MINISTRY OF INFRASTRUCTURE
OF UKRAINE

SPILNO IN UA
PPP MANAGEMENT OFFICE

Western NIS
Enterprise Fund

Current concession projects in sea port sector of Ukraine

October 2017
Kyiv, Ukraine

WORK ALREADY PERFORMED

1. The Ministry of Infrastructure has selected pilot concession projects in port sector

2. PPP Project Management Office "SP^{3}ILNO" has been established by the Ministry and supported by Western NIS Enterprise Fund

3. EBRD and World Bank agreed to help the Ministry with the preparation of pre-feasibility studies

4. EBRD, World Bank with an institutional support of the "SP^{3}ILNO" PPP PMO lead selection of the consultants and preparation of the pre-feasibility studies

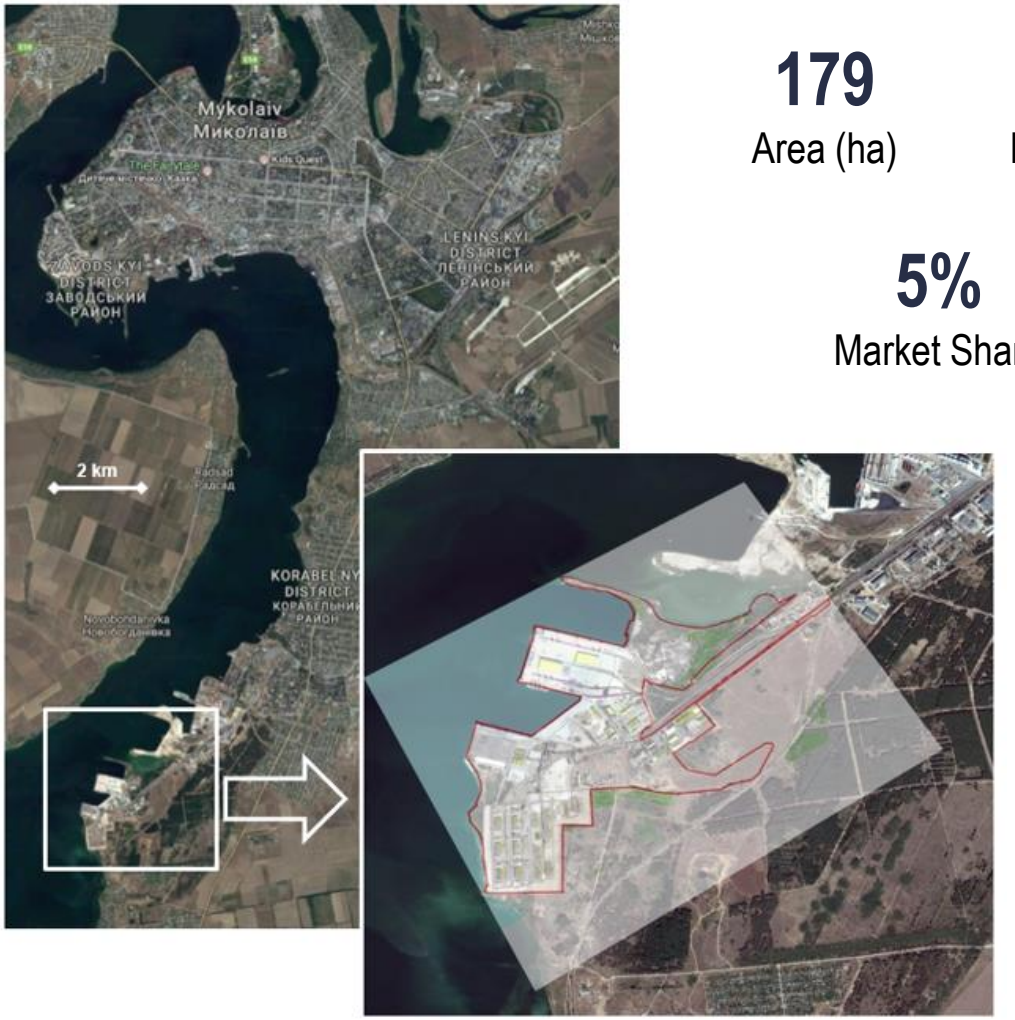
5. "SP^{3}ILNO" PPP PMO has developed Concept Notes of the projects, which were approved by the Ministry of Infrastructure, Ministry of Economy and Ministry of Finance

NEXT STEPS

1. Selecting the consultants for Full Feasibility Study preparation and Transaction advisory in cooperation with EBRD and IFC
2. Supporting the consultants team in preparation of Full Feasibility Study
3. Efficiency Analysis and approvals from the Ministry of Economy and Ministry of Finance
4. Preparation of tender documents
5. Establishing tender committee and launching the tender

SC “Olvia”
concession project

STEVEDORING COMPANY "OLVIA" AT GLANCE



179
Area (ha)

7
Berths

1.53
Quay Length (km)

10.3
Max Depth (m)

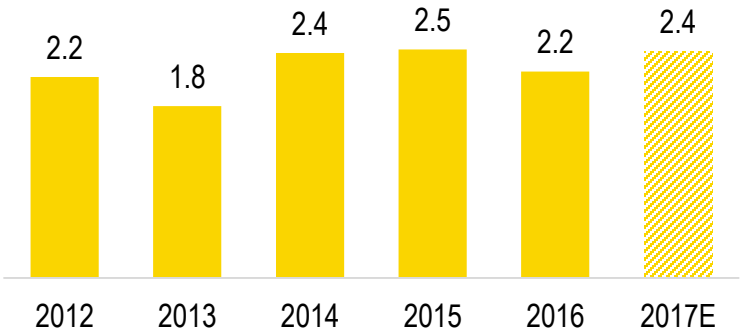
5%
Market Share

15.4
Revenue ($mln, 2016)

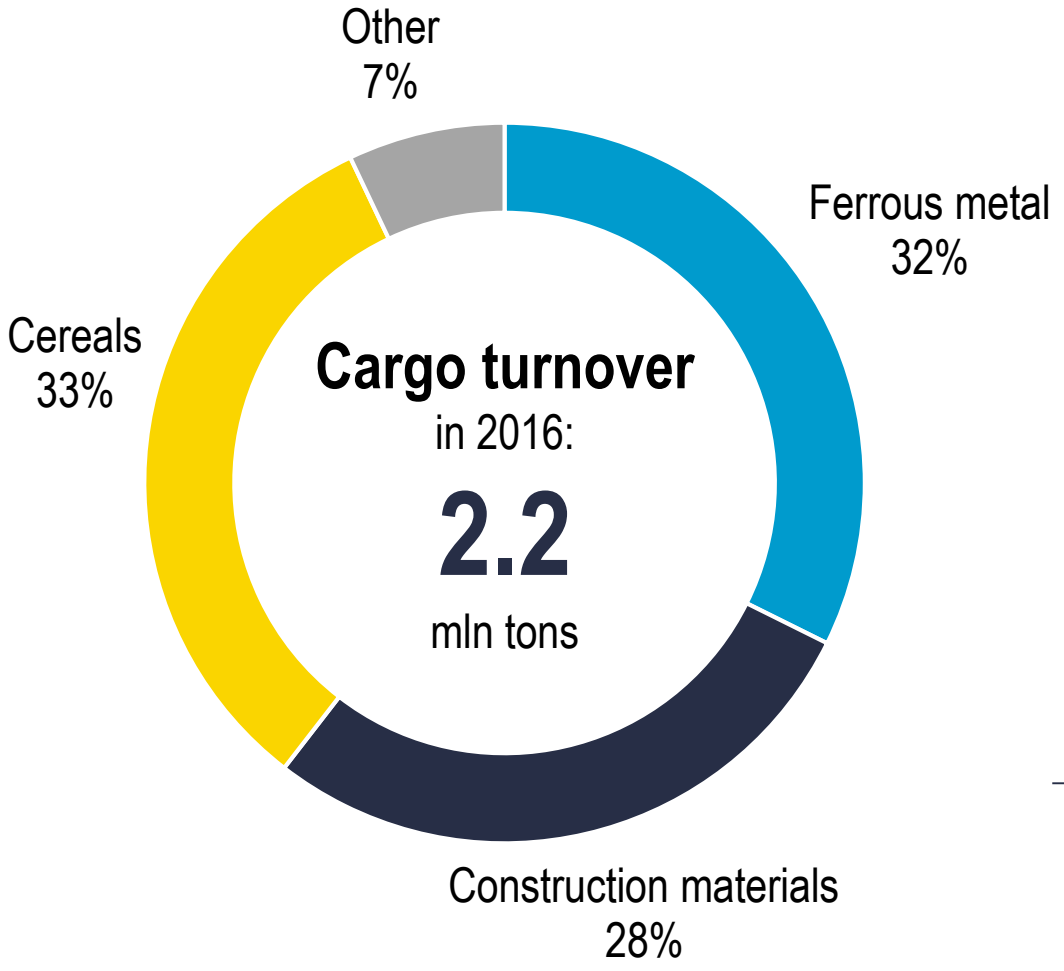
47%
EBITDA Margin (2016)

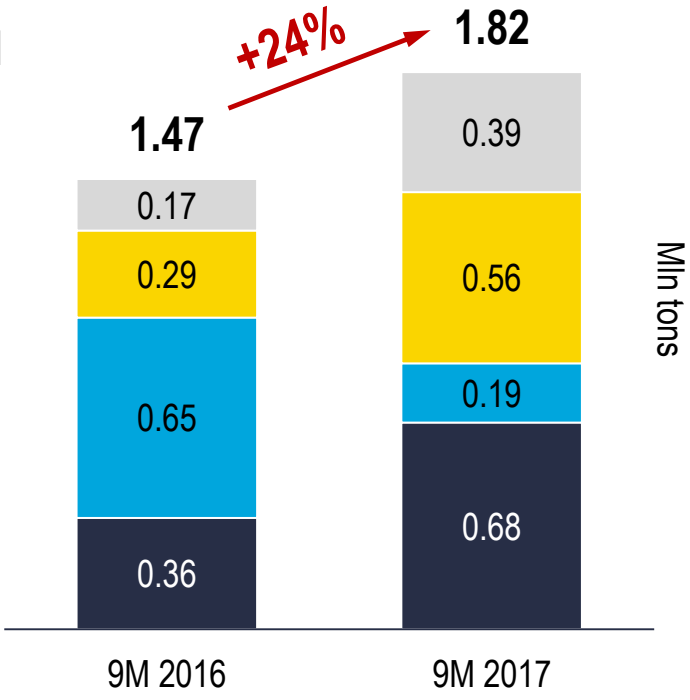
Cargo turnover

million tons



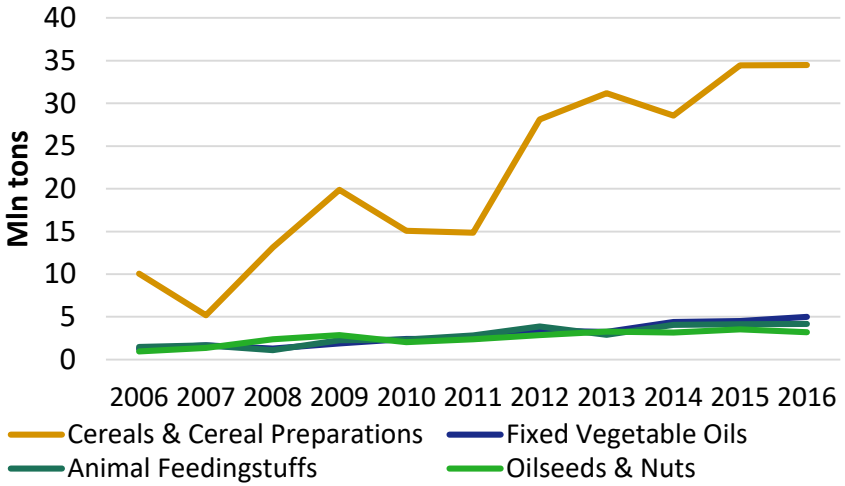
CURRENT CARGO MIX IN THE PORT



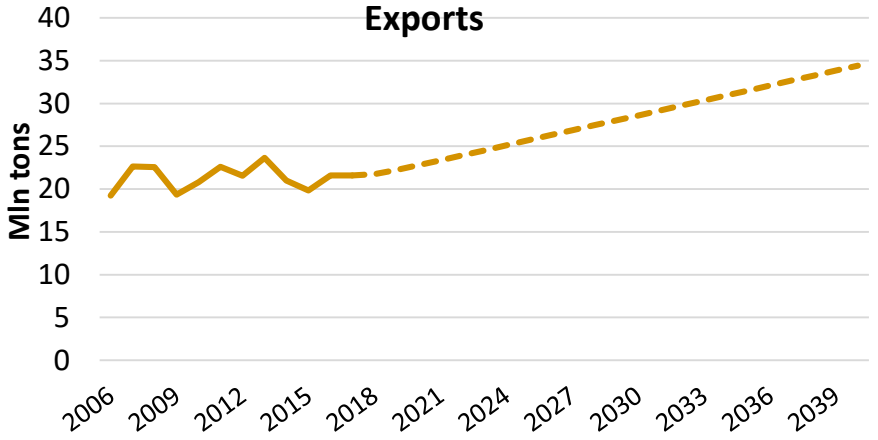


KEY CARGO MARKET FORECASTS

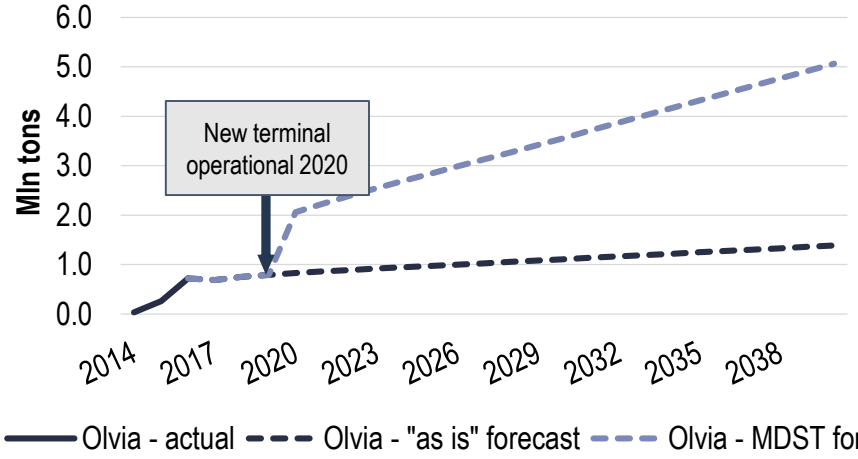
Ukraine Grain Exports



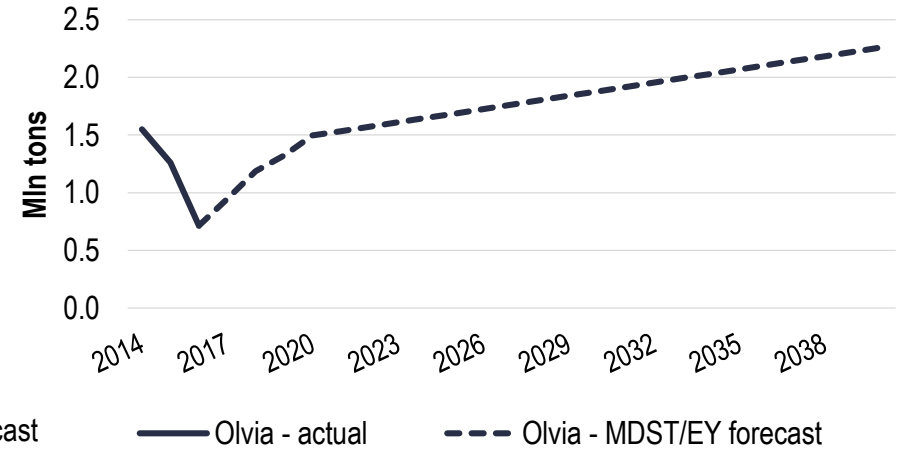
Ukraine Iron & Steel Exports



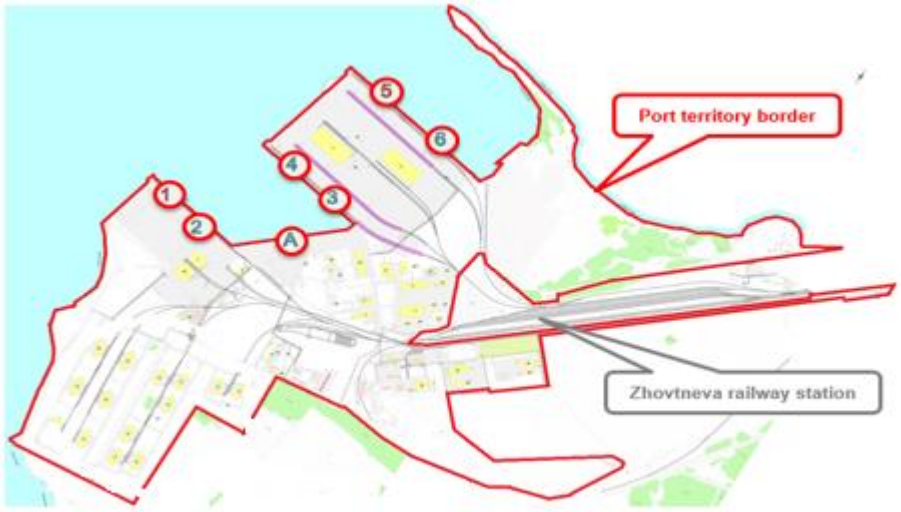
Port Olvia Traffic forecasts 2016-2040 - GRAIN

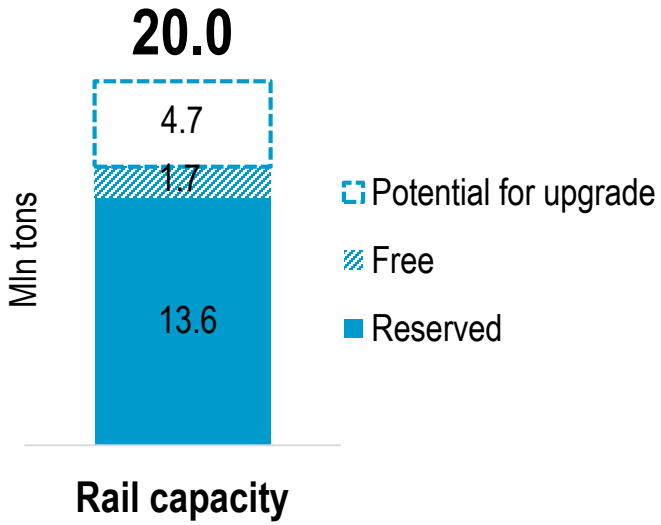


Port Olvia Traffic forecasts 2016-2040 - STEEL



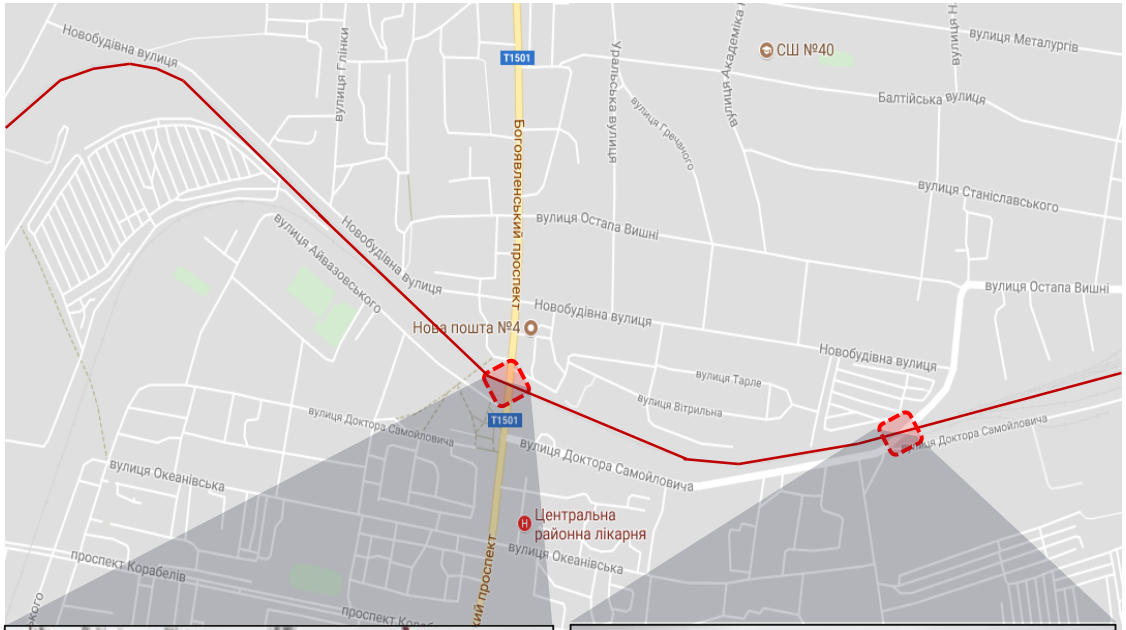
RAIL ACCESS





- Port accessed by 15 km single line branch
- Branch has major level crossing congestion issues
- At the moment Port station “Zvhotneva” can handle 15.3 mtpa (all terminals)
- 13.6 mtpa of rail capacity is reserved by other terminals
- For the last 3 years only 5.5-6.5 mtpa of rail capacity was used by all terminals
- Capacity could be increased to 20 mtpa with upgrade works
- Railway can supply Olvia with up to 1.7 mtpa with limited upgrades and additional 4.7 mtpa with station reconstruction

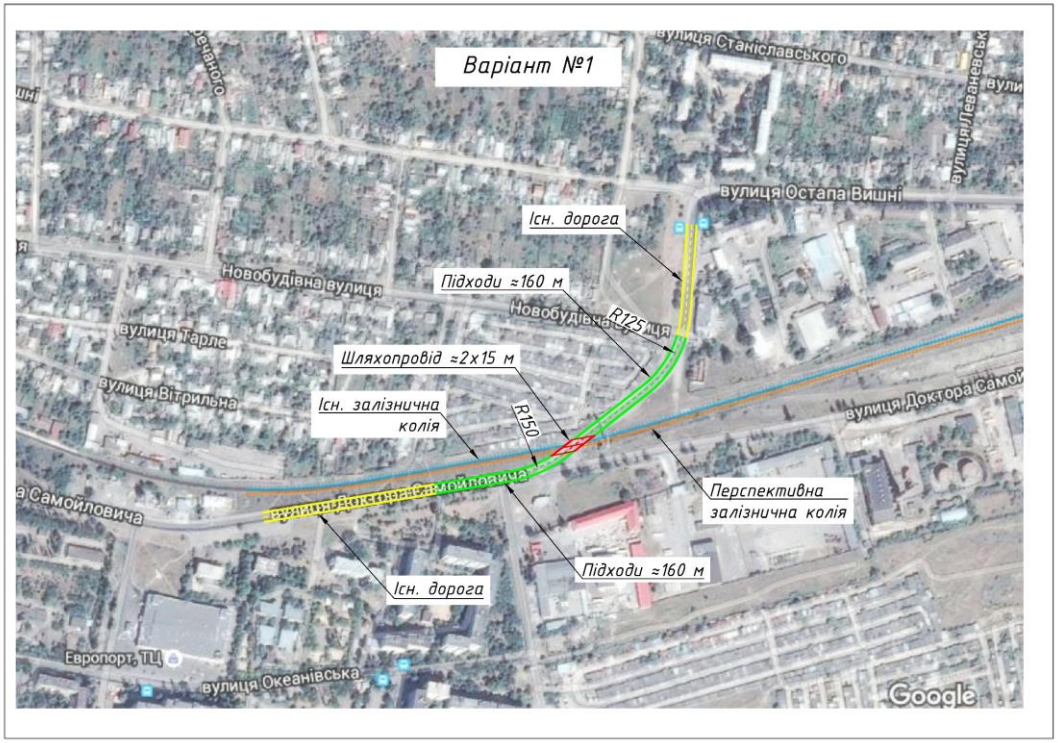
ROAD ACCESS



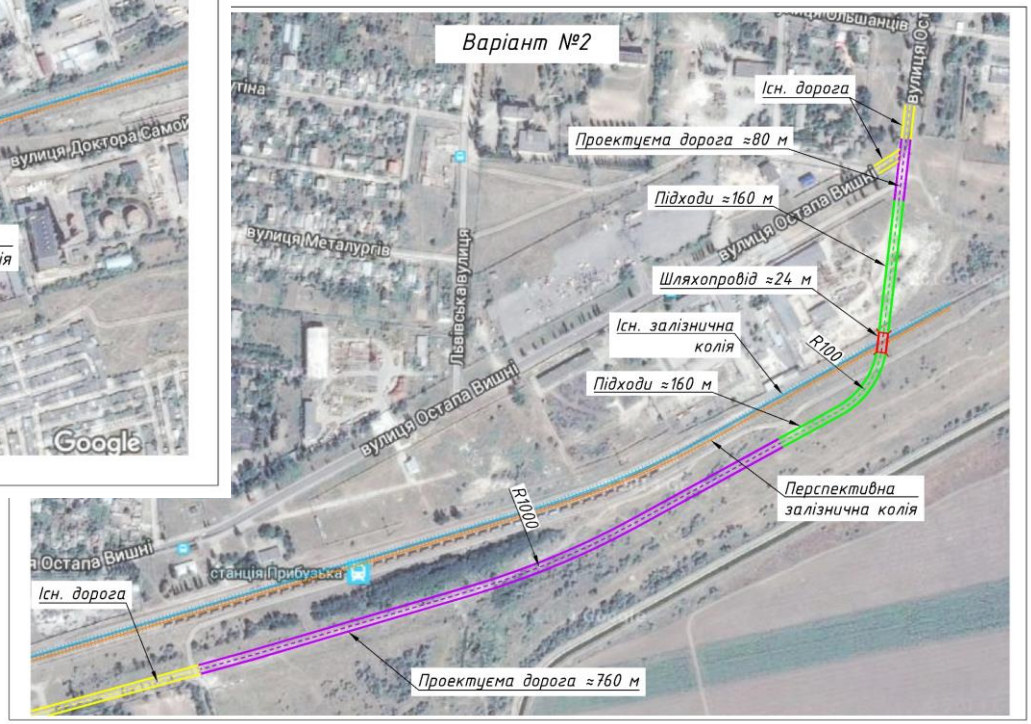
- The port has sufficient road access
- All trunk roads to Olvia run via urban city routes
- Level crossings on existing access routes create congestion
- Additional grain traffic will generate significant increases in lorry volumes

ROAD ACCESS POSSIBLE SOLUTIONS

CAPEX – $3.2 mln



CAPEX – $3.75 mln



POWER SUPPLY

- The source of port power supply is Transformer Station “Oktyabrska”
- 14 transformer substations with a total capacity of 9570 kW are located on the port territory
- The contracted allowable power is 5193 kW, including:
  - 4500 kW for Olvia
  - 693 kW for USPA
  - Total reserve – 3000 kW
- Total TS reserve in the port region is **20 MW**

1 STEVEDORING COMPANY OLVIA

OLVIA PROJECT SELECTED

Greenfield Specialized Grain Terminal North

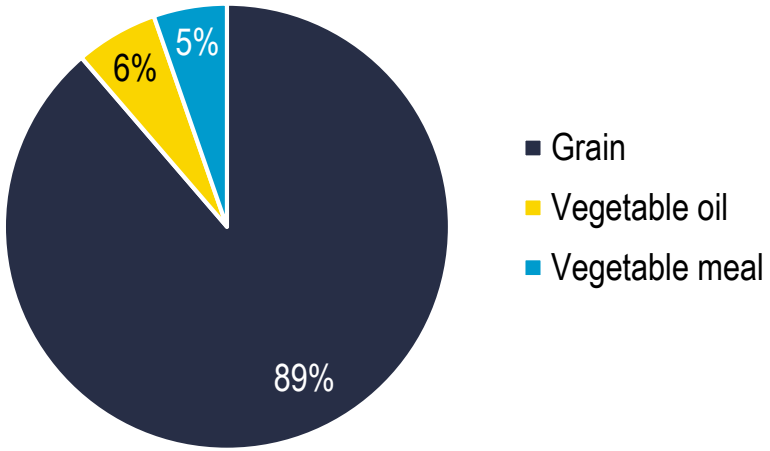
25.7
Area (ha)

3
New berths

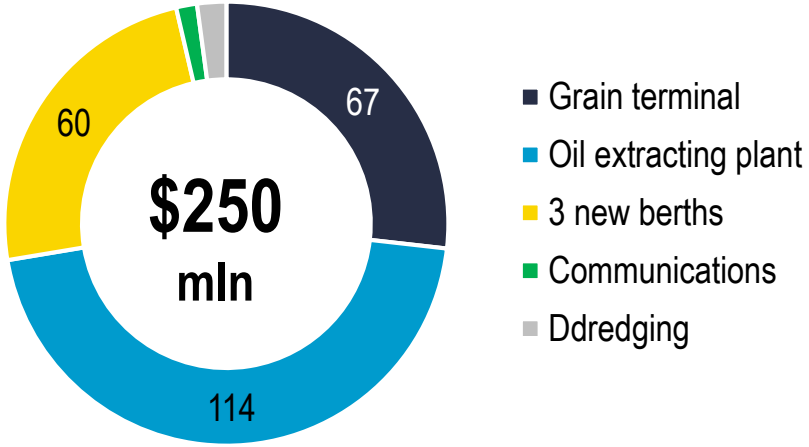
4
New Grain terminal capacity (mtpa)

0.5
New Oil plant capacity (mtpa)

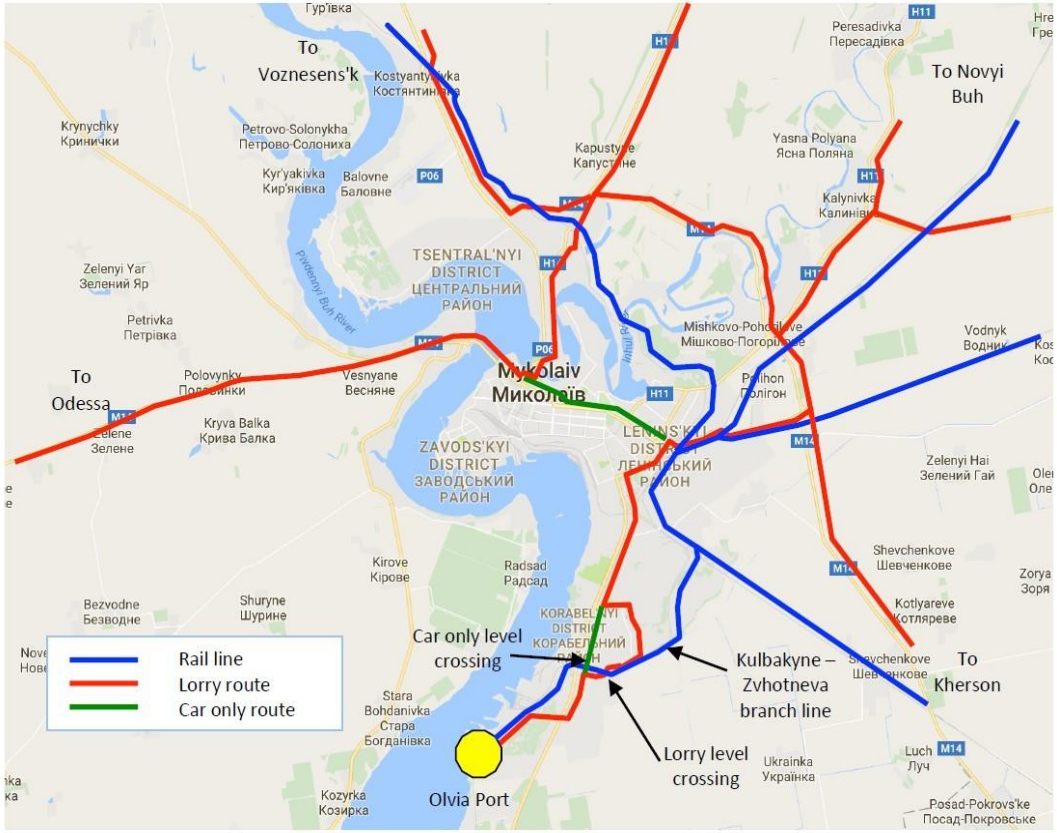
Cargo mix expected



CAPEX estimated



RAIL & ROAD DEVELOPMENT



- Existing modal split for cereals - 40% by road and 60% by rail
- The rail share of traffic arriving at the new Project terminal would be 2.2 mtpa
- New rail connection to “Zhovtneva” station with at least two unloading sidings capable of unloading 500 metre trains
- New road infrastructure and unloading facilities for lorry traffic

POWER SUPPLY DEVELOPMENT

- Project requires additional 8 MW power supply, which will require the following:
  - Reconstruction of 35 kV open switchgear in TS “Oktyabrskaya”
  - Laying of 35 kV double circuit overhead line from TS “Oktyabrskaya” to the Port Olvia (approx. 4.5 km)
  - Construction of a new 35/6 kV transformer substation
  - Laying of 6 kV underground cable lines from a new 35/6 kV transformer substation to existing Port’s 6 kV Central Distribution Point
  - Port’s 6 kV Central Distribution Point Reconstruction

CAPEX – $3.4 mln

ECONOMIC EVALUATION

Benefits:

- New independent grain terminal
- Oil extracting plant with high value added
- Sharing costs with USPA (dredging, berths)

Costs:

- Investments in the project
- Investments in access road and rail tracks outside perimeter
- Investments in power supply
- Investment in overbridge (optional)

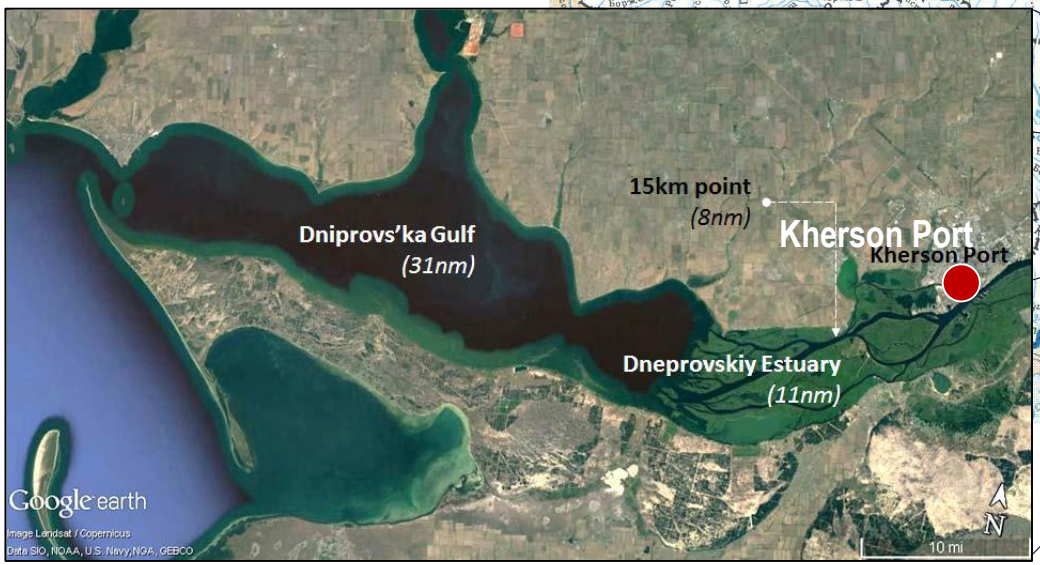
Preliminary conclusions:

- OLVIA Project is a viable investment opportunity
- Project with sufficient NPV and IRR

Kherson SCP
concession project

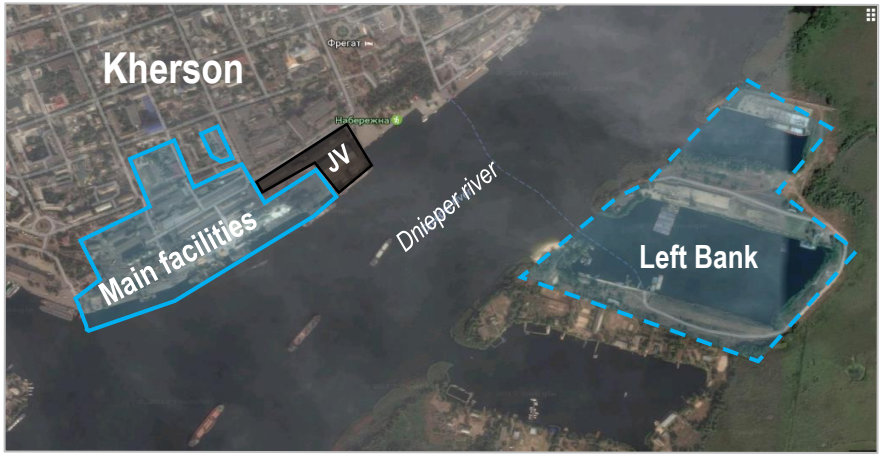
PORT HAS FAVORABLE LOCATION

Kherson Sea Commercial Port is located on the both banks of the Dnieper river, key inland waterway in Ukraine going through main agricultural and industrial regions of the country



28 km away from the Dnieper-Bug estuary and 90 km from the Black Sea. (46°38' N; 32°37' E)

PORT KEY FACILITIES

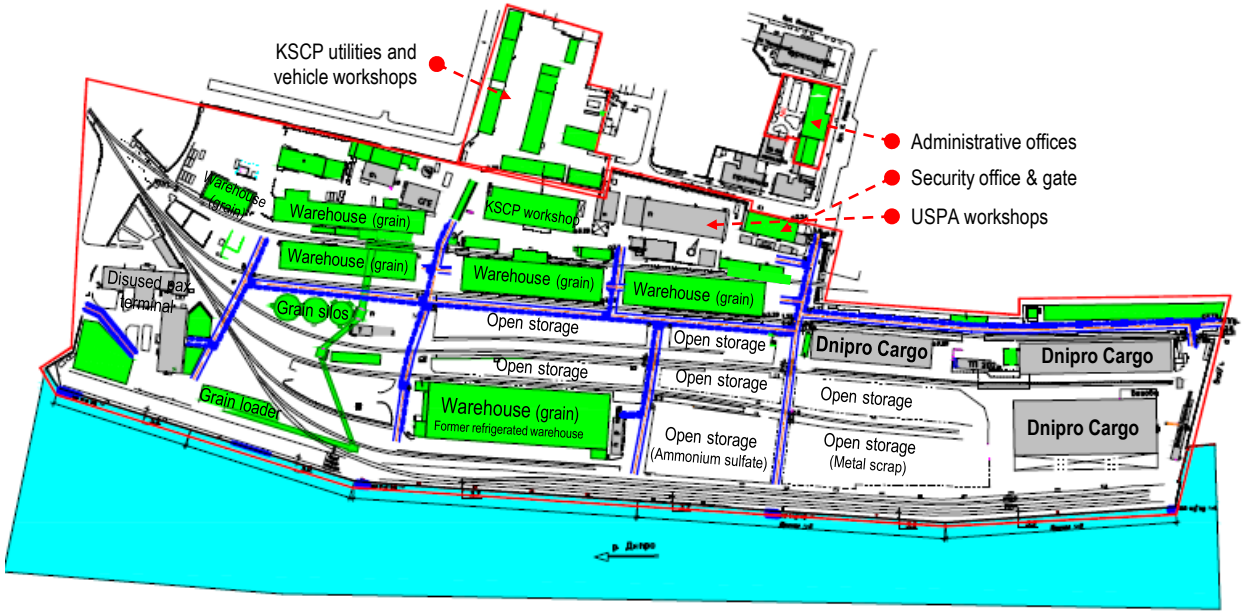


4
Berths

600
Quay Length (m)

47
Total area (ha)

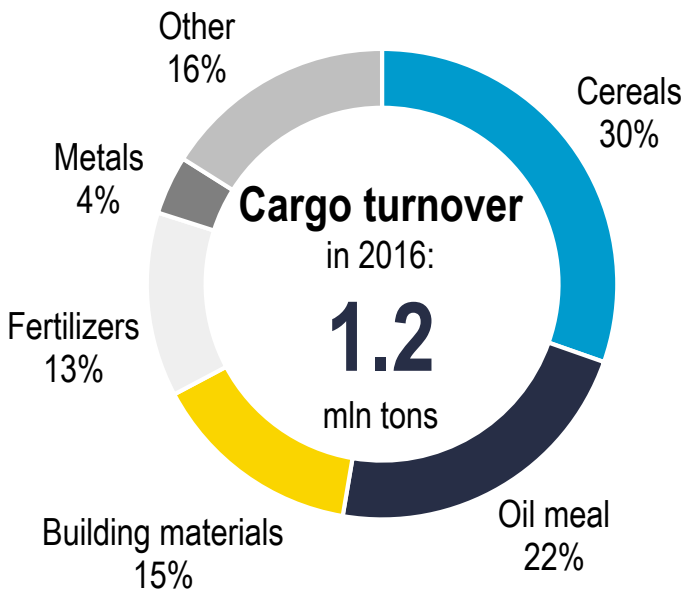
7.6
Max Depth (m)

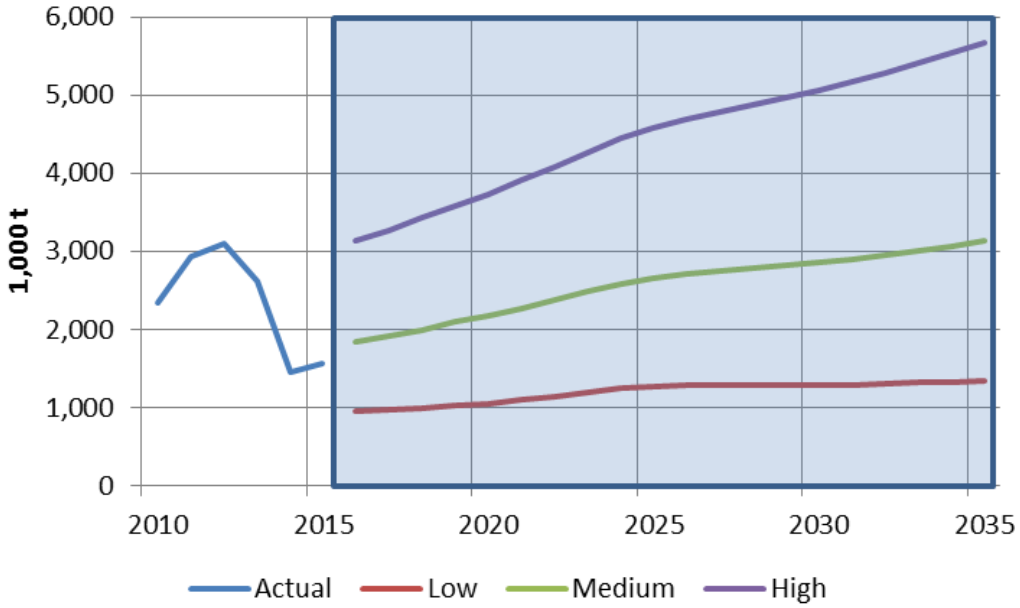


- Right bank has 15 ha area
- Warehouses provide ~16500 m^2 of covered storage and ~20000 m^2 open storage areas
- Silos of ~12000 tons static capacity are available
- The port is equipped with 14 gantry cranes (5-20 tons) and 6 floating cranes (15-150 tons)
- KSCP operates a fleet of 13 barges, 11 of which are 1078 DWT, but there is one unit of each of 3000 DWT and 2500 DWT
- Fleet of forklifts, trucks and bulldozers is used for horizontal transport

HANDLED CARGO MIX AND FORECASTS

- KSCP handles a mix of cargoes: grain, metals, break bulk, etc.
- Cargo flows can increase for all commodities up to 3-5 mln tons per year
- Grain is a very promising commodity
- KSCP has a typical regional cargo flow structure





HUMAN RESOURCES

732
Present staff number

KSCP is overstaffed

Project staff numbers will be rationalized in a negotiation process with the Labor Unions taking into account their preliminary requirements:

- Collective Employment Agreement unchanged for next 5 years
- No forced staff reduction for 5 years (natural reduction & re-training acceptable)
- Level of wages unchanged for next 3 years

Possible solutions:

- Severance payments
- Early retirement payments
- Training/outplacement costs

MULTIMODAL PORT ACCESS

Rail:

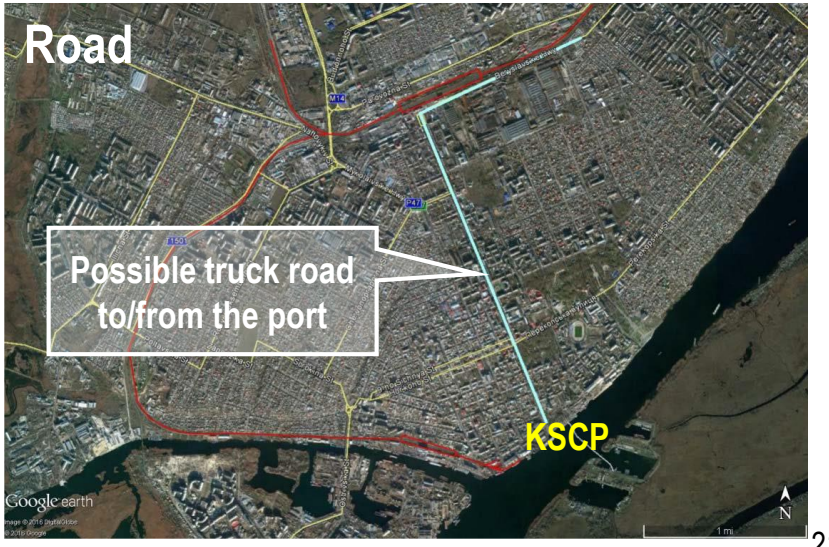
- Rail operations are hampered due to single rail track to KSCP
- By-passes needed outside the port
- $5 mln CAPEX estimated for rail upgrade

Road:

- Road access to the port run via urban city routes
- No dedicated truck route to/from port
- $3 mln CAPEX estimated to upgrade 6 km of existing road

River:

- River traffic underdeveloped but very promising
- EIB is ready to finance modernization of Dnieper river locks to increase river cargo flow



LEFT BANK

Characteristics:

- Depth is 3.5 to 5.5 m
- No existing road or rail connection
- Weak subsoil conditions
- Surrounded by environmentally protected area
- Capital dredging needed to increase water depth
- Can be used for parking barges / floating storage
- Opportunity for further port transshipment development

Possible future asset in concession

STORAGE FACILITIES AND TERMINAL EQUIPMENT

Current storage capacity hampers port throughput:

- Limited and outdated storage capacity (i.e. grain)
- Warehouses often filled with long-stay shipments
- Low storage tariffs do not motivate short dwell times

Condition of current terminal equipment:

- Old and outdated
- Capacity not used efficiently
- Modern cargo handling equipment lacking
- Poor communications / coordination strongly affects KSCP productivity

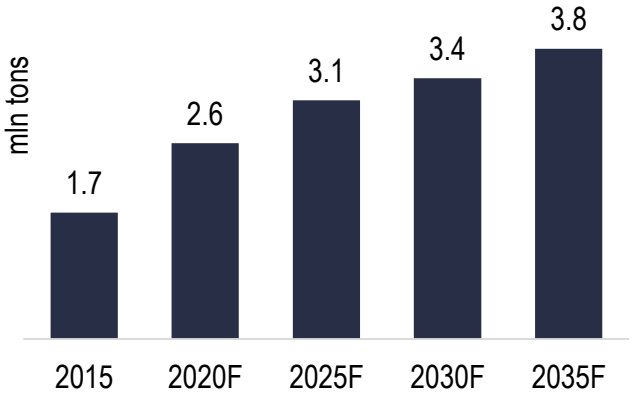
EXISTING JOINT VENTURE

- "Dnipro Cargo" is an existing cargo handling operating company inside the KSCP area
- Joint Activity Agreement with KSCP and USPA is signed until 2028
- "Dnipro Cargo" handled almost 400 000 tons of cargo – mainly sunflower seeds – through its KSCP terminal last year
- "Dnipro Cargo" employs 60 staff at the terminal and occupies 3 warehouses close to berths #5 and #6
- Assets operated by "Dnipro Cargo" according to JV agreement are not the concession object

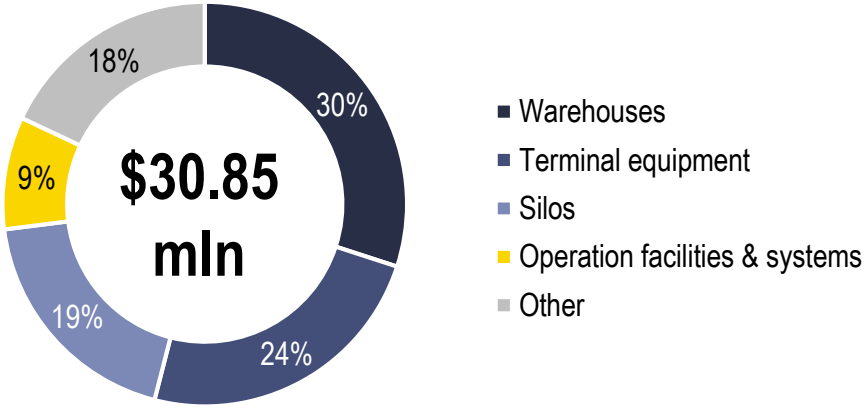
PORT DEVELOPMENT

SCENARIO A: Mixed cargo port with grain high + other cargo medium forecast

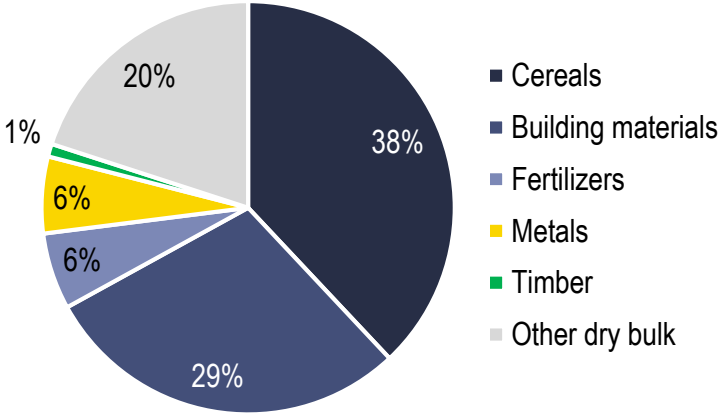
Cargo turnover forecast



CAPEX estimated



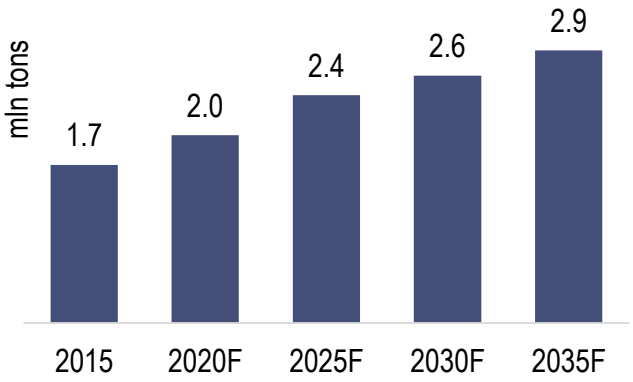
Cargo mix expected



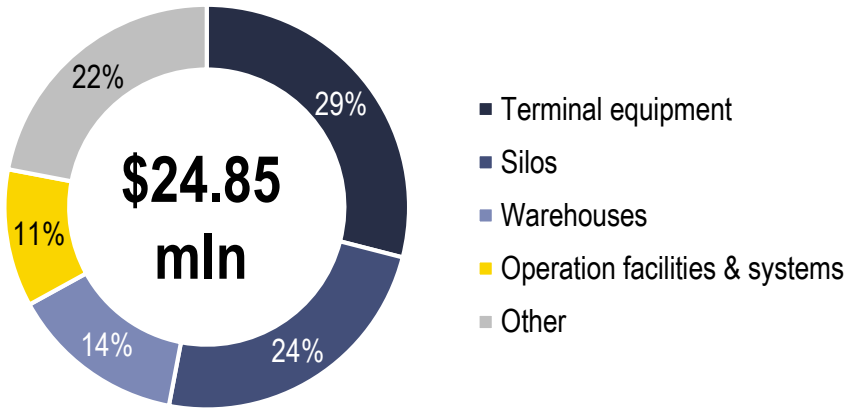
PORT DEVELOPMENT

SCENARIO B: Mixed cargo port with grain high + metal high + other cargo low forecast

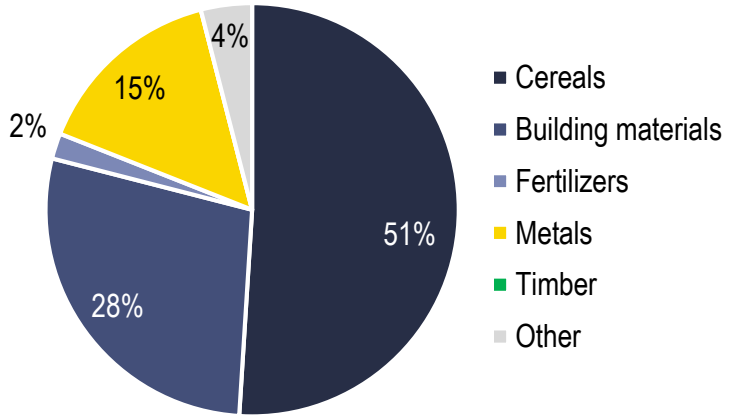
Cargo turnover forecast



CAPEX estimated



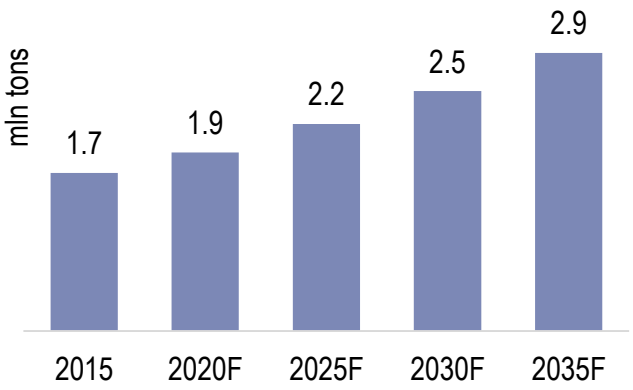
Cargo mix expected



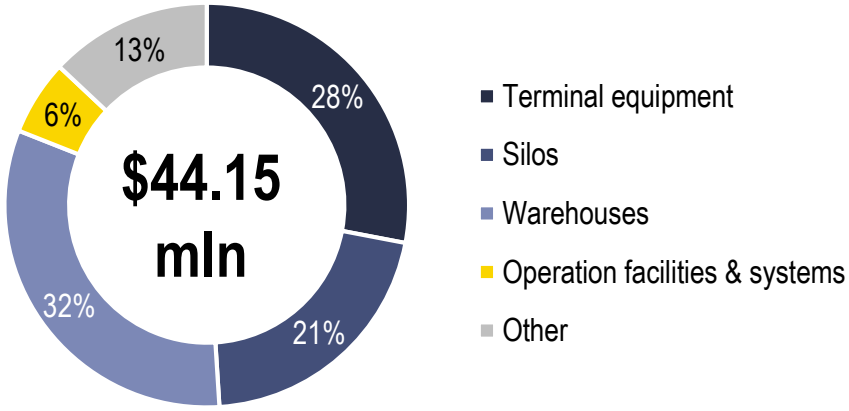
PORT DEVELOPMENT

SCENARIO C: Specialized port with grain only

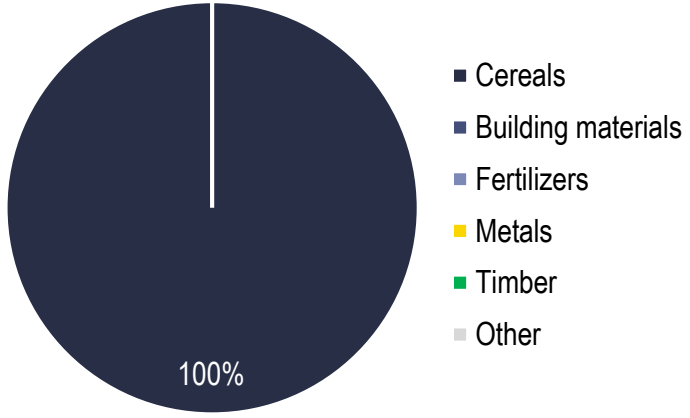
Cargo turnover forecast



CAPEX estimated



Cargo mix expected



ECONOMIC EVALUATION

Benefits:

- Reduced operating expenses
- Labor savings costs
- Reduced pilferage/damage of cargoes
- Reduced handling times vessels
- Reduced waiting times vessels

Costs:

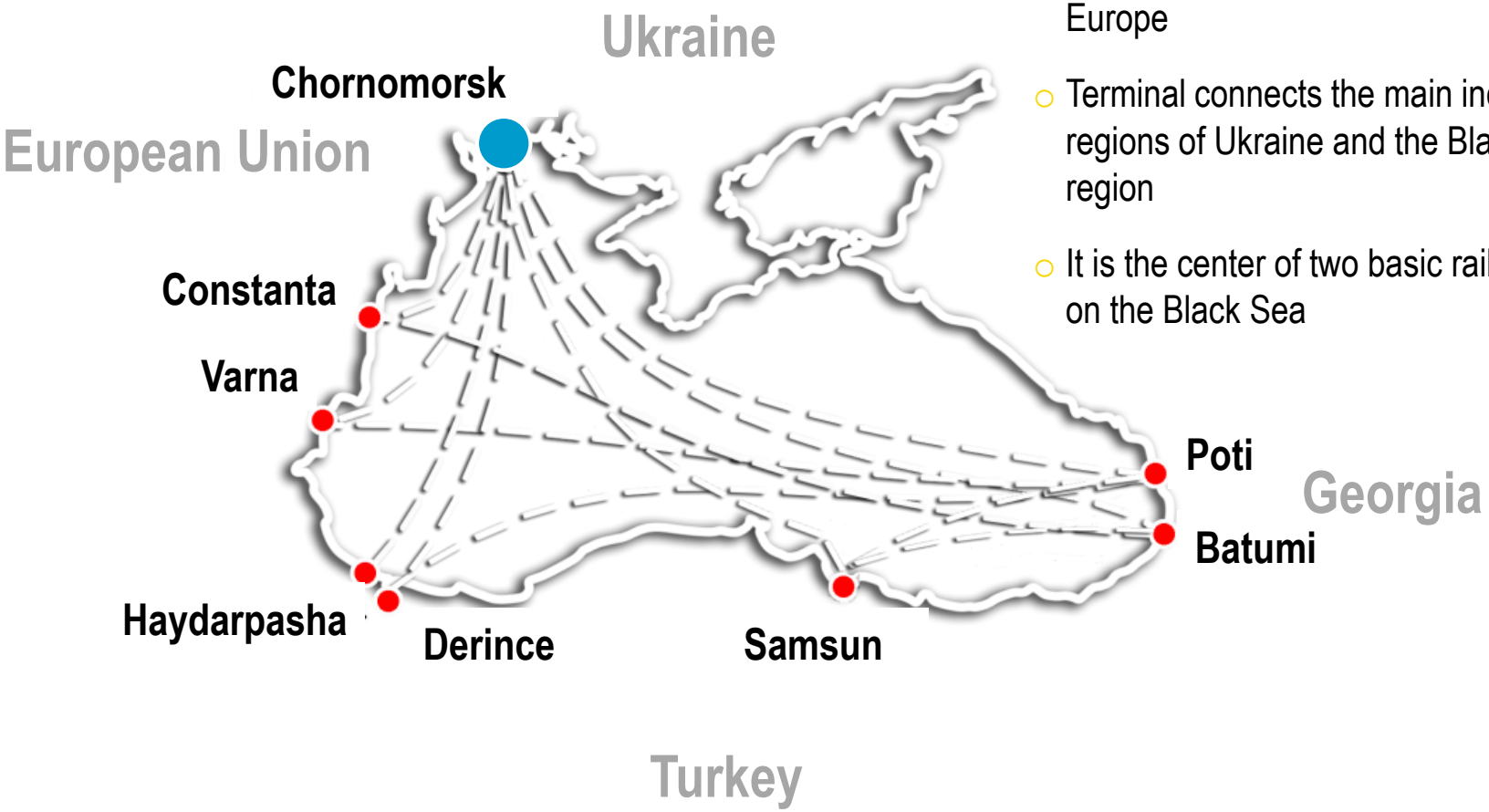
- Investments in KSCP
- Investments in access road and rail tracks outside perimeter
- Severance payments / training costs labor

Preliminary conclusions:

- All scenarios are a viable proposition
- No scenario stands out
- Slight preference for Scenario A (mixed cargo port) based on NPV.

Ferry Terminal
concession project

TERMINAL IS LOCATED ON THE INTERSECTION OF INTERNATIONAL TRANSPORT CORRIDORS



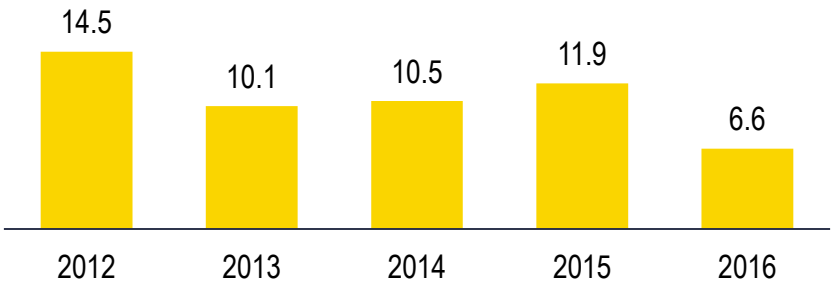
- Favorable location at the intersection of transport corridors between Asia and Europe
- Terminal connects the main industrial regions of Ukraine and the Black Sea region
- It is the center of two basic rail ferry lines on the Black Sea

TERMINAL HAS A DEVELOPED OFF-SIDE INFRASTRUCTURE

- Sea Commercial Port of Chornomorsk is located on the both banks of Sukhyi estuary, 12 miles South-West of Odessa
- It is one of the largest ports in Ukraine
- The port is specialized on handling grain, iron ore and ro-ro vehicles

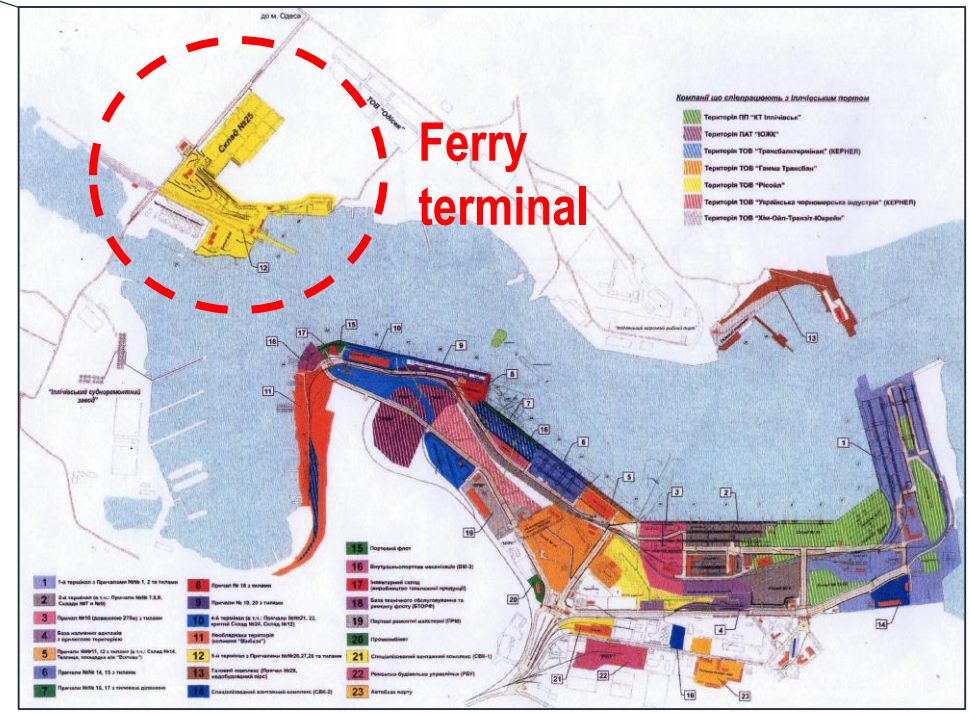
Cargo turnover

Million tons

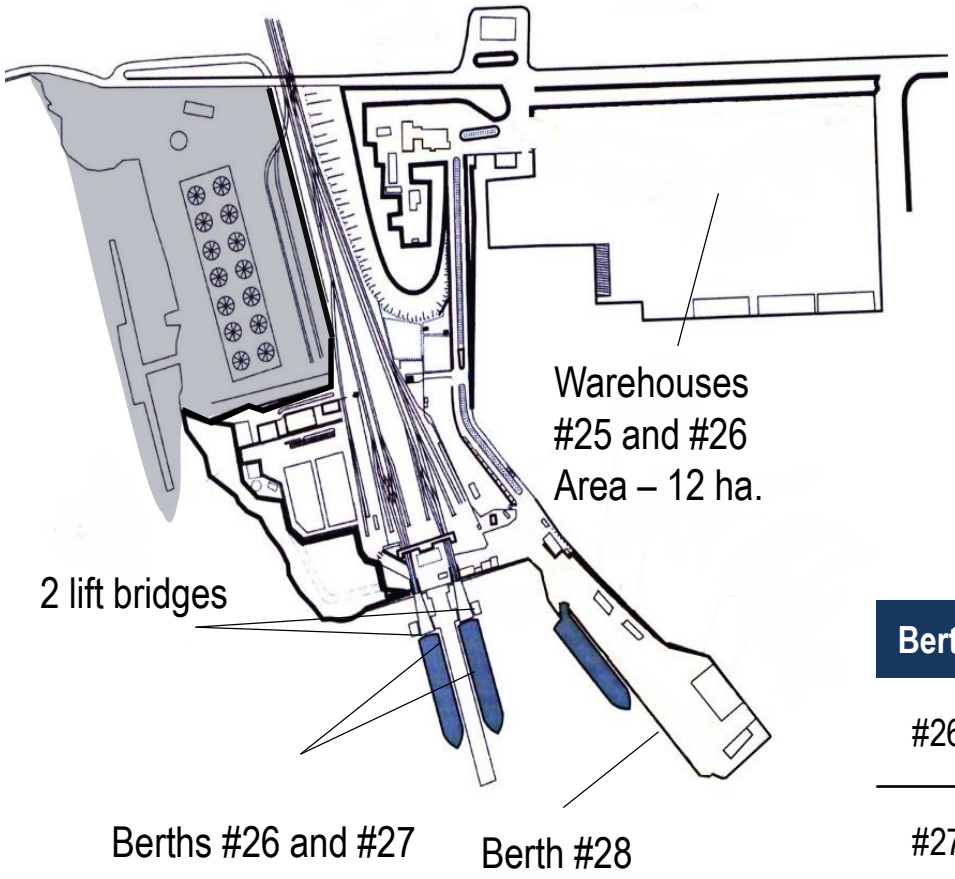


Revenue
2016
$44 mln

EBITDA margin
2016
24%



UNIQUE FACILITIES WITH SUFFICIENT CAPACITY



Annual capacity

4.5 mln tons
cargo in railway wagons

150 000
heavy duty trucks

250 000
units of vehicles

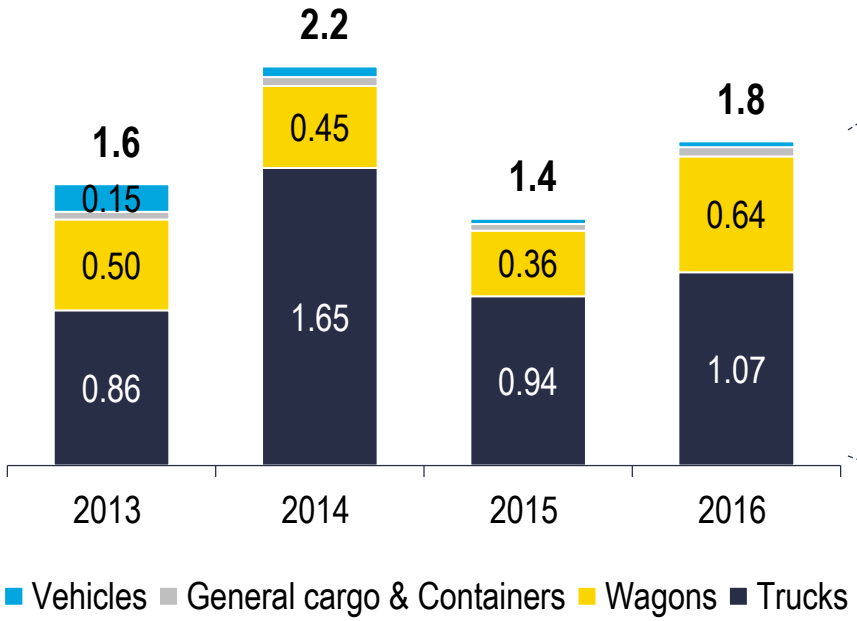
Main facilities

Berth	Length, m	Depth, m	Cargo type
#26	210	9.6	railway wagons, trucks, general, containers
#27	210	9.6	railway wagons, trucks, general, containers
#28	270	9.6	vehicles

DIVERSIFIED & FLEXIBLE CARGO FLOW

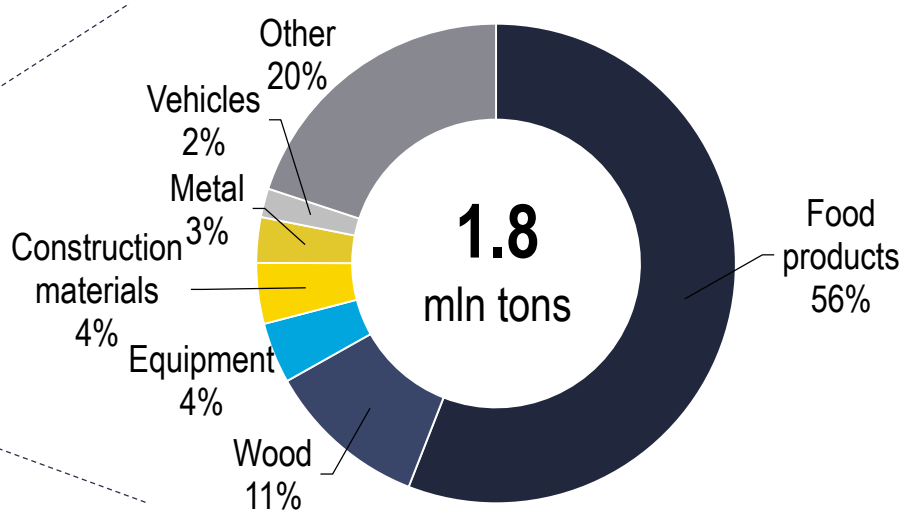
Cargo handling dynamics

Million tons



Cargo structure in 2016

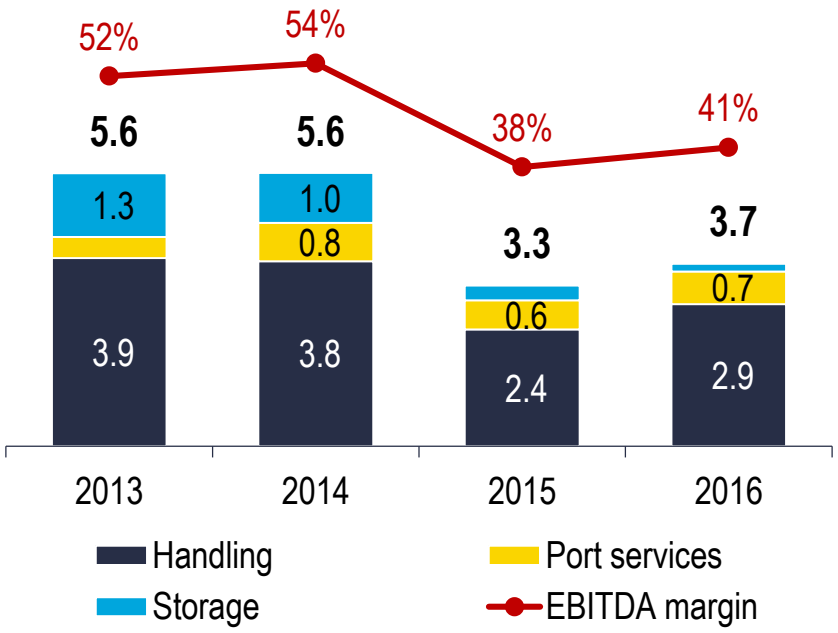
Million tons



SUSTAINABLE FINANCIAL POSITION

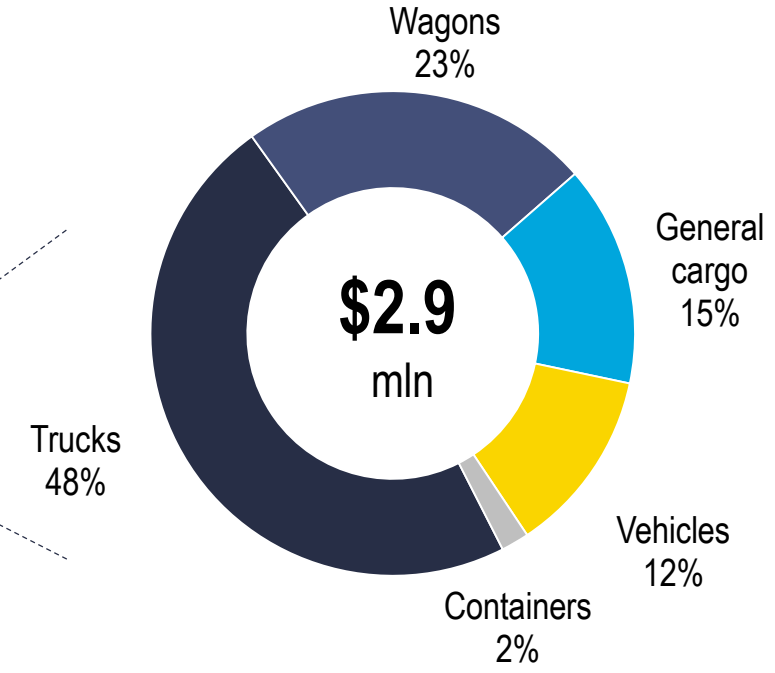
Financial indicators

Millions USD



Handling revenue structure

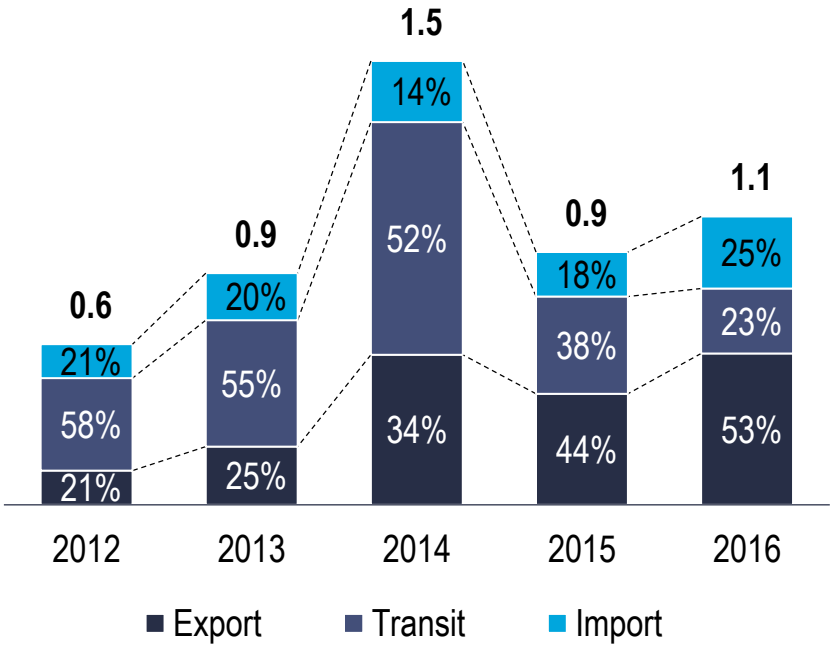
Million tons



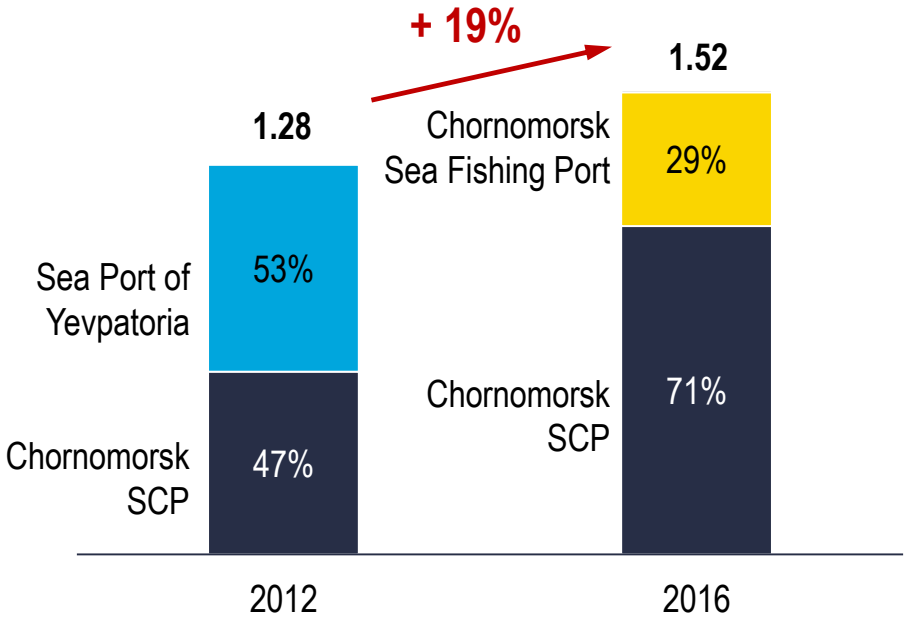
TRUCKS SEGMENT

Terminal operations by direction

Million tons



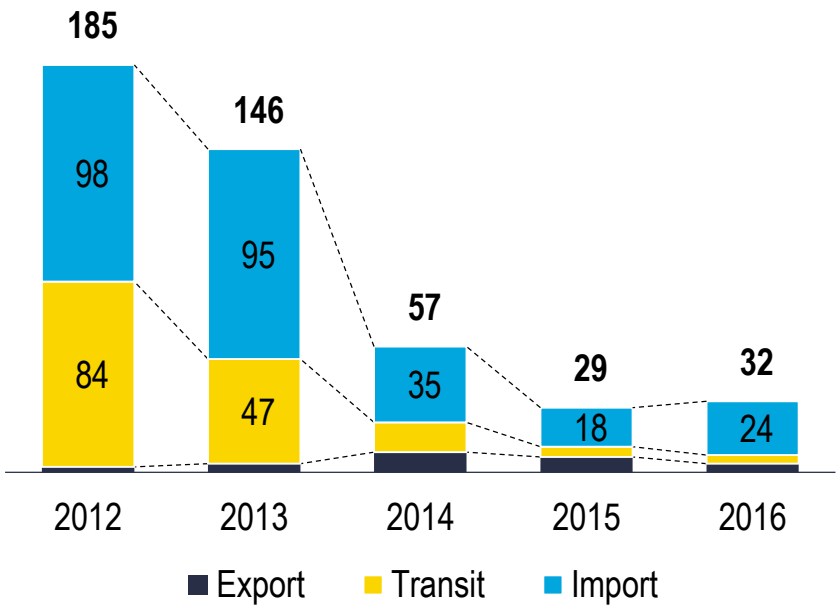
Market structure



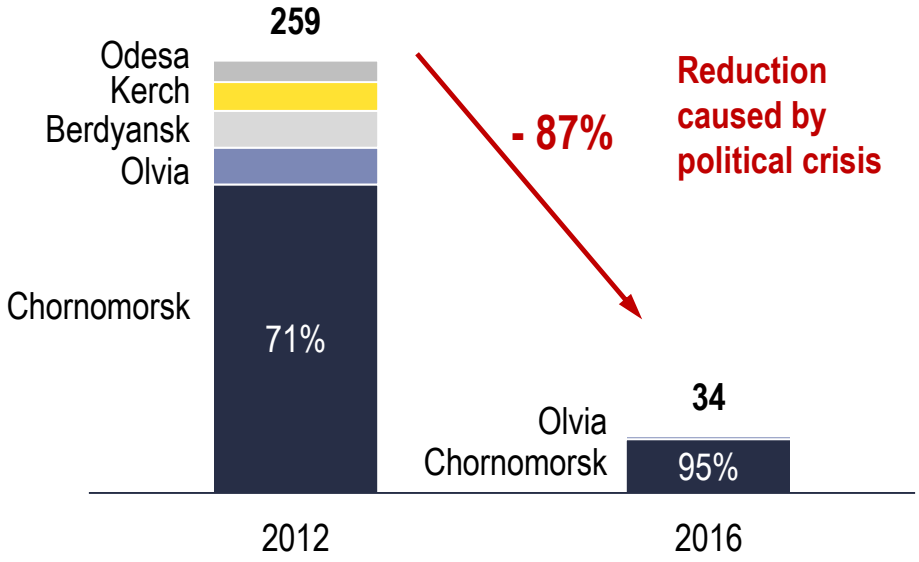
VEHICLES SEGMENT

Terminal operations by direction

Million tons



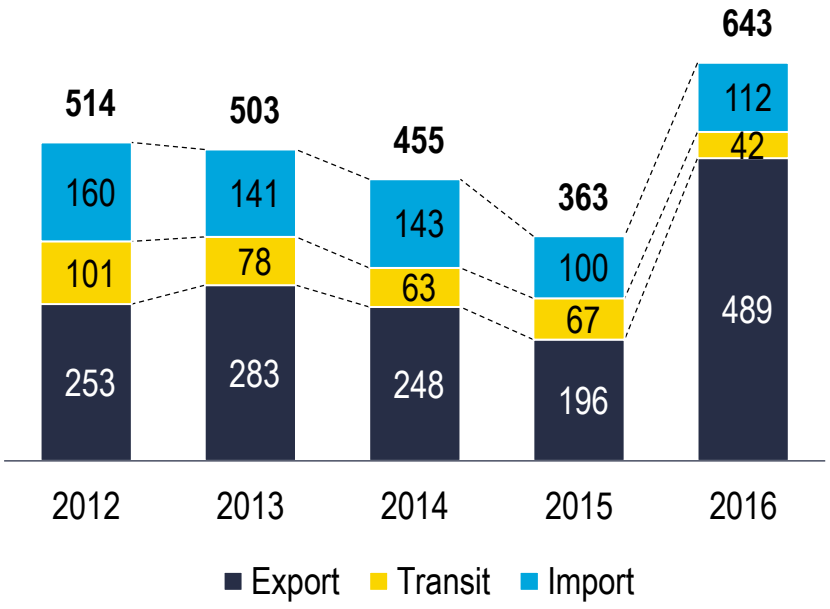
Market structure



RAILWAY WAGONS & GENERAL CARGO SEGMENTS

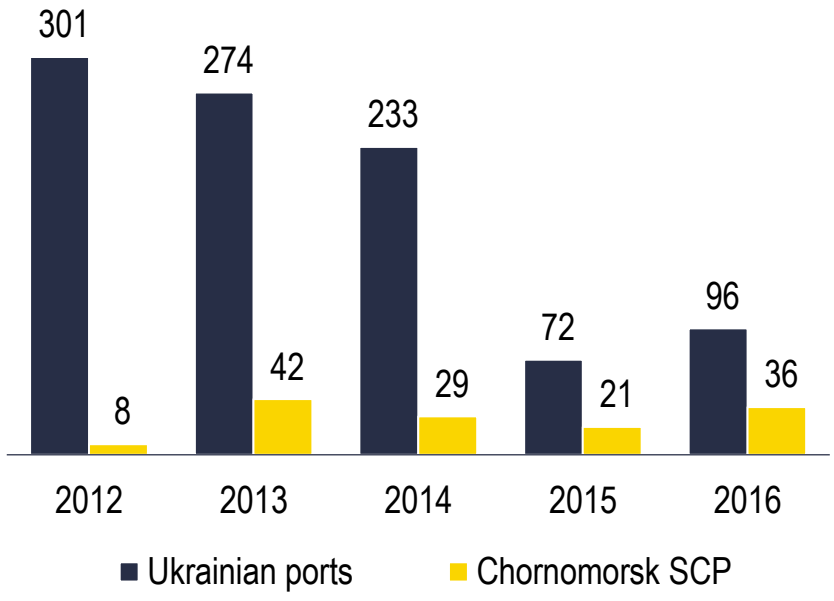
Terminal operations by directions

Million tons



Perishable goods handling in Ukraine

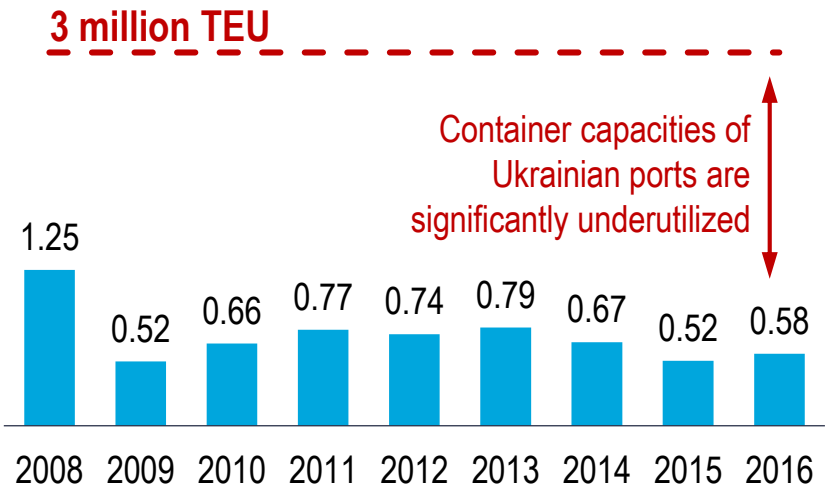
Million tons



PROMISING SEGMENTS: CONTAINERS & PASSENGERS

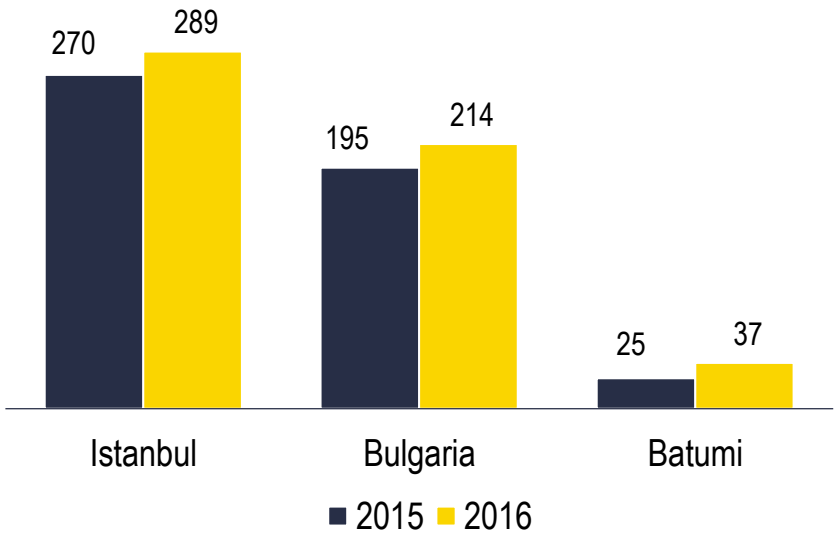
Containers operations in Ukrainian ports

Millions of TEU



Tourists flows from Ukraine

Thousand of people



INVESTMENT OPTIONS

Trucks parking area

Vehicle processing area

New passengers terminal

Investment projects

Passengers — Terminal for passengers and drivers

Trucks — Parking for trucks

Cars — Vehicle processing station for the preparation of the cars for sale

PROJECT TIMELINE

DURATION	MEASURE
2 months	Consultants selection process
5 months	Full Feasibility Study
3 months	Tender documents preparation
5 months	Tender approval
4 months	Bidding process and negotiations

MINISTRY OF INFRASTRUCTURE OF UKRAINE

SPILNO PPP MANAGEMENT OFFICE

Western NIS Enterprise Fund

European Bank for Reconstruction and Development

IFC International Finance Corporation WORLD BANK GROUP

easyBUSINESS IN UA

SPILNO IN UA

PPP MANAGEMENT OFFICE

WWW.SPILNO.IN.UA

TRANSACTION SCHEME