



JUNE 2015
MINISTRY OF INFRASTRUCTURE
OF UKRAINE

INVESTMENT OPPORTUNITIES





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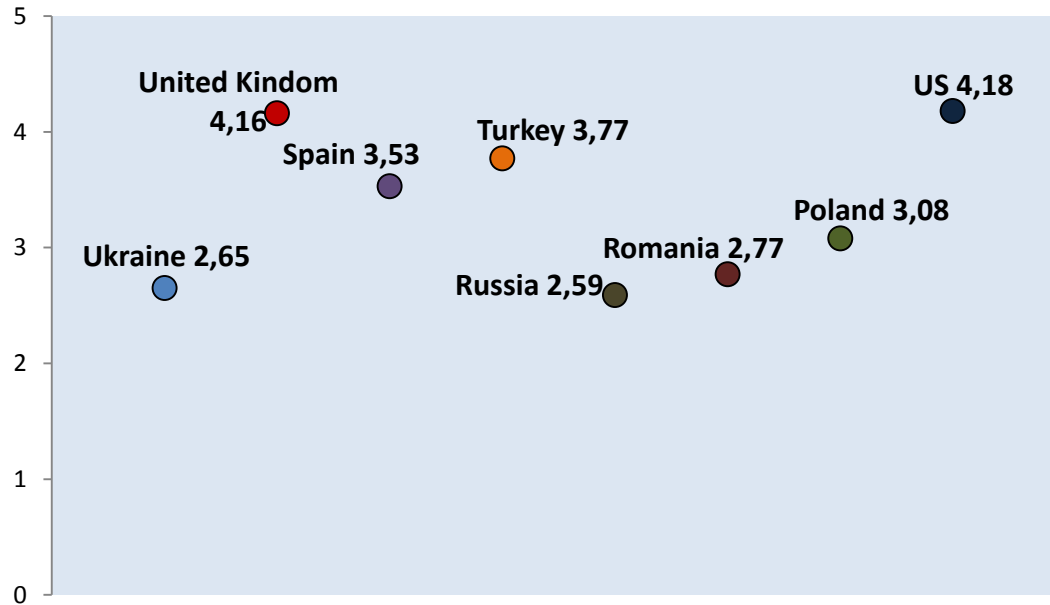


I. POTENTIAL OF INFRASTRUCTURE DEVELOPMENT IN UKRAINE

UKRAINE'S TRANSPORT LOGISTICS AND INFRASTRUCTURE



Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high) in 2014



Source: World Bank

Table of inter country transport infrastructure (railways, airports, river ports, seaports, roads) in 2014

Country	Railway, km	Roads, km	Seaports	River ports	Airports
Poland	19599	412264	6		15
Romania	22298	85362	8	17	1
Ukraine	21600	169 600	13	16	19
Spain	16 026	16204	66		58
Russia	85 000	933000	63	30	329
Turkey	10991	426906	35		54

Source: Wikipedia

Well-designed infrastructure investments can raise economic growth, productivity, and land values, while also providing significant positive spillovers to areas such as economic development, energy efficiency, public health, and manufacturing.



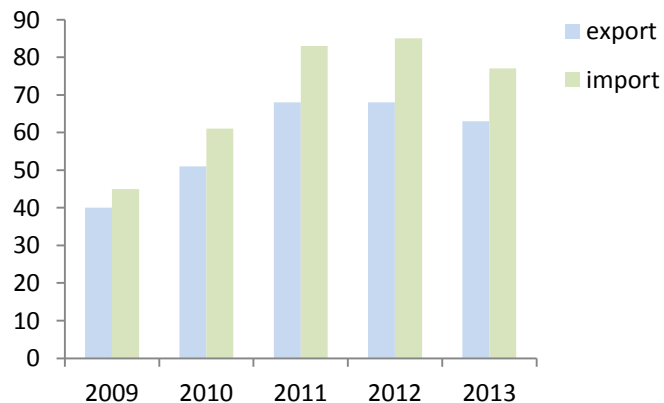
UKRAINE STRATEGIC LOCATION PROVIDES OPPORTUNITIES FOR TRANSPORTATION INFRASTRUCTURE DEVELOPMENT

Map of Pan-European transport corridors (III, V, VII, IX)



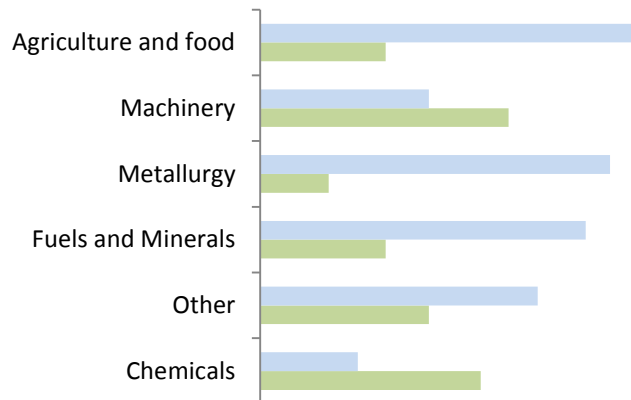
- ❑ Four out of ten Pan-European transport corridors (III, V, VII, IX) and other major transit routes (Gdansk-Odessa, Europe-Caucasus-Asia, Europe-Asia) cross Ukraine.
- ❑ Development of international trade stimulates infrastructure improvement in Ukraine.
- ❑ Agriculture sector expansion increases freight transportation volumes. In 2014 share of agriculture products in total export made 31.5%.
- ❑ Ukraine is seeking significant further development of its transportation networks. This relates primarily to international transportation corridors: seaports, railways, airports and motorways.

Export-Import dynamics in Ukraine 2009-2013, bn. USD

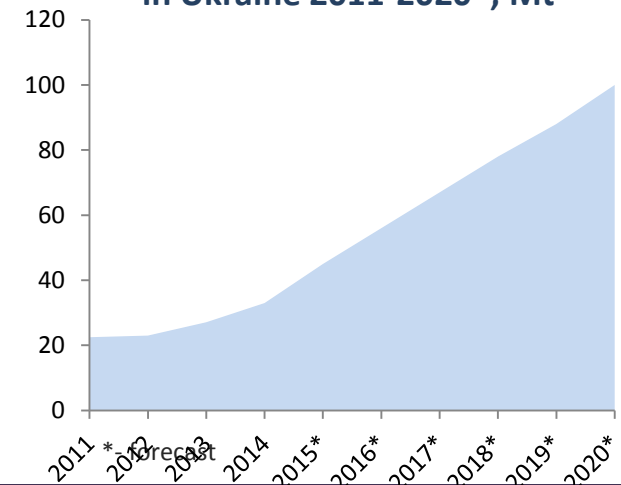


Source: State Statistics Service of Ukraine; Ministry of Agrarian policy and Food of Ukraine

Ukraine's merchandise export import structure 2014



Export of grain forecast in Ukraine 2011-2020*, Mt

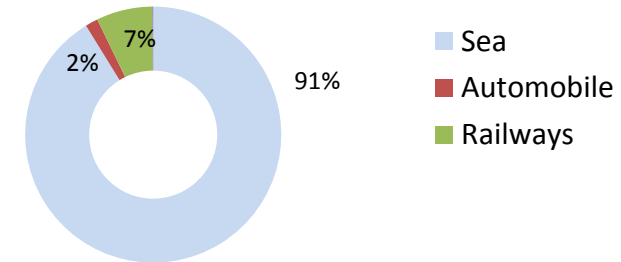




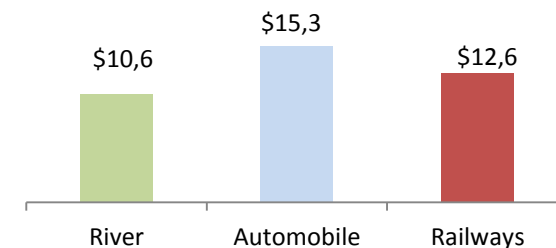
GRAIN EXPORT TRANSPORTATION STRUCTURE IN UKRAINE

- ❑ In 2013/14 MY Ukraine exported 33 Mt of grain, it was possible due to the biggest grain harvest Ukraine ever produced – 63.1 Mt. As a result in 2013/14 MY Ukraine became #3 world largest grain exporter following the USA and EU.
- ❑ The largest export markets: Middle East, European Union, North Africa and South-East Asia, CIS, Americas and other countries.
- ❑ Biggest international companies operating in Ukraine: ABCD (ADM, Bunge, Cargill, Louis Dreyfus) and Glencore.
- ❑ Road transport carries 36% in bulk grain transport. The smaller the distance, the higher share of trucks in grain transport.
- ❑ Railways are the most important sector in grain transportation to the seaports. Grain hoppers, with 13,562 units as of August 2014, account for 14% of Ukraine's freight wagon fleet. These grain hoppers are very old, with an average age of 26 years and 27% of them are older than the 30 year normative period.
- ❑ The total capacity of sea grain loading facilities reaches 35 Mt. More than 91% of grain trade in Ukraine goes through seaports. In 2013/14 Ukrainian ports transshipped 33Mt of grain products out of a total exported.

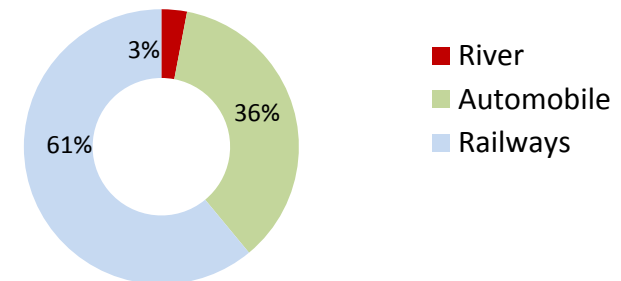
Grain export transportation structure in Ukraine 2014



Grain export transportation costs 650 km \$/t in Ukraine 2014



Grain transportation structure to the seaports in Ukraine 2014



Source: State Statistics Service of Ukraine



REFORM TARGET

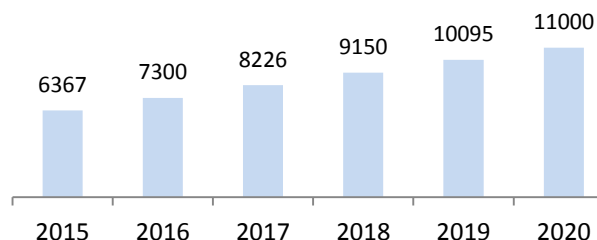
- ❑ According to the Ministry of Agrarian policy and Food of Ukraine the volume of grain export in 2020 will reach 60 Mt. This volume exceeds transportation capacity of grain in Ukraine.
- ❑ Ukraine takes 1st place in the world of sunflower oil export. Sunflower oil production companies are experiencing serious shortage of rail cars for shipment seed meal. Such conditions lead to the fact that companies are forced to suspend production of sunflower oil, the situation becomes threatening.

Ukraine requires significant investments in Infrastructure sector to meet the growth of agricultural product's export:

1. Updating rolling stock of grain hoppers and purchasing new freight wagons.
2. Developing grain loading facilities in seaports. Privatization of state-owned seaport-operating companies.
3. Development of grain transportation by in-land waterways: repair of the locks on Dnieper, reconstruction of drawbridges, dredging, and removal of stone ridge-corner near Dniprodzerzhinsk.
4. Rehabilitation of existing international roadways and construction of new roads connecting Ukraine with EU (project of road concession Lviv-Krakovets).

Source: Ministry of Infrastructure of Ukraine

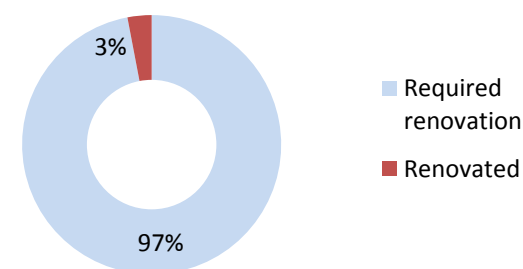
Forecast of requirements for renewal of hoppers in Ukraine, units



Draught limits in Dnieper river



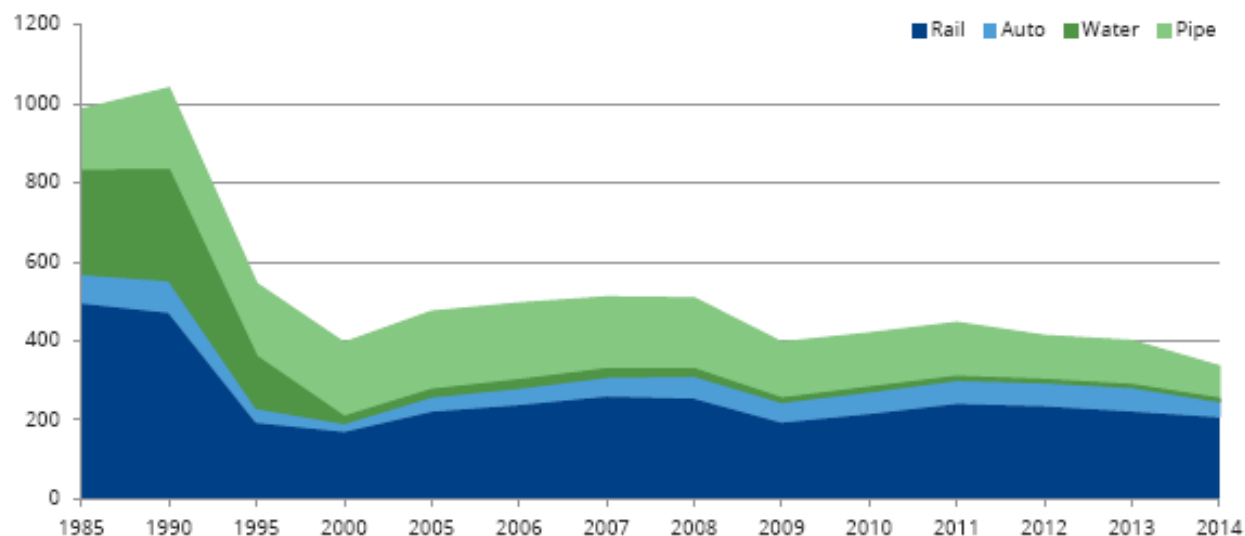
Requirements for roads rehabilitation in Ukraine 2014



FREIGHT AND PASSENGER TURNOVER IN UKRAINE

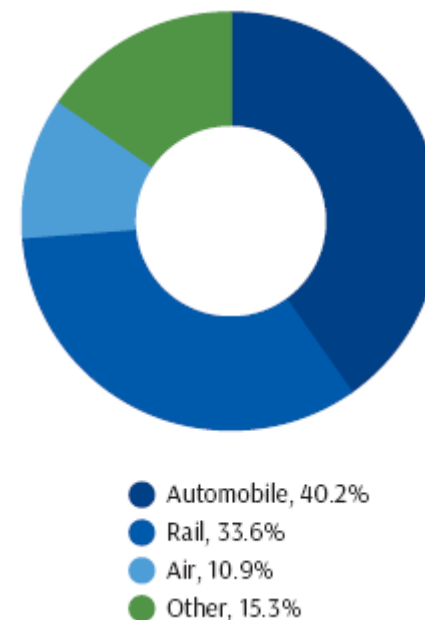


Freight Turnover in Ukraine by Mode of Transport (billion ton-km)



Source: State Statistics Committee of Ukraine

Passenger Transportation in Ukraine by Mode of Transport, 2014



SECTOR INFORMATION

- ❑ Ukrainian freight turnover volumes have been relatively stable since 2000 at 200-300 billion ton-km (excluding pipe transport), after a significant drop from around 800 billion ton-km seen at Soviet times. In the years of economic downturn of 2000, 2009, and 2014 the transportation volumes demonstrated contraction with subsequent recovery.
- ❑ Rail is the primary mode of transportation in Ukraine, accounting for 63% of total freight turnover in 2014. In the passenger transportation segment, rail accounted for 34% of total turnover, close to automobiles (40%).



II. GOVERNMENT REFORMS AND SUPPORT FOR INVESTMENTS



- ❑ The EU's relations with Ukraine are governed by the Association Agreement. This Agreement, including a Deep and Comprehensive Free Trade Area, was negotiated over the period 2007-2011 and initialed in 2012. On 21 March 2014 the EU and Ukraine signed the political provisions of the Association Agreement, underlining their joint commitment to proceed to the signature and conclusion of the remaining parts of the Agreement.
- ❑ Provisional application of important parts of the EU-Ukraine Association Agreement began on 1 November 2014, including those on the respect for human rights, fundamental freedoms and rule of law; political dialogue and reform; justice, freedom and security; economic and financial cooperation.

EU-Ukraine Aviation Agreement

- ❑ This agreement is designed to create a "common aviation area" between the EU and Ukraine, based on common standards. It would offer further commercial opportunities, more direct connections and economic benefits on both sides, while it would bring regulatory convergence in all aviation fields.
- ❑ Limitations to weekly flights between Ukraine and the EU would be removed, while free and fair competition would help to establish market prices for all flights. To attain these objectives, Ukraine would have to align its legislation with EU aviation standards and enforce EU requirements in areas such as: aviation safety, air traffic management, environment, economic regulation, competition, consumer protection and social aspects.
- ❑ Air transport of passengers and cargo between Ukraine and the EU has been growing steadily in recent years and new investment opportunities for airlines would open up by allowing reciprocal majority ownership, facilitating the development of airlines and consolidation of the aviation sector. The comprehensive aviation agreement was initialed in November 2013. Since then it is in the hands of the Council. The Commission urges the signature of the agreement as soon as possible. Following signature, the ratification process will begin for both EU and Ukraine. Similar comprehensive aviation agreements have already been signed with other neighboring countries: the Western Balkans, Morocco, Georgia, Jordan, Moldova and Israel.



MAIN POLICY ACTIONS TO PROMOTE LONG-TERM INVESTMENTS IN UKRAINE:

**Designing policy
measures that are
supportive of long-
term investing**

**Reforming the
regulatory framework
for long-term
investment**

**Providing transparent
environment for
infrastructure
investment**



REFORM OF STATE-OWNED ENTERPRISES

The Ministry of Economic Development and Trade of Ukraine (MoEDT) has made the reform of SOEs its top priority and is committed to building a healthy and transparent system that will aim to make Ukraine adherent to OECD Guidelines on Corporate Governance of SOEs (OECD Guidelines, www.oecd.org/corporate).

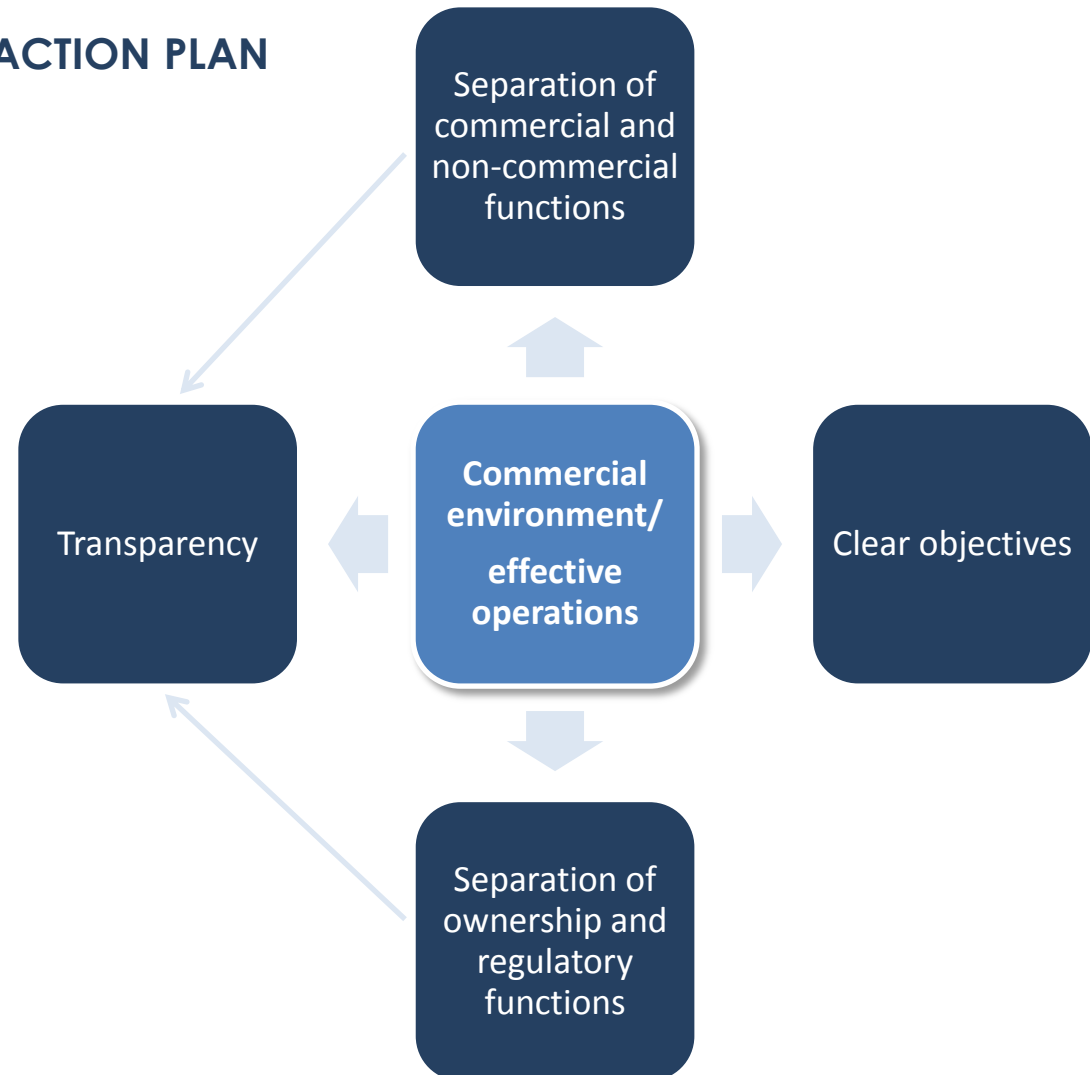
Strengthening Supervision and Improving Transparency

The Government is planning to introduce more viable supervision and management mechanisms for SOEs to ensure transparency of their operations and the establishment of strategic business targets.

Enhancing Management

Pursuant to the adoption of the Framework Document will be the restructuring of the corporate governance of SOEs, to ensure that SOEs are capable of operating under market conditions like private companies without distortion of the competitive environment. As a result of increased competition, SOEs will have to ensure that they utilize their assets more responsibly and rationally.

ACTION PLAN





Clear Objectives

At present, the majority of SOEs pursue diverse and often conflicting objectives, which results in uncertainty over responsibilities. Public authorities when exercising their ownership rights have to ensure that all commercial and non-commercial (political and social) objectives of SOEs are fully transparent and clearly declared. This will help SOEs implement their strategic tasks, while delivering products and services to citizens meeting the principles of maximum efficiency and the highest standard.

Separation of Commercial and Non-Commercial Functions

OECD Guidelines urge SOEs to define their non-commercial (or social) functions and state them clearly in their statutes. In addition, enterprises must separate commercial and non-commercial operations in their accounting documents to ensure greater transparency and simplify financial analysis.

Ownership and Regulatory Policy

SOEs compete with private businesses, hence the Government must adhere strictly to the principle of the separation of ownership and regulatory functions in setting up their corporate management structures.

Striving for Transparency

When there is little accurate data publicly available, it is difficult to evaluate the work of SOEs and their management bodies as well as require from them efficient employment of capital and achievement of the set targets. Publicly available information on the activities of SOEs stimulates responsibility and reduces the risk of corruption.

Enhancing a Healthy Business Environment

Transparent activities of SOEs contribute to the creation of a business-friendly environment which is needed for more foreign investors to come to Ukraine. Analysis carried out by the World Bank has confirmed that direct foreign investments spur the development of national economies. Foreign companies often become business catalysts fostering progress of entities with which they compete directly, as well as related sectors of the economy.



❑ **The Anti-Corruption Bureau** is the Ukrainian Government Anti-corruption agency which investigates corruption in Ukraine and prepares cases for prosecution. It was established in 2014 after its predecessor, the National Anti-Corruption Committee. The agency is set to employ 700 people and be fully functioning by October 2015.

❑ The newly-adopted law "On Amendments to Some Laws of Ukraine on Access to Public Information in the Form of **Open Data**" will bring in more transparency and efficiency, while stimulating a start-up, entrepreneurial spirit. The launch of the open data environment in Ukraine will create additional opportunities for democratic control over authorities, tackling corruption, well-informed citizen participation in decision-making, and enhanced and friendly public services.

According to the Law about the access to public information in the form of open data, the Ministry of Infrastructure has launched a new website <http://new.mtu.gov.ua> in the beta version, where financial information of the companies subordinate to the Ministry is available. This website supports "two clicks" rule.

❑ **Initiative "Electronic Government"**

Implementation of the model of public administration, which is based on the use of modern information and communication technologies to improve the efficiency and transparency of government, as well as establishing public control over it.

Aiming to spend taxpayers' money transparently and efficiently the Ministry of Infrastructure of Ukraine encourages its affiliated companies to use digital state procurement system ProZorro, that was launched in Ukraine due to the initiative of civil activists and the support of Administration of the President and Ministry of Economic Development and Trade.

All state companies that fall under Ministry of Infrastructure management are instructed to hold all state procurement and identifying the winner of the tender with online-streaming.

❑ **The program CoST (Initiative of transparency in the construction sector)**

The World Bank initiated Ukraine's accession to the international program (CoST). 6 November, 2013 Ukravtodor officially joined the international program CoST.

Implementation of the program CoST in Ukraine envisages a number of measures to improve transparency in the construction industry in Ukraine, namely disclosure of the planned projects, international bidding procedures and other government procurement projects and support full transparency of information on the whole cycle of the project. The pilot project for the implementation of the program CoST in Ukraine will be two joint projects with the World Bank: "The project to improve roads and traffic safety" and "The second project to improve roads and safety."

The official announcement of accession to the international program Ukravtodor CoST posted on the official website of the program CoST (<http://www.constructiontransparency.org>).

COOPERATION WITH INTERNATIONAL FINANCIAL INSTITUTIONS



EUROPIAN COMMISSION

European Commission announced a large support package for Ukraine to help stabilize the economic and financial situation of the country. All the measures combined could bring overall support of €11 billion over the next seven years from the EU budget and the international financial institutions, including up to €1.4 billion of bilateral grants.

WORLD BANK

World Bank announced that the Bank is ready to commit up to \$2 billion in 2015 for projects in Ukraine.

It is expected that credit resources of the World Bank will be used for budget support, assistance in reforms implementation, especially in energy and banking sector, as well as for fighting corruption, improving standards in health and public infrastructure, supporting most vulnerable and improving governance and business environment.

The World Bank financing will be part of the overall international assistance package to Ukraine that will include new credit arrangement with the IMF and financial assistance from other donors.

EBRD

Through the history of EBRD operations in Ukraine it has provided loans worth €10 billion in total, and it continues to invest about €1 billion per year. The bank plans to increase the volume of investments in Ukraine and to expand its operations in Ukraine.

EIB

The European Investment Bank (EIB) may provide a loan of EUR 150 million for modernization of approximately 250 kilometers of railways in the southern regions of Ukraine.

The project aims to improve Ukraine's transport infrastructure and promote sustainable transport. The total cost of the project is EUR 350 million.

IFC - provides consultancy services for Government Institutions in Ukraine



III. SECTORS OF TRANSPORTATION INFRASTRUCTURE WITH POTENTIAL OF DEVELOPMENT



A. SEAPORTS

SEAPORTS IN UKRAINE: OVERVIEW



SECTOR INFORMATION

- ❑ Ukraine has 13 seaports with the total handling capacity of 149 Mt of mixed and bulk cargoes, 42 Mt of liquid cargoes, 40 Mt of container cargoes (3.5 million twenty-foot equivalent units), and 1 million passengers.
- ❑ In 2014, Ukrainian seaports handled 143 Mt of cargoes, up from 137 Mt in 2013 (both figures exclude Crimean ports). The share of exports increased from 68% in 2013 to 72% in 2014.
- ❑ The largest seaports are Odesa, Illichivsk and Yuzhny, all located in Odesa region (the north-western part of the Black Sea). In 2014, they accounted for 63% of Ukraine's total seaport cargo turnover.
- ❑ In the Azov Sea region, Ukraine has two seaports, Mariupol and Berdyansk.
- ❑ Three other seaports (Mykolayiv, Kherson and smaller Oktyabrsk) are located at the estuaries of the Dnieper and Southern Buh rivers.
- ❑ Five seaports located in annexed Crimea are much smaller compared to those in mainland Ukraine. In 2013, they accounted for a mere 5% of total freight turnover at Ukrainian seaports.

Map of Ukrainian Sea Ports



GROWTH DRIVERS

- ❑ Grain export is expected to grow from 33Mt to 100 Mt in five year perspectives and requires to increase capacities of national seaports.
- ❑ National strategy for diversification of energy sources includes construction of import facilities for LNG and coal.
- ❑ Transit traffic from Baltic ports to Black seaports has significant potential for growth.

REFORM FOCUS

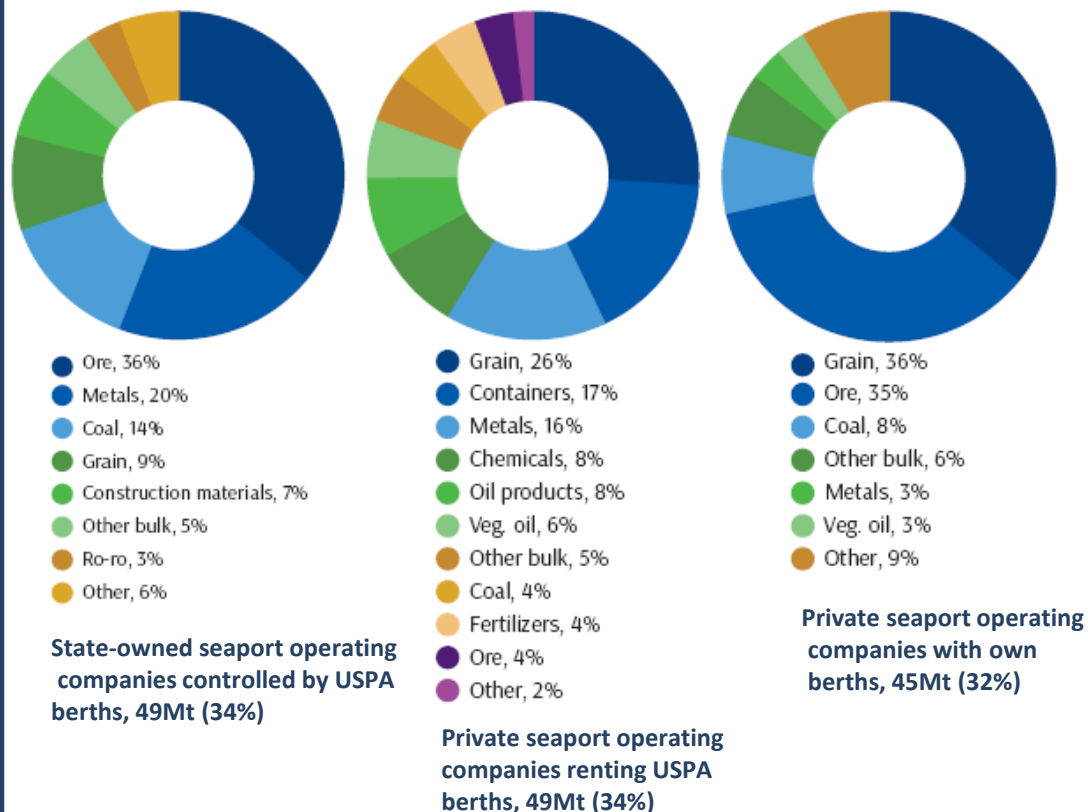
- ❑ Privatization of state-owned seaport operating companies located at 13 seaports in Ukraine.



SECTOR STRUCTURE

- ❑ In 2013, domestic port management system was transformed to separate administrative and commercial functions at seaports.
- ❑ The Ukrainian Seaports Administration (USPA), a newly established governing body, took control of the seaports' strategic infrastructure, namely the water zone, coast-protecting structures, berths, and general-use infrastructure (access roads and utility connections).
- ❑ State-owned seaports operating companies use USPA berths for their operations and own infrastructure required for stevedoring operations (buildings, vessels, handling equipment, etc.). The port infrastructure is aged and needs renovation (depreciation rate estimated at 80%).
- ❑ As of 2014, state seaports operating companies employed about 20,000 people.
- ❑ The state-owned seaports operating companies compete with private stevedores. The share of state-owned stevedoring companies in total freight transshipment went down from 100% in 1991 to 34% in 2014.

Freight Turnover at Ukrainian Ports by Berth Ownership and Product Type

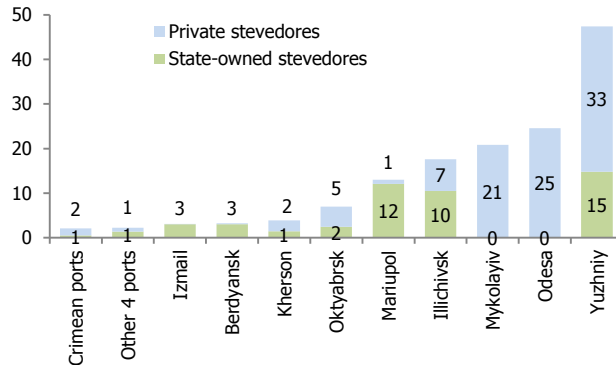


- ❑ State-owned seaports operating companies primarily transship ore (36% of total volume in 2014), metals (20%) and coal (14%), while grain accounted for only 9%. Grain is mostly handled by private seaport operating companies.

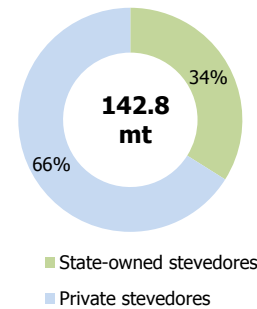


UKRAINIAN PORT INDUSTRY HIGHLIGHTS

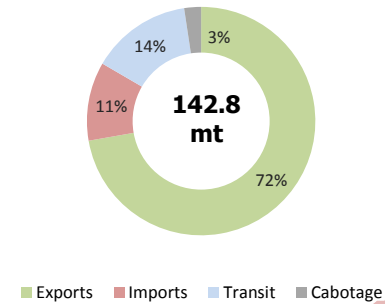
Cargo turnover by stevedores, mt (2014)



Stevedores by ownership (2014)*



Cargo turnover by direction (2014)*



*Note: industry data excludes cargo turnover of the Crimean ports

Odesa region

Yuzhnyi:

- Specialization: state-owned stevedores ("SOE") – ore, coal; Private stevedores ("Private") – ore, grain, chemicals, coal
- Max. draft: **13.5-18.5m**
- Vessel type: Capesize, Panamax

Odesa:

- Specialization: SOE – no operations; Private – grain, containers, metals, oil
- Max. draft: **13.5m**
- Vessel type: Panamax

Illichivsk:

- Specialization: SOE – ore, grain, auto; Private – containers, grain, oil
- Max. draft: **13.5m**
- Vessel type: Panamax

Mykolayiv region

Mykolayiv:

- Specialization: SOE – no operations; Private – grain, ore, metals
- Max. draft: **9.0-12.5m**
- Vessel type: Panamax

Oktyabrsk:

- Specialization: SOE – metals, construction; Private – grain, chemicals, coal
- Max. draft: **12.5m**
- Vessel type: Handymax

Mariupol region

Mariupol:

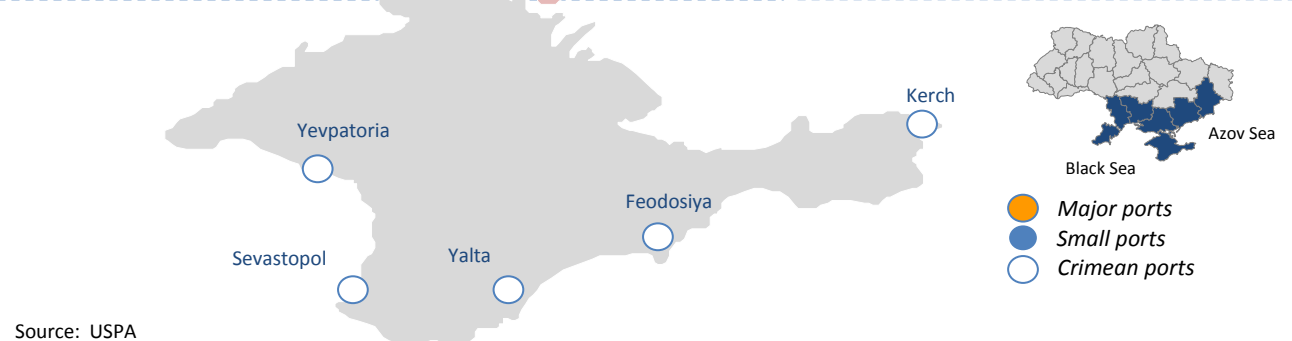
- Specialization: SOE – metals, coal; Private – metals, grain
- Max. draft: **8.5-9.8m**
- Vessel type: Handymax

Izmail region

Izmail:

- Specialization: SOE – coal, ore; Private – no operations
- Max. draft: **4.0m**
- Vessel type: Handy

Other ports in the region: Reni, Ust-Dunaisk, Bilgorod-Dnistrovsk, Odesa, Yuzhnyi, Mykolayiv, Oktyabrsk, Kherson, Skadovsk, Mariupol, Berdiansk.



Source: USPA



B. IN-LAND WATERWAYS DEVELOPMENT



SECTOR INFORMATION

- ❑ Ukraine has a great untapped potential in transporting of grain by river. The main river of Ukraine – Dnieper, runs just in the middle of the territory from North to South, the delta of Dnieper provides convenient access to the largest seaports of Ukraine.
- ❑ Besides Dnieper there are several rivers suitable for navigation in Ukraine: Danube, Southern Bug and Dniester.
- ❑ The length of the Dnieper from Kyiv to the river mouth is 867 km. There are 10 river ports on the Ukrainian part of the Dnieper.
- ❑ There are six locks and six reservoirs located on the Dnieper. Locks are outdated, which decreases the traffic intensity and increases transportation costs. Locks were not capitally repaired since construction.
- ❑ There are there drawbridges on Dnieper that impose limitations for river navigation: in Dnipropetrovsk and Kremenchuk, the height of fairway arches is 8.5 and 9.6 m respectively. The height of fairway arches of Kherson bridge is 17.2 meters.
- ❑ Depth of the Dnieper River is the another limiting factor for goods transportation. The allowed draft of vessels on Dnieper is 3.65 m lower from Dnipropetrovsk and limited to 3m in the upper part of the river. Draft of Kiev reservoir is limited to 2.65m. Stone ridge-corner near Dniprodzerzhinsk and shallow river depth near Kaniv limit the draft to 3 meters.

Source: World Bank

In-land waterways of Ukraine traffic flows



Source: TRACECA Eastern Partnership Report 2015

REFORM TARGETS

- ❑ Develop inner waterways system in order to reduce the burden on the automobile roads and increase capacity of freight turnover.
- ❑ Repair of the locks on Dnieper, reconstruction of drawbridges, dredging and removal of stone ridge-corner near Dniprodzerzhinsk.



C. RAILWAYS



SECTOR INFORMATION

- ❑ With 21,600 km of rail tracks, Ukraine ranks 2nd in the CIS and 6th in Europe (excl. Russia), though its rail density is 2-3 times smaller than in the EU.
- ❑ 4 of 10 pan-European transport corridors cross Ukraine. The domestic rail network forms a key link between the EU and Russia and Central Asia.
- ❑ Ukraine is the largest market in Europe (excl. Russia) and second largest in the CIS in terms of rail freight turnover.
- ❑ The country ranks 2nd in the CIS and 4th in Europe in terms of passenger transportation. Some 47% of Ukraine's rail tracks are electrified, compared to 51% in Russia, 47% in China, 29% in India and 16% in Belarus.
- ❑ Ukraine operates a large railcar fleet totaling almost 75,000 freight and 5,300 passenger cars (3,160 passenger cars are currently operating), powered by over 4,000 locomotives (50% diesel and 50% electric).
- ❑ State-owned rail monopoly Ukrzaliznytsia (UZ) operates 6 state regional railway companies and close to 140 other subsidiaries with around 350,000 employees.

Map of main railway hubs in Ukraine



REFORM TARGET

- ❑ Develop a feasible program for financing renovation of railway infrastructure and rolling stock.
- ❑ Simplify the freight tariff system (e.g. using cost-plus method).
- ❑ Foster competition with private freight operators.



GENERAL INFORMATION

- ❑ State-owned rail monopoly Ukrzaliznytsia (UZ) operates 6 state regional railway companies and close to 140 other subsidiaries with around 350,000 employees.
- ❑ The domestic rail network is a strategic asset and a key transport link for Ukraine between the EU and Russia and Central Asia (4 out of 10 pan-European transport corridors cross Ukraine).
- ❑ UZ operates 21,600 km of rail tracks (47 % electrified) and a fleet of 4,000 locomotives and 123,000 railcars. It accounts for c. 63 % of total freight transportation and 34 % of passenger transportation in Ukraine, ranking first in Europe (ex-Russia) on freight turnover.
- ❑ UZ provides second highest turnover by passenger transportation in the CIS and #4 in Europe. Metal and mining goods accounted for 58 % of its 2014 freight transportation in volume terms, followed by construction materials (15 %) and grain (8 %).
- ❑ With over 350,000 employees, UZ is one of the largest employers in Ukraine. The Government plans to corporatize UZ this year but does not have any immediate plans for privatization.

REFORM TARGET

- ❑ Complete incorporation, centralize and streamline the legal structure (especially regional subsidiaries) and consolidate cash flows; continue with management overhaul.
- ❑ Improve transparency of procurement tenders.
- ❑ Develop a feasible program for financing renovation of rail infrastructure and rolling stock in view of the latter's wear rates of 80-90 % and the average service life of operating electric locomotives of up to 40 years.
- ❑ Optimize costs, including through divestment of noncore assets such as, for example, UZ's more than 90 hospitals and human resource reform.
- ❑ Simplify the freight tariff system (e.g. using cost-plus method).
- ❑ Foster competition with private freight operators.
- ❑ Work on a debt management strategy.

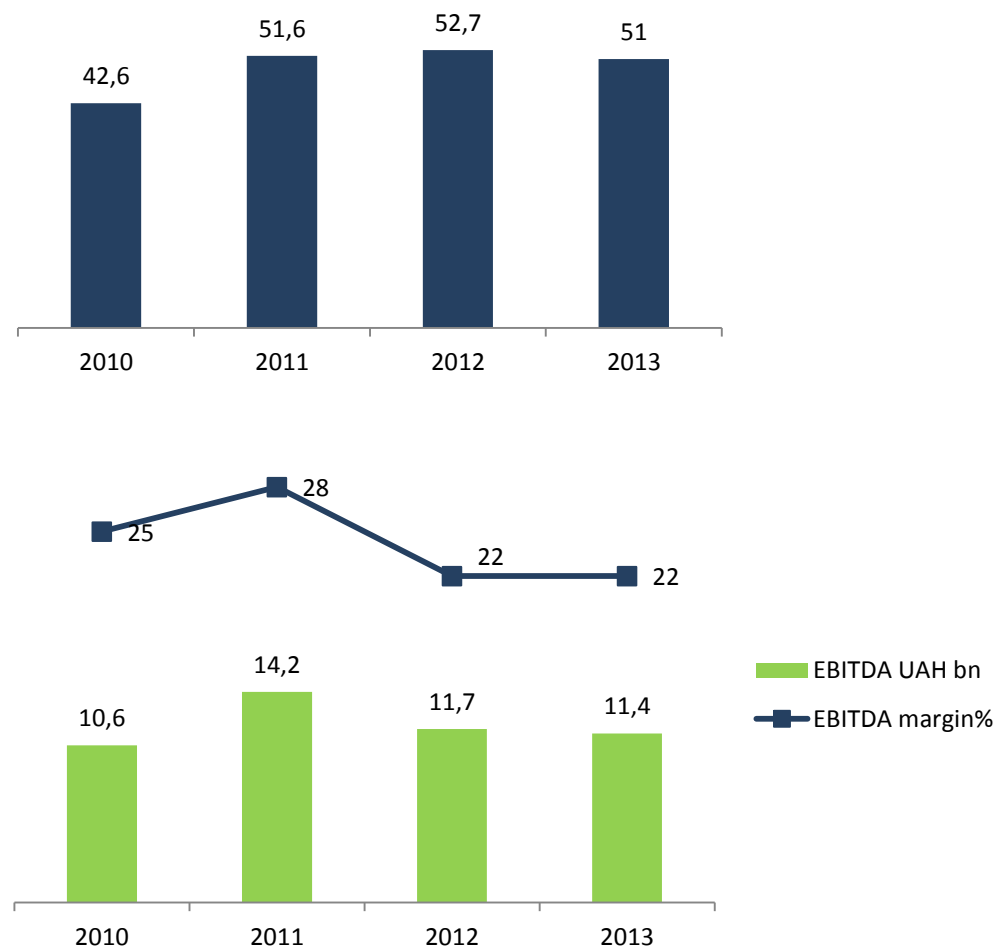


OPERATING SUMMARY FOR 2014 AND 2013

- ❑ Domestic economic weakness and the military conflict in the East caused a decline in freight and passenger transportation in 2014.
- ❑ The freight volumes decreased from 224 to 211 billion ton-km and the passenger volumes from 49 to 37 billion passenger-km in 2014 compared to 2013.
- ❑ Some increase in tariffs (in UAH) compensated decrease in volumes, and nominal sales of 2014 remained almost at the level of 2013 (around UAH 50 bn).
- ❑ Freight revenue comprise around 80% of the company's revenue with passengers account for 20%.
- ❑ Following almost 3 times devaluation of Ukrainian currency in 2014 (from 8 to 24 UAH/USD), the company reported heavy losses due to revaluation of debt denominated in foreign currency (75% of the company's debt is nominated in USD and EUR).

UZ Major financial figures

Revenue 2010-13 in UAH bn.



Source: Ukrzaliznytsia

RENEWAL OF CARGO RAILCARS AND LOCOMOTIVES



CURRENT SITUATION

- High depreciation of railcars and locomotives (about 90%) accompanied with the rapid decline in their total amount.
- Average age of railcars and locomotives is far above their normative threshold (see table below). Appx. 40-60% are still used after normative age expiration.
- In 3 years more than 85% of current rolling stock will be in violation with international technical requirements, and could be suspended.

INVESTMENT PROJECT

- Replace around 40,000 railcars and 10 electric locomotives with new ones produced locally.
- The size of investments is assessed at \$2bn with the timeline of replacement of around 2 years.

EXPECTED RESULTS

- Boosting economy and creating new jobs: majority of work can be performed by local producers (Azovmash, Kryukov, Dneprovagonmash, Interpipe, etc.).
- Decreasing transportation risks, safer railway infrastructure
- Increasing railway productivity.

\$2bn Required level of investments

2 years Timeline

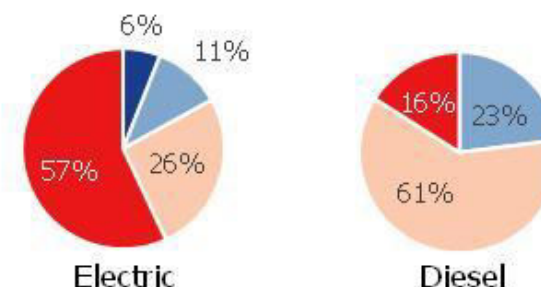
40,000 New railcars

10 New electric locomotives

Indicator	Railcars	Locomotives	
		Electric	Diesel
Current stock, ths	110	1.8	2.3
Normative vs avg actual age	22 24	30 39	25 30
Obsolescence, %	88%	90%	97%
Usage after normative age, %	60%	40%	60%

Locomotives age

■ < 16y ■ 16-25y ■ 26-40y ■ >40y



Source: World Bank



D. RAILCAR AND LOCOMOTIVE MARKET IN UKRAINE



GENERAL INFORMATION

- ❑ Ukraine operates a sizable rolling stock consisting of almost 200,000 freight cars, 5,300 passenger cars (3,160 operating) and over 4,000 locomotives (split equally between diesel and electric vehicles). According to the Ministry of Infrastructure estimates, the fleet's wear rates range from 80 to 90%.
- ❑ The main railcar and locomotive producers of Ukraine are:
 - Kryukiv Car <http://www.kvsz.com>
 - Azovmash <http://www.azovmash.com>
 - Dniprovahonmash <http://dvmash.biz/>
- ❑ Railcar producers were able to preserve production of freight cars at minimum levels from a project to modernize metro cars and the purchase of a speed train for state rail monopoly Ukrzaliznytsia.
- ❑ Although many Ukrainian railcar and locomotive producers are already privatized, the industry remains of significant importance for the state. Rail monopoly Ukrzaliznytsia is a key customer of the railcar and locomotive manufacturers.

REFORM TARGET

- ❑ Facilitate Joint-Ventures of Ukrainian railcar and locomotive producers with US private companies.

Figure of average monthly railcar output dynamic in Ukraine v.s. Russia

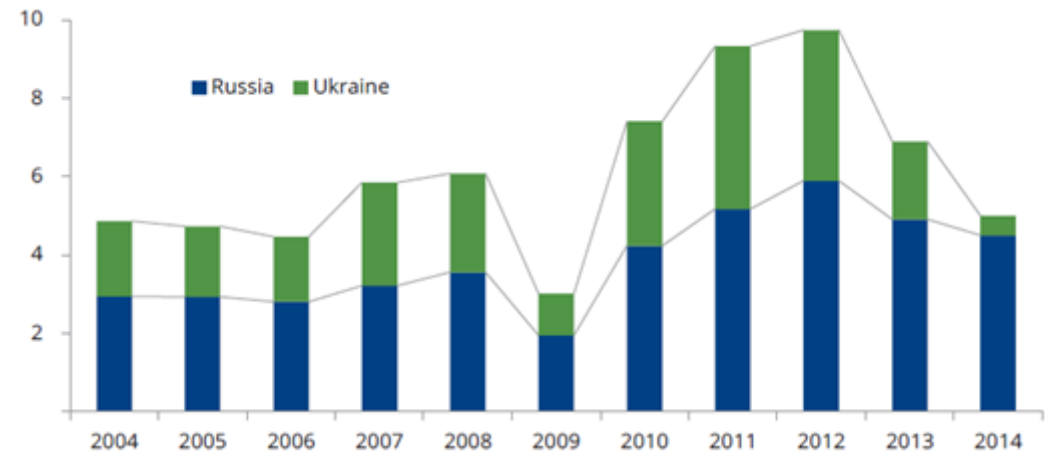


Figure of quarterly railcar output dynamic in Ukraine by main producers



Source: State of Statistic Service of Ukraine



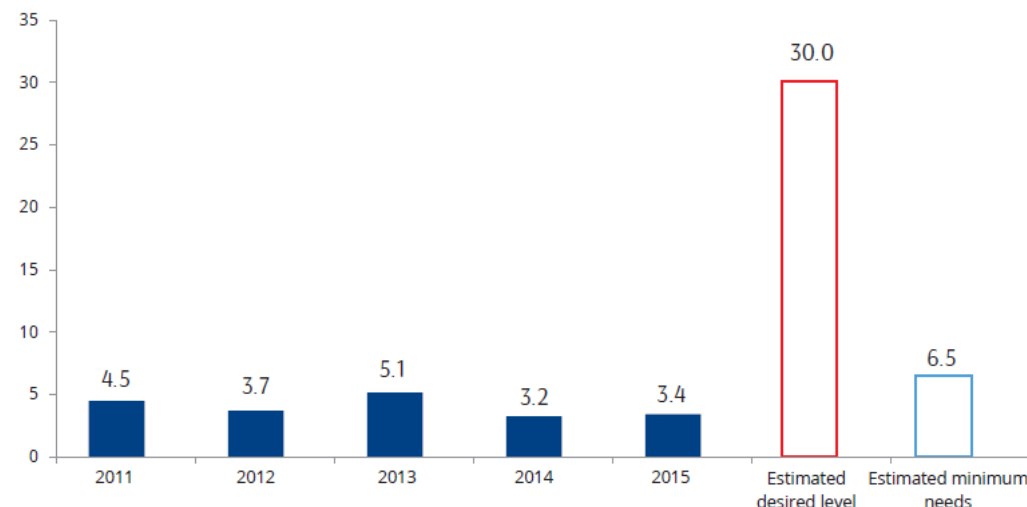
E. ROADS



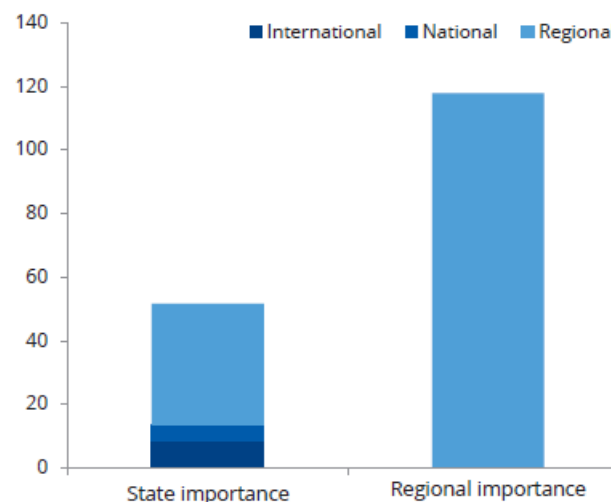
SECTOR INFORMATION

- ❑ Ukraine has significant potential for motorway development due to its location on the intersection of multiple transport corridors, namely Berlin (Dresden)-Wroclaw-Lviv-Kyiv; Trieste-Ljubljana-Budapest (Bratislava)-Lviv; and Helsinki-St. Petersburg (Moscow)-Kyiv- Chisinau (Odesa)-Bucharest-Dimitrovgrad-Alexandropoulos.
- ❑ The existing road network in Ukraine requires substantial modernization. The total length of domestic roads remained unchanged over the last 15 years at 169,600 km, with 30% classified as roads of state importance. Such roads have a higher standard rate of expenditure for road maintenance of UAH \$2,700/km vs. \$1,200/km for regional roads, largely because of intensive freight transport.
- ❑ In 2013, road transportation had a 74% share of total freight transportation in Ukraine in tonnage terms. On average, a ton of freight was transported to a distance of 47 km in 2013, versus 21 km in 2000.
- ❑ In Ukraine, road construction and repairs are managed by Ukravtodor, a state agency subordinate to the Cabinet of Ministers through the Ministry of Infrastructure.

Ukravtodor's annual spending on road maintenance from State Budget (UAH bn) Note: does not include transfers to regional budgets for communal roads.



Ukraine road network in 2014 ths.km



Source: Ukravtodor



KEY ROAD SECTIONS FOR REHABILITATION (SEE MAP)

- Lviv – Krakovets (85 km, 1 cat),
- Odesa – Mykolaiv – Kherson (190 km, 1 cat),
- Dubno – Ternopil – Ivano-Frankivsk (220 km, cat 1),
- Rivne – Lutsk (65 km, cat 1),
- Poltava – Kharkiv (140 km, 1 cat),
- Zhytomyr – Vinnytsya (120 km, cat 1),
- Odesa – Palanki – Monashi (84 km, cat 2),
- Terebovlya – Chernivtsi (138 km, 2 cat).

INVESTMENT PROJECT

- Rehabilitation of key road sections which are part of the international corridors or comprise bottlenecks to the existing infrastructure.
- Over 900 km is to be rehabilitated with the size of investment around \$4.3bn.

EXPECTED RESULTS

- The realization of these projects will boost the economy of Ukraine.
- Improve quality of roads based on the international standards.
- Decrease transportation risks, provide safer road infrastructure.
- Decrease 'death on roads ratio' to the EU level.



\$4,5bn Required level of investments

4 years Timeline

925km Total length



F. MUNICIPAL TRANSPORT

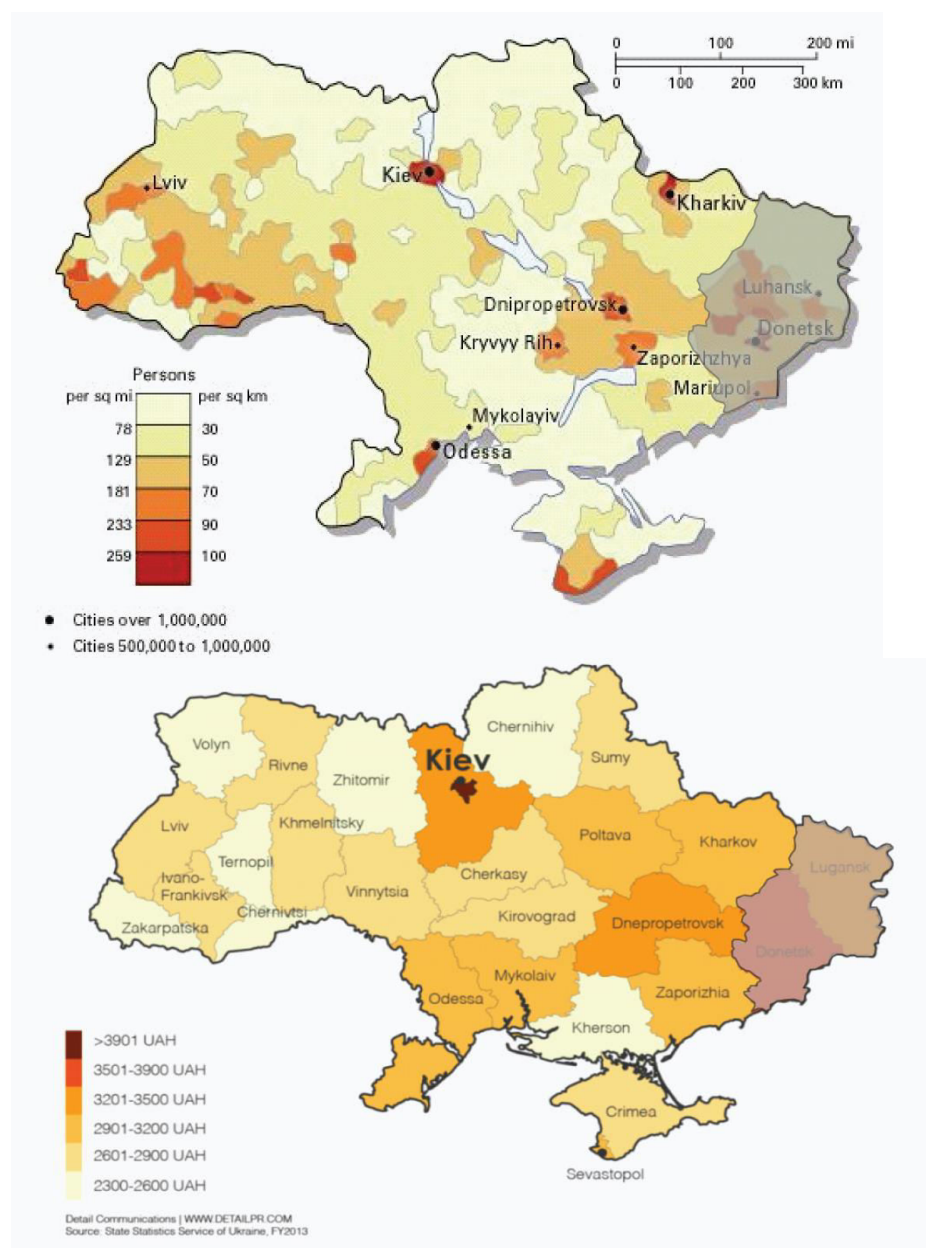
MAIN CITIES OF UKRAINE



General information of main cities of Ukraine

City	Population (2013)	Specialization
Kyiv	2 847 200	The capital of Ukraine, important industrial, scientific, educational, and cultural centre.
Kharkiv	1 441 622	Major cultural, scientific, educational, transport and industrial centre of Ukraine. Its industry specializes primarily in machinery and electronics. There are hundreds of industrial companies in the city.
Odessa	1 003 705	The city hosts two important ports. Together they represent a major transport hub integrating with railways. Odessa's oil and chemical processing facilities are connected to Russia's and EU's respective networks by strategic pipelines.
Dnipropetrovsk	1 001 962	Industrial center of Ukraine.
Zaporizhzhya	772 600	important industrial center of Ukraine, the country's main car manufacturing company, the Motor-Sich world-famous aircraft engine manufacturer.
Lviv	760 026	Cultural center of Ukraine. The city has many industries and institutions of higher education.
Kryvyi Rih	654 900	Main steel industry city of Eastern Europe, being a large globally important centre of the iron-ore mining and metallurgy region.
Mykolaiv	498 518	Major shipbuilding center of Ukraine and important river port.
Mariupol	486 856	Center of industry, business, education.

Population density and average monthly salary in Ukraine 2013





GENERAL INFORMATION

- ❑ Municipal transport in Ukraine includes: buses, mini buses, trolleybuses, trams and subway.
- ❑ Ukraine has well developed municipal transportation system in big cities. However urban transport is worn out, have not been updated for many years, the roads inside the cities are in poor condition.
- ❑ The most difficult situation is in electric transport segment – trams. While there were some replenishments of trolleybuses and buses, the trams have exhausted their resources, but continue to operate.

REFORM TARGET

- ❑ Decentralization, transfer of power and budgets to the local cities and region administrations to fund municipal transport projects.
- ❑ Attract private capital to invest in projects to upgrade rolling stock, construction of road infrastructure (roads, interchanges, bridges, tunnels, parking lots, replacement of lighting to energy efficient).

COOPERATION WITH INTERNATIONAL FINANCIAL INSTITUTIONS

The Ministry of Infrastructure of Ukraine recognizes regional transportation issues and its committed to develop a regional transportation model defining the needs for replacement of trolleybuses and trams by expanding the transport model created for Kiev to the other regions and cities to identify the need and attract funding from IFIs.

Table of municipal transport requirements in major cities of Ukraine

City	Municipal transport	Investment requirements
Kyiv	Kiev Metro (underground), buses, mini buses trolleybuses, trams	Rehabilitation of rolling stock, improvement of road infrastructure
Kharkiv	Kharkiv metro, buses, minibuses, trolleybuses	Rehabilitation of rolling stock, improvement of road infrastructure
Odessa	Trams, trolleybuses, buses, ferry service	Rehabilitation of rolling stock
Dnipropetrovsk	Metro, trams, buses, electric trolley buses and mini buses	Rehabilitation of rolling stock of trams, reconstruction of small roads, increasing number of metro stations
Lviv	Buses, trams, trolleybuses, rail-bus, bicycle transport	Rehabilitation of rolling stock, improvement of road infrastructure



G. AIRPORTS



GENERAL INFORMATION

- ❑ Top-5 airports, two are state-owned (Kyiv Boryspil and Lviv), two airports are managed as private-public partnership (Kyiv International Airport and Odesa) and one is privately owned (Dnipropetrovsk).
- ❑ Kyiv Boryspil is by far the largest airport in Ukraine, responsible for organizing air transportation for 63% of total passengers or 6.9 million people last year (–13% y-o-y).
- ❑ Lviv Danylo Halytskyi International Airport is the largest airport in western Ukraine, serving 7,700 flights (–19% y-o-y) and 585,000 passengers (–16% y-o-y) in 2014. The airport currently provides services to 18 airlines operating flights to 32 destinations (30 international and 2 domestic).
- ❑ Ukraine started negotiations with the EU on joining the European Common Aviation Area (ECAA) in November 2013. According to the latest available information, the ECAA is expected to be signed in 2015. The key objectives of the Agreement are gradual liberalization of the aviation market in Ukraine, introduction of common rules in Ukraine and the EU.

Ukrainian Airspace and Airport Facilities



Source: airports' public reports, Boryspil airport

REFORM TARGETS

- ❑ Accession of the European air space (open sky), the harmonization of legislation and technical regulations with the EU.
- ❑ Formation of competitive environment for airlines. The openness of the market for new players in order to attract low-cost airlines.
- ❑ Development of strategic program of regional airports reconstruction , attract investments in this sector to improve airport infrastructure.



IV. PROJECTS HIGHLIGHTS

YUZHNY SEAPORT



THE PROJECT IS IN THE LIST OF CABINET OF MINISTERS OF UKRAINE FOR PRIVATIZATION IN 2015

GENERAL INFORMATION

- ☐ Yuzhny is the largest (by cargo turnover) and deepest port in Ukraine.
- ☐ Handling: 47 Mt (2014), incl. 15 Mt by the state seaport operating company.
- ☐ Approach channel of 3.3 km from the sea to the port. The depth of the main piers is 14 meters, there are two deep-water berths with a depth of 18.5 meters capable of accommodating Capesize vessels.
- ☐ The anchorage capacity of Yuzhny is 24 vessels. Open storage yards cover 185,500 m², sheltered warehouses — 2,000 m².
- ☐ Main products: chemical, ore and general cargoes including coal, metal, cast iron, pellets, palm oil, carbamide, ammonia, methanol, crude oil and grain.

Financial data of Yuzhny Sea Port 2014

Name	Net sales (UAH m)	Assets (UAH m)	Number of employees	ROCE
Yuzhny Sea Port	1279	2482	2748	20%

Source: Administration of Yuzhny seaport



INVESTMENT OPPORTUNITIES

- ☐ Private investment in state-owned Yuzhny seaport operating company.
- ☐ Investment in seaport dredging in order to increase port depth and increase freight turnover.
- ☐ Investment in development of seaport terminals, road and rail infrastructure.
- ☐ Streamline tariff policy.
- ☐ Improve marketing and customer service.

OKTYABRSK SEAPORT



THE PROJECT IS IN THE LIST OF CABINET OF MINISTERS OF UKRAINE FOR PRIVATIZATION IN 2015

GENERAL INFORMATION

- ☐ Freight turnover 2,4 Mt (2014) by the state seaport operating company .
- ☐ Main products: grain, minerals, ferrous metals, coal
- ☐ Outdoor storage: 277200 m²; indoor storage: 41135 m²
- ☐ Depth near berths – 9,75-11,5 m; 7 berths – 1,53 km;
- ☐ General area of the seaport – 178,8 ha
- ☐ Freight arriving by train station "Oktyabrskaya" railway capacity 828 wagons / day.
- ☐ General processing capacity of SE Oktyabrsk seaport operating company is 2,57Mt.



Financial data of Oktyabrsk Sea Port 2014

Name	Net sales (UAH m)	Assets (UAH m)	Number of employees	ROCE
Oktyabrsk seaport	250	651	750	16,5%

Source: Oktyabrsk seaport administration

INVESTMENT OPPORTUNITIES

- ☐ Private investment in of Oktyabrsk seaport operating company.
- ☐ Investment in seaport dredging in order to increase port depth and increase freight turnover.
- ☐ Investment in development of seaport terminals, road and rail infrastructure.
- ☐ Streamline tariff policy.
- ☐ Improve marketing and customer service.

UKRAINIAN DANUBE SHIPPING COMPANY



Ukrainian Danube Shipping Company is one of TOP transportation State Owned Enterprises.

- ☐ Ukrainian Danube region transport hub provides the external economic interests of Ukraine in the Danube countries, and the countries of the Black Sea and the Mediterranean.
- ☐ Total freight turnover in 2014 made 2.5Mt.
- ☐ River barges of various types of freight capacity from 1000 to 2 300 t.
- ☐ Self-propelled dry cargo vessels carrying capacity 1814 tons (the total power of the main power plant is 2100 hp, is also used for pushing of the barge convoys).
- ☐ In total, the river fleet of 91 self-propelled vessel and 423 units of self-propelled fleet.

Financial data of Ukrainian Danube Shipping Company 9M14

Name	Net sales (UAHm)	Assets (UAH m)	Number of employees	ROCE
Ukrainian Danube Shipping Company	282	279	2072	17,7%

Source: Ministry of Ministry of Economic Development and Trade of Ukraine

THE PROJECT IS IN THE LIST OF CABINET OF MINISTERS OF UKRAINE FOR PRIVATIZATION IN 2015



INVESTMENT OPPORTUNITIES:

- ☐ Private investment in state owned Ukrainian Danube Shipping Company
- ☐ Investment in fleet facilities in order to increase freight turnover.
- ☐ Streamline tariff policy.
- ☐ Improve marketing and customer service.

CONSTRUCTION THE SECOND TRACK OF THE RAILWAY GREBINKA – POLTAVA – KRASNograd – LOZOVA



INVESTMENT PROJECT

- ❑ The daily traffic turnover is 10 pairs of freight trains and 24 pairs of passengers trains (including suburban).
- ❑ The length of the second track of the railway Grebinka – Poltava – Krasnograd – Losova is 360 km.

EXPECTED RESULTS

- ❑ The aim of the project is to eliminate bottlenecks railway infrastructure.
- ❑ Increasing capacity of transportation.
- ❑ Increasing the level of safety.
- ❑ Reducing the total costs of transportation.
- ❑ Meeting the needs of industries and population in traffic.
- ❑ The project will Improve the economic efficiency of the rail sector.
- ❑ Improving the environment by reducing the time passing steam trains.

INVESTMENT OPPORTUNITIES

- ❑ Investment in railway construction section Grebinka – Poltava – Krasnograd – Losova



\$370m Required level of investments

6 years Timeline

360km Total length



CURRENT SITUATION

- More than 10 ths km (47%) of railway electrified (#10 in the world, #6 in the Europe), which covers 90% of railway cargo volume.
- Unelectrified section Slovechno – Korosten – Zhytomyr – Berdychiv creates the bottlenecks for the Ukrainian logistics due to the poor technical situation.

INVESTMENT PROJECT

- The project is technically supported by EIB and other IFIs .
- Implementation timeline is around 4 years with unleveraged IRR for investors at around 8-10%.

EXPECTED RESULTS

- Boost to economy and creating of new jobs: majority of work can be performed by local producers.
- Transportation cost reduction by over 50% per 1 km.
- Reducing bottlenecks and improving capacity by 30%.
- Substituting imported fuel with locally produced electricity.

INVESTMENT OPPORTUNITIES

- Investment in railway electrification section Slovechno – Korosten – Zhytomyr – Berdychiv.



\$100m

Required level of investments

4 years

Timeline

196km

Total length

LVIV-KRAKOVETS ROAD CONSTRUCTION PROJECT



The road will connect Lviv with the existing M-10 road to the State border with Poland by 2015.

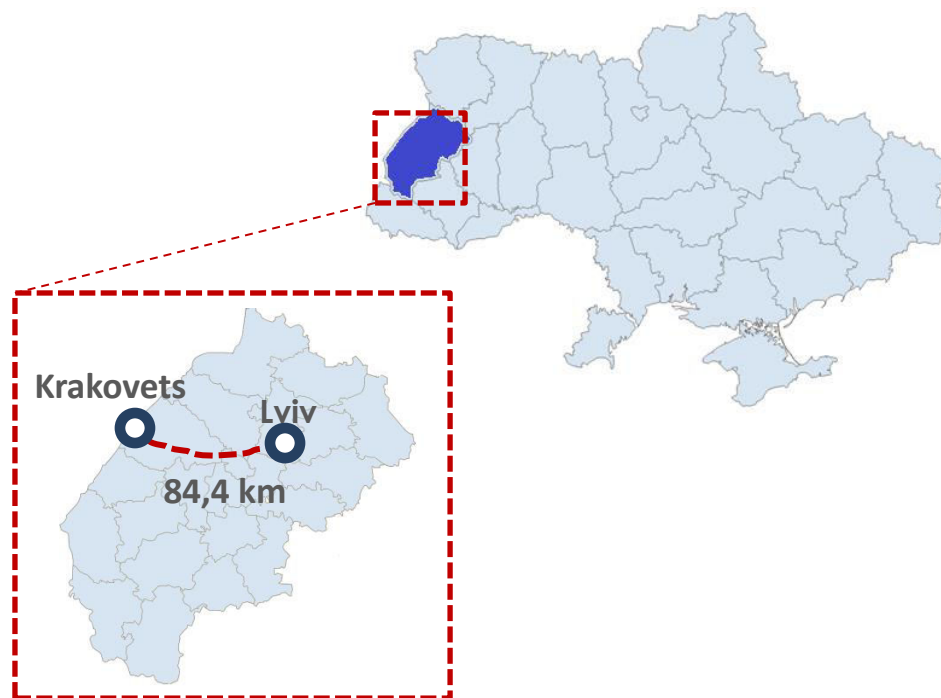
- Existing traffic flow - 8,400 cars/day.
- Road length - 84.4 km.
- Road category - 1-A.
- Number of lanes - 4.
- Lane width - 3.75 m.
- Width of sub grade - 27.5 m.
- Road shoulder width - 3.75 m.
- Area of land allocation - 570 hectares.
- Estimated construction speed - 120 KM/year.
- Intended potential traffic flow - 14-18,000 vehicles/day.

PROJECT REALIZATION

- ☐ The concessionary is Ukravtodor, the State Road Agency of Ukraine, which falls under the authority of the Ministry of Infrastructure of Ukraine.
- ☐ Ukravtodor will provide the land necessary for construction of the new highway.

INVESTMENT OPPORTUNITIES

- ☐ Concession agreement of construction of road Lviv-Krakovets.
- ☐ Construction of first toll road in Ukraine.



\$244m

Required level of investments

4 years

Timeline

84,4km

Total length

THANK YOU FOR ATTENTION!

