

Bulgaria

Fishing Ports

Projects: Modernization and
reconstruction of fishing ports
in Sozopol, Balchik, and Varna
- Bulgaria



Reforming
European Fisheries.
For the future of
fishermen and fish.

Ribni Resursi Ltd
(Bulgaria Fishing
Ports Company)

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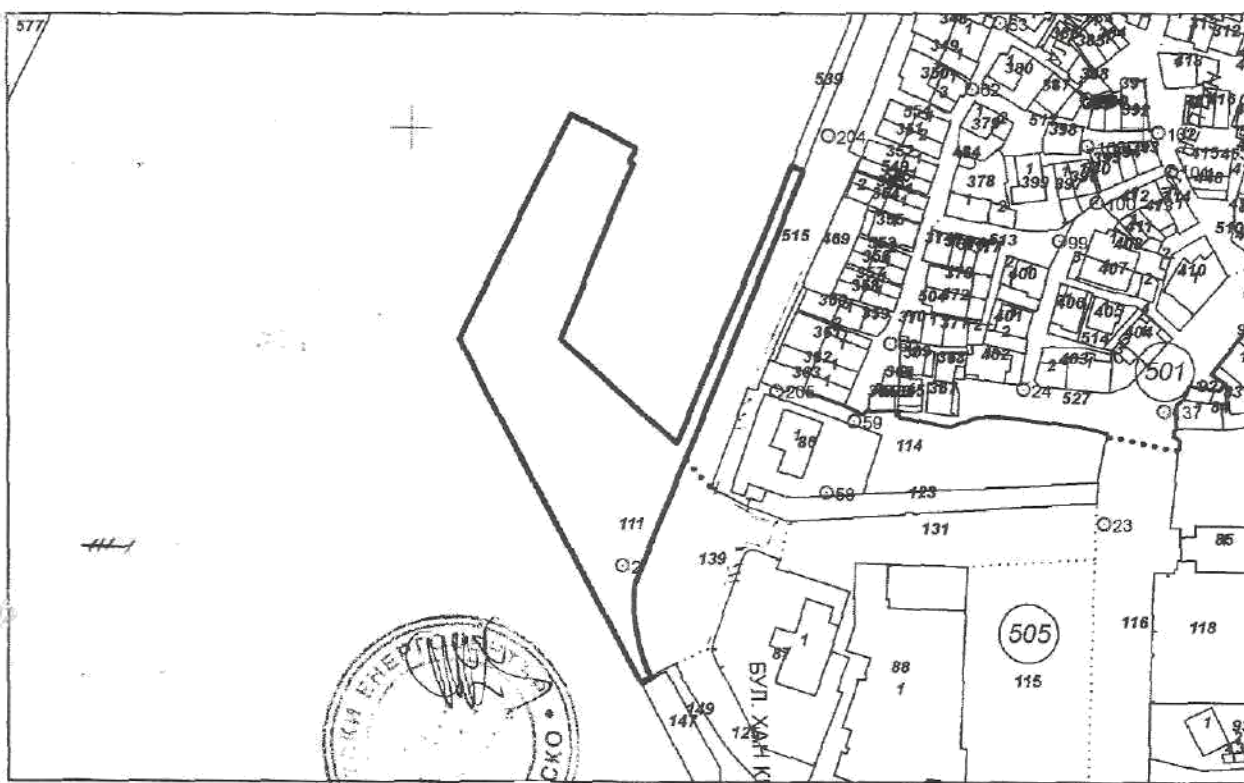
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1. About us

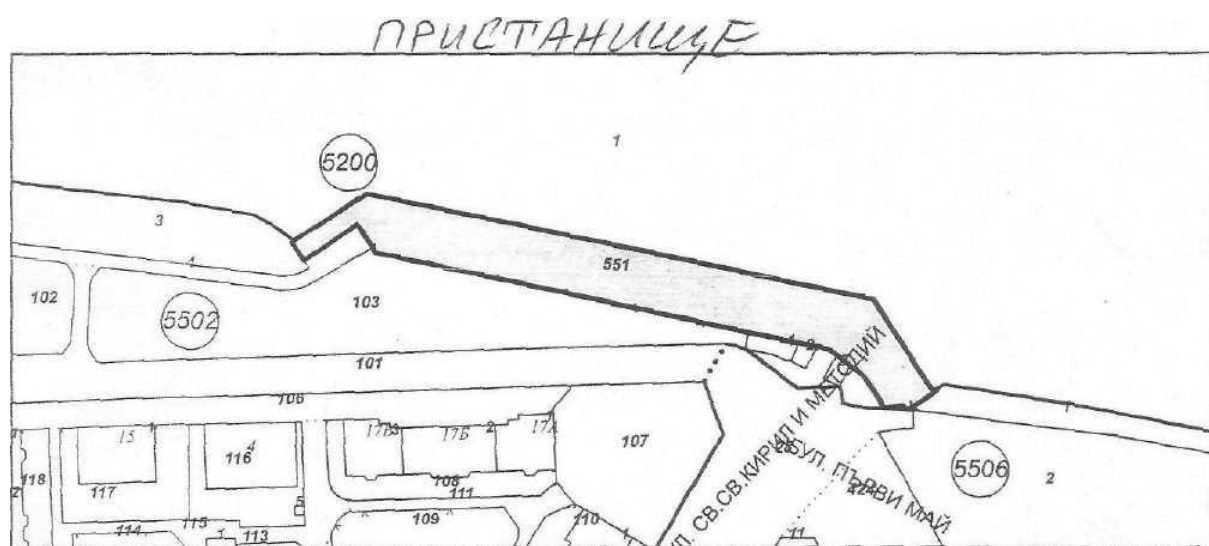
Fisheries resources Ltd (UIC 831909905) is a public limited liability company owned by the Ministry of Agriculture and Foods in Bulgaria.

The capital of the company is **11 650 514 BGN**, and included:

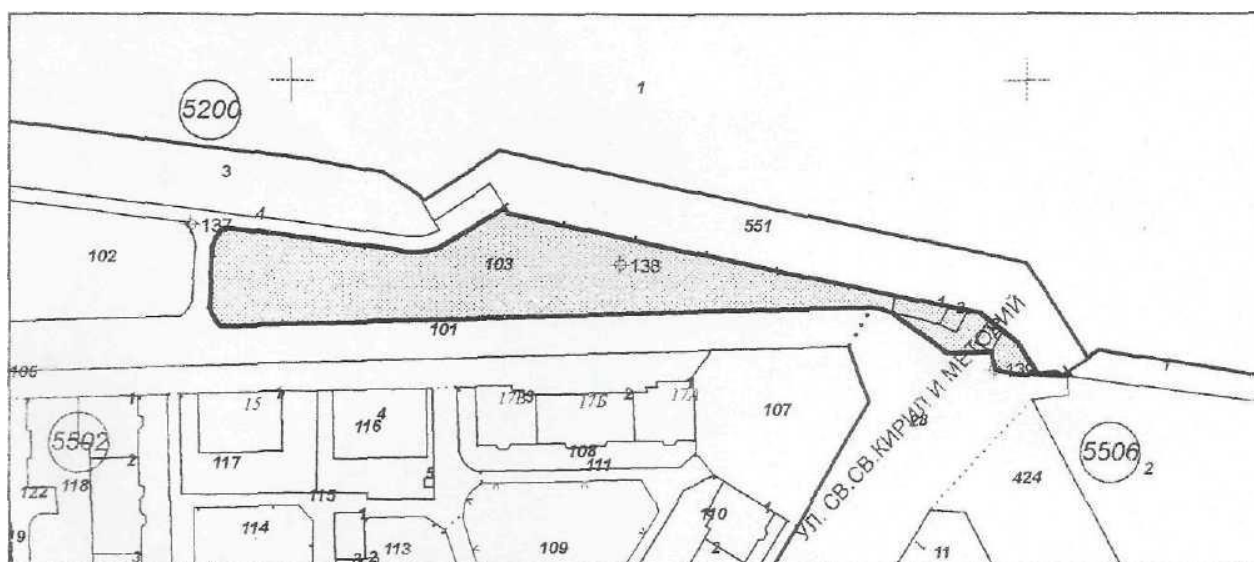
1. The port terminal of Sozopol – a land property (identification No 67800.505.111) with an area of 4 121 square meters;



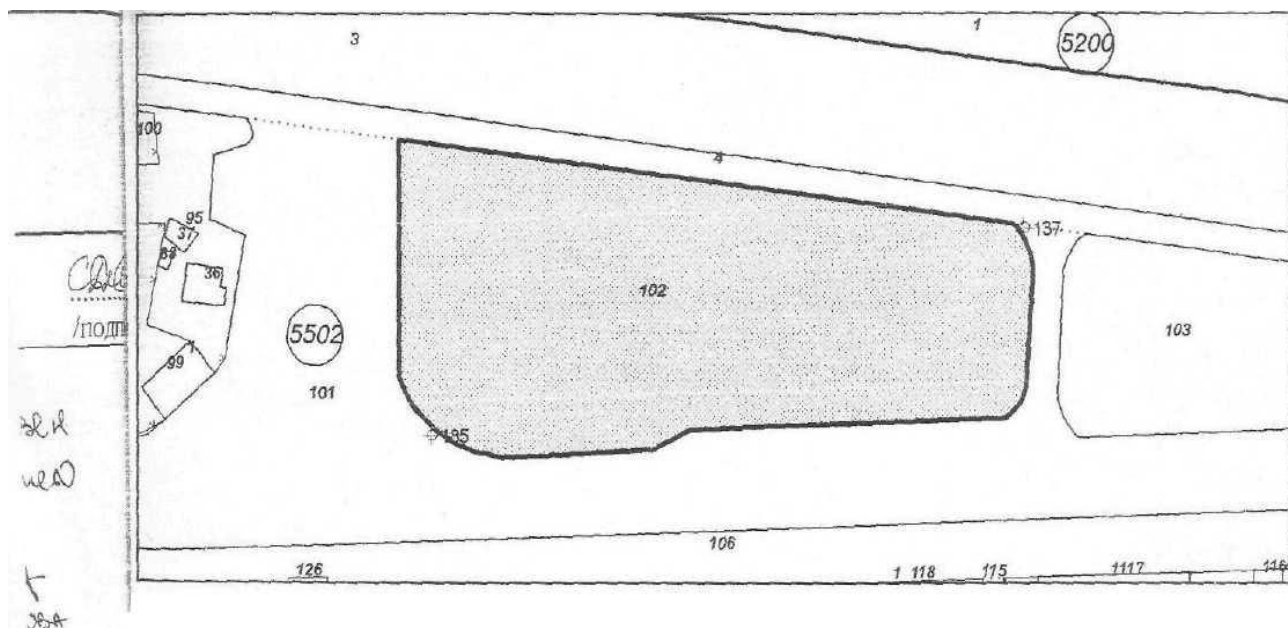
2. The port terminal of Varna – a land property (identification No 10135.5502.551) with an area of 2 833 square meters;



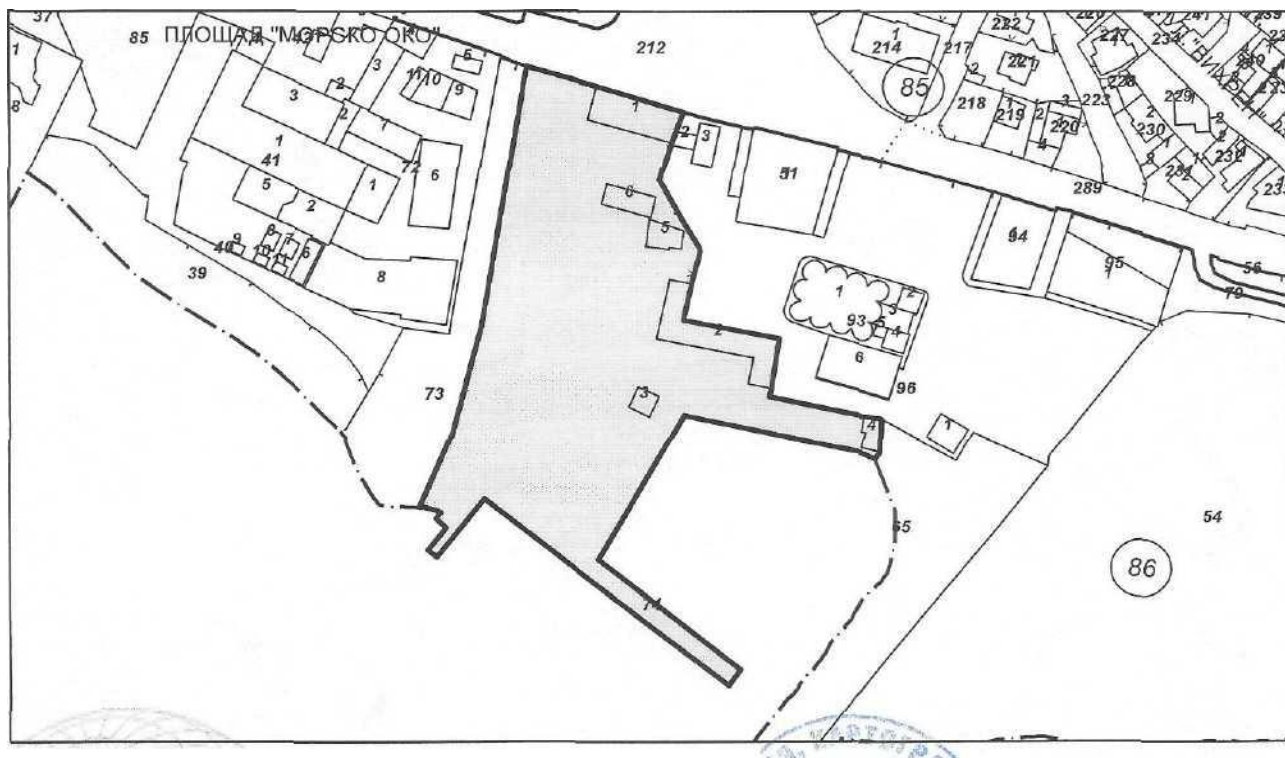
2.1. The port terminal of Varna (additional green space-1) - land property (identification No 10135.5502.103) with an area of 3 864 square meters;



2.2. The port terminal of Varna (additional green spacea-2) - land property (identification No 10135.5502.102) with an area of 3 065 square meters;



3. The port terminal of Balchik – a land property (identification No 02508.86.74) with an area of 7 556 square meters;



2. Project decision

The proposed business plan is named “Reconstruction and modernization of fishing ports Sozopol, Balchik and Varna”. The ports are used by fishermen for landing catches and are situated at the most used by the commercial fishing fleet landing sites at the Black sea coast of Bulgaria. All of them are in working order, but there is an old-fashioned equipment and lack of infrastructure.

The ports are used by fishermen for landing catches facilities form a key-element in the chain from the catching of the fish to the final product. The aim of this project is to modernise all our fishing of fish so as to provide efficient, safe and hygienic services for landing and handling of the catches as well as to enhance the marketing and business prospects of our facilities. On the other hand the “minimum vitalis” level of the Bulgarian fleet is linked to the current port facilities available, with maintenance and auxiliary services, meaning that the whole fleet is dependent on those three key fishing ports. At the present moment there is not a single fishing port in Bulgaria (private or public) that can offer adequate services to the fisheries tourist and entertainment business.

For tourism point of view the ports are situated in areas regularly visited by tourists and provide tourist services at present such as parking of tourist’s cars and busses as well as mooring of tourist ships and passenger services.

3. Scope of services

The following services will be offered to the fisheries business:

- ➡ Loading logistics jetties, floating quays for landing of catches and loading of vessels (fuel supply etc.);
- ➡ Provision of mooring quays and servicing facilities for primary marketing and storage of catches;
- ➡ Provision of facilities for fishing vessels (water, electricity, etc.);
- ➡ Limitation of sewage water in the fishing ports;
- ➡ Storage and chilling facilities;
- ➡ Tourism (including pesca (fishing) tourism);
- ➡ “Slip way” for the repairs of the fishing vessels not only from the port of Balchik and Varna;
- ➡ Excise storage for petroleum products for bunkering the ships visiting the Port.

Other services that help to enforce common-fisheries-policy rules will be designed to:

- Ensure that only the allowed quantities of fish are caught;
- Collect the necessary data for managing fishing opportunities
- Clarify the roles of EU countries and the Commission
- Ensure the rules are applied to all fishers in the same way, with harmonized sanctions across the EU
- Ensure that fisheries products can be traced back and checked throughout the supply chain, from net to plate.

Entertainment services for the general public visiting the port areas

- Coffee and restaurant for fresh fish
- Parking lot
- Car wash
- Passenger services
- Tourist ships
- Repair shops
- Souvenir shops

Our motto is: Invest in sustainable fisheries

3. The investment

The projecting and construction of ports' elements and the port in general have to consider all the modern trends for development of fisheries ports to be provided and to comply with all applicable procedures and existing requirements of the Bulgarian legislation.

The projects have to provide all activities connected with the improvement of working conditions and achieve effective and ecological exploitation.

STEP ONE – FEASIBILITY STUDIES AND CONCEPTUAL DESIGN

№	Type of Activity
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1.	Part Architecture – low construction
2.	Part Architecture – high construction
3.	Design of hydraulic structures available for optimal configuration of the port by pontoon facilities and connections in the aquatic environment
4.	Hydraulic project - study of waves and wave currents; - project decision for wave energy and safety of wave impact and providing wave impact of the water area; - strengthening of the coast - extension of the quay
q	Road Project
6.	Calculation of electrical project
7.	Calculation of waters
9.	Investment project working phase projecting

STEP TWO – WORKING INVESTMENT PROJECT

No	Type of Activity
1.	Part Architecture – low construction
2.	Part Architecture – high construction
3.	Design of hydraulic structures available for optimal configuration of the port by pontoon facilities and connections in the aquatic environment

4.	Hydraulic project - study of waves and wave currents; - project decision for wave energy and safety of wave impact and providing wave impact of the water area; - strengthening of the coast - extension of quays
5.	Road Project
6.	Project Part Landscape
7.	Project part Construction – low construction
8.	Project part Construction – high construction
9.	Project part Electrician
10.	Project part Water supply buildings
11.	Project part Water supply
12.	Project part Technology
13.	Project part- development and parking
14.	Project Part Fire and emergency safety
15.	Project for automated system for port management

INVESTMENT EXPENDITURES:

No	Type of Activity
1.	Construction expenditures
2.	Purchase and installation of new machinery and equipment (including computer) and other directly related to the investment.
3.	Specialized machinery and equipment directly related to the storage, unloading of fishery products

4.	Purchase of know-how, patents and licenses necessary for the preparation and implementation of the project;
5.	Purchase of software, including the cost of delivery, installation, testing and exploitation;
6.	Expenditures for consultation services, connected with preparation and implementation of the project, engineer research, evaluations and analysis, preparation of technical/working project and expenditures for independent constructional and investment control;
7.	Specialized vessels which serve the port, connected with the marine activities as mooring, verification and control for maintaining the approaches to the port, floating lifts, vessels associated with the purity of the water environment, in accordance with good fishing practices, adopted by the European Union
8.	Expenditures associated with accepting and processing waste: a. waste storage b. treatment facilities
9.	Cost for delivery, installation, testing and commissioning: a. equipment to improve the quality, safety, storage capacity and traceability of products; b. facilities and / or equipment to improve safety and working conditions; c. Safety and control facilities; d. activities to increase the level of safety of the port facilities;

3.1. The project decision for the ports' reconstructions and modernization is based on:

The all the listed above investments aim at:

- Improve unloading terms in designated ports
- Improving conditions for product unloading, processing, hygiene, storage and auctioning;
- Improve the supervision of trading and marketing facilities for fisheries products;

- Provide fuel, ice, water and electrical power supplies;
- Maintaining fishing vessels and repairing equipment;
- Construct, modernize and expand of docks in order to improve safety during loading and unloading;
- Install electronic management systems for the tracking of fisheries activities;
- Improvement safety and working conditions;
- Store and process waste in order to reduce discards;
- Construct and modernize small fishing shelters to improve safety.

3.2. Principal management scheme

Public-private partnership (PPP) is becoming increasingly important for furthering development goals. Many options exist for such partnership arrangements, and the differences among them can be subtle but significant. It is therefore important that researchers for development, managers, advisors and policymakers understand the language and concepts of PPPs. Such partnership will be created for the management of the three fisheries ports – Sozopol, Varna and Balchik on a 50 – 50 joint venture share basis.

Joint ventures are in many instances attractive to both the public and the private sector for a number of reasons. For the public sector, they ensure a continued and sometimes controlling interest in management and operations as well as share of anticipated profits while importing desired managerial and investment inputs. For the private party, joint ventures can indicate a governmental commitment to nourishing a successful enterprise as well as reducing the level of investment and risk.

3.3. Location of the ports

The Black Sea coastline of Bulgaria is 378 km in length. The main ports used by fishermen for landing catches are in Balchik, Burgas, Varna, Sozopol and Nessebar. Fishing catch activities are located along the entire coast, but the central and northern regions are the main location for the production of molluscs. The coast is important for fishery, but it is as well an important spa and health zone, where several famous resorts have been developed. Building of seaside resorts and mass tourism has a major impact on the environmental conditions prevailing on the coast, but these have little impact on fishing activities.

Though almost enclosed, the Black Sea is deep. With low oxygen levels, the water is an extremely vulnerable environment. For the past thirty years, the major rivers that flow into the Black Sea have been dumping massive quantities of industrial waste into it, resulting in considerable damage to the ecosystem.

Economically speaking, the Black Sea is still the most popular tourist destination for people in nearby countries. But more significant is the large volume of traffic passing through the area – both people and goods, including gas and oil on its way from the Caspian Sea. These are mostly transported on tankers, but major construction work is currently underway on pipelines.

Population

The population of Black Sea rim is unevenly distributed among the metropolitan area of Istanbul, with its 12 million inhabitants, the two large cities of Odessa (Ukraine) and Samsun (Turkey) each with 1.2 million inhabitants, and several smaller cities with 300 000 to 450 000 inhabitants each: Constanta (Romania), Trabzon (Turkey), Sochi (Russia), Varna (Bulgaria), Sebastopol (Ukraine) and Novorossiysk (Russia).

Exploitation of resources

The Black Sea remained a major fishing zone until the early 1960s. Over the last 10 years, total annual catches have ranged from 360 000 to 620 000 tonnes.

These fluctuations are due to the size of catches of sprat, anchovies and jacks, small pelagic species whose populations can vary greatly from one year to the next. Other sought-after species are short-finned tunny and turbot.

Passenger transport

Ferry lines cross the Black Sea in both north-south and east-west routes. Other routes also run parallel with the coast. The most important ports are Istanbul (Turkey), Poti (Georgia), Sochi (Russia) and Illichivsk (Odessa, Ukraine).

Tourism

Seaside resorts in Bulgaria, Romania, Ukraine and Russia are still very active but this phenomenon is not found on Turkey's coasts, where tourism is focused on the Mediterranean.

Fishing port – Sozopol (+42°25'20.82", +27°41'29.76")





Fishing port – Balchik-View



Fishing port – Varna(+43°11'1.98", +27°53'59.40")



3.4. Similar projects

Reconstruction and modernization of the Sarafovo fishing port.



The total cost of the project is BGN 12 M and it will be implemented using a grant of BGN 9.77 M under the operational program for the development of the Fisheries sector.

This is Bulgaria's first approved project under Measure 3.3. Investments in reconstruction and modernization of fishing ports, landing sites, and shelters, according to reports of the Bulgarian Fisheries and Aquaculture Executive Agency.

In end-August 2012, the Bulgarian government granted the Burgas municipality a seabed construction permit, paving the way for the finalization of construction works and expansion of the Sarafovo fishing port with EU funding.

Under the project, the port is to accommodate 104 vessels with a height of up to 8 meters and 6 vessels with a height of up to 20 meters.

The upgraded Sarafovo fishing port will be equipped with a fishing exchange, modern fish storing and processing units, ship repair sites, and a parking lot.

The project is to be completed within 18 months.

3.5. Technical project decisions

FUNCTIONAL ZONING

1. The following functional areas are provided to be included:

- unloading area
- homeport area
- road area
- building area
- catch registration
- pedestrian unloading area

UNLOADING AREA

Includes quay wall 70 m., directed northeast - southwest. Currently there unload 2 vessels. It is envisaged 3 vessels to be served after the implementation of the project.

LANDINGSIDE INCLUDES:

1. Quay wall 100 m., directed to northwest - southeast, provided for landing of 9 vessels. Fishing vessels less than 25 m. It is envisaged to be bound and floating pontoons for serving of 18 fishing vessels.
2. Floating pontoon for 30 boats;
3. Low quay wall for homeport of 62 boats with an overall length 190 m.;

ROAD AND PARKING ZONE:

Includes inland roads of the port and places for parking for the fish transporting vessels. The common area is 1680 m², of which 1363 m² for the road and 318 m² for parking.

CONSTRUCTION AREA

Construction area is divided on two parts. First part provided for the deployment of massive and small structures for service access and representation of the various institutions involved in the activities of the port – National Agency for Fisheries and aquaculture Executive Agency Maritime Administration and others.

Second part is provided for massive construction of buildings and industrial halls. The building will have an administrative purpose and production areas purposed for storage and initial processing of fish and first sale.

REGISTRATION AREA

This area will be located next to the reload area 90m² where will be located electrical scale and a registration point.

PEDESTRIAN AREA

Pedestrian area is lying parallel along the quay walls and provides easy access by the fishing boats and vessels and other development zones. The common area of the pedestrian zone is 1 360 m².

TERMINALS AREA

Because of the small area and the port, the activity of the terminal it doesn't provide terminal for specialized activities. It is provided only zoning port.

COMMUNICATION TRANSPORT AREA

The access and connection of the port with the national travel net will be used by the current network.

WATER SUPPLY

The port doesn't have water system that is owned by the company. It is planned to be built internal water supply sewerage with outlets to power the port for vessels between about 45 sm.

ELECTRICIAL

Power cable to supply dock vessels with electricity will be included

FACILITIES FOR WASTEWATER COLLECTION

There is no sewerage net in the port. By the street is passing a sewerage outlet which takes the water to wastewater treatment station of the town. According the national legislation there have to be such kind of treatment which will process the water according the ordinance №7 or 14.11.2000. The administrative building will be directly connected with whit the sewerage net of the tow.

FACILITIES FOR WASTE COLLECTION

The following waste caused by the vessels will be treated the port:

1. Solid waste:

- household wastes- food, medical, packaging materials - plastic, cans, glass containers, food containers, paper and more. – as a result of the activities of the vessel;
- other wastes – result of the exploitation of the vessel - batteries, paints, oil rags etc.

2. Waste oil - used oils, sludge etc..

PORT FACILITIES

According ordinance № 9 от 29.07.2005 г. each port needs:

1. Facilities for safe accepting, serving and processing of the vessels, passengers, cargo and mail
2. Security technical means, vessels, machinery, equipment and cargo;
3. Facilities that permit the acceptance of waste;
4. Facilities for entry/exit points;

FACILITIES FOR LOADING ACTIVITIES

1. Port crane (up to 5 tones)
2. Forklift trucks carrying capacity up to 2,5 tones

EQUIPMENT FOR INITIAL PROCESSING, STORAGE AND FIRST SALE

1. First sale
2. Cooler (refrigerator temperature)
3. Shock freezer
4. Freezer (-35 °C)
5. Ice generator
6. Scale

INFORMATION BOARD

TRANSPORT AND SPECIALIZED EQUIPMENT

1. Refueling vehicle
2. Waste collection vehicle
3. Forklift truck

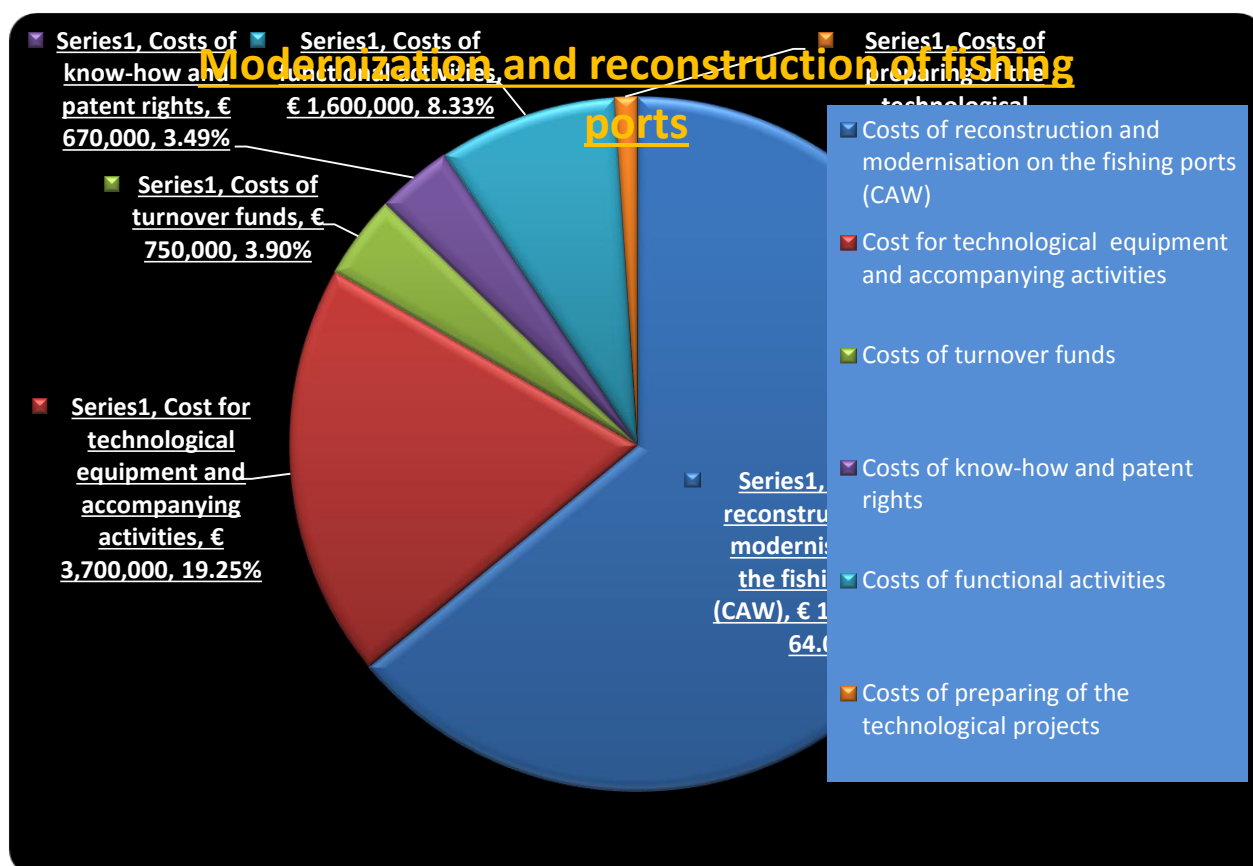
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3.7. Cost of investment

The estimated expert amount for building and putting into service the farm for breeding and fattening of aquaculture on the selected type, technology, and process equipment is:

19 217 500 EURO

We present cost estimates of the groups as follows:



4. Key context indicators for the description of fisheries sector:

1. Share of the fisheries in the GDP - 14 300 000 and as a percentage 0.14%;

2. Employment figures by sub-sector, male and female:

Employees engaged in **marine fishing** - 3 430, 0 % women.

Employees engaged in **aquaculture** - 4 980, 0.2 % women.

Employees engaged in **processing** - 2 230, 89 % are women.

Employees engaged in **Inland fisheries** - 1 620, 0.92 % women.

3. Annual income of workers by sub-sectors:

Annual income in the marine fishing industry per worker: 1.850 €.

Annual income in the aquaculture industry per worker: 2 000 €.

Annual income in the fish processing industry per worker: 2.230 €.

Annual income in the inland fisheries per worker: 310 €.

4. Bulgarian Fishing Fleet :

2 556 vessels, 67 over 15 meters, 2 453 under 12 meters;

2 556 vessels, total GT 8 320, 93, total kW 62924.12, total VCU 67581.00;

5. Catches in the Black Sea:

The catches in the Black Sea account for nearly 90 % of total fish production in Bulgaria and amounted to 17 620 tons, sea snail (Rapana) alone accounts for 47.7 % of total catches in Black Sea.

5. SWOT analysis of the Bulgarian Fisheries sector

Strengths

- Experienced and skilled fishermen
- Underexploited pelagic fish and mollusk resources
- Excellent environmental conditions and water quality for growing freshwater species
- Relatively low cost of labour
- Existence of a skilled workforce
- Exceptional natural resources
- Existence of market potential for fish and fish products
- Big retail stores are presented on the Bulgarian market

Opportunities

- Restructuring and modernization of the fishing fleet
- Modernization of fishing ports facilities and landing sites
- Modernisation of landing site infrastructure
- Modernisation of Danube River fishing fleet
- Potential for diversification of aquaculture production towards species with better market value and good demand on the international markets, including organic aquaculture
- Marine aquaculture production potential
- Increase the market demand of processed products and diversity
- Increase of fish and fish products consumption
- Market potential for new species and innovative fish products
- Potential for tourism development

Weaknesses

- Obsolete and non economically viable fishing fleet
- High percentage of inefficient old small-scale fishing vessels
- Insufficient landing infrastructure
- Low diversification of species and outdated installation in aquaculture
- Lack of fiords and gulfs on the Black Sea for marine aquaculture
- Poor and seasonal demand and weak traditions in consuming fish and other aquatic products
- Poor distribution networks
- Low diversification of economic activities in fishing areas
- Difficulty in mobilizing the necessary co-funding

Threats

- Deficient control of fisheries
- Pollution of Danube River waters
- High level of poaching
- Difficulties in accessing financial support
- Increased competition on the EU market
- Growing import of high added value products
- Population migration to more economically developed areas
- Lack of cooperation between local partners

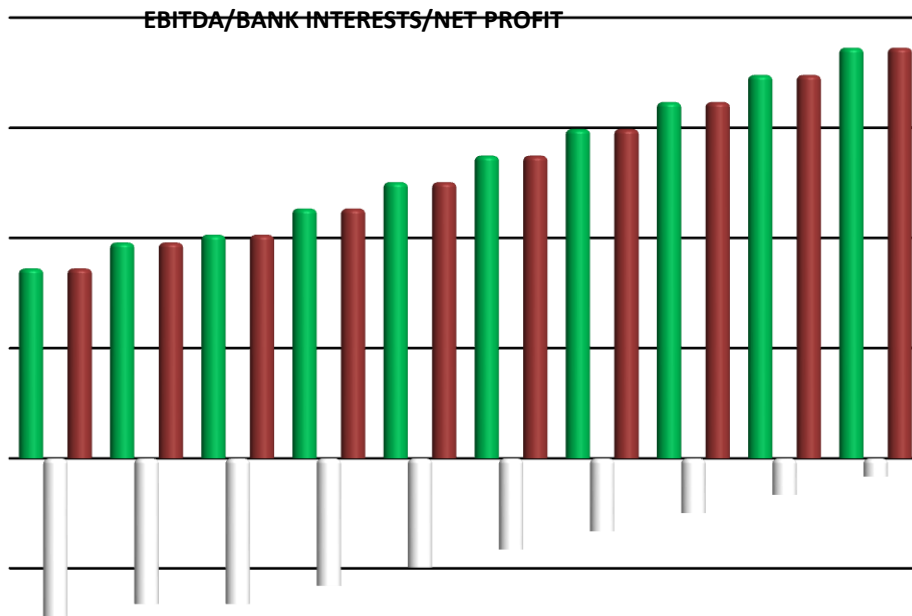
6. Economic and financial estimates

6.1. Forecast calculations

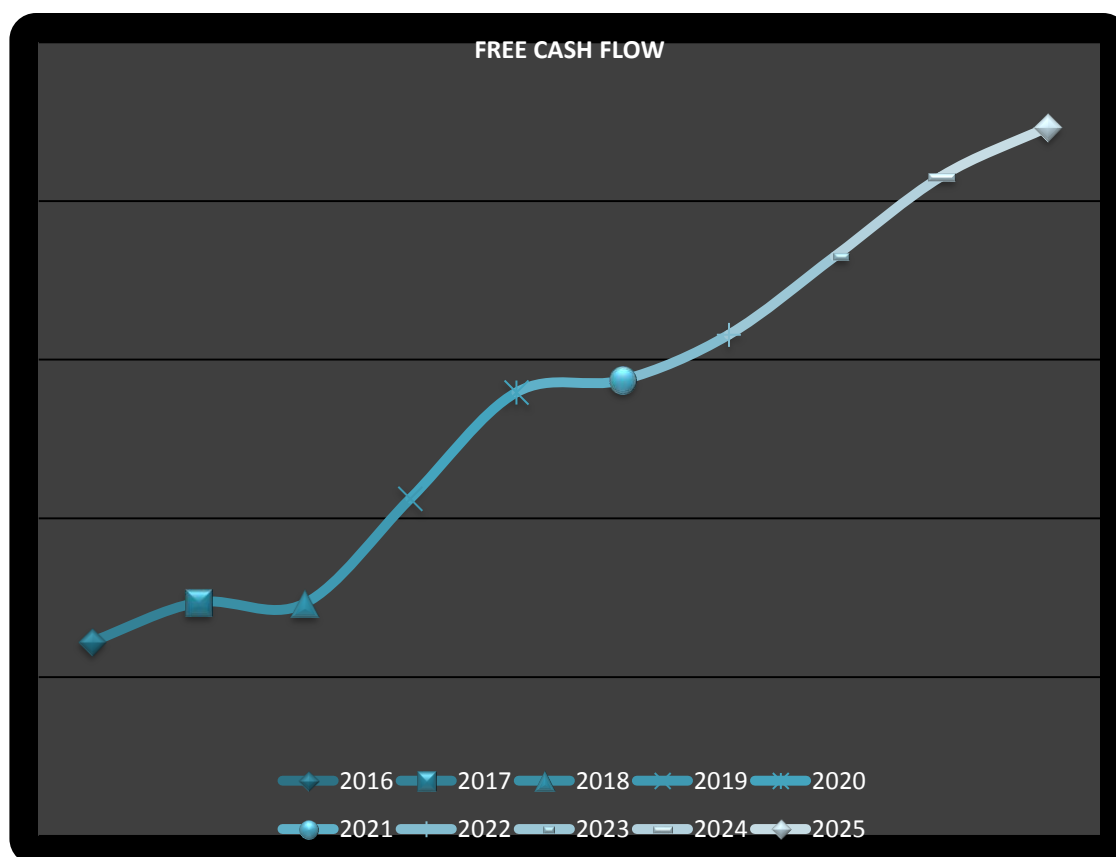
- ➡ We accept that the first sales will be 18 months after the reconstruction and the modernization of the fisheries ports in Sozopol, Varna and Balchik;
- ➡ We accept that the full sales of the services provided by the Fisheries Resources Ltd will be achieved in the summer of 2016;
- ➡ Sales of the services costs are based on experience in other European fisheries ports;
- ➡ The average working capital calculation of the average ten years.

6.2. Operational Charts

EBITDA/BANK INTERESTS/NET PROFIT



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
EBITDA	344,919	391,897	406,035	453,602	501,473	549,654	598,152	646,974	696,125	745,613
BANK INTEREST	-298,181	-265,050	-265,050	-231,919	-198,788	-165,656	-132,525	-99,394	-66,263	-33,131
NET PROFIT	344,919	391,897	406,035	453,602	501,473	549,654	598,152	646,974	696,125	745,613



6.3. Indicators

Break Even Point (Price):	€ 6,43
Break Even Point (Units):	103 097 units

IRR:	22,4%
MIRR	18,9%

6.4. Repayment

