

EE-LV00063

**Possibilities for Public Private Partnership in upgrading harbours for offshore developments
(Harbours and PPP)**

Public Private Partnership (PPP) possibilities for harbours in Estonia and Latvia

“Europe’s ports are not ready for the build-out of offshore wind Europe wants. And that’s deeply worrying. Because you can’t do offshore wind without ports.”

Giles Dickson, Wind Europe chief executive

Contents

INTRODUCTION	2
Port operating models and ownership	2
Investment needs	5
Sources of funding	5
PPP model	10
Main legal and financial aspects of PPP in European Union.....	10
PPP legal applicability possibilities and differences in Estonia and Latvia	11
Harbours possibilities.....	11
Recommendations for municipalities harbours development plans	13

INTRODUCTION

The objective of the analysis is to provide information on the PPP possibilities that can be applied for developing small and/or medium size harbours in Estonia and Latvia.

The analysis covers:

- legal and financial aspects that serve the grounds for assessing required development investments for PPP possibilities;
- legal differences in Estonia and Latvia for the possibilities of the harbours in the project area to apply PPP principles;
- the PPP elements that can be applied, considering the ownership models and development needs of the harbours;
- theoretical knowledge and practical aspects in comparison, to provide a guide for navigating the complexity of implementing a PPP project.

The analysis is carried out for the Association of Estonian Marine Industries in the framework of the Est-Lat project “Possibilities for Public Private Partnership in upgrading harbours for offshore developments” (Harbours and PPP).

The methodology for analysing Public-Private Partnerships (PPPs) involves a comprehensive review of existing legal frameworks, practices, and examples of PPP implementations in Estonia and Latvia, focusing specifically on harbours development. This includes examining relevant European Union regulations, national legislations, and case studies of successful PPP projects to identify best practices and potential challenges in the context of upgrading harbours for offshore developments.

Port operating models and ownership

Generally, there are four main models of ports: the public service port, the tool port, the landlord port, and the private service port.¹

The terms port authority (PA) used are covered by Port law in Estonia and Latvia. Port management body (PMB) focuses mainly on managing the operational and economic activities of the port and may be an administrative body (e.g. port management or council). Port management bodies (PMB) focus mainly on managing the operational and economic activities of the port and may be an administrative body (e.g. port management or council).

Service ports

The PA provides all necessary services for the seaport system, including ownership, maintenance, and operation of assets. Cargo handling is handled by directly employed labour. Service ports are typically controlled by the state or local municipality.

¹ Alternative Port Management Structures and Ownership Models: Port Functions, Services, and Administration Models. (s.a.), https://www.ppiaf.org/sites/ppiaf.org/files/documents/toolkits/Portoolkit/Toolkit/module3/port_functions.html

Tool port

Tool port is similar to service port and PA owns, develops, and maintains the port infrastructure as well as the superstructure, including cargo handling equipment such as quay cranes and forklift trucks. The only difference from the service port is that a private entity is handling the cargo operations.

Service and tool ports mainly focus on the realization of public interests.

Landlord ports

Landlord ports have a mixed character and aim to establish a balance between public (port authority) and private (port industry) interests. Under this model, the PA acts as regulatory body and as landlord, while port operations (especially cargo handling) are carried out by private companies. In the landlord port model, infrastructure is leased to private operating companies or to industries.

The lease to be paid to the PA is usually a fixed sum per m² per year, typically indexed to some measure of inflation. PA collects rents on existing infra- and superstructure under concession to private operators while the concessionaires provide cargo handling and warehousing services to the port users.

Private ports

In private ports, public sector is retaining a standard regulatory oversight. However, public entities can be shareholders in private ports.

The private ports that are in scope regarding offshore wind farms developments in Estonia and Latvia are mainly smaller marinas or fishing harbours. They do not yield a significant public interest. In some cases, these private harbours are also owned by non-profit associations or partnerships. However, public interest may arise if a private harbour is suitable for carrying out O&M harbour functions and therefore produce local benefits. The attached scheme, public and private roles in port management characterizes the private and public sectors in different types of port management models.

Public and private roles in port management

<i>Port Model</i>	<i>Public (Institutional Functions)</i>	<i>Private Sector (Interventions)</i>
<i>Public Service Port</i>	Ownership and operations	Traditional activities (« dry side »)
<i>Tool Port</i>	Ownership and outsourcing	Operating equipment and workforce
<i>Landlord Port</i>	Regulation and concessions (or similar)	Operating concessions contracts
<i>Private Sector port</i>	Infrastructures	Ownership and operations

Figure 1. Public Private Partnership (PPP) for Ports Development and Operation,
www.unescwa.org/sites/default/files/event/materials/PPP%20for%20Ports%20Development%20and%20Operation_Final%20Re%20port_.pdf

Public private balance of risk and regulation allocation

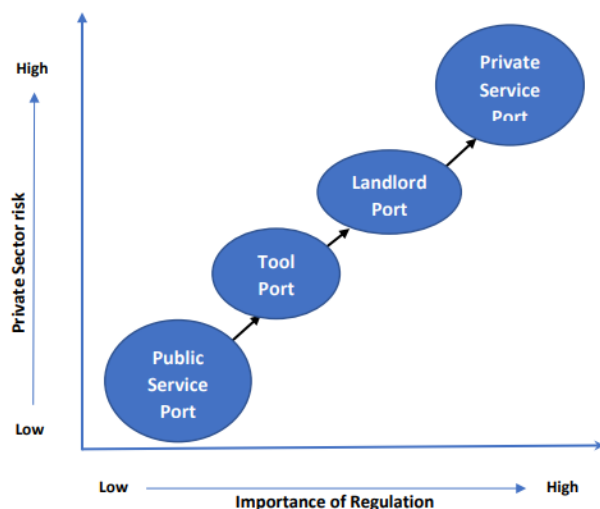


Figure 2. Public Private Partnership (PPP) for Ports Development and Operation, www.unescwa.org/sites/default/files/event/materials/PPP%20for%20Ports%20Development%20and%20Operation_Final%20Report.pdf

Ports owned by the state and local government are **mainly service ports, but they may also have some characteristics of a landlord ports** as part of the port is leased to a specific company that operates in its own pier and on its own land. In a typical case a part of the port is rented (or has been granted a right of superficies) to another private party who uses it for its own activities (berth, warehouse, building, etc.).

The harbours in Estonia and Latvia that are suitable for O&M operations are also mainly service ports and the land may be the property of the state, local government or other legal or natural person. In private ports, the land belongs to the private owner.

The difference between Estonian and Latvian ports is, that in Estonia the port water area also belongs to the port owner, while in Latvia it belongs to the state.

In Latvia, ports operate under the relevant port authority (PA).²

According to the Estonian Ports Act § 2 there can exist 1) port authority (PA) – a person who organises the activities of the port as a whole and 2) port operator – a person who provides port services on the basis of a contract entered into with the port authority.³

² Latvian Law of ports section 4.1. and 5 <https://likumi.lv/ta/en/en/id/57435>

³ Estonian Ports Act <https://www.riigiteataja.ee/en/eli/518102024016/consolide>

O&M harbours (CTV and SOV) are often established in small harbours (fishing, yacht, etc.), with the close distance to the offshore wind farm site being the decisive factor, determine the need for investment⁴.

Investment needs

Regarding the investment needs of O&M harbours, several studies have been carried out, addressing the investment needs of similar harbours and the investment estimates of specific harbours themselves.

International studies:

The need for shore-based investment in a harbour is about €3.6 million for a 1GW offshore wind farm. This amount assumes that the port is existing and active and needs just to be adjusted into a CTV or SOV port.⁵

Running cost of such harbours make about €538 000 per year for a 1GW wind farm.⁶

An indicative spending for O&M harbours per project can be from €958 000 to €1.6 million a year for 1GW wind farm. This sum has to also cover investments or depreciation.⁷

The investment needs estimated by the Estonian and Latvian potential O&M harbours themselves are in the range of €2 - 20 million per harbour.

Based on our research and verified data, offshore wind farm service vessels (CTV and SOV) harbour construction costs breakdown in percentage, based on rough estimates from some project examples, **cost category percentage of the volume of necessary investments:**

Quay and dock construction 40–50%

Logistics and buildings 20–25%

Dredging 20–30%

Navigation and security systems 5–10%

Connections to land infrastructure 10–15%

Sources of funding

There are many sensible and smart reasons for investing in ports and port ecosystems. But investments will only be fully unlocked by a favourable regulatory environment and a strong political effort. Together these

⁴ Mapping port infrastructure for offshore wind Industry and job creation in Viet Nam https://ens.dk/sites/ens.dk/files/Analyser/depp_vietnam_port_study_for_offshore_wind_final_report.pdf

⁵ Guide to an offshore windfarm. (s.a.), <https://guidetoanoffshorewindfarm.com/> , p 78

⁶ Guide to an offshore windfarm. (s.a.), <https://guidetoanoffshorewindfarm.com/> , p 107

⁷ A guide to UK offshore wind operations and maintenance, <http://csmres.co.uk/cs.public.upd/article-downloads/Offshore-wind-guide-June-2013-updated.pdf>

can give the supply chain and other industry players a confidence boost, lowering the investment risk and mobilising activities and products servicing coastal clusters, cities, and communities.⁸

There are several options for covering investments and CAPEX costs of harbours. This depends primarily on the port owner or port PMB. In case the port is owned by the state or local government, it is reasonable to use the port development by:

1. **Grants:** vital tool in preparing port facilities for ensuring a viable business case based on longer return of investments.

2. **Loans:** equally important as they provide attractive pricing and a signalling effect, helping the project attract the necessary capital for large investments. Wind Europe Vision for European Offshore Wind Ports: Trends and Opportunities gives great examples of providing financial backing for ports infrastructure development as a key element in the offshore wind supply chain, and in supporting a just transition in regions moving from fossil fuels to renewable sources.

Given the continuance of financial bottlenecks, PMBs in Europe largely seek to obtain funding from public entities in order to be able to carry out investment projects. Around 40% of projects seek national or regional grants, while 1/3 seeks Connecting Europe Facility CEF grants. European Investment Bank loans are sought for a smaller percentage and are not as prominent in the funding mix.

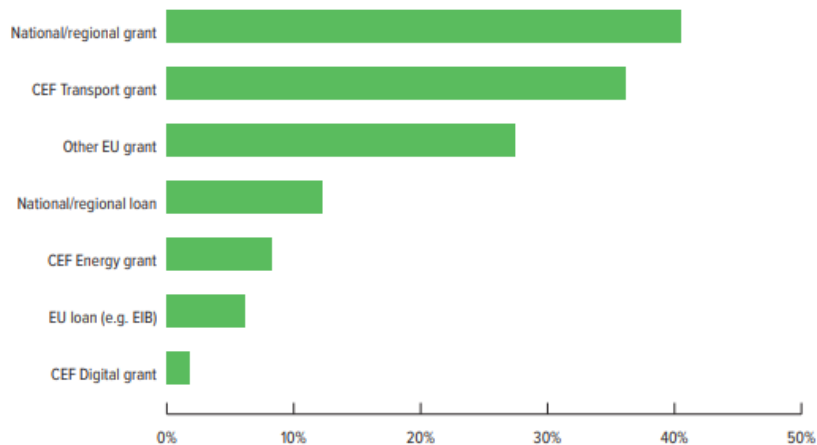


Figure 3. The PMBs' desired funding mix for planned investment project in Europe. ESPOP port investment study 2024, p 22, <https://www.espo.be/media/ESPOPportInvestmentsStudy2024.pdf>

3. **Value creation:** a third option besides grants and loans is the value creation of the investments. This is a capital-based investment where the projected returns cover the necessary investments and the associated depreciation costs.

⁸ A 2030 Vision for European Offshore Wind Ports: Trends and Opportunities. (s.a.). WindEurope, <https://windeurope.org/intelligence-platform/product/a-2030-vision-for-european-offshore-wind-ports-trends-and-opportunities/>

The value creations of ports investment projects

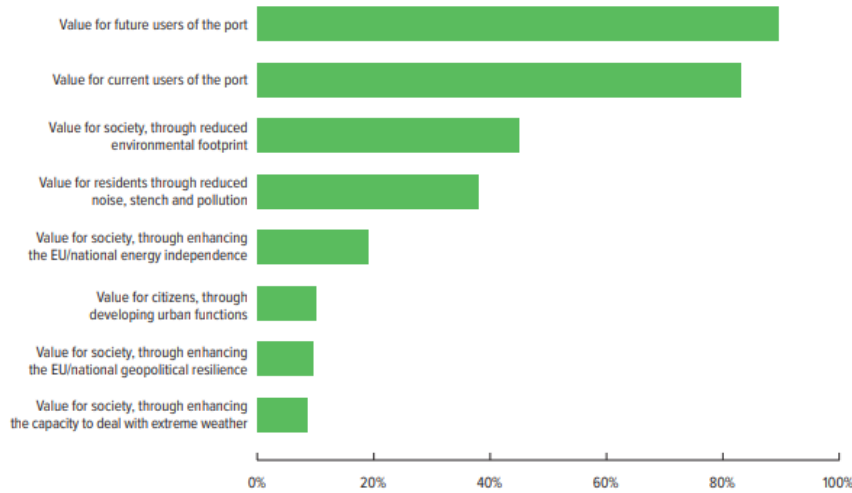


Figure 4. ESPOP port investment study 2024, <https://www.espo.be/media/ESPOPPortInvestmentsStudy2024.pdf> P16

Typically, the trigger for port investments is the expected growth in volumes handled by ports and increasing size of vessels, but in recent years, decarbonization of the economy and the transition to zero carbon is also an important reason for harbour developments.

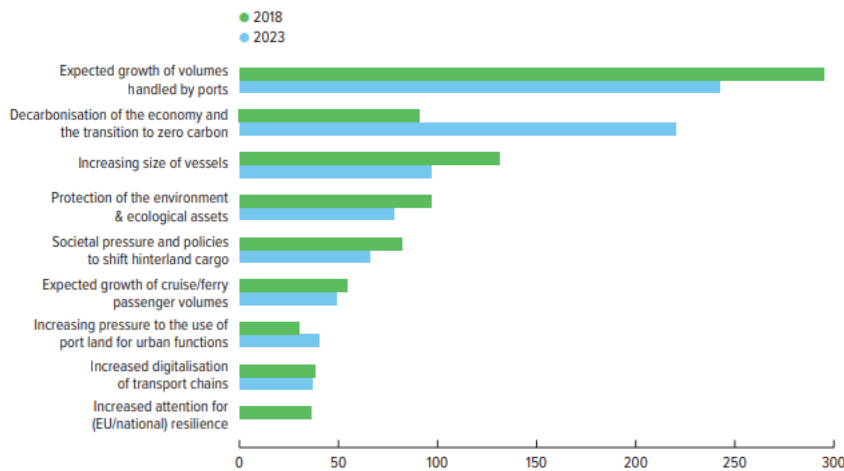


Figure 5. ESPOP port investment study 2024, <https://www.espo.be/media/ESPOPPortInvestmentsStudy2024.pdf> P16

Green transition is also the main challenge for the Estonian and Latvian harbours, because handling larger cargo flows or ships may actually decrease, as part of the harbour meets O&M harbour needs.

Therefore, if a port contributes to the green transition, its profitability **can come primarily from the positive environmental impact of offshore wind farms, the favourable price of electricity, and the socio-economic impact on the region.** The offshore wind farms build-out rush triggered by the need to

meet the net-zero may also cause the need, for accepting the harbour investments decisions sooner and at greater risk than usual.

Necessary port infrastructure investments generate high value for users and society, but do not always generating sufficient financial return in terms of common private investments.

This is derived from the fact that societal value creation cannot be fully captured through the port's income. Port infrastructure is capital-intensive and has a long period of return on investments. The business case of an investment in port infrastructure includes the value created for users and captured by the port managing body, while the value case includes the creation and costs for society.

Framework to classify investment projects according to business potential and societal value.

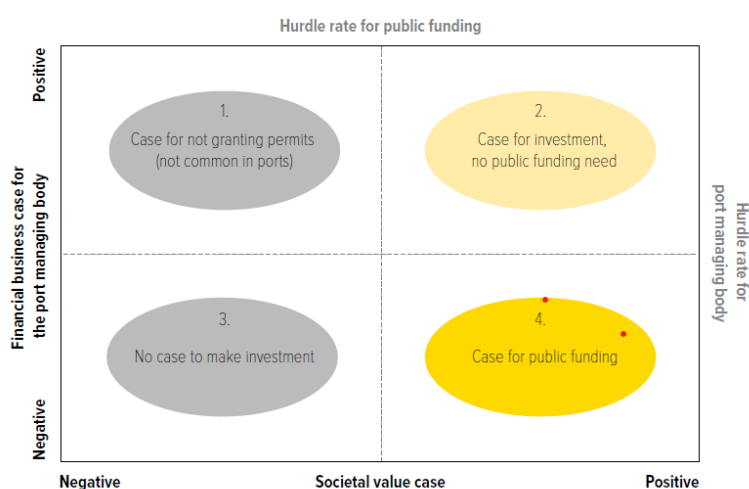


Figure 6. ESPOP port investment study 2024, <https://www.espo.be/media/ESPOPPortInvestmentsStudy2024.pdf> p 26

Offshore wind O&M ports are primarily owned by port companies, with wind turbine manufacturers owning fabrication and storage facilities. Two basic models for PPP type of investments are used:

1. Investments in dedicated port facilities are made by the port, state contributions, or through partnerships. Offshore wind developers or manufacturers lease or buy land, while vessels pay port charges. Investments in port capacity are based on commercial assessments, and O&M ports are often established in small ports due to the distance to the offshore wind farm site.

In this model, private companies invest in assets such as terminal equipment, warehouses, etc.⁹

In most ports in Estonia, Latvia, as well as Sweden and Finland, tonnage GT dues are used to calculate port prices, which may include a security fee, mooring fee, pilotage fee, waterway fee, and towing fee¹⁰

⁹ Depp Vietnam port study (s.a.). p 175

https://ens.dk/sites/ens.dk/files/Analyser/depp_vietnam_port_study_for_offshore_wind_final_report.pdf

¹⁰ Tapaninen, U. P., Hunt, T., Prause, G. K., Palu, R., Laasma, A. (2022) Sadamate konkurentsivõime tegurid ja avaliku sektori roll sadamate konkurentsivõime toetamisel Eesti, Läti, Soome ja Rootsi näitel. Tallinna Tehnikaülikool, <https://kliimaministeerium.ee/sites/default/files/documents/2023-07/Sadamate%20konkurentsiv%C3%B5ime%20tegurid%20ja%20avaliku%20sektori%20roll%20sadamate%20konkurentsiv%C3%B5ime%20toetamisel%202023.pdf>

Based on the preliminary calculations, using the current pricelists of Estonian and Latvian harbours, one SOV visit generates about 7 000-9 000 EUR income for harbours. According to our Estonian-Latvian harbours joint strategy survey, a SOV uses harbour services twice a month during the navigation season, that allows to estimate that the annual income from rendering SOV services will be between 162 000 EUR and 216 000 EUR. The respective calculations for CTV model is problematic because such a price list does not exist.

The price of 1GT for the ports covered in our study is 1,4-1,9 EUR/1GT. This is more profitable for larger ships, but becomes less profitable the smaller the ships, because it doesn't actually cost per GT, but per berth meter. Therefore, according to a standard port price list, CTV's stay at the port is inefficient for the port.

Our comparison of the pricing of existing and potential Estonian and Latvian ports suitable for servicing wind farms shows that the profitability of wind farm service ports may not cover all investment costs at the current market price of a regular service port. Thus, in the case of the value creation of the investments scheme harbour can have "special deal".

In this case, it is necessary to develop and agree on mechanism for reviewing of any special deal. Such a special price may be justified if the developer gets their own berths in the port, which are reserved. The port owner and authority (PA) should consider the possibility of concluding such a special agreement.

2. Another option is to give the wind farm developer exclusive possession (building rights, PPP or some other) for harbour. In this case, the developer can contribute, for example, to dredge to accommodate the developer's fleet, supply water and electricity, parking, installation of fuel tanks, road access, fencing and security.

This situation, that harbours have been neglected as part of offshore energy also requires significant political attention in European Union.

The problem was last expressed on September 2, 2024 as Wind Europe chief executive Giles Dickson said: "Europe's ports are not ready for the build-out of offshore wind Europe wants. And that's deeply worrying. Because you can't do offshore wind without ports. If the ports aren't ready, then all the other huge efforts and investments that are being made across the offshore wind value chain are potentially wasted"¹¹. Giles Dickson said the same already in 2018: "Ports are an essential part of the offshore wind supply chain. They are natural centres of industrial activity and help to bring together knowledge and labour to offshore wind. With offshore wind turbine components getting larger and installation volumes going up there's a need for new investments in port infrastructure. This is also essential as ports will play a key role in accommodating operations related to the decommissioning of offshore wind farms and recycling of components. These investments will help the offshore wind sector to cut costs. And help ports to attract new business activities. We'd be keen to see new public-private partnerships and the allocation of existing EU funds to make this happen."¹²

PPP model

Main legal and financial aspects of PPP in European Union

PPP is a potential financing alternative beyond traditional bank lending and to increase financing available for PPPs via alternatives and innovative mechanisms.

PPP is a contract between a government and a private company, where the private company finances and operates a public service, and is paid over time through concessions, government payments, or a combination of both. This allows the private sector to earn money over the asset's life, reducing payments from the public sector. PPPs can effectively raise funds and attract private investment and management expertise.

In 2003, the European Commission identified four fundamental roles for the private sector within Public Private Partnership (PPP) frameworks:

1. the provision of additional capital,
2. the contribution of alternative management and implementation expertise,
3. the delivery of value-added services to consumers and the public,
4. the improved identification of needs coupled with the optimal allocation of resources.

In the following year, the European Union further articulated the concept of PPP in its Green Paper on Public Private Partnerships and Community Law on Public Contracts and Concessions¹³.

The European PPP Expertise Centre (EPEC) <https://www.eib.org/epec>, established in 2008, was created to enhance the capacity of public sector entities in executing PPP agreements. Despite these advancements, the European Union does not possess a unified regulatory framework for PPPs applicable across all member states. Instead, the governance of PPPs is primarily structured around EU procurement and state aid regulations, supplemented by specific guidelines and frameworks.

The foundational legislative instrument addressing PPPs at the EU level was the European Parliament and Council Directive 2004/18/EC¹⁴. Adopted in 2004, this directive delineated public procurement procedures relevant to PPPs, focusing on competitive mechanisms and transparent negotiation processes. Subsequent directives, such as Directive 2014/24/EU, introduced comprehensive reforms in public procurement regulations to further promote transparency and fair competition in contracts often awarded under PPP arrangements¹⁵.

Eurostat rules for accounting PPPs within the European Union are based on the European System of Accounts (ESA 95), which aligns with the global System of National Accounts (SNA) 2008¹⁶. Eurostat emphasizes three key risk categories: construction risk, availability risk, and demand risk. To assist stakeholders, EPEC and Eurostat jointly developed the Guide to the Statistical Treatment of Public-Private Partnerships, clarifying the implications of PPP projects on government balance sheets¹⁷.

¹³ Green Paper on public-private partnerships | EUR-Lex. (s.a.), <https://eur-lex.europa.eu/EN/legal-content/summary/green-paper-on-public-private-partnerships.html>

¹⁴ European Parliament and Council Directive 2004/18/EC <https://eur-lex.europa.eu/eli/dir/2004/18/oj>

¹⁵ Directive 2014/24/EU <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0024>

¹⁶ Overview—Eurostat. (s.a.), <https://ec.europa.eu/eurostat/web/esa-2010>

¹⁷ European Investment Bank & Eurostat, European Commission). (2016). A guide to the statistical treatment of PPPs. Publications Office of the European Union. <https://data.europa.eu/doi/10.2867/64196>

PPP legal applicability possibilities and differences in Estonia and Latvia

Although there is no universally agreed-upon definition of PPPs, national legislation provides a foundation for shared understanding. In some member states, terms such as "public-private cooperation" encompass a wide array of collaborative arrangements between public and private entities.

Estonia relies on general Public Procurement Act and EU frameworks, emphasizing flexibility but lacking specific PPP-focused legislation¹⁸. Renovation of general education schools in Tallinn is usually considered as the first major PPP project in Estonia. The project, signed in 2006, involved the renovation and technical management of 10 schools. However, the partnership became a burden, limiting credibility and causing budgetary restrictions. Negotiations led to an agreement with one private partner, but no compromise was reached with the other.

The Ministry of Finance has issued a legal opinion in 2019 that current laws allow for the development and implementation of Public Private Partnership (PPP) projects. These projects involve the state acquiring large infrastructure investments through public procurement, with the private sector investing immediately and the state buying out on a long-term contract. The Ministry of Finance has developed principles and implementation guidelines for these projects.

Latvia adopted the Public Private Partnership Law in 2009 to establish a legal framework for launching PPP¹⁹. The law defines the available types of PPPs, prescribes ground rules for PPP procedures, and stipulates more in-depth regulations regarding concession and institutional PPP.

The Public Procurement Law, which regulates procurements by the public sector, does not apply to concessions in the PPP Law itself. The law also includes Cabinet Regulation No. 1152 of 2009, which outlines the procedure for conducting financial and economic calculations, determining the type of a PPP agreement, and providing an opinion regarding financial and economic calculations. Cabinet of Ministers Regulations No. 1216 of October 2009 provide regulations on the operation of the supervisory institution and the provision of a report on the performance of the contract by the public partner or its representative.

The Kekava Bypass road project in Latvia is the first major PPP project in the country. The project consists of the construction and maintenance of a 17.5 km stretch of road bypassing Kekava, with 14.4 kilometres of new road and 3.1 kilometres of existing road. The project will become part of the Trans-European Transport Network (TEN-T). Kekava ABT AS, a private partner, is responsible for the development, design, build, finance, operate, and maintain of the Kekava Bypass. March 10, 2016 project was approved in the Latvian Cabinet of Ministers. Preparations for the project began by preparing financial and economic calculations for the project in 2015. The PPP contract was signed on 16 July 2021. On 13. It turns out that the project, including preparation, lasted about 9 years.

Harbours possibilities

Application of classical Public Private Partnership (PPP) models in port infrastructure projects has been limited in both Estonia and Latvia. Several factors contribute to this, including the ownership structures of the ports and the preference for public or EU grant funding.

¹⁸ Public Procurement Act <https://www.riigiteataja.ee/akt/101072017001?leiaKehtiv>

¹⁹ The Latvian Law on Public-Private Partnership, <https://likumi.lv/doc.php?id=194597>

The regulatory and institutional framework does not strongly incentivize private sector involvement in port development.

Latvia mirrors Estonia's situation, with ports typically operating under state or municipal control. Although there have been discussions on fostering private sector collaboration, no significant PPP projects in port infrastructure have been realized to date. Experts have highlighted the need for regulatory reforms to create an enabling environment for PPPs, particularly in large-scale port infrastructure projects.

In both countries, while PPPs are recognized for their potential to enhance infrastructure financing and management efficiency, their implementation in port projects remains underdeveloped. Further research and policy reforms could address these gaps and foster greater private sector participation.

Public Private Partnerships (PPPs) can enhance efficiency and service quality in ports, allowing the government to maintain its regulatory role while the private sector invests in infrastructure projects. PPPs transfer operational and project execution risks to the private partner, allowing government funds to be redirected to other socioeconomic areas and reducing budget deficits. However, many countries have experienced mixed results and perceptions with PPPs in the transportation sector.

In Latvia, according to Clause 1(1) of the Law on Public Private Partnership, the PPP refers to co-operation between the public and private sector simultaneously characterized by the following features²⁰:

- co-operation is between one or several public partners and one or several private partners involved in the public-private partnership procedure;
- co-operation is carried out in order to meet public needs in performing construction works or providing services;
- it is a long-term co-operation lasting up to 30 years but even longer in the cases, when it is necessary for the purpose of a contract and deliverables based on financial and economic calculations;
- a public and a private partner pool and use the resources available thereto (e.g. property, financial resources, knowledge and experience);
- a public partner and a private partner share the responsibility and risks.

In Estonia, PPP can be implemented in accordance with the Public Procurement Act, under which it qualifies as a concession contract²¹.

Due to the long-term cooperation and usually larger investments, the PPP model has been used in Europe for larger investments and has not been successful in smaller ports. However, this is not excluded.

As European ports have mixed solutions between public authorities at national and regional levels, in PPP contracting authorities are national, regional, or local bodies governed by public law, applying public procurement directives for public contracts²².

²⁰ Latvia, Law on Public-Private Partnership <https://likumi.lv/ta/en/en/id/194597>

²¹ Public Procurement Act www.riigiteataja.ee/en/eli/ee/Riigikogu/act/508072024001/consolide

²² Governance of European Seaports. (2010), <https://www.espo.be/media/espopublications/espofactfindingreport2010.pdf>

PPP structure in some Northern European Ports

	Poland	Germany	Netherland	Belgium	France
General management	<i>Public entity</i>	<i>P+P</i>	<i>P+P J/V</i>	<i>Public</i>	<i>Public</i>
Land	<i>Public</i>	<i>Public</i>	<i>Public</i>	<i>Public</i>	<i>Public</i>
Port Ownership	<i>State-City J/V</i>	<i>State-City J/V</i>	<i>State-City J/V</i>	<i>City</i>	<i>Public C^o</i>
Infrastructure	<i>P+P</i>	<i>Private</i>	<i>Private</i>	<i>Private</i>	<i>P+P</i>
Operations & services	<i>P+P</i>	<i>Private</i>	<i>Private</i>	<i>Private</i>	<i>Private</i>
Self-Financing	<i>Partly</i>	<i>Partly</i>	<i>Yes</i>	<i>Yes</i>	<i>Partly</i>

Figure 6. Public Private Partnership (PPP) for Ports Development and Operation
https://www.unescwa.org/sites/default/files/event/materials/PPP%20for%20Ports%20Development%20and%20Operation_Final%20Report_.pdf

Due to the long-term cooperation and usually larger investments needs, the PPP model has not typically been used smaller ports. However, this is not excluded.

Recommendations for municipalities harbours development plans

As mentioned above, the most common way to cover O&M investments is through grants and loans.

A PPP model can be considered a situation where the developer (owner) of offshore wind farms or the manufacturer of wind turbines becomes a private sector partner in the development of a port. However, such model of cooperation is a tailored solution, that can be developed specifically for each port.

The local government of the region might have a significant interest in the development of the relevant port in its territory, because jobs, supply chains and subcontracting will come to its territory.

It is necessary to seek for European Union, national or regional funds that would help develop suitable harbours. It is advisable, for example, that the Recovery and Resilience Facility (RRF) will stay at the heart of the Next Generation EU package, European Regional Development Fund (ERDF), Connecting Europe Facility (CEF), etc²³.

To choose appropriate funding and PPP models and maximize potential local benefits from offshore developments, it is advisable for the region and respective offshore wind farm developers to initially conclude a **memorandum of understanding (MoU)**, a non-binding agreement between two parties to broadly determine the collaborative roles of the parties regarding place-specific renewable energy projects or initiatives such as preliminary assessments, special planning, energy uptake initiatives, seeking additional investment funds etc . Prior to signing the contracts with a harbour, it is reasonable to complete a harbour assessment to determine the feasibility of the location, potential limitations, risks, and opportunities of a given harbour location. This assessment can include having viable port options at the

²³ Special report: Offshore renewable energy in the EU. (s.a.). European Court of Auditors.
<http://www.eca.europa.eu/en/publications/sr-2023-22>

MoU (or lease) stage for securing a port for the project in following areas: 1. port location, 2. land suitability, 3. marine suitability, 4. risks, and 5. additional considerations.²⁴

There are necessary early site screening and preparation to identify and confirm a logistical setup for a given OWF port selection must be also made at the same time as the development of the offshore wind farm begins.

Initiating dialogue with local stakeholders regarding the feasibility of a potential port, a port assessment can provide a more informed foundation for these discussions.

The key decisions on the O&M strategy are usually made in the wind farm development process. Owners will start considering options and strategies for O&M once the turbine OEM has been identified. This is because of the critical role that operating and management play in O&M. At the point when the financial investment decision is made, the owner and/or OEM will have identified the O&M strategy and be in the advanced stages of planning with the **host harbour**²⁵.

Final conclusions:

1. **Port Operating Models:** The report delineates four primary port operating models: service ports, tool ports, landlord ports, and private ports. Service ports, predominantly owned by the state or local municipalities, are the most common in Estonia and Latvia. The landlord port model offers a mixed approach, balancing public and private interests, while private ports often lack significant public interest.
2. **Investment Needs:** Investment estimates for O&M harbours range from €2 million to €20 million per harbour, depending on existing infrastructure and specific development needs. International studies suggest that the investment required for a shore base for a 1GW offshore wind farm is approximately €3.6 million, with annual running costs around €538,000.
3. **Funding Sources:** Funding for these investments primarily relies on public grants and loans, with about 40% of projects seeking national regional grants. The report emphasizes the importance of creating a favorable regulatory environment to boost investor confidence and mobilize investment.
4. **Legal Framework:** Estonia lacks specific PPP-focused legislation but operates under general public procurement laws, while Latvia has established a comprehensive legal framework through its Public Private Partnership Law. However, the application of PPP models in port infrastructure has been limited in both countries.

²⁴ <https://peak-wind.com/om-port-assessment-in-offshore-wind-key-considerations-for-screening/>

²⁵ A guide to UK offshore wind operations and maintenance, 2013, <http://csmres.co.uk/cs.public.upd/article-downloads/Offshore-wind-guide-June-2013-updated.pdf>

Recommendations:

5. **Implementation of Tailored PPP Models:** Municipalities should consider developing tailored PPP models where offshore wind farm developers can partner with local governments to facilitate port development. This collaboration can leverage both public and private resources effectively.
6. **Funding Strategy Development:** It is essential for local governments to identify and secure European Union, national, or regional funds to support harbour developments.
7. **Conduct Feasibility Assessments:** Prior to finalizing any agreements, comprehensive harbour assessments should be conducted to evaluate potential sites for their suitability, risks, and opportunities. This should include considerations for land and marine suitability.
8. **Strengthening Regulatory Frameworks:** Both countries should work towards enhancing their regulatory frameworks to foster a more encouraging environment for private investments in port infrastructure, thereby facilitating smoother PPP implementations.
9. **Stakeholder Engagement:** Engaging local stakeholders early in the planning process can help address potential concerns and foster community support for port development initiatives.