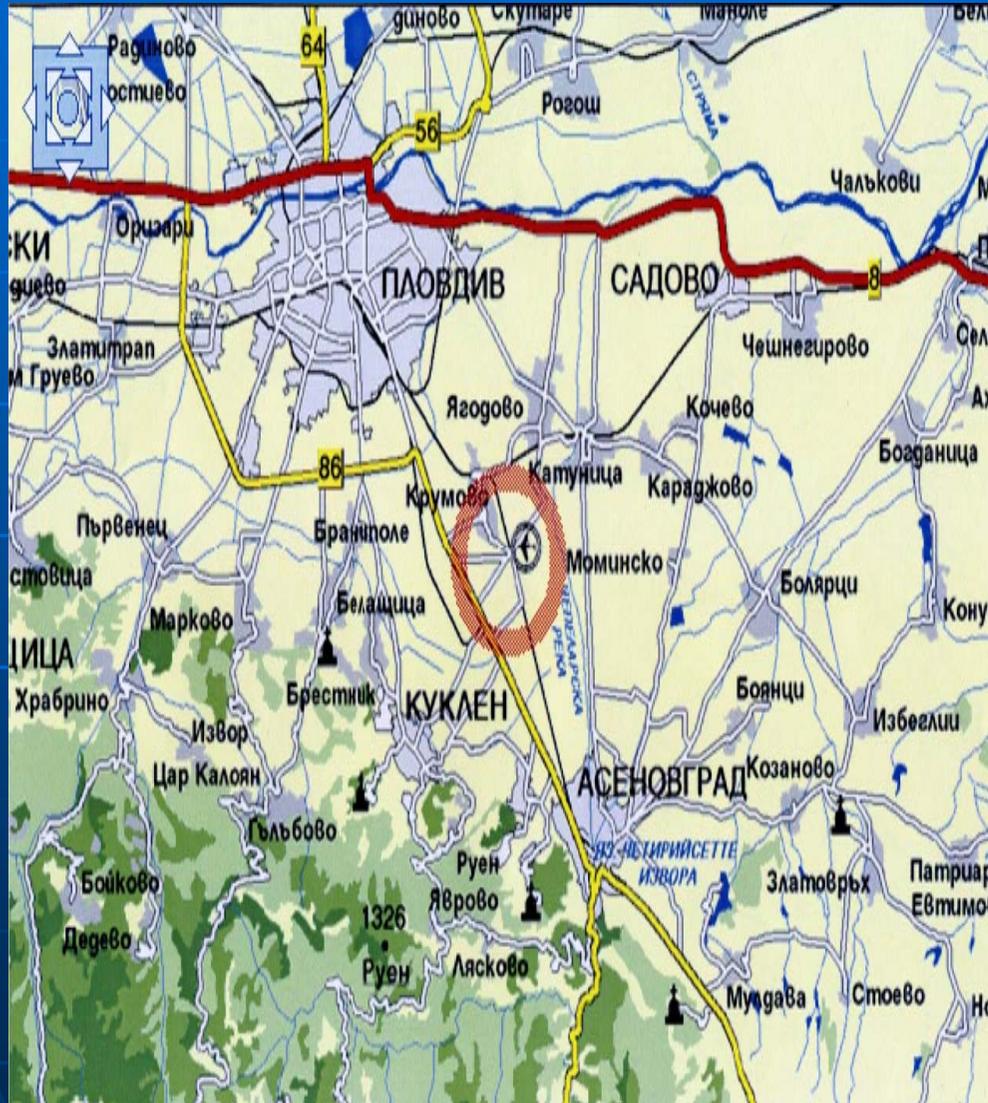
# *AIRPORTS*

# *AIRPORTS PRESENTATION*

# *AIRPORT PLOVDIV – A CIVIL AIRPORT FOR PUBLIC USE*

LOCATION

# Airport Plovdiv



Airport Plovdiv is located at a distance of 10 km from Bulgaria's second largest city – Plovdiv, 3 km away from the Plovdiv - Asenovgrad road and close to the railway linking the two cities. It is also close to the international highway from Sofia to Burgas and Istanbul. The winter resorts Pamporovo and Borovets are located at about 90 km, and Bansko – at 140 km away from the airport.



# *AIRPORT PLOVDIV*

## DESCRIPTION OF THE LEGAL STATUS OF THE AIRPORT AIRPORT OPERATOR

# *Airport Plovdiv*

AIRPORT PLOVDIV IS OPERATED BY THE “PLOVDIV AIRPORT” SOLE-OWNER JOINT-STOCK COMPANY.

THE CAPITAL OF THE COMPANY IS FULLY OWNED BY THE STATE.

**THE PROPERTY RIGHTS** OF THE STATE ARE VESTED WITH THE MINISTER OF TRANSPORT, INFORMATION TECHNOLOGIES AND COMMUNICATIONS.

THE COMPANY’S OBJECT IS AS FOLLOWS:

AIRPORT OPERATIONS, PRODUCTION, TECHNICAL AND BROKERAGE OPERATIONS, INVESTMENTS AND ENGINEERING, RESEARCH AND DESIGN, TRAINING AND QUALIFICATION OF PERSONNEL, DOMESTIC AND FOREIGN TRADE, CURRENCY EXCHANGE, SALE OF AIR TICKETS; MAIN LINE OF BUSINESS – TRANSPORT; THE COMPANY MAY BE ENGAGED IN ANY ACTIVITIES, WHICH ARE NOT BANNED BY LAW.

# AIRPORT PLOVDIV



„Airport Plovdiv” JSC performs the functions of an airport administration pursuant to the provisions of the Civil Aviation Act, and has been licensed as an airport operator.

*Airport Plovdiv*

TECHNICAL PARAMETERS OF THE  
AIRPORT

# *Airport Plovdiv*

Airport Plovdiv has one runway, 2,500 m. long and 50 m. wide. The concrete pavement of the take-off and landing runway has a strength rating PCN-38R/A/X/T/, and the surface is in a good condition. There are 6 taxiways, each 22.5 m wide, with concrete pavement with the same strength rating as the – PCN-38R/A/X/T/



The size of the apron is 800 by 111 m. Most of the apron, 85 %, has concrete pavement, and 15 % are paved with asphalt. The apron has 13 aircraft berths, of which 6 are designed for type “C” aircraft, and 7 – for type “D” aircraft. The apron pavement is in a good condition. The airport is equipped with an instrument landing system (ILS) for Runway 30; landing at Runway 12 is subject to visual flights rules. The system used is D-3.

*“Airport Plovdiv” JSC is licensed for ground operations at Airport Plovdiv, namely:*



1. Ground administration and supervision;
2. Passenger services;
3. Luggage handling;
4. Cargo and mail handling;
5. Ramp services;
6. Aircraft services;
7. Aircraft services – fuels and lubricants

The following operators have been licensed for airport operations on the territory of Airport Plovdiv :

- 1. "Service Air" Ltd. – Flight operations and flight crew management;
- 2. "LCS" Ltd. – On-board catering;
- 3. "Leipzig – 91" JSC - On-board catering;
- 4. "Synergia" Ltd. – Ground administration and supervision;
- 5. "Bulgarian Air Charter" – Technical maintenance of aircraft (self-service)
- 6. "BAS – Bulgarian Aviation Services" Ltd. – Ground administration and supervision;
- 7. "Right Air" Ltd. – Flight operations and flight crew management;
- 8. "AV Air" Ltd. – Ground administration and supervision;

The new passenger terminal at the airport was commissioned on 01.08.2009.



# A modern and functional passenger terminal

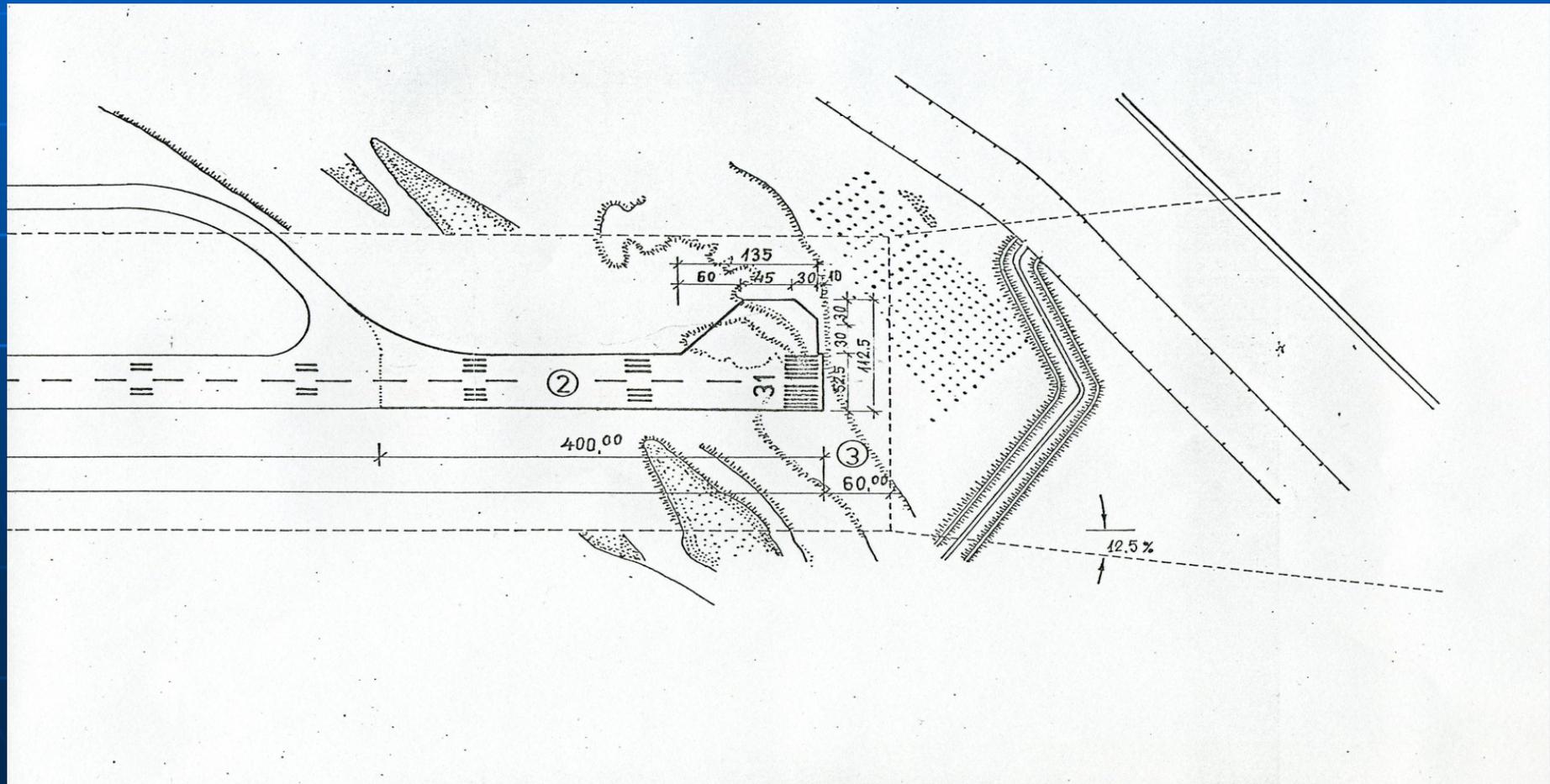


*Airport Plovdiv*

OPPORTUNITIES FOR EXPANSION OF  
AIRPORT PLOVDIV

According to the Master Plan envisages the construction at Airport Plovdiv of a cargo terminal, a second passenger terminal, a new storage for fuels and lubricants and a new building for the fire protection authority.

There is an option to extend the take-off and landing runway by 400 m. to the East to a total length of 2,900 m. The project for the extension of the runway was drafted in 1997 but it was not implemented.



# *Airport Plovdiv*

- SWOT – analysis, including:
  - strengths and weaknesses
  - opportunities and threats

# *Airport Plovdiv*

## Domestic environment

### Strengths

- **Infrastructure – a completely new passenger terminal with an adjacent parking lot, extended apron with new lighting and a total of 13 aircraft berths for Type C and D aircraft, take-off and landing runway in a very good state;**
- **Ground equipment – new ground services equipment for almost all required items, purchased and delivered before and during the winter 2009/2010 season;**
- **24/7 – round-the-clock operation of the airport and all auxiliary services (flight control, customs, border control etc.)**
- **Low operational occupancy, allowing for a flexible selection of slots;**
- **Good meteorological conditions for flights, with a very small number of foggy days during the winter season;**
- **The company is the sole licensed operator for ground services at Airport Plovdiv, which allows for a very flexible approach to negotiating ground services fees.**

# *Airport Plovdiv*

## Domestic environment

### Weaknesses

- **Strong dependence in terms of operations in the sphere of tourism, especially winter tourism;**
- **Apparent seasonal trends in the airport operations;**
- **No historic record of regular flights (to Airport Plovdiv);**
- **Lack of specialized service units; same units perform various types of operations;**
- **Insufficient or non-existing specialized courses;**
- **Poor language knowledge by a portion of the personnel;**
- **Lack of a catering infrastructure and a catering license;**
- **No apron buses and ambulift vehicles;**
- **No public transport to/from the City of Plovdiv;**
- **Commercial and legal problems inherited from the merger of Airport Varna Ltd. And Airport Burgas Ltd.;**
- **Long-term rental agreements with a private joint-stock company, resulting in an additional financial strain on the company.**

# *Airport Plovdiv*

## *External environment*

### *Opportunities*

- **Bulgaria's EU membership and the related free movement of people;**
- **Globalization, resulting in an increase number of travels, both of Bulgarians abroad and of foreigners to Bulgaria;**
- **Large – compared to this country's population – Bulgarian communities in several European states, which are expected to generate passenger traffic;**
- **Bulgaria's Open Skies membership;**
- **Favourable geographic location and easy access to/from Airport Plovdiv;**
- **The attractiveness of Bulgaria's second largest city – Plovdiv, as a cultural, business and education centre;**
- **Closeness to a large number of resorts for winter and SPA tourism, as well as to cultural and historic landmarks.**

# *Airport Plovdiv*

## *External environment*

### *Threats*

- **The global financial crisis and specifically the impact of the crisis on air carriers and the tourist industry;**
- **Competitive advantages of many European airports due to flexible policies regarding airport (state) fees aimed at creating incentives for launching new lines;**
- **Bulgaria is generally considered a small market;**
- **The closeness of Airport Sofia, which – combined with the preceding factor – is a prerequisite for a lack of interest in Plovdiv on the part of air carriers, with services to Sofia;**
- **No provisions in the new Fees Regulation for incentives to airlines to launch new destinations;**
- **Strong state regulation in terms of commercial revenue from non-aviation operations – permits and approvals for procedures to rent out commercial and advertising premises.**

Airport Gorna  
Oryahovitsa



# *Airport Gorna Oryahovitsa*

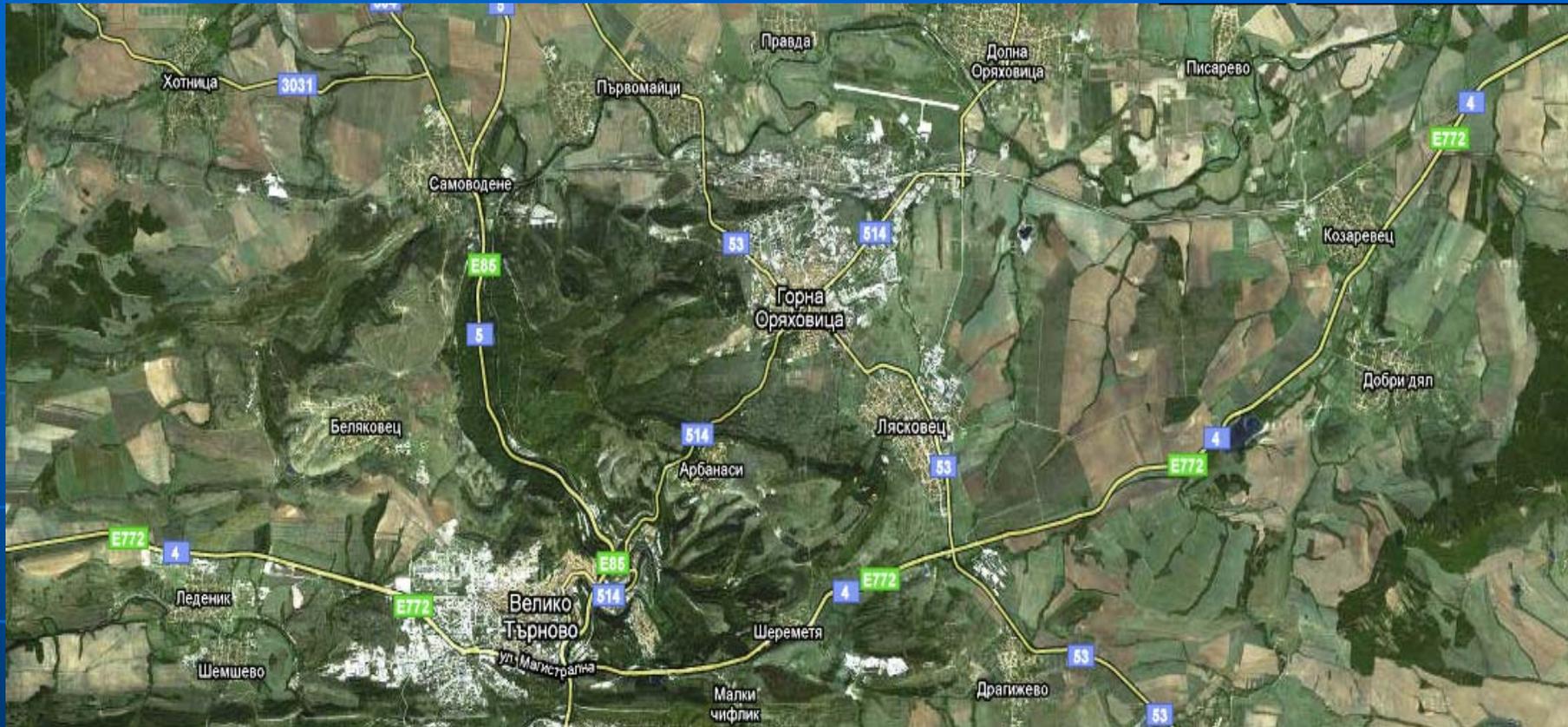
LOCATION

# Airport Gorna Oryahovitsa



Airport Gorna Oryahovitsa is located in Central Northern Bulgaria, at equal distances from several large administrative centres – Sofia, Varna, Plovdiv, Burgas, Stara Zagora, and Pleven. The airport is located at a very short distance from Bulgaria's ancient capital city – Veliko Tirново.

# Airport Gorna Oryahovitsa



The airport is in the immediate proximity of one of the most important railway junctions in Bulgaria – Gorna Oryahovitsa. The Gorna Oryahovitsa Railway Station provides for round-the-clock links to and from the largest cities in Bulgaria. The Gorna Oryahovitsa Railway Station services also international railway lines, which creates favourable conditions for links to other countries.



**Airport Gorna  
Oryahovitsa**

The favourable topographic and climatic conditions and the key location of the Airport in Central Northern Bulgaria - 4 km away from the town of Gorna Oryahovitsa (a major road and railway junction in Central Bulgaria) and 12 km away from Bulgaria's ancient capital city of Veliko Tirnovο have resulted in the rapid development of the airport. The tourist sites and landmarks located close to Veliko Tirnovο and the town of Arbanasi have attracted a lot interest from tourists during their visits to Bulgaria. Businessmen, tour operators and forwarders are interested in opportunities for operations to and from the airport.

***Airport Gorna Oryahovitsa***

Airport Gorna  
Oryahovitsa



# DESCRIPTION OF THE LEGAL STATUS OF THE AIRPORT OPERATOR

*Airport Gorna Oryahovitsa*

# *Airport Gorna Oryahovitsa*

- AIRPORT GORNA ORYAHOVITSA IS OPERATED BY THE “AIRPORT GORNA ORYAHOVITSA” SOLE-OWNER JOINT-STOCK COMPANY.
- THE CAPITAL OF THE COMPANY IS FULLY OWNED BY THE STATE.
- THE RIGHTS OF THE CAPITAL OWNER ARE VESTED WITH THE MINISTER OF TRANSPORT, INFORMATION TECHNOLOGIES AND COMMUNICATIONS.
- THE COMPANY HAS THE FOLLOWING LINE OF BUSINESS: AIRPORT SERVICES TO FLIGHTS, GROUND SERVICES TO AIRCRAFT, PASSENGER SERVICES, HANDLING OF LUGGAGE, CARGO AND MAIL, REFUELLING, DOMESTIC AND FOREIGN TRADE, TRAINING AND QUALIFICATION OF PERSONNEL, AS WELL AS ALL OTHER ACTIVITIES, WHICH ARE NOT BANNED BY LAW.

Airport Gorna  
Oryahovitsa



# TECHNICAL PARAMETERS OF THE AIRPORT

*Airport Gorna Oryahovitsa*

# Airport Gorna Oryahovitsa

Cargo services

Technical services -

Fire protection services

Emergency-rescue category 6

Border Police Control, Customs – 24 hrs

RWY PCN 45/R/C/X/T

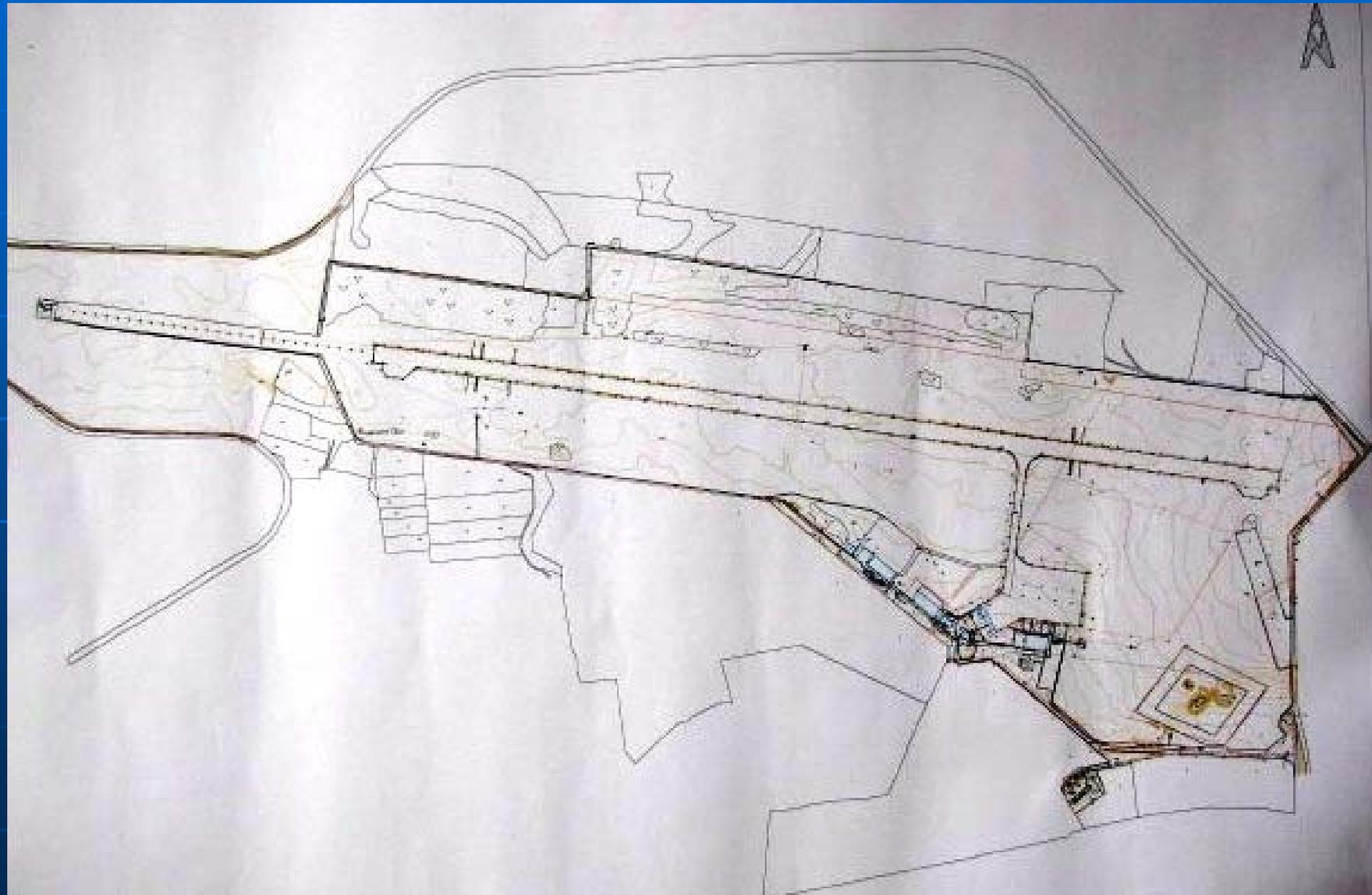
TWY A, 20 m, PCN 45/R/C/X/T

Navigation Aids: - NDB, VOR, DME

AWOS – VAISALA 24 hrs

Runway designation	Take-off runway available TORA (m)	Take-off distance available TODA (m)	Accelerate-Stop Distance Available ASDA (m)	Landing Distance Available LDA (m)	Remarks
09	2250	2250	2450	2450	
27	2450	2510	2450	2250	THR RWY 27 is displaced 200 m inwards

# LOCATION DIAGRAM



## **“Airport Gorna Oryahovitsa”**

ICAO code **LBGO**

IATA code **GOZ**

**Geographic latitude:**

**N-43°09'05.63"**

**Geographic longitude:**

**E-025°42'42.67"**

**RWY centre**



**RWY 09:  $H_{abs} = 86$  m; GEO 098.06°, MAG 094°**

**RWY 27:  $H_{abs} = 83$  m; GEO 278.06°, MAG 274°**

**Magnetic variance 4°02' E**

**Geographic coordinates and geoid undulation at threshold 09:**

**N - 43°09'10.58"**

**E - 025°41'53.98"**

**Geoid 41.0 m**

**Geographic coordinates and geoid undulation at threshold 27:**

**N - 43°09'00.49"**

**E - 025°43'31.26"**

**Geoid 41.7 m**

**Airport Gorna  
Oryahovitsa**



**Location – 4 km away from the town of Gorna Oryahovitsa, and  
12 km away from the city of Veliko Tirnovo**

**Elevation - 85 m**

**Reference temperature - 11°C**

**Postal address - Gorna Oryahovitsa Airport 5100 Gorna Oryahovitsa P.O Box 52**

**Bulgaria Tel.: (+359 618) 600 31 Fax: (+359 618) 600 21**

**SITA: GOZAPXH e-mail: [goryahovitsaairpotr@abv.bg](mailto:goryahovitsaairpotr@abv.bg)**

**Health and sanitation, cargo handling, technical services – emergency-rescue  
category 6 as per ICAO**

**Immigration, Customs**

**Take-off and landing runway – asphalt/concrete, strength PCN 45/R/B/X/T**

***Airport Gorna Oryahovitsa***

Airport Gorna  
Oryahovitsa



## SERVICES

*Airport Gorna Oryahovitsa*

# The airport operator provides the following ground services:

- ▶ Ground administration and supervision;
- ▶ Passenger services;
- ▶ Luggage handling;
- ▶ cargoes and mail handling;
- ▶ Aircraft ramp services;
- ▶ Aircraft services;
- ▶ Fuels and lubricants.



Airport Gorna  
Oryahovitsa



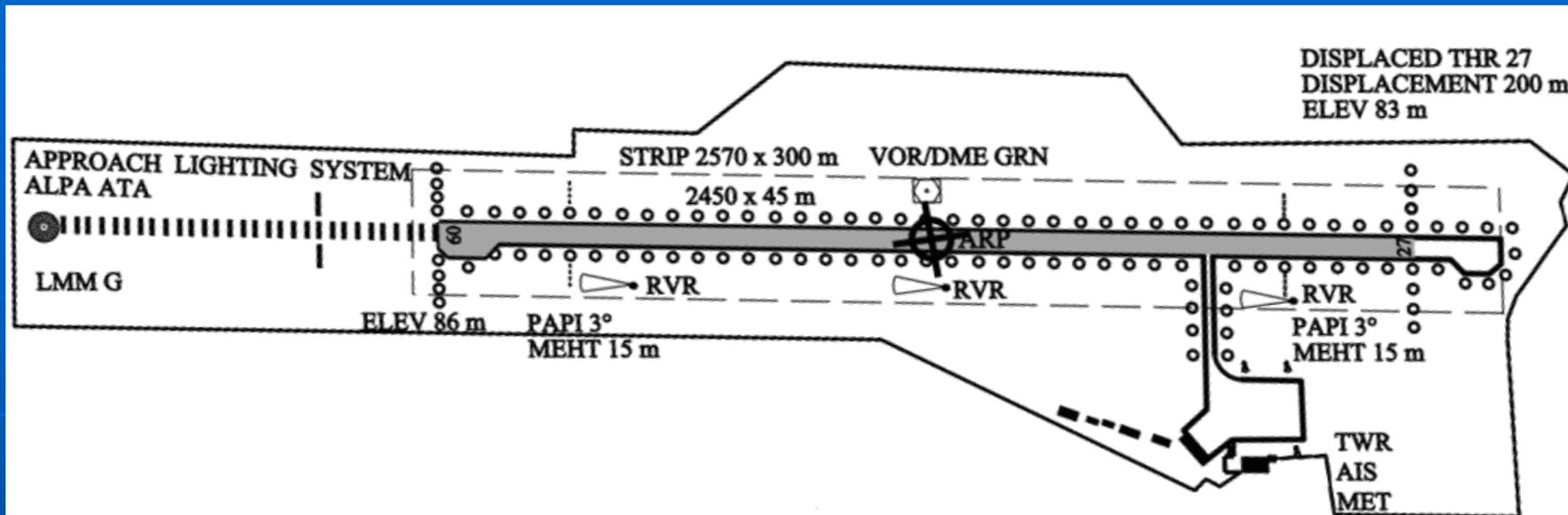
# STATUS OF THE MAIN AIRPORT EQUIPMENT

*Airport Gorna Oryahovitsa*

# Take-off and landing runway

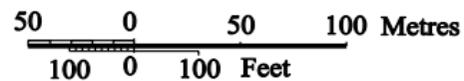
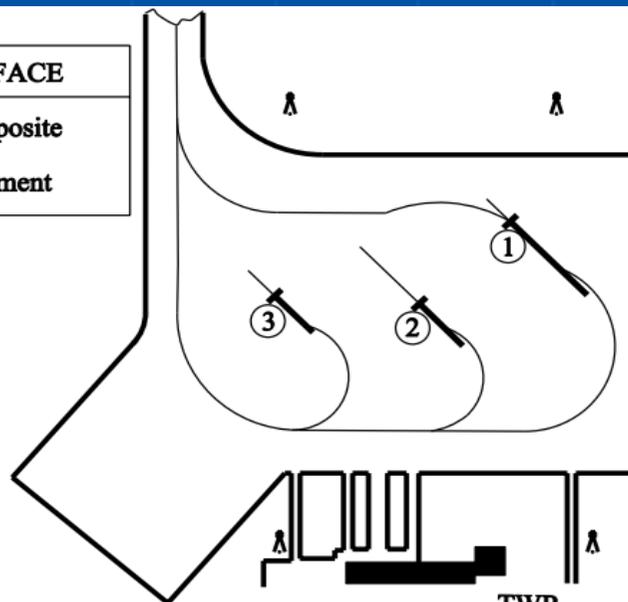
## Characteristics

Designations / RWY NR	09	27
TRUE & MAG BRG	GEO 098.06° MAG 094°	GEO 278.06° MAG 274°
Dimensions of RWY (m)	2450 x 45 m	2450 x 45 m
Strength (PCN) and surface of RWY and SWY	45/R/B/X/T Composite pavement	45/R/B/X/T Composite pavement
THR coordinates and geoid undulation	43°09'10.58" N 025°41'53.98" E Geoid undulation: 41.0m	43°09'00.49" N 025°43'31.26"E Geoid undulation: 41.7m
THR elevations of nonprecision APP RWY (m)	86 m	83 m
Slope of RWY – SWY	Bilateral 1%	Bilateral 1%



	WIDTH	BEARING STRENGTH	SURFACE
TWY	20 m	PCN 45 R/B/X/T	Composite pavement
Aircraft stands 1-3			

AIRCRAFT STANDS	CODE	MAX WIDSPAN	MAX LENGHT
1	D	52	62
2	C+	42	34.5
3	C-	30	27.5



## Ramp, taxiways

### Ramp

Located 300 m to the south of the take-off and landing runway immediately in front of the airport building. The ramp has the following parameters: :

- length – 220 m.;
- width – 140 m.;
- Pavement – composite (asphalt/concrete)
- Pavement classification : PCN 45/R/B/X/T/;

The ramp has three aircraft berths, with No. 1 designed for Code D aircraft, No. 2 – for Code C+ aircraft, and No. 3 – for Code C- aircraft.

The three ramp aircraft berths are capable of accommodating a variety of aircraft of the Boeing 737 (200-800) and Airbus 310, 319, 320 series, and others.

### Taxiways

Airport Gorna Oryahovitsa has one taxiway.

- Taxiway A – width 20 m.
- Pavement – composite (asphalt/concrete);
- Pavement classification (strength) : PCN 45/R/B/X/T/;



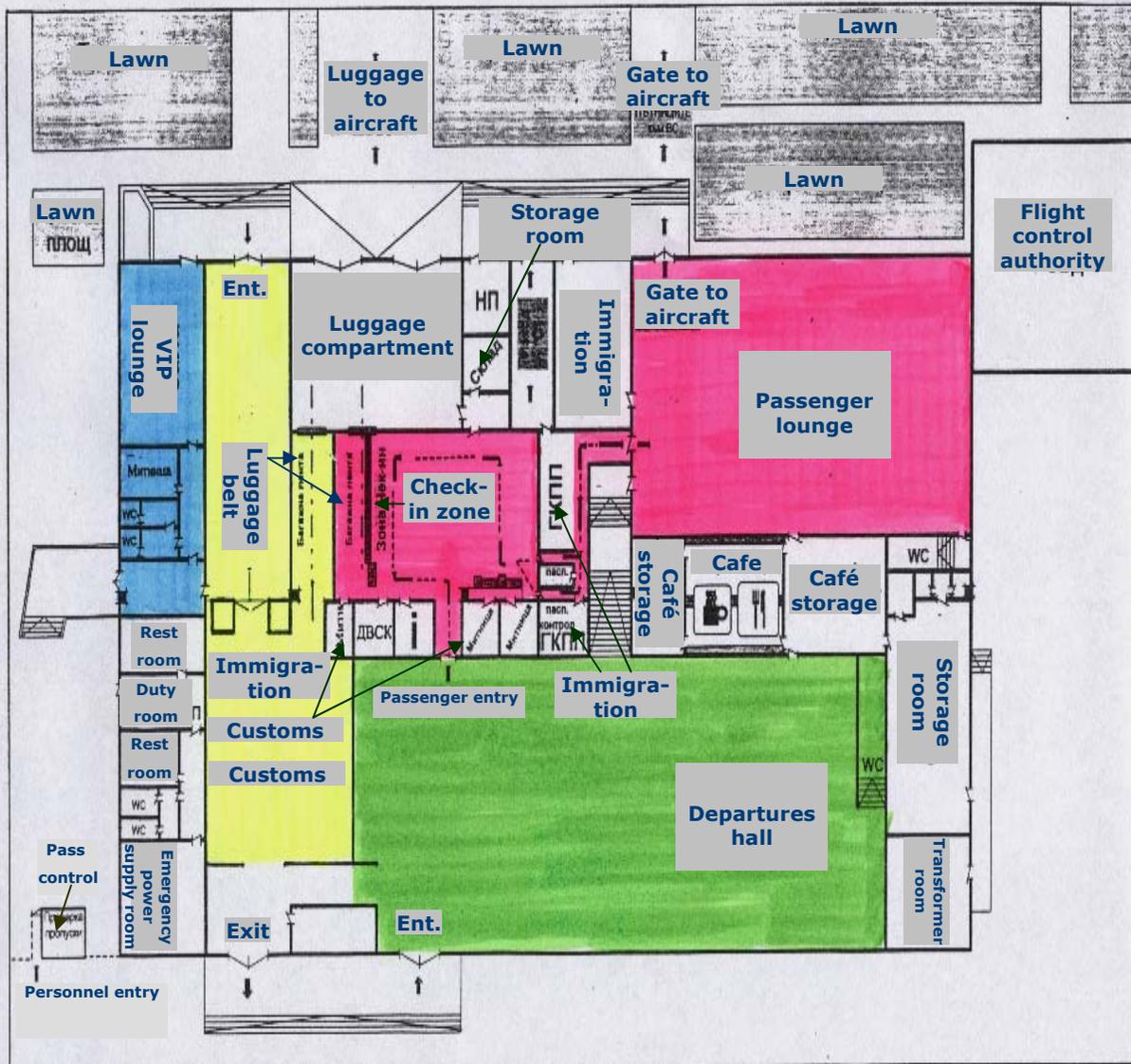
# Airport Gorna Oryahovitsa







# Airport buildings – passenger terminal



1. Public access zone  
The section has: :
  - a coffee bar
  - WC - 2
  - Information desk

2. Departures and passenger lounge  
The section has:
  - Information desk
  - Check-in - 1
  - Luggage compartment
  - Customs
  - Passport check – border control
  - WC - 2

3. Arrivals  
The section has:
  - Luggage compartment
  - Passport check – border control
  - Customs

4. VIP lounge  
The VIP lounge has:
  - Sofas and tables
  - Customs
  - Border control
  - WC - 2



## The airport has no cargo terminal

AIRPORT GORNA ORYAHOVITSA HAS THE FOLLOWING STORAGE FACILITIES AND EQUIPMENT:

- Airport vehicles pool
- Tent for aircraft servicing equipment;
- Fire protection depot;
- Two garages



## FUELS AND LUBRICANTS STORAGE

**Airport Gorna Oryahovitsa has the following capacity for storing fuels and lubricants:**

**Jet fuel (type JET A-1 storage tanks ): 10 units x 50 cu. m.**



**Fuels, lubricants and special liquids:**

**Jet fuel (type JET A-1) (with or without “Nicozol 37M” – upon application filed by the flight crew)**

**Aviation gasoline (type 100 LL)**

**De-icing liquid – Savewing type 1**

**Fuel tank trucks – 2 units with a capacity of 22 cu. m.**

## Equipment for aerial navigation services

### Location and coordinates

Type of aid, CAT of ILS, MAG VAR for VOR / ILS	ID	Frequency	Hours of operation	Site of the transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
DME	GRN	CH 83x	H 24	43 09 11.0N 025 42 43.0E	90 m	Co-located VOR/DME
VOR (4°E 2005)	GRN	113.6 MHz	H 24	43 09 11.0N 025 42 43.0E	NIL	Co-located VOR/DME
LO OM	GRN -----	284 kHz 75 MHz	H 24	43 09 42.2N 025 36 50.9E	NIL	RWY 09
LM MM	G - - - - -	335 kHz 75 MHz	H 24	43 09 14.8N 025 41 13.7E	NIL	RWY 09
LO OM	GO -----	305 kHz 75 MHz	H 24	43 08 28.0N 025 48 55.4E	NIL	RWY 27
LM MM	O - - - - -	526 kHz 75 MHz	H 24	43 08 53.8N 025 44 34.1E	NIL	RWY 27

The following aerial navigation means are available at Airport Gorna Oryahovitsa:

- ▶ DME
- ▶ VOR
- ▶ Near non-directional beacon
- ▶ Far non-directional beacon

# AIRPORT EMERGENCY AND RESCUE SUPPORT

## Category 6 according to ICAO



Airport Gorna  
Oryahovitsa has the  
following emergency/  
rescue and fire  
protection assets:

- FFV Mercedes Aktros
- FFV ZIL 130
- ERV Ford-Transit

A professional team of  
11 fire-fighters



## Parking lot



A flight control centre, with all certificates and licenses required for its operations, has been constructed on the territory of Airport Gorna Oryahovitsa.



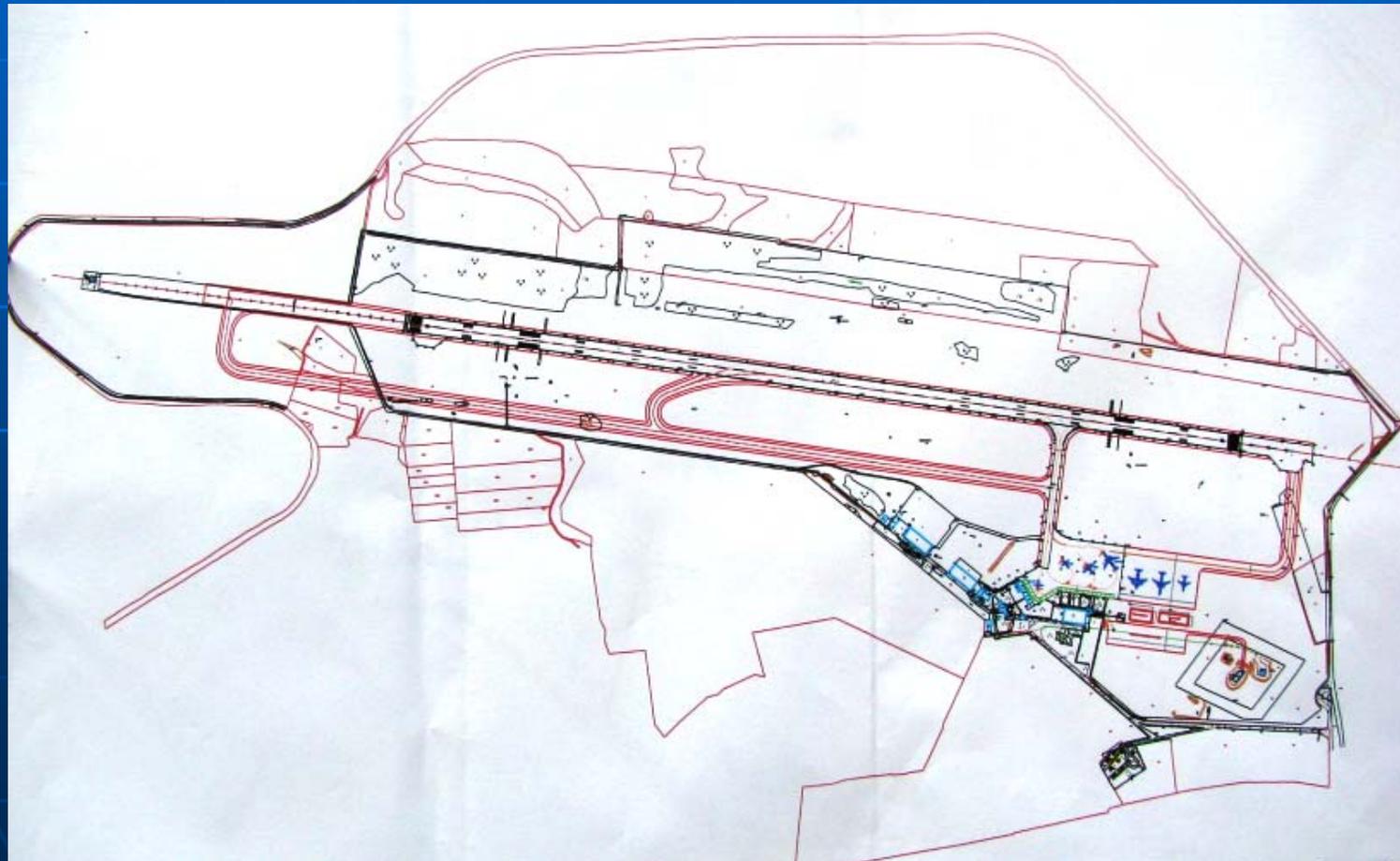
Airport Gorna  
Oryahovitsa



# OPPORTUNITIES FOR AIRPORT EXPANSION

*Airport Gorna Oryahovitsa*

Airport Gorna Oryahovitsa has the favourable possibility to extend the take-off and landing runway to the West. There are also possibilities to construct three more taxiways, one of which will be suitable for higher-speed taxiing. There are also genuine conditions to double the area of the apron by an extension to the East, as well as for the construction of a modern cargo terminal located to the South of the apron. The implementation of these projects may transform Airport Gorna Oryahovitsa into the largest cargo airport on the Balkans.



## Concept development project

### Legend:

#### In red:

▶ possible options for extension

#### In black:

▶ current situation

Airport Gorna  
Oryahovitsa



- SWOT – analysis, including:
  - strengths and weaknesses
  - opportunities and threats

*Airport Gorna Oryahovitsa*

# *Airport Gorna Oryahovitsa*

## STRENGTHS

- **Favourable geographic location – the only international airport in Central Northern Bulgaria.**
- **Favourable climatic conditions throughout the year.**
- **Immediate proximity to Bulgaria's ancient capital – the City of Veliko Tirново, which is a preferred tourist destination.**
- **Good infrastructure – runway length 2,450 m., pavement renewed in 2008.**
- **Well trained personnel, performing in line with international norms.**
- **Used by a number of training air companies based at the airport.**

# *Airport Gorna Oryahovitsa*

## **WEAKNESSES**

- **Outdated aircraft servicing equipment.**
- **Absence of large sea and mountain resorts, which would attract passenger flows.**
- **Lack of instrument landing system (ILS) in difficult atmospheric conditions.**
- **Insufficient number of aircraft berths on the apron and the existence of a single taxiway.**
- **Absence of a cargo terminal.**
- **Insufficient number of check-in desks, no passenger Shengen zones.**
- **No fees are collected for landing by aircraft of air companies, engaged in initial training flights.**

# *Airport Gorna Oryahovitsa*

## OPPORTUNITIES

- **The airport owns land necessary for the extension of the runway and for improving the infrastructure.**
- **A concept project has been drafted for transformations of the airport terminals in line with Shengen requirements.**
- **Possibility for installing ILS for landing in difficult meteorological conditions.**
- **Possibility to use the airport for tourists visiting Bulgaria's ancient capital and for tourist flights.**
- **In case of an amendment to the Regulation on Fees – opportunities for collecting fees for landing by aircraft of air companies, engaged in initial training flights.**
- **Development options:**
  - **development as a cargo airport;**
  - **aviation training centre;**
  - **repair facility for small aircraft.**

# *Airport Gorna Oryahovitsa*

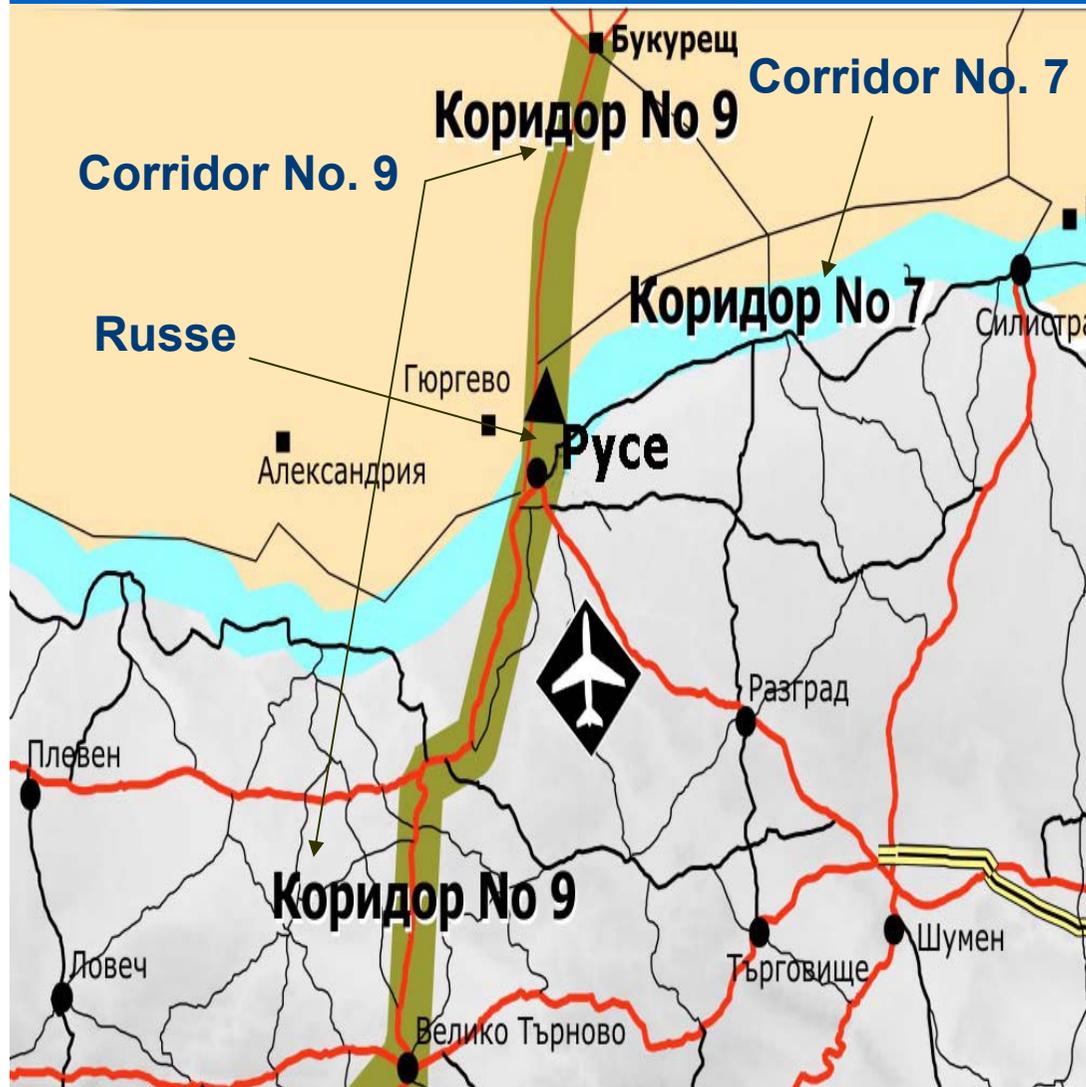
## THREATS

- **Slow emergence out of the global economic crisis, which has affected the aviation industry.**
- **Reduced volume of flights as a result of the global economic crisis.**

# *CIVIL AIRPORT RUSSE*

LOCATION

# AIRPORT RUSSE



Airport Russe is located 18 km away from the City of Russe, close to the village of Shtraklevo. Russe is located in the northern part of Bulgaria, on the Danube river.

The region of Russe has a developed road, railway and river port infrastructure.

The city hosts the only bridge across the Danube in the Bulgarian-Romanian section of the river.

These and other factors highlight Russe as a natural transport node at the cross point of two pan-European transport corridors – No. 7 (the Danube) and No. 9 (Helsinki - Kiev – Chisinau – Bucharest – Russe - Alexandropolis).

Airport Russe was initially constructed as an air force airport, and it was used also for civil aviation purposes since the 70-s of last century until 1999. The airport building, the apron for civil aircraft and other facilities were constructed during this period.



# *AIRPORT RUSSE*

CURRENT STATUS OF THE AIRPORT

# *AIRPORT RUSSE*

Currently, Airport Russe is not used for aviation operations and does not have a valid certificate for operational compatibility in line with the requirements of the effective legislation.

Active flight operations at the airport were terminated in 1999.

By force of a decision of the Council of Ministers, dated 28.02.2005, the territory of the airport was transferred to the Ministry of Transport.

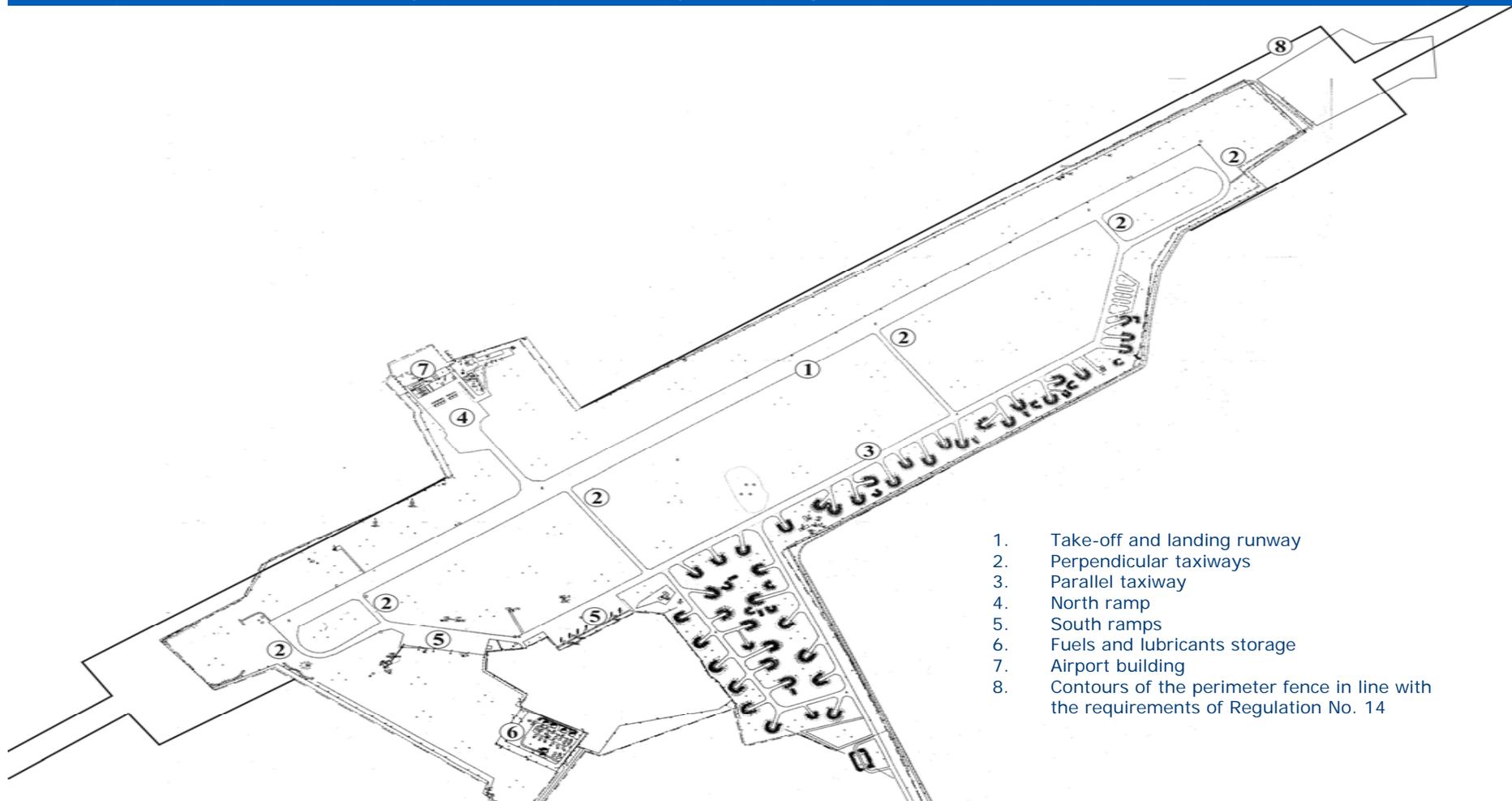
As of 22.12.2006, Airport Russe has the status of an international airport.

# *AIRPORT RUSSE*

## TECHNICAL PARAMETERS OF THE AIRPORT

Airport Russe has a take-off and landing runway with the following parameters:

- Length – 2,500 m. (location 05/23)
- Width - 50 m.
- Seven perpendicular taxiways
- A parallel taxiway along the full length of the take-off and landing runway
- PCN - 29 R/C/Y/T (no technical audit certificate)
- The runway is covered by hexagonal concrete slabs.



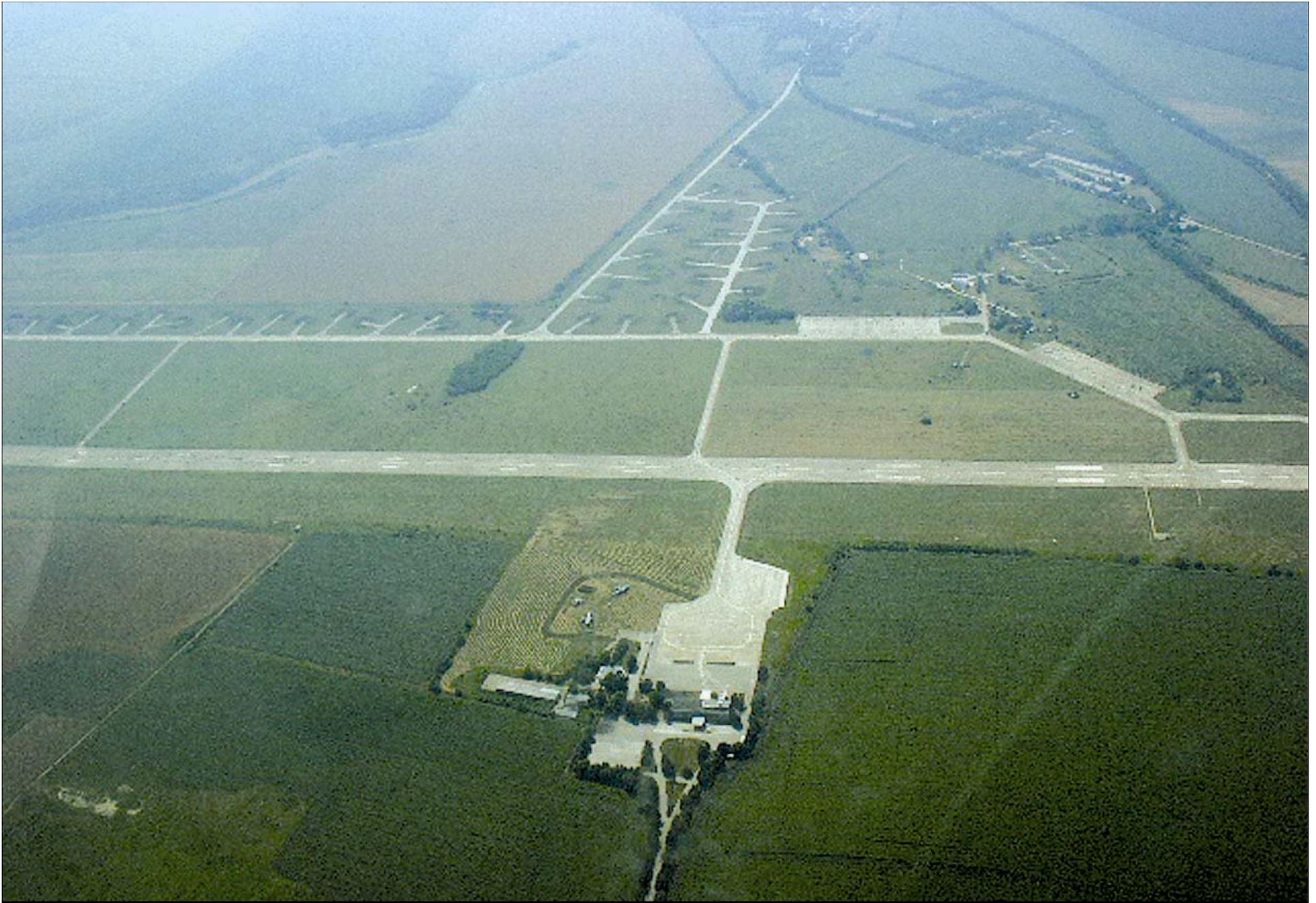
1. Take-off and landing runway
2. Perpendicular taxiways
3. Parallel taxiway
4. North ramp
5. South ramps
6. Fuels and lubricants storage
7. Airport building
8. Contours of the perimeter fence in line with the requirements of Regulation No. 14



View from the East



View from the West



View from the North

# AIRPORT RUSSE



Three aircraft ramps have been constructed adjacent to the take-off and landing runway – a northern ramp with an area of about 10,000 sq. m. and two southern ramps with a total area of about 12,000 sq. m.

The international designation of the airport is as follows:

ICAO code - LBRS

IATA code - ROU

Latitude: N 43° 41' 45"

Longitude: E 26° 03' 29"

Average elevation: 187 m.

View from the take-off and landing  
runway

# *AIRPORT RUSSE*



The airport has a terminal for departing and arriving passengers. The building has premises for a restaurant, snack bar, VIP lounge, offices and stores.

The main lobby of the terminal



The terminal building – view from the North



# The technical infrastructure consists of:

- potable water mains;
- copper-wire telephone lines; an optic cable is laid some 0.8 km from the airport;
- electricity mains with back-up, diesel generator;
- garage for aircraft servicing machines;
- flight control tower and other general buildings.

- The current location of the installations at Airport Russe allow for the separate handling of passenger and cargo flows, with independent access routes to both zones without intersections with the runway.

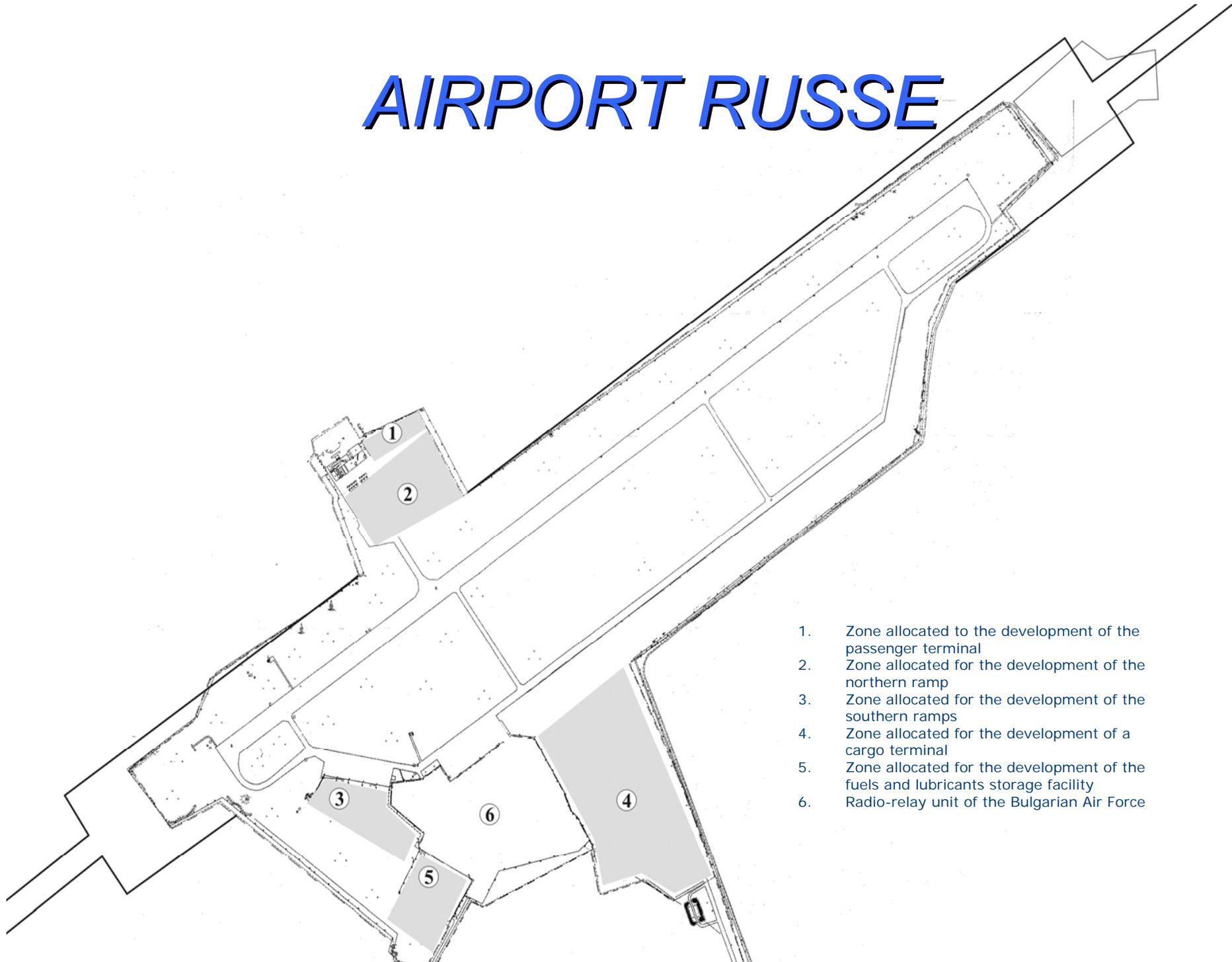
- Passengers may be serviced on the northern side of the take-off and landing runway.

- Cargo handling may be located to the south of the runway. This region allows for the construction of various storage facilities – for reloading, customs storage, production premises etc.

# *AIRPORT RUSSE*

## OPPORTUNITIES FOR EXPANSION OF AIRPORT RUSSE

# AIRPORT RUSSE



1. Zone allocated to the development of the passenger terminal
2. Zone allocated for the development of the northern ramp
3. Zone allocated for the development of the southern ramps
4. Zone allocated for the development of a cargo terminal
5. Zone allocated for the development of the fuels and lubricants storage facility
6. Radio-relay unit of the Bulgarian Air Force

# *AIRPORT RUSSE*



Zone allocated to the development of a cargo terminal

# AIRPORT RUSSE

The opportunities for development of Airport Russe are in the following directions:

## Services to passengers:

- Services provided to passenger ships travelling along the Danube.
- Services to budget airlines
- Restoring the direct Russe – Sofia destination.
- Use by owners of private aircraft.
- Chartered flights for events on the territory of the City of Russe.
- Visiting hunting tourists.

## • Cargo handling:

- Export of agricultural and special produce.
- Temporary import operations.
- The creation of a reloading centre.
- The large distances from the airport to large cities and towns, as well as the clear access routes allow for using the airport round the clock.

# *AIRPORT RUSSE*

- **Creation of a training centre.**
- **Auxiliary activities:**
  - **Transport services to and from the airport;**
  - **Services to personnel and passengers – catering, restaurant, coffee bars, pharmacy, stores etc.;**
  - **Hotel operations;**
  - **Advertising.**

# *AIRPORT RUSSE*

- SWOT – analysis, including:
  - strengths and weaknesses
  - opportunities and threats

# AIRPORT RUSSE

Strengths	Weaknesses
<ul style="list-style-type: none"><li>■ Opportunities for a flexible pricing policy;</li><li>■ Clear access routes and absence of sound pollution of large cities and towns;</li><li>■ The airport represents a component of a transport junction between all types of transport;</li><li>■ No restitution claims;</li><li>■ Aggregated state-owned land lots in the immediate vicinity of the airport.</li><li>■ Located in a region with a population of more than 3,000,000 people (including Bucharest)</li></ul> <p>- Availability of personnel potential.</p>	<ul style="list-style-type: none"><li>■ Lack of operational preparedness;</li><li>■ A road junction with a limited transit capacity;</li><li>■ Absence of a railway link to the airport.</li></ul>

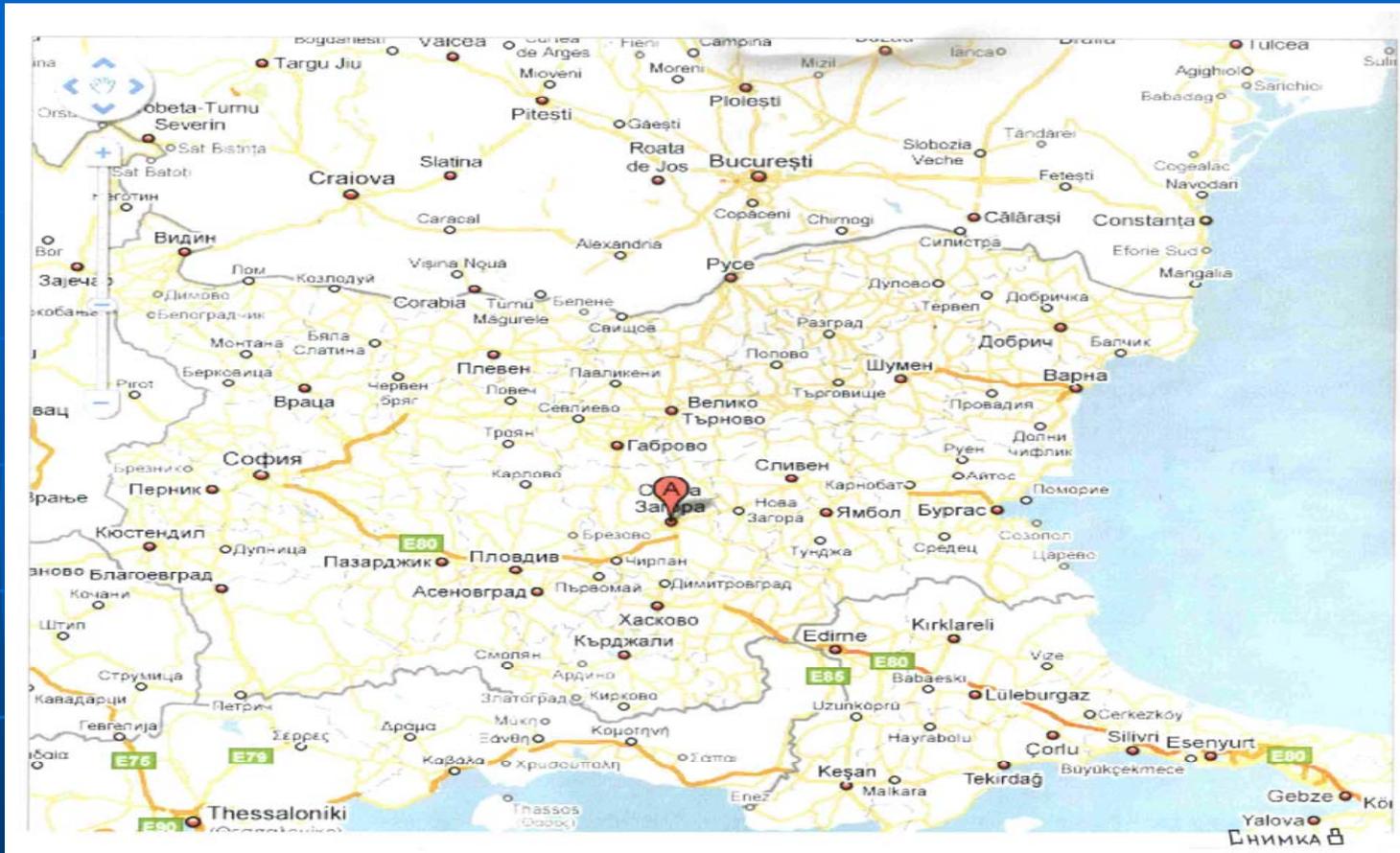
# AIRPORT RUSSE

Opportunities	Threats
<ul style="list-style-type: none"><li>■ There are possibilities for the construction of a new passenger terminal;</li><li>■ There are possibilities for the construction of cargo terminals;</li><li>■ There are possibilities for improving the technological capacity of the runway – strength and length.</li></ul>	<ul style="list-style-type: none"><li>■ The existence of competitive airports at a small distance from Airport Russe – „Henri Coanda” (Otopeni) and „Aurel Vlaicu” (Baneasa) in Bucharest, and Airport Gorna Oryahovitsa</li><li>■ the challenges generated by the tendency towards a diminishing air traffic on a European and global scale.</li></ul>

# *Airport Stara Zagora*

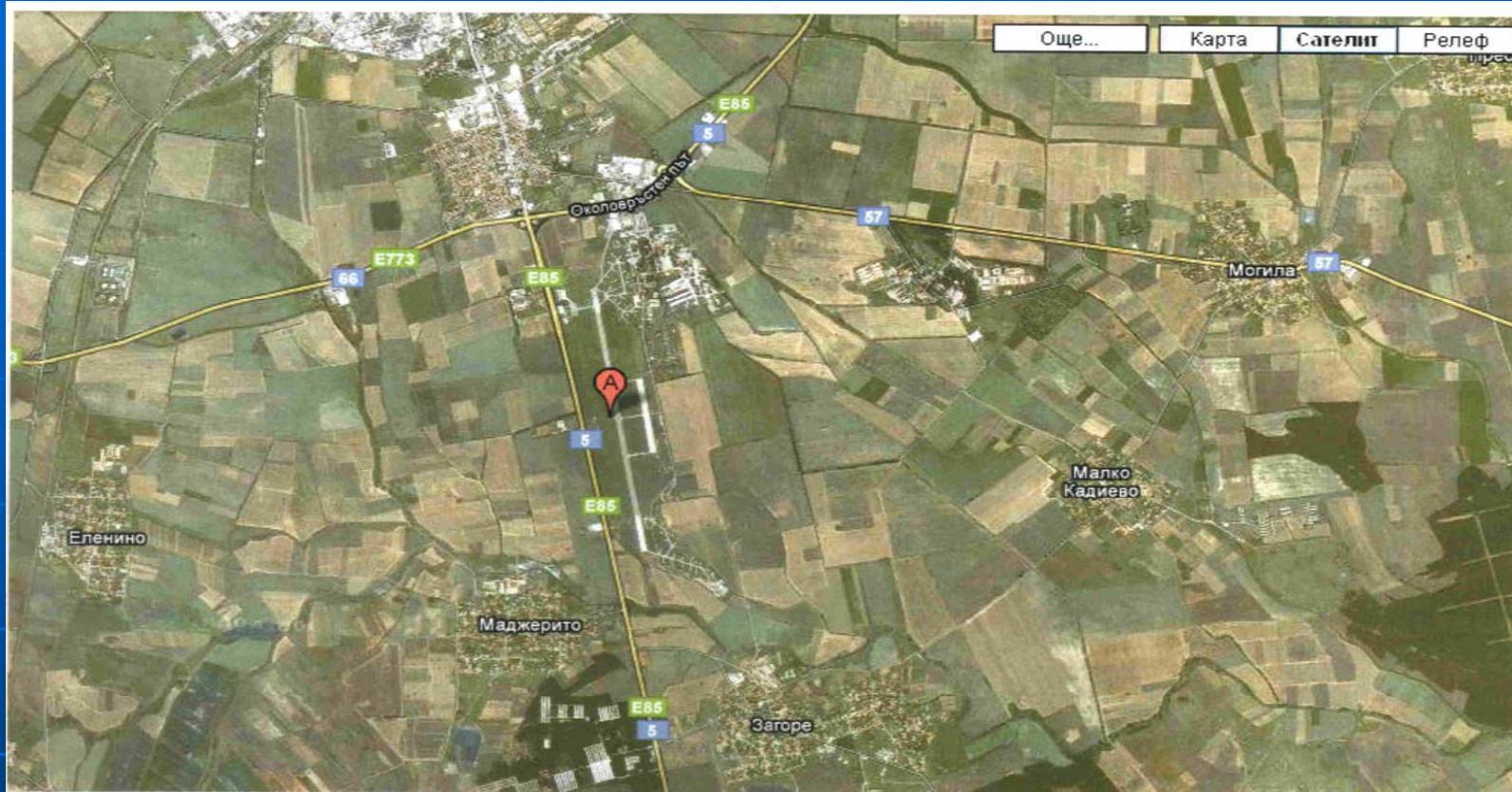
LOCATION

# Airport Stara Zagora



The airport is located in the southern part of the City of Stara Zagora, about 5 km away from the city centre, and very close to the first-class road Stara Zagora – Haskovo – Kurdjali. Airport Stara Zagora is about 5 km away from the “Trakia” highway.

# Airport Stara Zagora



Highways and first-class roads, as well as railway lines pass through the territory of the Stara Zagora region and serve as links between Bulgaria's northern border at the Danube with its southern border with Greece and Turkey. Three European transport corridors intersect on the territory of the region : No. 4 (Nuremberg – Prague – Vienna – Budapest – Bucharest – Sofia – Thessalonica - Plovdiv – Istanbul); No. 8 (Duras – Tirana – Skopje – Sofia – Plovdiv – Stara Zagora – Burgas – Varna); and No. 9 (Helsinki – Saint Petersburg – Moscow – Kiev – Bucharest – Russe – Stara Zagora – Alexandroupolis)

# *Airport Stara Zagora*

CURRENT STATE OF THE AIRPORT

# *Airport Stara Zagora*

Airport Stara Zagora is closed for flights.  
Currently, the airport has no operator with a license for airport operations.

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## TECHNICAL PARAMETERS OF THE AIRPORT



# *Airport Stara Zagora*

- Take-off and landing runway with direction 348° / 168° (35/17), composite (asphalt/concrete) pavement, length 2,500 m., width 45 m.
- 100/50 m. ramp, composite (asphalt/concrete) pavement
- Taxiway, width 18 m.



Section of the ramp, take-off and landing runway, and flight field

# *Airport Stara Zagora*

One-storey airport building with a total floor area of 892 sq. m., administrative section, passenger hall, passenger lounge and dedicated section (restaurant)



View from the West at the administrative section and the airport building

# *Airport Stara Zagora*

Technical premises and storage facilities – total floor area 480 sq. m., and parking lot. The airport has no fuel and lubricants storage and no cargo terminal.



View from the West to the technical premises building

# *Airport Stara Zagora*

View from the East at the airport building and the technical section (flight control tower)



View from the East at the storage facilities and the vehicles pool



# *Airport Stara Zagora*

The airport has no lighting system, which limits its use to the daylight period.

The aerial navigation and related equipment at the airport has been decommissioned and conserved due to lack of flight operations.

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## OPPORTUNITIES FOR EXPANSION OF THE AIRPORT

# *Airport Stara Zagora*

There are possibilities for reconstructing and expanding the airport after the procedures for transferring the title over the land from the Ministry of Defence to the Ministry of Transport, Information Technologies and Communications are completed. The airport will then have some 2,500 dca of free land, which will allow any investor to freely develop the airport infrastructure depending on the specific business concept for its development and future use. There is a possibility to extend the take-off and landing runway to the south, which will take into account the prevailing N/NW winds and the clear approach path for landing on Runway 35.

# *Airport Stara Zagora*

- SWOT – analysis, including:
  - strengths and weaknesses
  - opportunities and threats

# *Airport Stara Zagora*

## **Domestic environment**

### **Strengths**

- The geographic location of Stara Zagora for Bulgaria, as well as for the Balkans and Europe, is of a major importance.
- The region is among the most intensively developing in Bulgaria in many spheres of the economy – mining and processing industries, building construction.
- Foreign investors have demonstrated interest in modernizing, expanding and use of the airport.

# *Airport Stara Zagora*

## **Domestic environment**

### **Weaknesses**

- Proximity of operational international airports – Airport Plovdiv – 90 km, Airport Burgas – 190 km.
- The impact of the global financial crisis on the economic conditions in Bulgaria and worldwide.
- The actual conditions of the flight field, the airport installations and the existing infrastructure.

# *Airport Stara Zagora*

## **External environment**

### **Opportunities**

- There are options to have the airport repaired for operations with the aim to provide a maximum-level servicing of the strong economic growth in the region.
- There are options to provide services related to the historical potential of the region and create incentives for their development.
- There are options to create a logistics centre servicing the Balkans and Europe.

# *Airport Stara Zagora*

## **External environment**

### **Threats**

- Achieving the required level of modernization, expansion and operation of the airport depends to a large extent on the implementation of large-scale improvements at a regional level.
- The global financial crisis has severely limited the financial resource at the disposal of foreign investors.
- The operational airports located in close proximity (Burgas and Plovdiv) and their development by means of increasing the passenger and cargo flows.