

# Public-Private Partnership as a Tool for Ukraine's Recovery



**Transparency International Ukraine** is an accredited chapter of the global movement Transparency International, which has more than 90 national chapters and operates in more than 100 countries around the world. Transparency International Ukraine's mission is to limit the increase in corruption levels in Ukraine by promoting transparency, accountability, and integrity of public authorities and civil society. Find out more about the activities of the organization on the website: <https://ti-ukraine.org/en/>.

**Author:** Volodymyr Datsenko, Dmytro Hrechukha, Yevhen Cherevykov

**Team:** Yurii Hermashev, Valeriia Zalievska, Ivan Lakhtionov, Yaroslav Pylypenko, Serhii Pavliuk, Veronika Borysenko, Kateryna Rusina, Daryna Synytska, and Anastasia Ferents.

**Literary Editor:** Anna Trofimova

**Design:** Serhii Buravchenko

---

The study was prepared by the DOZORRO team.

DOZORRO is a project of civil society organization Transparency International Ukraine which aims to ensure fair play in public procurement.

The project team has created and administers the [dozorro.org](https://dozorro.org) monitoring portal and the BI Prozorro [public](#) and [professional](#) analytics modules. In addition, DOZORRO is developing the DOZORRO community, a network of civil society organizations which monitor public procurement and report violations to supervisory and law enforcement agencies.

The rest of our studies can be found in the Research—Public Procurement section on the website of Transparency International Ukraine at: [bit.ly/DOZORRO-research](https://bit.ly/DOZORRO-research)

© 2023 Transparency International Ukraine. All rights reserved

Dissemination of the report for non-commercial purposes is encouraged.

We have verified the accuracy of the information in the report. However, Transparency International Ukraine is not responsible for the consequences of its use for another purpose or in another context.

This report was prepared with the financial support of the European Union. Its content is the sole responsibility of Transparency International Ukraine and does not necessarily reflect the views of the European Union.

# Introduction

The full-scale invasion of Russia has led to colossal destruction of the country's infrastructure. According to [the latest estimates](#) of the Kyiv School of Economics, the total amount of direct infrastructure losses in Ukraine amounts to USD143.8 bln.

One of the important tasks for the effective post-war recovery of Ukraine is not only the physical reconstruction of the destroyed infrastructure, but also its global modernization and transition to European standards.

Integration into the EU zone and further full membership implies the unification and bringing of Ukraine's infrastructure facilities in line with the requirements of the European Union standards. In particular, this means full integration into a single transport network TEN-T (The Trans-European Transport Network), the European energy network ENTSO-E (European Network of Transmission System Operators for Electricity), ensuring EU standards in the field of civil engineering.

Therefore, the overall needs for infrastructure reconstruction can far exceed current estimates and require considerable investments in relatively short periods of time.

Public-private partnerships (PPPs) can be one way to attract international investment in infrastructure. However, the success of PPP programs depends on the quality of conditions within the country and whether it will be possible to overcome the challenges on the way to developing an effective model of public-private partnership.

In this study, we analyze the experience of other countries in the implementation of PPP projects and assess promising areas of application of this mechanism and potential risks that may adversely affect the implementation of public-private partnerships in Ukraine.

# 1. Global PPP regulation practice and main types of PPP agreements

In international practice, there is no generally accepted definition of a public-private partnership because it is difficult to distinguish it from other forms of agreements between public and private entities. Typically, the definition of a public-private partnership is used for forms of agreements that provide for private investment or private management in regard to a public facility, the cost of which is covered by the revenues from the operation of this facility during the term of the agreement.

Thus, these agreements are a more complex form of interaction between public and private partners than other public contracts.

Most often, public-private partnerships are used to attract private investment in areas where privatization is not justified. This may concern facilities that provide important public services: transport (roads, bridges, airports), utilities (water supply, energy production), health care facilities, educational institutions, etc.

The main objective of PPPs is to leverage the strengths of both sectors to implement infrastructure projects or deliver public services more efficiently than each sector could do separately. The public sector benefits from the experience, innovation, and financial resources of the private sector, while the private sector gains access to new business opportunities and gains more control over the efficiency of investment.

Consequently, PPP agreements have sufficient advantages for both parties. A public-private partnership may carry additional risks for the public partner and users of the facility compared to other methods of construction, modernization, or management of the facility, such as higher cost of investments (and, as a result, higher cost for users), risks of covering investments of a private partner, poor performance by a private partner of its obligations, complexity of contracts, etc.

## Types of PPPs

Typically, PPP agreements are divided into three main categories:

- concessions;
- transfer of an object for management;
- joint venture.

Concessions are the most common category of PPPs. A transfer for management and a joint venture are usually subject to the provisions of general legislation. Considering this, in many cases, countries do not develop special legislation on PPPs, but only in the field of concessions.

According to European Union Directive 2014/23/EU, "concession" means a contract by which a public partner entrusts a private partner with the performance of works and/or the provision of services, the remuneration for which consists in the right to use the objects that are the subject of the contract (or in this right together with payment).

That is, in general, concession agreements provide for the performance of certain works on the construction or modernization of the facility at the expense of the private partner, and these costs are covered by the fee received by the private partner from the users of this facility. An essential condition of a concession is the transfer of operational risks (supply and demand risks) to the private partner. That is, the partner is not guaranteed the reimbursement of the investments made or the costs incurred during the performance of works or the provision of services that are the subject of the concession. The concession agreement may provide for additional payments by the public partner when the user fee does not cover the cost of the investment. Agreements may also provide for concession payments on the part of the private partner for the right to manage the facility if the expected revenues from its management exceed the value of private investment.

There are actually quite a few forms of PPP. They are usually divided in accordance with the terms of the contract, which determine the procedure for the construction, management, payment, and transfer of the facility.

The most common forms of PPP are, in particular, the following types of agreements:

– **BOT (Build, Operate, Transfer)**

In BOT contracts, the private sector is responsible for financing, designing, constructing, operating, and maintaining the infrastructure project for a certain period. At the end of the agreed period, ownership and control of the asset is returned to the public sector. The BOT agreement covers the life cycle of the project, including financial arrangements, revenue sharing, performance objectives, and asset transfer provisions.

#### **DERIVATIVES:**

*BOOT (Build, Own, Operate, Transfer)*

*BOLT (Build, Own, Lease, Transfer)*

#### **– DBO (Design, Build, Operate)**

This contract is commonly used in PPPs where the private sector is responsible for the design, construction, and long-term operation of the infrastructure project. The DBO agreement defines the design requirements, construction deadlines, quality standards, performance indicators, as well as the operating and maintenance conditions of the asset.

#### **DERIVATIVES:**

*DBFO (Design, Build, Finance, Operate)*

*DBFOM (Design, Build, Finance, Operate, Maintain).*

#### **– BOO (Build, Own, Operate)**

In this PPP model, the private sector is responsible for the financing, construction, and ownership of infrastructure facilities. The private partner also manages and maintains the asset for a specified period, usually with the intention of earning revenue through use fees or otherwise.

#### **– BBO (Buy, Build, Operate)**

This model assumes that the private sector buys existing public infrastructure facilities, often from the government, and then reconstructs, operates, and maintains them. The private partner acquires ownership, carries out the necessary upgrades or repairs, and manages the asset to provide the planned services.

#### **– LRO (Lease, Rehabilitate, Operate)**

LRO represents a PPP model where the private sector concludes a lease agreement with the public sector for the lease of a public infrastructure object. The private partner is responsible for the rehabilitation or reconstruction of the asset and then operates and maintains it for a specified period under the lease agreement.

#### **– OM (Operate, Maintain – contract for private operation and maintenance services)**

This type of PPP contract focuses on private sector involvement in the operation and maintenance of public infrastructure assets or objects. The government retains ownership, while the private partner assumes responsibility for efficient operation and regular maintenance.

#### **– OMM (Management and “Operation and Maintenance” Contracts)**

OMM is a PPP contract that covers not only operation and maintenance, but also general services for the management of public assets or objects. The private sector partner is responsible for the maintenance and operational and strategic management of the asset to achieve the desired results.

These forms of PPP differ in their structure, scope, and degree of private sector involvement. The choice of a PPP model depends on the specific objectives of the project, funding mechanisms, risk allocation, and desired outcomes for the public sector.

If you look at the different forms of object management throughout the life cycle, you can see that PPP contracts can contain certain stages inherent in both procurement and privatization (lease) of a public object, and are inherently a broader form of public procurement:

Form of agreement	Lifecycle of an object											
	Determining the need	Determining object characteristics	Design	Search for investments	Search for contractors	Construction	Construction supervision	Object management	Revenues	Maintenance	Ownership right	
<b>Privatization</b>												
Privatization	Public entity						Private entity					
Lease	Public entity						Private entity (for the term of the contract)			Public entity		
<b>Procurement</b>												
Procurement transaction (basic)	Public entity				Private entity	Public entity						
Total Cost of Ownership (TCO)	Public entity				Private entity	Public entity			Private entity	Public entity		
Engineering and Construction Contract, ECC	Public entity		Private entity	Public entity		Private entity	Public entity					
Procurement in the form of an EPC contract (Engineering, procurement and construction)	Public entity		Private entity	Public entity	Private entity			Public entity				
Procurement in the form of EPC-F (Engineering, procurement, construction and financing)	Public entity		Private entity						Public entity			
<b>PPP</b>												
BOT (BOOT, BOLT)	Public entity		Private entity							Public entity		
DBO (DBFO, DBFOM)	Public entity		Private entity					Public entity				
BOO	Public entity		Private entity									
LRO	Public entity				Private entity	Public entity	Private entity			Public entity		
OM (OMM)	Public entity						Private entity	Public entity	Private entity	Public entity		

## When to use PPPs

Despite the fact that public-private partnerships are widely used in global practice, such programs are not always successful.

Quite often, governments do not agree to the privatization of public property and tend to use a PPP as a form of compromise attraction of private investment. However, in all cases where the privatization of a public object does not threaten the national interests or the interests of consumers of socially important services, it is the priority way to dispose of the object since it does not provide for further risks for the public partner related to the operation and return on investment.

However, privatization does not always solve all the needs of the state. Sometimes the state needs to create a new facility, modernize or improve management, but the government does not have enough resources to implement such a project. Unlike lending, PPP agreements can be a more interesting tool because for the most part, they do not burden the budget too much, and investments are covered through the use of the facility itself.

The World Bank [notes](#) that governments should develop only those PPP projects that are justified in terms of the cost-benefit ratio, provide better price-quality correlation than traditional public procurement, and are financially responsible.

That is, a PPP agreement, in fact, is a certain alternative option for managing a public facility in terms of mechanisms such as privatization (alienation) and procurement, when both of these options do not allow achieving the goal.

Thus, it can be concluded that PPP agreements are appropriate to use for the construction, modernization, or management of objects that play an important public role and require resources that are not available to the state owner.

PPPs have gained particular popularity in the field of large-scale investment programs, which are difficult to implement without the active participation of the private sector. But when selecting programs, it is important to weigh all the risks and prospects of the project.

## PPP risks

While public-private partnerships offer a number of benefits, they also face certain challenges that may affect their successful implementation.

### More space for corruption

Often, PPP agreements involve difficult conditions for determining payment and confirming the fulfillment of obligations by the private partner.

To minimize this challenge, governments should ensure that quality policies are developed to calculate the size of private investment, the timeframes for its coverage, additional payments by the public partner, the procedure for monitoring and controlling PPPs by the state, etc.

### Complexity

The development and approval of PPP contracts can be complex and time-consuming. Balancing the interests of both the public and private sectors, determining the distribution of risks, establishing performance indicators, and ensuring the transparency of procurement require special attention and competence of the public partner.

### Political and regulatory risks

Changes in government priorities, legislative or regulatory changes, or contract disputes can pose challenges to the stability and continuity of PPP projects, which are usually long-term contracts.

### Financial feasibility and cost overruns

PPP projects often involve significant initial costs. Ensuring their financial viability can be challenging. Accurate cost estimation, securing financing, managing financial risks, and avoiding cost overruns are critical. At times, projects may become financially insolvent.

### Risk distribution

Proper risk distribution between the public and private sectors is critical to the success of PPPs. Identifying, assessing, and mitigating risks such as construction delays, demand variability, regulatory changes, or force majeure require careful analysis and effective risk management strategies.

### Public partner experience

The implementation of PPP projects requires sufficient capacity and expertise in the public sector to effectively manage and monitor partnerships. This includes skills in project assessment, contract management, financial analysis, and monitoring and evaluation. Lack of experience and resources can hinder the successful implementation of PPPs.

### Long-term commitment and performance monitoring

PPP projects often involve long-term commitments, and monitoring the performance of the private partner during the term of the contract is essential. For the private partner to achieve the expected results, meet quality standards and target indicators, reliable monitoring mechanisms are required.

Addressing these challenges requires careful planning, a robust legislative and regulatory framework, clear policies, and ongoing monitoring and evaluation. The government should seek a balance between the interests of both sectors, while maintaining transparency and accountability.

## Prerequisites for successful PPP implementation

### 1. Projected regulatory policy and priorities of the state

PPPs typically involve a long-term contract between the public and private parties for the construction or reconstruction, financing and operation of an infrastructure asset in which the private party bears significant risk for the duration of the contract.

According to the [Global Infrastructure Hub](#) analysis, most large-scale PPP projects in 2005–2015 typically had a duration of more than 20 years. At the same time, changes in regulatory policy and the lack of a consistent position of the state pose significant threats to the private partner.

## 2. **Investment protection**

The inability to protect the rights and interests before the state and other economic entities is often the main obstacle to attracting international investment.

That is why it is necessary to develop effective mechanisms for appealing the actions of participants in PPP tenders, independent consideration of complaints, transparent and fair hearing of cases in the field of PPP by courts (dispute resolution), institutional support of private partners by the state.

A study by [Marsh McLennan](#) during the analysis of 3,700 different PPP projects found that 25% of projects between a public and private partner had disputes during the term of the contract. Therefore, disputes may arise not only at the stage of the tender, but also after the conclusion of the contract.

The lack of an effective judicial system calls into question the honesty and transparency of such disputes.

## 3. **Performance monitoring**

The public partner should closely monitor the work of the private company to ensure that the service is provided as agreed. From the very beginning, during the tender, it is necessary to come to a common understanding of key performance indicators; otherwise, the parties can take advantage of ambiguous or unclear KPIs. As a result, the public partner may face the fact that the condition of the object and the quality of its maintenance will be significantly worse than expected.

As the PPP contract is long-lasting, it is important to monitor its effectiveness throughout the duration of the contract.

## 4. **Definition of PPP conditions**

If the main conditions of the PPP are not defined transparently and clearly, the balance of interests may face significant risks. The government should ensure the development of appropriate policies that clearly regulate the procedure for determining the objective period of use (management) of the object by the private partner so that it can reimburse its expenses, the procedure for clarifying and adjusting planned calculations, the procedure for monitoring the compliance of declared expenses and income with actual ones, etc.

Otherwise, PPP contracts risk causing significant losses to the public partner and violating the interests of the facility users.

## 5. **Project support**

Sometimes state actors believe that the PPP agreement is an easier way than procurement and further operational management on their own.

However, PPP agreements are usually complex agreements that require the constant participation of the public partner in monitoring the effectiveness of management, the implementation of planned indicators, ensuring the transparency of financial resources, and the compliance of the works performed. Appropriate competency and integrity of personnel are required.

## 6. **PPP impact study**

By their nature, infrastructure PPPs involve a wide range of interrelationships between different parties.

The public partner should focus not only on the financial feasibility of the project, but also on how the project affects the interests of the users of the object, whether there is an improvement in the quality of services and whether such an improvement corresponds to a change in the conditions of cost and access to such services for users. It is also necessary to consider the interests of the state and the long-term impact of the project.

## 7. **Revision of terms**

[Marsh McLennan](#) data show that in 45% of PPP projects, terms were revised during the contract period.

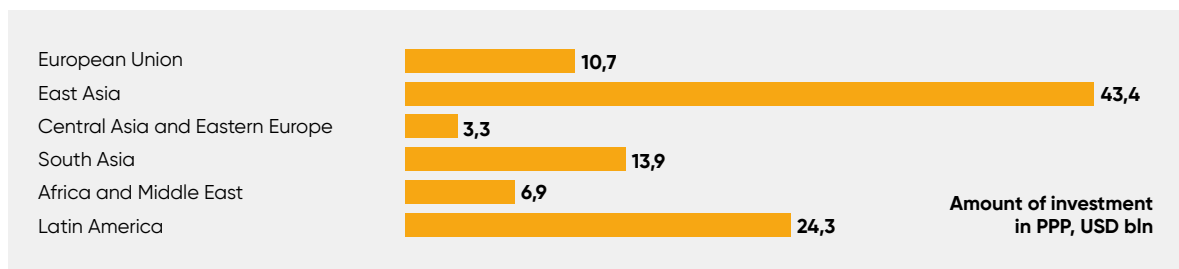


Renegotiation may be necessary as a response to external changes and to allow for better outcomes. However, they can also reduce transparency and jeopardize the credibility and effectiveness of the competitive PPP procurement process. Therefore, clear policies need to be identified under which it will be possible to revise the terms of the contract, conduct a proper justification, and ensure objective approaches.

## PPP in the world

According to research by the [World Bank](#) and the [European Investment Bank](#) on the implementation of public-private partnership programs for 2022, total PPP investments amount to more than USD100 billion. The largest volume of projects was implemented in the East Asian region – USD43.4 billion. This is primarily due to China's leadership in the PPP.

### Distribution of PPP investments by region (infographic):



The main areas for investment in PPPs are transport infrastructure, renewable energy, energy, water supply, and drainage.

Some of the largest PPP projects in the world are:

1. [Crossrail \(United Kingdom\)](#)

The cost is approximately USD25 bln.

Crossrail is a major rail infrastructure project in the United Kingdom. It envisages the construction of a new railway line that will connect different parts of London and the southeastern region. The project is a partnership between the UK Government, Transport for London, and private sector contractors.

2. [Toll road in Indiana \(USA\)](#)

Cost – USD3.8 bln.

The Indiana Toll Road is a major transportation infrastructure project in the United States. The length of the highway is 251 km.

The project involves a long-term concession agreement under which a private consortium operates and maintains the toll road for a certain period. A consortium of the Spanish construction firm [Cintra](#) and Australian [Macquarie Atlas Roads](#) is responsible for financing, upgrading, and managing the toll road to ensure efficient and safe traffic.

3. [Athens International airport \(Greece\)](#)

The cost is USD3.4 bln.

The concession project of the Athens International Airport envisaged the development, operation, and management of a new airport in Greece, which is capable of accommodating 25 million passengers a year. The concession for 30 years was granted to a private consortium, which financed the construction and took responsibility for the operation and maintenance of the airport.

4. [A1 motorway concession \(Poland\)](#)

The cost is USD3.5 bln.

The concession to the A1 motorway in Poland is a significant infrastructure project in Eastern Europe, which involves the development, operation, and maintenance of a large highway connecting Gdańsk and Pyrzowice. The private concessionaire is responsible for the financing, upgrading, and management of the motorway to ensure efficient and safe movement of traffic.

5. [Khalifa Port](#) (United Arab Emirates)

Cost – USD7.2 bln.

Khalifa Port is a modern deepwater port located in Abu Dhabi, UAE. It was developed as part of the Khalifa Industrial Zone Abu Dhabi (KIZAD) project. Abu Dhabi Ports Company was entrusted with the development and operation of the port under a concession agreement for a period of 30 years. The project involves significant investment in port infrastructure and aims to strengthen Abu Dhabi's position as a global trading hub.

6. [London Array Offshore Wind Farm](#)

The cost is approximately USD2.9 bln.

London Array is one of the world's largest offshore wind farms, located at the mouth of the Thames, United Kingdom. It consists of 175 wind turbines and has a total peak capacity of 630 MW.

7. [Navi Mumbai International Airport](#) (India)

The cost is approximately USD2.1 bln.

Navi Mumbai International Airport is a new airport project in Maharashtra, India. Its goal is to reduce congestion in Mumbai and meet the growing demand for air travel. The project envisages the construction of a new airport terminal, runways, auxiliary facilities, and related infrastructure. It is being developed under a PPP agreement between the Government of India and a private consortium.

8. [Gautrain Rapid Rail Link](#) (South Africa)

The cost is approximately USD1.7 bln.

The Gautrain Rapid Rail Link is a high-speed rail network in South Africa connecting the cities of Johannesburg, Pretoria, and Tambo International Airport. The project provides for the construction of railway infrastructure, stations, service facilities. The project is a partnership between the South African government, private consortia, and international lenders and involves a 20-year concession to Bombela Concession Company (Pty) Ltd.

9. [Construction of the University of California campus](#)

Cost – USD1.3 bln.

The project for the construction of a new university campus with an area of 0.36 million m<sup>2</sup> covers the construction of student housing, classrooms, educational and research premises, health and counseling centers for students, as well as a place for recreation. The implementation took place in three stages starting in mid-July 2018 and the second phase was completed in mid-2019.

10. [New Karolinska Solna Hospital](#) (Sweden):

The cost is USD1.7 bln.

New Karolinska Solna Hospital is a large medical facility located in Stockholm, Sweden. It was developed as a public-private partnership project in which a private consortium is responsible for the design, construction, financing, and maintenance of the hospital.

## 2. Analysis of PPP practice in the EU

The main areas of applying public-private partnerships in the European Union are energy, management and distribution of water resources, telecommunications, road and railway infrastructure, airports, educational and medical institutions.

Although the EU has been using PPP mechanisms for quite some time, the experience of implementing such projects in many countries is still limited. First of all, this is because of the complexity of this tool.

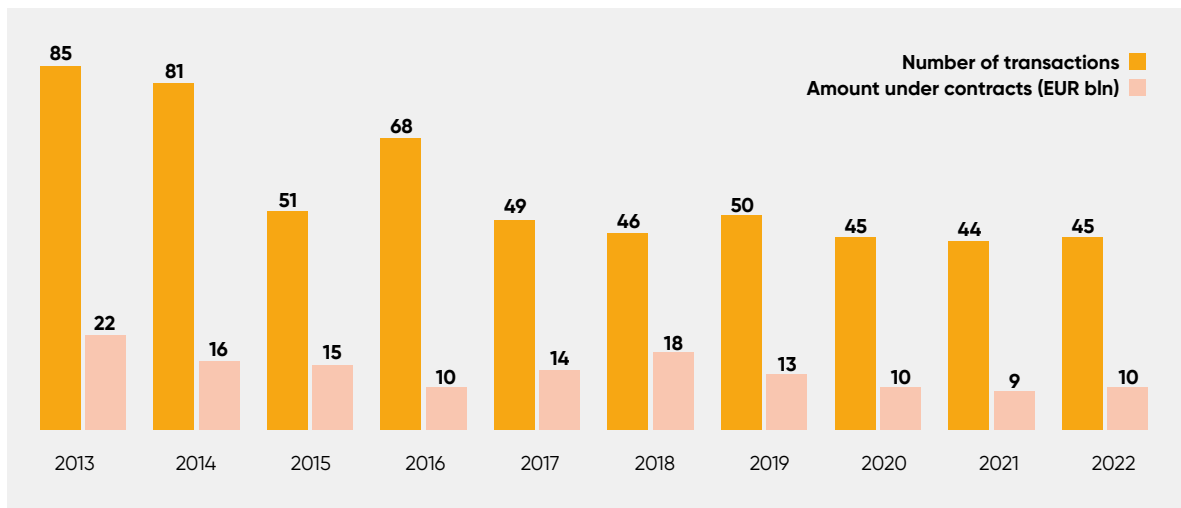
PPPs are usually used for complex and expensive projects that are often impossible to implement purely by state actors.

Before leaving the EU, the leader of public-private partnerships had been the United Kingdom.

According to [the European PPP Expertise Centre \(EPEC\)](#), the total value of PPP projects reaching financial closure in the European Union in 2022 amounted to EUR9.8 bln. In total, 44 large projects were implemented.

However, the volume of investments in PPPs has decreased significantly compared to previous years, which was obviously affected by the global pandemic of 2019–2021.

### Scope of implemented PPP projects in the EU (infographics)



In 2022, two large PPP projects were implemented in the European Union with a total value of EUR4.25 bln:

- [CEGELOG French Military Accommodation PPP](#) (France) – EUR1.4 bln – a concession agreement with the Ministry of the Armed Forces of France to manage the country's housing stock for a period of 35 years.
- [Port of Larnaca and Marina Reconstruction](#) (Cyprus) – EUR1 bln – an agreement for the reconstruction of the port of Larnaca, which should bring Cyprus EUR19.6 bln and create 4,000 new jobs.

The largest PPP market in Europe in 2022 was the Italian market (EUR2.2 bln), and the largest number of projects was recorded in France – 17.

Structure of PPP projects by sectors of the economy (infographics):

- Transport sector: 16 projects worth EUR6 bln;
- Environment: 9 projects worth EUR866 mln;
- Telecommunications sector: 3 projects worth EUR427 mln;
- Education: 5 projects worth EUR391 mln;
- Recreation and culture: 4 projects worth EUR126 mln

## — EU legislative framework:

1. [Concession Directive \(2014/23/EU\)](#). This directive, adopted in 2014, created the legal basis for the granting of concessions by public and local authorities. It introduced common rules on award procedures, selection criteria, and contract terms for concession contracts. The Directive was intended to ensure non-discrimination, transparency, and equal treatment of potential concessionaires.
2. Public Procurement Directives ([2014/24/EU](#) and [2014/25/EU](#)). They establish the rules of competitive tender procedures and selection criteria for PPP projects and concessions worth over EUR5.2 mln. Thus, the EU legislation in the field of PPP and public procurement in terms of tender procedures is harmonized.
3. Case Law of [the Court of Justice of the European Union](#). Through its case law, the EU Court of Justice played an important role in shaping the legal framework for concessions and PPPs. It issued a ruling clarifying key concepts such as the definition of concession, the distinction between concessions and public contracts, and the application of EU rules on public agreements.

## — Institutional framework for PPPs in the EU:

[European PPP Expertise Centre \(EPEC\)](#): The European PPP Expertise Centre, established by the European Commission, provides technical assistance and promotes best practices to implement PPPs in the EU. The EPEC offers guidance on various aspects, including project structuring, risk assessment, and contract management.

[European Long-Term Investment Funds \(ELTIF\)](#): The EU introduced the ELTIF regulation in 2015 to facilitate long-term investment in infrastructure and other asset classes. ELTIF aims to raise private capital for co-investment funds.

Support of [the European Investment Bank \(EIB\)](#): The European Investment Bank is an EU financial institution that is actively involved in supporting concessions and PPPs. It provides loans, guarantees, and technical assistance to public and private entities involved in infrastructure projects, including through concessions and PPP models.

At the same time, national governments are also creating their own institutions to support and manage PPP projects.

## — Key provisions of the Concession Directive 2014/23/EU

EU legislation lacks a regulatory act that settles public-private partnerships in a broad sense. The special directive is designed only for concession projects as the most common form of PPP, which has significant differences from other public contracts.

In the general interpretation, concession agreements are rather a separate form of procurement. This proceeds from the logic of the development of public procurement, which contains many different types of agreements on the procurement of goods, works, and services with the inclusion of additional components, such as the cost of the life cycle, the cost of design, financing, project support at different stages of implementation.

Thus, concession is to some extent procurement with a broader definition of additional components, in particular, regarding the procedure for managing and operating the construction facility, the procedure for attracting and covering investments from the operational activities of the object, etc.

The Concession Directive 2014/23/EU applies to concession contracts for works and services with a value equal to or exceeding EUR5.2 million. When assessing the value of the concession, the buyer must consider the total turnover of the concessionaire received during the term of the contract.

## — Basic principles:

**Time limit:** the concession agreement shall be time-limited. For concessions lasting more than 5 years, the duration shall not exceed the period during which the concessionaire can reasonably recover their investment.

**Transparency and accessibility:** the Directive emphasizes the transparency of the award process. Procuring entities are obliged to publish a preliminary information notice to inform potential candidates about future concession opportunities. They should also publish a concession notice to invite interested parties to submit their bids. The notice should contain essential information about the concession, selection criteria, and the award procedure.

**Award procedure:** The Directive requires a competitive and non-discriminatory award procedure. Procuring entities shall establish clear and objective selection criteria to assess the qualifications, financial and technical capabilities and other relevant factors of candidates. The selection criteria shall be proportional to the concession item.

**Attitude towards candidates:** Directive 2014/23/EU provides that the public partner must ensure equal and fair treatment throughout the contract award process.

**Contract conditions:** The Directive requires that the terms of the concession contract be clear, unambiguous, and consistent with the concession item. The contract shall define the rights and obligations of the parties, including the scope of work or services, financial arrangements, and the duration of the concession. Procuring entities must also ensure compliance with applicable environmental, social, and labor legislation.

**Change of terms and contract termination:** The Directive provides for a list of cases in which the provisions of the concession agreement can be changed without a new tender. It also defines the conditions that must be reflected in the relevant national legislation under which the public partner has the right to terminate such an agreement.

EU Member States may develop national laws in the field of concessions, provided that they comply with the requirements of the EU Directives and [the basic rules](#) for awarding a concession contract:

- 1) Publication of the concession notice in the [Tenders Electronic Daily](#) (TED) database, including a description of the concession and the conditions for participation in the concession procedure (minimum financial turnover, availability of equipment, experience with specific types of work or services, etc.).
- 2) Informing potential and real participants of the procedure about the terms of reference and award criteria.
- 3) Compliance with the established requirements and screening out candidates who do not meet them.
- 4) Exclusion of candidates who have been convicted of certain crimes, such as fraud and money laundering.
- 5) Providing all participants with a description of the procedure.
- 6) Use of contract award criteria that ensure equal treatment of all participants. The criteria should be non-discriminatory (should not give preference to local or national products or companies), objective, and defined in advance.
- 7) The contracting authority may negotiate with candidates and participants. However, certain elements of the initial tender, the concession item, the award criteria, and the minimum requirements cannot be changed during the procedure.
- 8) The contracting authority shall ensure that all stages of the procedure are recorded.

### National legislation in certain EU countries:

Country	National legislation on PPPs and concessions
<a href="#">France</a>	Code on Public Procurement and Concession Contracts (PPP Code). By-laws.
<a href="#">Germany</a>	PPP Acceleration Act 2005. Law on Modernization of Procurement Legislation 2016.
<a href="#">Spain</a>	Spanish Law on Public Procurement (Law 9/2017).
<a href="#">Poland</a>	The Law on Public-Private Partnership, dated December 19, 2008, as amended. Law on Concession. Law on Public Procurement.
<a href="#">Greece</a>	<a href="#">Law No. 3389/2005 (JO A' 232) Public-Private partnership.</a>
<a href="#">Czech Republic</a>	<a href="#">Law on Concession Contracts and Concession Procedures (Law on Concessions).</a> <a href="#">Law on public procurement.</a>

So, as we can see, some countries are developing a separate law in the field of PPP, but most of them directly follow the approaches of the EU Directives and determine the features of using contracts only in the field of concessions. At the same time, tender procedures for the selection of a private partner are regulated by the general legislation on procurement.

## Overall assessment of PPP implementation in EU countries

In general, it is difficult to assess the effectiveness of the use of public-private partnerships in the European Union since PPP cases vary greatly depending on the country and scope. However, this tool clearly allows the implementation of complex and expensive projects that have a significant impact on the development of the EU infrastructure.

In the European Union, there were cases of unsuccessful concessions, when projects faced problems or did not achieve the planned results. In particular, financial difficulties, poor management, changes in market conditions or incorrect risk assessment became a hindrance.

Examples of selected unsuccessful or controversial PPP projects in the EU:

### A1 motorway concession in Poland:

The construction of the highway lasted from 2005 to 2022. The agreement on the concession of a large toll road for the A1 motorway in Poland faced financial difficulties. The private consortium responsible for the project, which included international investors, suffered financial losses due to lower than expected traffic volumes and problems with debt restructuring. The project was completed with EU co-financing.

### Limerick Tunnel concession in Ireland:

The concession of the Limerick Tunnel in Ireland ran into difficulties after its opening in 2010. It was difficult for a private operator to attract the projected level of traffic, which led to financial losses. Eventually, the Irish government took over the management of the tunnel from a private company and later concluded a new management contract for the object.

### PFI Birmingham Highways in the United Kingdom:

The Birmingham Highways Private Finance Initiative (PFI) project, which aimed to improve and maintain urban roads, proved unsuccessful. The private consortium responsible for the project faced financial difficulties, and the cost of the project significantly exceeded the initial estimate. In 2022, a repeated tender was announced.

### PPP projects for the construction of schools in Greece:

Greece faced challenges related to PPP projects in building new schools. The financial crisis and the unfavorable economic environment in Greece led to the suspension of the PPP for the construction of 24 modern schools.

The structuring and financial closure of the transaction caused many problems. With EU assistance, it was possible to restore the cost-effectiveness of the project to the minimum level necessary for its completion.

Consequently, the success of PPP projects depends on many factors. This tool allows the implementation of large investment projects that would be inaccessible to states. However, it is important to correctly assess the prospects, ensure financial and political stability in the country, and establish the correct project management so that it ensures the goal.

## 3. Analysis of PPP implementation experience in Ukraine

### PPP legislative framework in Ukraine

The list of the main regulatory acts in the field of PPP:

- [Commercial Code of Ukraine](#) (Chapter 36, 40)
- [Civil Code of Ukraine](#) (Chapter 70, 77)
- [Law of Ukraine on Public-Private Partnership](#)
- [Law of Ukraine on Concession](#)
- [Law of Ukraine on Features of Lease of Municipally Owned Heating, Water Supply, and Sewerage Facilities](#)
- [Law of Ukraine on Features of Lease and Concession of Objects of Fuel and Energy Complex of State Ownership](#)
- [Resolution of the Cabinet of Ministers of Ukraine No. 384, dated April 11, 2011, Certain Issues of Organization of Public-Private Partnership](#)
- [Resolution of the Cabinet of Ministers of Ukraine No. 232, dated February 16, 2011 on Approval of the Methodology for Identifying the Risks of Public-Private Partnership, Their Assessment and Determining the Form of Their Management](#)
- [Resolution of the Cabinet of Ministers of Ukraine No. 706, dated August 12, 2020, on Approval of the Methodology for Calculating Concession Payments](#)
- [Resolution of the Cabinet of Ministers of Ukraine No. 909, dated August 20, 2021, on the Procedure for Concession Tender and Competitive Dialogue in the Electronic Trading System](#)
- [Resolution of the Cabinet of Ministers of Ukraine No. 117, dated February 2, 2023, on Approval of the Procedure for Adopting a Decision on Providing State Support for the Implementation of Public-Private Partnership](#)
- [Order of the Ministry of Economy of Ukraine No. 1067, dated December 14, 2021, on Approval of the Methodology for Analyzing the Effectiveness of the Implementation of Public-Private Partnership](#)
- [Order of the Ministry of Infrastructure of Ukraine No. 61, dated January 28, 2014, on Approval of the Regulations of the Selection Commission for the Concession Tender for the Construction and Operation of Highways](#)

Unlike EU legislation, Ukrainian legislation considers PPPs separately from procurement. It consists of a high-level law on PPPs, special legislation in the field of concessions, and by-laws that regulate certain issues in the field of PPPs.

It is difficult to determine whether a separate PPP law that does not apply to concessions is justified. After all, most relations in the field of PPPs that do not fall under the definition of concession (transfer to management, joint management, etc.) are already partially regulated in other legislative documents.

Overall, the legislation of Ukraine is too broad and does not clearly define the processes of cooperation between public and private partners, considering the features of different types of PPPs (BOT, BOO, DBO, etc.). Certain concepts and definitions differ significantly from European legislation, and this is a potential challenge for the implementation of the European integration process in Ukraine.

If we look at [the register of concession agreements](#) concluded in Ukraine, 90% of them are concluded for the maximum possible period: 49 years. However, there is no justification for such a long term of the contract.

In many cases, there is no effective analysis of why another method of management, in particular privatization, was not used for the object.

Data on concession agreements are superficial and do not allow identifying the scope of work and expected results.

In particular, one of the concession projects provides for the concession of the Tartakiv Palace architectural monument for a period of 49 years.

The purpose of the project was [to restore the architectural monument](#) and transfer it to private management. However, according to available information, the restoration of the object [has not begun](#), despite the fact that the agreement was concluded more than 10 years ago. At the time of the last [report](#), the contract

had not yet been terminated. This indicates a low level of control over the effectiveness of the concession agreement implementation.

Thus, in Ukraine, most concession contracts were concluded rather as a more profitable alternative to privatization for a private partner, which implied weak control and optional fulfillment of the obligations.

Recent concession projects of the ports of [Olvia](#) and [Kherson](#) are rather difficult to assess. The signing of contracts took almost two years, including [due to litigation](#) to challenge the results of the tender. Immediately after the transfer of the objects, the full-scale invasion of Russia began.

The EBRD, in its [assessment of the implementation of PPPs in Ukraine in 2017–2018](#), notes the following shortcomings in the legislative framework of Ukraine:

- the regulatory framework in the field of public-private partnership is not harmonized and does not give a clear understanding of the procedure to be followed at each stage of the PPP project;
- it is necessary to harmonize various norms of legislation;
- too comprehensive (broad) legislation;
- there is no clear methodology for calculating the compensation that a public party pays to a private party if the latter violates its obligations under the non-concession/concession PPP agreement;
- there are no tax or customs benefits for private partners in the implementation of non-concession/concession PPP;

The EBRD also notes that the shortcoming in the regulatory framework is the weak development of institutional support for PPPs.

Between 2018 and 2023, Ukraine took several steps to reform the PPP sector:

- the [Public-Private Partnership Support Agency](#) started its work, which was the beginning of the development of institutions in the field of concessions;
- a [new Law](#) was adopted that differentiated the regulation of concession and other forms of PPP implementation;
- a number of by-laws on determining concession payments and analyzing the effectiveness of PPPs were approved.

It is difficult to assess these changes, since due to the full-scale invasion of Russia, most PPP projects in Ukraine have been suspended, and the resumption of active work in this area is unlikely to be expected in the near future.

[According to](#) the Ministry of Economy of Ukraine, as of January 1, 2023, **193 agreements were concluded** under the terms of the PPP, of which 18 **are being implemented** (9 – concession, 5 – on joint activities, 4 – others), **162 agreements are suspended** (116 – not implemented, 46 – terminated/expired), **13 are suspended** due to the armed aggression of Russia.

## The life cycle (main stages) of the PPP project on state-owned objects at the initiative of the public partner in Ukraine <sup>[1]</sup>

No.	Name of the stage	Summary of the stage	Deadline, calendar days
1	Identification and selection of PPP projects	The process of preparing to implement a PPP project is usually preceded by determining priority investment projects, usually through their identification and selection. This process verifies whether the investment projects proposed by the public sector have potential as PPPs.	Not defined
2	Initiation of the project and creation of a working group to prepare for its implementation	The PPP initiator decides on the launch of a PPP project, identifies the responsible contractors, and/or establishes an appropriate working group to prepare the PPP proposal.	Not defined
3	Developing a concept note for PPP implementation	A PPP Implementation Concept Note is a document that provides an investment rationale and an assessment of the basic parameters of a PPP project that are necessary to decide whether further in-depth and detailed studies and feasibility studies (FS) of the PPP are expedient or inexpedient.	Not defined
4	Concept note analysis <sup>[2]</sup>	It is carried out in relation to public property objects by the initiator of the proposal preparation, considering the positions of the Ministry of Economy, the Ministry of Finance, and the central executive body that carries out, in accordance with the law, the functions of managing the relevant public property objects (when such a body is not the initiator of the proposal preparation).	30



No.	Name of the stage	Summary of the stage	Deadline, calendar days
5	Decision of the public partner on the expediency of preparing a feasibility study	The initiator of the proposal preparation (the central executive body) issues an administrative document.	Not defined
6	Development of a feasibility study for PPP implementation	The feasibility study for the PPP implementation is a set of calculation and analytical documents containing the main technical and organizational decisions, estimates, evaluative and other indicators that allow to consider the expediency and effectiveness of the PPP project. An integral part of the feasibility study is the financial model of the PPP implementation.	Not defined
7	PPP performance analysis	Performance analysis regarding state-owned objects is conducted by a central or local executive body, which carries out, in accordance with the law, the functions of managing the relevant state-owned objects, and if such a body is not determined, by the Ministry of Economy. Based on the results of the performance analysis, a conclusion is drawn up whether it is expedient/inexpedient to adopt a decision on the implementation of a PPP in a certain form (for example, a concession).	30
8	Decision of the public partner on the PPP implementation or on the inexpediency of its implementation	The conclusion and the proposal to implement the PPP (the feasibility study) are sent for approval to the Ministry of Economy, which sends them to the Ministry of Finance, the Ministry of Environmental Protection and Natural Resources, the AMCU, the SPFU. The Ministry of Economy checks and approves the proposal for the implementation of the PPP and the conclusion, considering the position of the Ministry of Finance, proposals, and clarifications of other bodies to which the conclusion and proposal or request were sent.	45
9	Establishing a selection commission	The public partner creates a selection commission, which will determine the terms of the tender and develop the tender documentation.	up to 180
10	Preparing tender documentation	At this stage, the final structuring of the project (financial structure, payment mechanism, risk allocation) and the development of tender documentation by the selection commission, in particular the draft PPP agreement (concession), which is submitted to the public partner for approval, are carried out.	up to 180 (can be extended for no more than 180 days)
11	Approval of tender documentation	-	10
12	Decision to hold a tender	-	30
13	Announcement of a tender	-	10 working days (14 calendar days)
14	Conducting a tender to determine a private partner (concession tender)	Based on the results of the tender, the commission draws up a protocol on the results of the tender (determining the winner of the tender, rejecting all tender proposals without determining the winner, or announcing the tender as such that did not take place) and submits it for approval to the public partner.  If the minutes are approved and information about the winner of the tender is published, the public partner invites the winner to negotiate a PPP/concession agreement. Notably, during the conclusion of the contract with the winner, it is prohibited to change the essential terms of the PPP/concession agreement, as well as the provisions reflecting the content of the tender bid.	- submission of bids: up to 90 - decision on admission of candidates to the tender: 14 - deadline for submission of a tender bid: not less than 60
15	Determining the winner of the tender	-	Evaluation of bids: 30 Approving the minutes of the selection commission: 5 working days Invitation to conclude a concession contract: 3 working days
16	Signing a PPP contract (concession)	The PPP contract/concession contract is considered concluded from the date of reaching an agreement on all its conditions and signing the text of the agreement by the parties.	up to 180
17	Transferring the existing concession object to the concessionaire (transition period)	-	Not defined
18	PPP (concession) contract management	The public partner/concessionaire manages the contract and monitors the performance of the private partner/concessionaire. The purpose of the PPP/concession contract management activities is to obtain the services specified in the specifications of this contract, achieve performance indicators, ensure high efficiency of the use of funds (Value for Money) and proper management of distributed risks, as well as resolve any technical, legal, regulatory, environmental, and social management issues that may arise during the implementation of the PPP/concession project.	During the term of the concession contract
19	Return of the concession object to the management of the public partner	-	Upon expiration or early termination of the concession contract

## Key challenges for PPP development in Ukraine

Ukraine has a rather weak position in attracting international investment, and this affects the development of the public-private partnership ecosystem in Ukraine.

The main reasons for this are:

- the lack of distrust in the judicial system of Ukraine;
- the changeable nature of the policy and priorities of the state;
- the lack of a clear long-term vision of the state development;
- corruption;
- the complexity of the Ukrainian construction sector and the licensing system;
- low degree of investment protection;
- the lack of effective institutions in the field of project management, etc.

It is difficult to expect that the situation in the field of PPP will change significantly unless the judicial and law enforcement systems are reformed, the system of investor rights protection is developed (in particular, effective appeal of abuses by state actors), and the development of project support and management institutions is promoted.

A PPP is often perceived in Ukraine as a simple solution to complex problems. But it should be understood that PPP contracts and especially concession contracts are often the most complex form of an agreement between a state and non-state actor. Its effective implementation requires the competency and integrity of the state personnel, which is capable of supporting and monitoring the project throughout the term of the contract.

If PPP contracts are concluded in a chaotic manner, without proper monitoring and mechanisms for objectively determining the essential terms of contracts and the ways in which they are awarded, this may cause uncontrollable consequences and significant problems in the future.

Therefore, to ensure an effective ecosystem of public-private partnerships in Ukraine, it is necessary to implement a set of measures to increase institutional capacity, develop clear methodologies and policies for PPPs, and reform the sphere of protection of investors' interests.

## Draft law 7508

In 2022, [draft law No.7508](#) on Amendments to Certain Legislative Acts of Ukraine to Improve the Mechanism for Attracting Private Investments Using the Mechanism of Public-Private Partnership to Accelerate the Restoration of War-Destroyed Objects and the Construction of New Objects Related to the Post-War Recovery of the Economy of Ukraine was presented.

This is a comprehensive document that proposes to introduce significant changes to more than 10 laws relating to PPPs.

The initiators declare that the draft law is a response to new challenges and should help Ukraine in the issue of post-war reconstruction. The draft law pays special attention to infrastructure and economic recovery projects. A special procedure for the preparation, selection, and holding of a tender to determine a private partner is envisaged for them.

In addition, the draft law proposes:

- clarifying PPP forms;
- expanding the scope of PPP application and the list of public partners;
- simplifying and shortening procedures for the preparation of PPP projects;
- updating the competitive procedures that will be carried out in the electronic trading system according to EU standards.

Therefore, this draft law could potentially improve the regulation of the PPP sphere and ensure the compliance of Ukrainian legislation with EU law.

However, TI Ukraine, [analyzing the latest](#) version of the draft law at the time of compiling this study, believes that it does not achieve its goal, contains significant risks, and does not ensure a balance of interests of all parties in the field of public-private partnership.

In particular, the draft law entrusts the settlement of any disputes that arise between public and private partners (including appealing against the actions of the selection commission) to the administrative courts of Ukraine. The absence of another appeal mechanism, such as one that functions in public procurement (appeal to the AMCU panel), can significantly undermine trust. After all, trust in the national justice is at a low level.

The draft law provides for an inexhaustible list of qualification criteria for candidates, which is potentially a risk of abuse by selection commissions when formulating requirements for candidates.

Moreover, the draft law has significant discrepancies with the provisions of Directive 2014/23/EU. In particular, the EU Directive clearly states that the duration of concession contracts should be no longer than the time for which the return on investment of the private partner (including the planned profit) is expected, whereas Draft Law No.7508 provides for the possibility of concluding contracts for a period exceeding such a term.

Thus, draft law No.7508 in its current version does not solve the need to reform the legislation of Ukraine in the field of public-private partnership. Detailed analysis of the above-mentioned draft law can [be found at the link](#).

## **Promising areas of attracting PPP in Ukraine**

Public-private partnership projects are a progressive mechanism for attracting private investment to develop important infrastructure, energy and social facilities.

Given that in the process of post-war reconstruction, Ukraine will need a huge number of projects and programs for the recovery of the main areas of social, transport, and energy infrastructure, the country will feel the need to attract significant investments.

Public-private partnership projects can cover part of this demand for investment and provide an opportunity for external partners to obtain more stable and predictable conditions for cooperation with state actors of Ukraine.

However, this investment attraction tool requires a much higher level of competence and support from the public partner. The effectiveness of achieving the project goals very often depends on whether they are correctly defined, whether the capabilities and necessary resources for the implementation of projects are correctly assessed, whether the process of managing such projects is sufficiently effective, how advanced the system of dispute resolution and disputes between public and private partners is.

Therefore, Ukraine needs not only to restructure the legislation and bring it in line with the requirements of EU directives, but also to develop an effective architecture to support such projects.

To ensure transparency and objectivity in the process of awarding PPP contracts, it is also necessary to build effective tools to appeal actions of public partners that are discriminatory or unreasonable. In addition, public supervisory bodies should have mechanisms to monitor and objectively evaluate such projects.

Draft law No.7508, which should become a key reform in the field of legislation, does not cover most of these challenges.

The main promising areas for the implementation of PPP projects and concessions in Ukraine during post-war reconstruction can be:

1. Rail transport:
  - development of high-speed passenger transportation networks;
  - management of railway stations;
  - construction of critical railway infrastructure (tunnels, bridges, logistics terminals, cross-border hubs, etc.).
2. Roads, ports & air transportation:
  - construction of additional road infrastructure (ring roads, high-speed motorways, etc.);
  - development of infrastructure of bridges and tunnels;
  - construction of toll roads in tourist areas;
  - development of port logistics and expansion of throughput capacity;
  - development of the domestic air transportation network.

3. Energy sector:
  - objects in the field of wind and solar generation;
  - construction of new nuclear and hydroelectric power plants;
  - construction of hydrogen energy facilities, etc.
  
4. Social infrastructure:
  - development of specialized medical and educational institutions;
  - projects in the field of waste processing;
  - projects in the field of improving the quality of water supply and drainage, etc.

At the same time, the example of other countries shows that PPP and concession projects in these areas can be both successful and unsuccessful. The state should seek a balance of interests between private investors and service users to guarantee sufficient user popularity of new facilities and ultimately ensure the profitability and cost-effectiveness of such projects.

## 4. Analysis of the leading experience of countries in the field of PPP

In this section, we are analyzing the experience of leaders in the implementation of public-private partnership projects in certain areas and the legislative and institutional foundations of how to succeed in implementing PPP projects, as well as outlining the conclusions for Ukraine.

### Turkey's experience in using PPPs for transport infrastructure development

Turkey is among the countries with the most developed experience in implementing public-private partnership projects. In 2021, Turkey **ranked third** in the world in terms of investment in PPP infrastructure projects (after Brazil and China).

Total annual investments in PPP projects in 2021 in the infrastructure sector of Turkey amounted to more than USD9.4 bln (12% of global PPP investments).

In fact, public-private partnership is one of the main components of the development of Turkish transport infrastructure in recent decades. These projects act as a catalyst for change in road and air transport.

Some of the largest concession projects in Turkey are:

1. New Istanbul airport: **EUR23.4 billion**  
One of the largest airport projects in the world, built on an area of 76.5 million m<sup>2</sup>. Opened in 2018, the airport has an annual capacity of 150 million passengers, making it one of the busiest airports in the world.
2. Gebze-Orhangazi-Izmir Motorway: **more than USD7 billion**  
A 433-kilometer toll road connecting the cities of Gebze, Orhangazi, and Izmir. Completed in 2019, the highway has 3 suspension bridges, 6 viaducts, and 29 tunnels.
3. Eurasian Tunnel: **USD1.25 billion**  
A 5.4-kilometer road tunnel connecting the Asian and European sides of Istanbul under the Bosphorus Strait. The tunnel, which was completed in 2016, reduced travel time between the two parts of the city from 100 to 15 minutes.
4. Third Bosphorus Bridge: **USD3 billion**  
A 1.4-kilometer bridge connecting the European and Asian parts of Istanbul. Opened in 2016, the bridge has six lanes and is the widest suspension bridge in the world.
5. Marmaros Tunnel: **USD4.5 billion**  
The Marmaros Tunnel is a 13.6-kilometer railway tunnel connecting the European and Asian parts of Istanbul under the Bosphorus Strait. Its construction was completed in 2013. It is the world's first underwater tunnel connecting two continents.

The most common **forms** of public-private partnership in Turkey are projects of the **BO** (build, operate), **TOR** (transfer of operating rights), and **BLT** (build, lease, transfer) types.

In general, Turkey's experience in the field of PPP is usually appreciated quite highly, despite the fact that other government programs and policies in Turkey have much worse ratings.

The European Bank for Reconstruction and Development **assessed** the effectiveness of Turkey's public-private partnership as high (71% of the maximum score), whereas Ukraine was **evaluated only at 43%**.

### Turkish legislation on PPPs and concessions

The country does not have **a single law** in the field of public-private partnership, and projects in certain areas may have significant differences.

During the implementation of PPP projects and concessions, it is necessary to comply with both general regulations (the Law on Public Procurement (Law No. 4734) and the Law on Public Procurement Agreements (Law No. 4735)) and special procurement or PPP provisions that apply to the relevant areas of activity.

For example, the build, operate, transfer (BOT) **projects** are regulated by Law No. 3996 (BOT Law), some PPPs are drawn up in accordance with general Law No. 4734; others are subject to documents of the relevant ministries.

At the same time, the procedure for holding an auction is determined by the general Law No. 4734.

#### **Special sectoral laws of Turkey in the field of PPP:**

- Law No. 3996 (OB dated June 13, 1994, No. 21959) on the implementation of general infrastructure and public services under the BOT model (the BOT Law);
- Law No. 3096 on the Production, Transfer, Distribution and Sale of Electricity by Private Enterprises (the Electricity Law);
- Law No. 3465 on the Construction, Maintenance and Operation of Highways (the Highways Law);
- Law No. 4283 on the construction and operation of thermal power plants based on the BO model (the BO Law);
- Law No. 5396 on the Lease of Buildings of Health Care Facilities (the BL Law);
- The Regulation on the Lease of Healthcare Facilities for Construction (the BL Regulation);
- Law No. 5335 on amending certain laws, including provisions relating to the lease and/or transfer of operating rights to airports and the privatization (in particular, the transfer of operating rights) of assets owned by Turkish Railways.

There are also other special rules and regulations governing the implementation of PPP projects and concessions in certain areas and under certain models of cooperation.

The EBRD **determines** that, despite the shortcomings of the extensive legal framework and differences in approaches in certain areas, the presence of developed specialized legislation has certain advantages. Laws cover most cases and options of public-private partnerships, and this contributes to legal certainty.

This approach may indicate that the presence of advanced general legislation is not always the key to an effective legal framework. The variability of special norms in individual areas can be more tailored to specific needs and serve as a better rule than the general approach.

## **Prerequisites for successful concessions and PPPs in Turkey**

The achievements of Turkey in the field of public-private partnership, despite systemic problems in the country's economy, is associated with a number of factors:

### **1. Relatively weak development of road infrastructure and significant natural barriers**

The strategic problem of Turkey's roads at the end of the last century was that the distance and travel time between key settlements could be much longer than in developed countries. All because of significant natural barriers (mountain ranges, Bosphorus, gorges, etc.) and outdated technological solutions: highways were usually designed to bypass such barriers or had significant speed and comfort limitations. This implied longer distances and more time on the road.

Attracting investments through concessions has made it possible to build more expensive road facilities, but shorter and more convenient.

For example, **the construction of a section** of the D-400 Alanya-Kemer road reduced the travel time between these settlements from more than 3 hours to about 40 minutes by constructing a tunnel system and, accordingly, reducing the length of the route several times.

Moreover, concessions allowed **speeding up the development** of Otoyol national highway networks, which have a greater number of lanes and maximum speed compared to the old roads.

This allows to achieve a quick, noticeable effect, which is a prerequisite for the support of concession projects by the population.

## 2. A balanced approach to the interests of concessionaires and the population

The cost of toll roads in Turkey is 10–30 times lower than in the EU countries. Due to this, many more citizens prefer faster and more comfortable toll roads than free ones.

In 2012, 200 million cars used Turkey's toll roads. In 2015, this number increased to 271 million (+36%). The total toll fare in Turkey is approximately USD500 million per year.

## 3. Comprehensive approach to strategizing

The development of highways in the country is associated with the development of tourism, which stimulates additional demand for the use of infrastructure facilities.

In particular, in 2015, 141 million vehicles used the Bosphorus bridges alone. This is directly related to the development of Istanbul's popularity as a tourist city and automobile tourism in Turkey in particular.

## 4. A strategy and a clear plan

Turkey also has a strategic approach to infrastructure development, which allows investors to assess and predict the prospects for entering the market.

Thus, Turkey recently completed a USD200 billion infrastructure investment program for 10 years. Despite the fact that this program underwent political and economic problems during implementation, in general, it was successful and completed on time.

## 5. Investor protection

Although the general legal system in Turkey may be criticized, the EBRD assessed the conditions for the business environment in the field of PPP and concessions in Turkey at 94% of the maximum possible. According to the EBRD, the PPP business environment demonstrates the existence of a capital/bond market that is present in the PPP/concession field and involved in debt and equity financing. The same applies to commercial banks, project funds and, to a lesser extent, insurance. There are no major issues that would jeopardize transparency. Private initiatives, such as uninvited proposals, are welcome. PPPs have a good reputation. The rights of investors under the project agreement are protected either in court procedures that guarantee sufficient protection or in international arbitrations.

## Impact of concessions on roads

In the early 2000s, Turkey had an extensive network of interregional roads, but four-lane double highways accounted for a small percentage of it. Other areas could be two-lane or even unpaved. To improve the current situation, in 2002, the authorities launched a large-scale program of public investment in infrastructure.

The key aspects of the investment projects were the creation of shorter and faster routes between key cities of the country and the expansion of the capacity of existing roads.

The impact of investment on international and domestic trade is reflected in the reports of Coşar and Demir (2016) and Coşar et al. (2018). Based on research, since the implementation of infrastructure projects, the logistics costs of the industry have decreased by 70%, and each dollar spent on roads has brought from USD0.7 to USD2 in profit. This was a significant impetus for the development of the regions and the economy as a whole. The largest increase is observed in mechanical engineering, chemical industry, and electronics.

Prior to the modernization of road infrastructure, Turkey did not take full advantage of its comparative advantages – a favorable geographical position between Europe and the rapidly growing regions of East Asia. Inside the country, before large-scale construction, 43% of all potential links between the provinces were undeveloped. After the inflow of investments, the regions with zero trade decreased to 3%.

Investment projects have led to a significant development of the service sector in the market, a reduction in travel time and fuel costs, as well as a significant reduction in the number of accidents and mortality rates. Even without this in mind, upgrading congested arteries of hard-surfaced two-lane roads to four-lane carriageways seems to be a cost-effective investment with a high rate of return for middle-income countries.

The main areas of modernization:

- 1) introduction of European safety requirements;
- 2) expanding the existing single-lane roads to two-lane ones;
- 3) road safety audits and checks during planning, design and operation;
- 4) installation of road signs, alarms, fences, and safety barriers.

In June 2016, Turkey completed the definition of its trans-European main transport network (TEN-T), which was agreed and published by the EU. The total investment from the EU amounted to EUR9399 million.

After the modernization of the highway system, 38% of highways are double four-lane roads (25.757 km). Every year, the mileage of road transport increases. If in 2003 it was 52.4 billion car-kilometers per year, then in 2016, it was 119.7 billion car-kilometers (+130%).

## ■ **Assessing Turkish experience and drawing conclusions for Ukraine**

When it comes to attracting investment through road concession projects, Turkey is often cited as a model for Ukraine. However, one should realize the difference in conditions between the two countries.

1. Ukraine already has a well-developed network of roads, which rather needs modernization, improvement of maintenance, and streamlining than the construction of new routes (the total length of roads in Ukraine is 169,500 km, while in Turkey, it amounts to 67,500 km). It is unlikely that Ukraine will be able to achieve such an improvement in the quality of road infrastructure and a reduction in travel time due to concession agreements, as Turkey has managed.
2. One of the conditions of effective concessions for Turkey is a rapid increase in the intensity of motorway use (approximately 10% per year), in particular by industry. The creation of new logistics chains that did not exist before or were too weak, which made it possible to have a global effect on the development of the economy and international trade.
3. A large number of concession projects are directly related to the tourism development program. That is, projects have a high return not only at the expense of the domestic consumer, but also by increasing the demand for access to infrastructure and attracting additional investment in the country. Potentially, such conditions exist in Crimea, the Carpathians, and other regions with high tourism potential. However, they are obviously inferior to the scale of the tourist regions of Turkey.
4. The increase in the use of highways and the development of tourism have allowed Turkey to introduce liberal fare for toll roads; this has not been achieved in most EU countries. Ukraine might fail to achieve it, too.
5. To widely attract concessions to the Ukrainian infrastructure, it is necessary to develop effective legislation, in particular sectoral legislation on public-private partnerships in certain areas. It is also important to ensure a favorable climate for investment by guaranteeing the rights to protect the interests of the investor/concessionaire in courts and the enforcement of international arbitrations.

It is important to understand that the investment attractiveness of the concession project is directly related to user popularity. Otherwise, the concession contract involves significant return risks and is less attractive. The transfer of risks from the concessionaire to the state does not solve this problem.

Analyzing the experience of Turkey for Ukraine, it is important to understand the differences in conditions that exist in these two countries.

It is also worth realizing that the mere development of national legislation is not the key to the successful implementation of PPP programs. It is necessary to create a system for protecting the rights of investments and concessionaires in courts and mechanisms through which decisions of international arbitrations will be strictly enforced.

Despite the general course of Turkey in foreign policy, which stopped the rapprochement with the EU, the country has introduced most of the standards and requirements of the European Union in the field of design, construction, and maintenance of roads. This had a positive effect and made it easier for European companies to access PPP projects.



## — Experience of Spain in attracting concessions during railway modernization

The construction of high-speed railways in Spain has become a significant infrastructure project in the EU, with a total cost of approximately USD50 billion and a tangible breakthrough for the country.

Prior to the implementation of this project, Spain had a track width that did not correspond to the pan-European one (1,668 mm in Spain, 1,435 mm in most EU countries). The role of rail transport in transborder travel was minimal.

However, after the implementation of the railway project, Spain was left with one of the most extensive high-speed networks in Europe, known as [Alta Velocidad Española](#) (AVE), which is integrated with the general network of high-speed railways of the EU countries.

During the construction of high-speed railways in Spain, concessions played a crucial role, in particular, in the form of cooperation between the state railway operator Renfe and private companies. Renfe managed AVE's services, while private companies were involved in the construction and maintenance of the railway lines.

Concessions allowed private companies to use their experience and resources, contributing to the effective implementation of construction projects. They also helped attract private investment, reducing the strain on public finances. In addition, concessions have fostered competition and innovation in the rail sector, leading to improvements in services and technology.

Throughout the construction process, concessions faced various problems and difficulties. Significant obstacles were the acquisition of land and obtaining the necessary permits and approvals.

In addition, the construction of high-speed railways often involves complex engineering tasks, including the construction of tunnels, viaducts, and bridges. These projects require precise planning, coordination, and technical expertise to ensure the safety and integrity of the infrastructure.

Despite the difficulties, the construction of high-speed railways in Spain has been largely successful and has significantly improved the efficiency of rail transport.

The AVE network connects major cities such as Madrid, Barcelona, Seville, Valencia, and Malaga, reducing travel time between them.

As of 2021, more than 3,200 km of railways with a speed of 250 to 320 km/h were built. It is planned to further develop the railway.

## ■ Spanish PPP legislation

The main Law governing PPPs in Spain is [Law No.9/2017](#) on Public Sector Contracts (Ley 9/2017, de 8 de noviembre, de Contratos del Sector Público). This law [transposes the European Union directives](#) on public procurement and concessions into Spanish law.

The legislation establishes procedures and requirements for public tenders for PPP contracts, including publication of contract notices, technical specifications, evaluation criteria, and selection methods.

Importantly, Spanish law defines specific rules and requirements for each type of agreement, such as duration, remuneration mechanisms, risk allocation, and performance monitoring.

The reason for the detailed regulation was [the preliminary checks and investigations](#) of public contracts in Spain, such as changes in contracts, the use of negotiation procedures, etc.

Spanish law also promotes transparency and accountability of PPP projects by requiring the publication of relevant information, including the terms of the contract, selection criteria, and performance indicators under which the implementation of the project will be assessed. It also establishes mechanisms for monitoring and auditing the performance of contracts.

At the central level, an Independent Procurement Regulation and Supervision Office and a National Evaluation Office [have been established](#) in Spain. Both public institutions deal with the issues of improving the quality of investments made by public authorities and best practices of public contracts.

So, as in the case of Turkey, Spain does not have extensive PPP legislation. Instead, it focuses on resolving practical issues of implementation, tracking, and evaluating the effectiveness of government contracts of various forms, including PPP. This allows setting clear rules for PPPs.

## ■ **Assessing Spain's experience in regard to Ukraine**

The main prerequisite for the successful implementation of the AVE high-speed railway in Spain was the lack of an available alternative and a significant reduction in travel time. Air transport did not fully meet the needs of the population, while the existing railway infrastructure required significant modernization.

Spain decided on an ambitious and expensive project that had a significant impact on the quality of services and led to a substantial increase in consumer demand.

The factors for the successful implementation of the PPP in the field of railway transport are as follows:

- clear legal and regulatory framework;
- political support;
- reliable financial planning;
- effective management and supervision of the project;
- long-term vision of regional development.

Currently, Ukrainian railway transport is in a situation similar to that in which the Spanish railway was before the introduction of high-speed railway traffic. We are talking about the following problems:

- difference in track width with neighboring EU countries;
- low speed;
- the need to modernize and improve services;
- the lack of state resources for the implementation of large-scale programs.

Attracting investments through PPP projects allowed the implementation of a large-scale infrastructure project in Spain, which provided a new level of quality of services. Ukraine can use this experience to modernize its own railway transport. However, for Ukraine to succeed, it needs to develop tools and policies for monitoring and evaluating PPP contracts. After all, complex long-term projects require high-quality operational risk management and timely response to challenges.

## — **Experience of the United Kingdom of Great Britain and Northern Ireland in attracting PPPs in the energy sector**

The United Kingdom has considerable experience in public-private partnerships in the energy sector, in particular in the development of projects in the field of nuclear and wind energy. These partnerships have played a crucial role in attracting private investment, promoting innovation, and stimulating the growth of renewable energy in the country. They also made it possible to implement a number of large-scale projects.

According to [data](#) of the International Monetary Fund, in 2000–2019, in the United Kingdom, the total value of investments in PPP projects exceeded USD191 billion, which in turn accounted for almost 14% of the total volume of public sector investments and almost 2.5% of the total volume of investments in private sector capital funds.

The largest projects are those related to the development of the energy complex.

### ■ **Some examples of large-scale energy projects**

#### **Nuclear power plant [Hinkley Point C](#), cost approximately USD40 billion**

The project is a joint venture between EDF Energy, a French state-owned utility company, and China General Nuclear Power Group (CGN). The UK government concluded a contract with the consortium to support the construction of the power plant.

Under the PPP model, EDF and CGN are responsible for financing, building, and operating the power plant.

The UK government provides financial support through a long-term Contract for Difference (CfD) mechanism, which guarantees a fixed price for electricity for a certain period.

The contract provides for the sharing of risks between the private consortium and the government. Private partners bear the construction and operational risks, while the state provides stability through the CfD mechanism, which reduces market risks.

After completing the construction, the state will get a new nuclear power plant with a capacity of 3,200 MW, which should significantly reduce the consumption of natural gas for electricity generation.

### Offshore Wind Energy

The United Kingdom applied the Contracts for Difference (CfD) PPP model to the development of offshore wind energy projects. CfDs provide long-term revenue stability for developers, which stimulates investment in renewable energy.

The government runs competitive bidding rounds, known as contract-for-difference rounds, where developers compete for CfDs. This process ensures transparency, competition, and efficiency in project selection.

The PPP model attracts private sector investment by providing financial incentives and a predictable revenue stream through CfD. Private companies such as Ørsted, Equinor, and SSE have invested in offshore wind projects in the United Kingdom, contributing to the growth of the sector.

Attracting private investments through PPP allowed significantly increasing wind generation in the country's energy consumption.

By 2023, more than 11,000 wind turbines with a total installed capacity of 28 GW, which is the equivalent of approximately 10 nuclear power plants, had been built in the United Kingdom.

This makes the United Kingdom the sixth country in the world in terms of wind generation capacity. Wind energy produces approximately 25% of the country's electricity. It is now the largest source of renewable electricity in the United Kingdom.

The country also uses PPPs in the field of energy networks.

British electricity transmission and distribution networks are managed by private companies in accordance with a regulated framework. These companies, such as National Grid, are responsible for maintaining and upgrading networks while ensuring a reliable energy supply.

The energy regulator, Ofgem, establishes the regulatory framework and oversees the operation of transmission and distribution companies. This regulatory framework promotes efficiency, investment, and service quality.

PPPs in energy projects in the UK have played an important role in the transition to low carbon and renewable energy sources. These partnerships attracted private investment, fostered technological progress, and enabled the country to meet its energy and climate goals. By using the knowledge and resources of the private sector, the UK has successfully diversified its energy balance and reduced reliance on traditional fossil fuel-based electricity generation.

## ■ UK PPP Legislation

Public-private partnerships in the UK are regulated, in particular, by the following legislative documents:

Public Procurement Regulations: These Regulations introduced the approaches of the EU Public Procurement Directive into the UK law. They provide the basis for the conclusion of contracts for goods, works, and services by public authorities. The regulations promote transparency, fair competition, and the correct ratio of price and quality in the procurement process.

Concession Contracts Regulations 2016: These Regulations govern the awarding of concession contracts by public authorities. Concession contracts involve the provision of works or services, such as infrastructure projects or public services, and the concessionaire bears significant operational or financial risks. The regulations determine the procedures for concluding and managing concession contracts.

**Private Finance Initiative (PFI):** PFI has been the prominent PPP model in the United Kingdom of Great Britain and Northern Ireland. Although it is no longer actively used, several PFI projects remain in operation. PFI provided for the conclusion of long-term contracts between public authorities and private consortia for the design, construction, financing, operation, and maintenance of public infrastructure projects.

**Infrastructure Contracts Regulations 2016:** These regulations relate to contracts for infrastructure projects and implement the EU directives on the granting of concessions in the utilities sector. The regulations aim to ensure transparency, competition, and fair treatment of tenderers in infrastructure projects.

**Regulated Asset Base (RAB) Model:** The RAB model is used in the energy and utility sectors. This allows private investors to finance and recover their investment costs through regulated fees paid by consumers over a long period. The RAB model provides incentives for private investment in infrastructure projects while providing consumer protection and regulatory oversight.

In general, UK legislation is sufficiently detailed at all levels. Thanks to this, PPP projects can be better forecasted and controlled.

## ■ **Assessing the experience of the United Kingdom**

PPP projects have allowed the government of the United Kingdom to attract tens of billions of dollars in the development of renewable energy sources and the reduction of the carbon footprint of power generation.

For post-war Ukraine, the reduction of coal generation and the transition to renewable sources will be one of the important tasks of the modernization of the energy infrastructure and the establishment of energy independence.

The PPP has played a crucial role in stimulating the growth of renewable energy in the UK, particularly offshore wind energy. Mechanisms such as Contracts for Difference (CfD) have attracted private sector investment, leading to the construction of numerous wind farms and significant renewable energy capacity.

PPPs have successfully attracted private sector investment, allowing the development of energy projects that could have been difficult for the public sector.

The development of renewable energy projects through PPPs has improved the UK's energy security and reduced reliance on traditional fossil fuel-based electricity generation. Increasing the diversity of the energy mix has increased resilience and reduced the impact of volatile natural gas prices.

## — **Brazil's civil infrastructure PPP experience**

In Brazil, PPPs have gained considerable popularity, and since the early 2000s, they have been implemented in various sectors. The legislative framework for PPPs was created in 2004 after the enactment of [Law No. 11079](#), which contained guidelines for the implementation, monitoring, and control of such partnerships.

The main objectives of PPPs in Brazil are attracting private investment, improving the quality of services, and promoting the efficient use of resources in public projects.

One of the popular PPP projects in Brazil is the [Line 4 of the São Paulo metro](#). The project involved the construction and operation of a new metro line in São Paulo, the country's largest city. It was developed under a PPP agreement between the São Paulo state government and a consortium of private companies. The partnership made it possible to effectively complete the project, using the experience and investment of the private sector.

Line 4 carried more than 650,000 passengers per day after one year of full operation, with a strong upward trend. That is, it is one of the busiest lines in the world.

Moreover, in Brazil, public-private partnerships have been used to build and operate schools and hospitals, to improve infrastructure, and provide services in these sectors.

In particular, the following projects were implemented:

**Bahia School Complex:** In the state of Bahia, a PPP project was launched to build and manage a network of educational institutions, including schools and vocational training centers. The project aimed to improve access to quality education and create modern infrastructure for students.

**Rio de Janeiro PPP in the field of education:** The state of Rio de Janeiro implemented a PPP project for construction and maintenance of schools in areas that are insufficiently provided with education. The project was aimed at creating educational facilities with modern amenities and promoting innovative teaching methods.

**Hospital do Subúrbio.** Located in Salvador, Bahia, Hospital do Subúrbio is a prime example of a hospital built according to the PPP model. The project involved the construction, operation, and maintenance of a modern hospital. The partnership aimed to improve the accessibility and quality of healthcare in the region.

**São Paulo Hospital Network:** The state of São Paulo initiated a PPP project to expand and upgrade the hospital network. The project involved the construction, renovation, and management of several hospitals to improve health infrastructure and services.

**Souza Aguiar Hospital Complex:** The City of Rio de Janeiro implemented a public-private partnership project to support, modernize, and expand the **Souza Aguiar** Hospital Complex.

The PPP agreement is designed for 32 years, with the requirement to attract private investment during the first three years.

In general, Brazil is a leader in implementing PPP projects in the field of civil infrastructure. This allows the country to quickly modernize the education and health care system.

## ■ Criticism of PPPs in Brazil

However, it is important to note that PPPs in Brazil face challenges and criticism. Some challenges include issues related to transparency, contract renegotiation, and the balance of risks and rewards between public and private partners. These challenges were addressed by improving the regulatory framework, increasing transparency, and promoting a more balanced approach to risk allocation.

Here are some of **the key** comments on PPP projects in Brazil:

**Insufficient transparency:** one of the common comments is the lack of transparency in the procurement and fulfillment of PPP projects. Concerns were voiced about the process of selecting private partners, negotiating contracts, and disclosing information about the project. Lack of transparency can undermine public trust and accountability.

**Contract renegotiations:** PPP contracts in Brazil were frequently subject to revisions, resulting in project scope changes, cost overruns, and delays.

**Financial viability and affordability:** There are risks to the financial viability of PPP projects, especially when it comes to the ability of governments to meet their financial obligations. This is due to the country's economic instability.

**Social inequality:** PPP projects can exacerbate social inequality as private partners tend to focus on projects that are financially viable and may overlook poor areas and insolvent citizens who constitute a large part of the country's population. This can lead to unequal access to public services and infrastructure in different regions.

Thus, the experience of Brazil shows that PPP projects cannot solve all the problems of the state regarding the development of social infrastructure. By focusing only on the well-off as consumers of services, PPP projects can lead to an increase in social inequality. That is why it is important for the government to provide additional programs and projects aimed at socially vulnerable sections of the population.

## The experience of the Netherlands in attracting PPPs to port infrastructure

Public-private partnership projects are an important aspect of infrastructure development in the Netherlands. These projects cover a wide range of sectors, including transport, energy, water management, health-care, and public institutions. But the most large-scale experience the Netherlands has is in the field of port infrastructure development.

**Port Rotterdam** is the largest **seaport** in **Europe** and the world's largest seaport outside of **East Asia**. From 1962 to 2004, it was the busiest port in the world. Although the ports of China and Singapore **overtook Rotterdam, it still remains a large-scale infrastructure object**. Covering 105 square kilometers, the Port of Rotterdam now stretches for a distance of 40 kilometers.

Port concessions in Rotterdam cover a wide range of terminal types and activities, including container terminals, liquid bulk terminals, and specialized terminals. In particular, such as:

**ECT Delta Terminal:** one of the largest container terminals in Europe, which handles a significant portion of container cargo passing through Rotterdam. It is operated by Europe Container Terminals (ECT) under a long-term concession agreement.

**APM Terminals Maasvlakte II:** APM Terminals operates a state-of-the-art container terminal in the Maasvlakte II area of the Port of Rotterdam. This concession includes automated container handling systems and advanced logistics solutions.

**Rotterdam World Gateway (RWG):** RWG is another major container terminal in Rotterdam, jointly owned by global terminal operator DP World and other interested parties. It operates under a concession agreement and uses advanced technology for efficient container handling.

**EMO Rotterdam:** a bulk terminal specializing in the handling and storage of coal and iron ore. It is operated by Europees Massagoed Overslagbedrijf (EMO) and has a long-term concession agreement with the Port of Rotterdam.

**Vopak Terminals:** Vopak operates several liquid bulk terminals at the Port of Rotterdam. These concessions involve the storage and transportation of various liquid products, including chemicals, oil, and liquefied gases.

The Port of Rotterdam Authority carefully manages the concession process, ensuring transparency, competitiveness, and compliance with relevant regulations.

Concessions in Rotterdam provide private operators with the opportunity to invest in infrastructure, introduce advanced technologies, and optimize their operations to meet the needs of global trade. Cooperation between the Port of Rotterdam Authority and concessionaires contributes to the continuous development and competitiveness of the port, strengthening its position as one of the world's leading logistics and industrial centers.

## Dutch PPP legislation

Main legislative aspects related to PPPs and concessions in the Netherlands:

**Public procurement:** public procurement legislation in the Netherlands provides the legal framework for concluding contracts, including those relating to PPPs and concessions. The main legislation governing public procurement is the Public Procurement Act 2012 (**Aanbestedingswet 2012**), which is based on European Union directives. The law establishes the principles of transparency, equal treatment, and non-discrimination in public procurement processes.

**Concessions Directive:** The Concessions Directive (2014/23/EU) is another EU directive implemented in the legislation of the Netherlands. It regulates the conclusion of concessions and establishes procedures and requirements for concluding concession contracts. The Directive establishes principles such as transparency, equal treatment, and competition.

**Infrastructure Act:** The Infrastructure Act (**Omgevingswet**), which entered into force in July 2022, consolidates and simplifies laws and regulations related to spatial planning, the environment, and infrastructure. It provides a framework for the development, operation, and maintenance of infrastructure projects, including those implemented through PPPs and concessions.

**Financial framework for public-private partnerships:** The Dutch government has created a financial framework for PPPs to ensure responsible financial management. The Public-Private Partnership Financial Framework ([Financieel Toetsingskader](#)) defines guiding principles and criteria for assessing aspects of financial viability, affordability, and risk allocation of PPP projects.

**Recommendations and best practices:** various guidelines and best practices have been developed for additional guidance on PPPs and concessions. These are guidelines for project management, risk allocation, and value for money. [The Ministry of Infrastructure and Water Resources](#) and the [Ministry of Finance](#) provide guidance and resources to assist public authorities and private entities in implementing successful PPP projects.

Notably, the legal framework for PPPs and concessions in the Netherlands is designed to promote transparency, competition, and fair value for money. Laws and regulations aim to ensure fair and equitable procurement processes, while ensuring flexibility for innovation and private sector participation. Public authorities are responsible for complying with these legal requirements during the procurement and management of PPP projects.

A high degree of control and regulation of relationships made it possible to achieve large-scale results in the development of the country's port infrastructure technologies.

## ■ **Conclusions for Ukraine based on the experience of the Netherlands**

One of the potential directions of attracting private investment through PPP projects in Ukraine is the port industry. Prospects for the development of sea and river trade ports and high demand for cargo transportation allow predicting sufficient interest of the private sector in this direction.

However, the example of the Netherlands also shows that the key to effective PPP projects is the proper level of organization of the work of public partners and ensuring transparency and accountability in the field of PPPs.

PPP projects are successful when they have clearly defined goals, expected results, and KPIs for the private partner and provide a transparent and objective process for tracking the achievement of these results.

# General conclusions regarding the prospects for the implementation of PPP projects in Ukraine

The post-war reconstruction of Ukraine may become the largest reconstruction project at the country level since post-war Europe of the 40s and 50s of the last century. PPP projects can find their important niche in this process. However, to implement them in Ukraine successfully, it is still necessary to take key steps:

- work out long-term strategies for the development of the main areas of the economy, which will allow potential investors to plan and forecast investment prospects;
- develop sustainable legislation that will ensure a predictable and transparent process of public-private partnership at all its stages;
- develop an institutional architecture of support, monitoring, and tracking of the effectiveness of PPP projects;
- introduce a transparent and convenient mechanism for appealing the actions of the public partner, in particular, selection commissions at the stage of awarding a PPP contract;
- develop the capacities of public partners.

In addition, on the way to building an effective PPP system, Ukraine needs to solve a complex of problems that traditionally have a negative impact on investment attraction. In particular:

- carry out judicial reform, which should become the basis of trust and guarantee the predictability of Ukrainian justice;
- implement mechanisms to protect the interests of investors, in particular with regard to abuses on the part of officials;
- ensure the predictability of national legislation;
- improve countering corruption, etc.

The most widely discussed areas of PPP in Ukraine were projects in the field of highways. Turkey is cited as an example of the successful use of PPP in the road sector for Ukraine. However, as noted in the study, the differences between countries and conditions between these countries should be considered. Ukraine should build a PPP strategy based on the realities of the development of its own infrastructure and its needs.

Concession projects in the road sector should be based on an increase in user demand of the population, due to the concomitant impact of concession projects: development of logistics, improvement of connections between different regions, acceleration of economic activity, development of tourism, etc.

PPP projects in the road sector, which do not have additional advantages compared to public road projects, may not have sufficient user demand to ensure the economic efficiency of the project and achieve its goals. This is often the case in the countries of Eastern Europe.

It is unlikely that the implementation of concessions in the field of road infrastructure in Ukraine can become a global solution to the problems of Ukrainian roads.

Other areas have more favorable conditions for PPP projects, in particular, the development of a high-speed railway network of passenger transportation, combined with the network of high-speed railways of the EU. The experience of Spain and other countries that have invested in the development of high-speed railway networks shows that such projects allow for a significant increase in user demand, improve relations between countries, and promote the development of tourism.

PPP projects in the field of high-speed rail transport can contribute to the technological leap of Ukrainian railways in terms of speed and comfort of connection both between key regional centers and with EU countries.

There are also great prospects in the field of energy, in particular, regarding the implementation of "green generation," hydrogen fuel, and nuclear generation projects. Ukraine has broad prospects to become a key player in the EU energy market, which is still heavily dependent on fossil fuel generation. Large territories, the country's own resources, and an industrial base contribute to the prospects for the development of "green generation" in Ukraine.



In addition, attracting investments through PPP projects may allow overcoming the technological gap between the transport and energy networks of Ukraine and the EU.

Therefore, the PPP mechanism can become a full-fledged solution for the post-war reconstruction of our country. However, Ukraine should start creating the proper foundation immediately and provide transparent and effective tools for cooperation between the state and private investors.