

TCT workshops

Key PPP concepts and principles

TCT Headquarters, Belgrade
12 and 13 October 2022

Objectives of the session

1

Introduce PPPs, key concepts, types of PPPs

2

Discuss the “5 case model”, a framework for PPPs

3

Define the “successful PPP”

Contents of the session

1. What is a PPP? Why using PPPs?
2. The “5 case model”, a PPP thinking framework
3. Key PPP concepts
4. Defining the “successful PPP”
5. Some PPP projects from the transport sector

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A public-private partnership is...

- A long-term contract
- Between a public authority and a private sector company
- For a public service
- Focused on **outputs** rather than project inputs
- With a **whole-of-life cycle perspective** on project requirements
- **Allocates certain project risks** to the private partner (e.g. design, construction, operation)
- Uses **private financing** to underpin the risks transferred
- Private partner remuneration by: **user payments** (concessions), **performance based payments** from the public authority (availability payment projects), **capital contributions** or a mix of systems

PPPs are not...

- Free – someone has to pay for the service in the end
- Just a financing tool – financing is only part of the story
- About hiding long-term liabilities – balance sheet treatment may be a driver but it should not be the only or the main one
- About dumping responsibilities on the private sector – not a way to outsource public sector core tasks
- Simple – PPPs are complex to put in place and manage and require significant preparation / resources / skills
- “Deals” – they are about long-term delivery of a public service
- A panacea, they can go wrong...

Why use PPPs? (1/2)

- Improve quality and consistency of public services
- Improve management of risks (e.g. interface between construction and operation)
- Improve visibility and certainty of **whole-life costs**
- Improve delivery of infrastructure **to time and budget**
- **Encourage innovation** in design, construction and/or service provision
- **Access skills** not available in the public sector

Why use PPPs? (2/2)

- Enable public sector to focus on its **core activities** – policy making, regulation, planning, preparation of project pipeline...
- Encourage **third party scrutiny** of projects – avoid “white elephants”
- **Mobilise private sector capital** to enable additional or earlier delivery of public services
- Improve **revenue generation** through improved use of infrastructure
- Improve **fairness** – matching long-term benefits to long-term payments
- Support the **reform of public sector practices** – “the mirror effect”

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Five key questions – the “5 case model”

1. Has the public authority **identified the needs** and requirements to be met and the strategy to address the needs?
2. Has the public authority:
 - a. chosen the **right project solution** to address the needs (options analysis, CBA)?
 - b. chosen the **right way to deliver** the project (VfM exists)?
3. Can the **market deliver** the project? (technical specs, “bankable”)?
4. Can the public authority **afford to pay** for the service (“affordability” analysis, budgeting), from which sources?
5. Can public administration **manage the process** (laws, institutions, processes, people)?

Issues may often conflict with each other



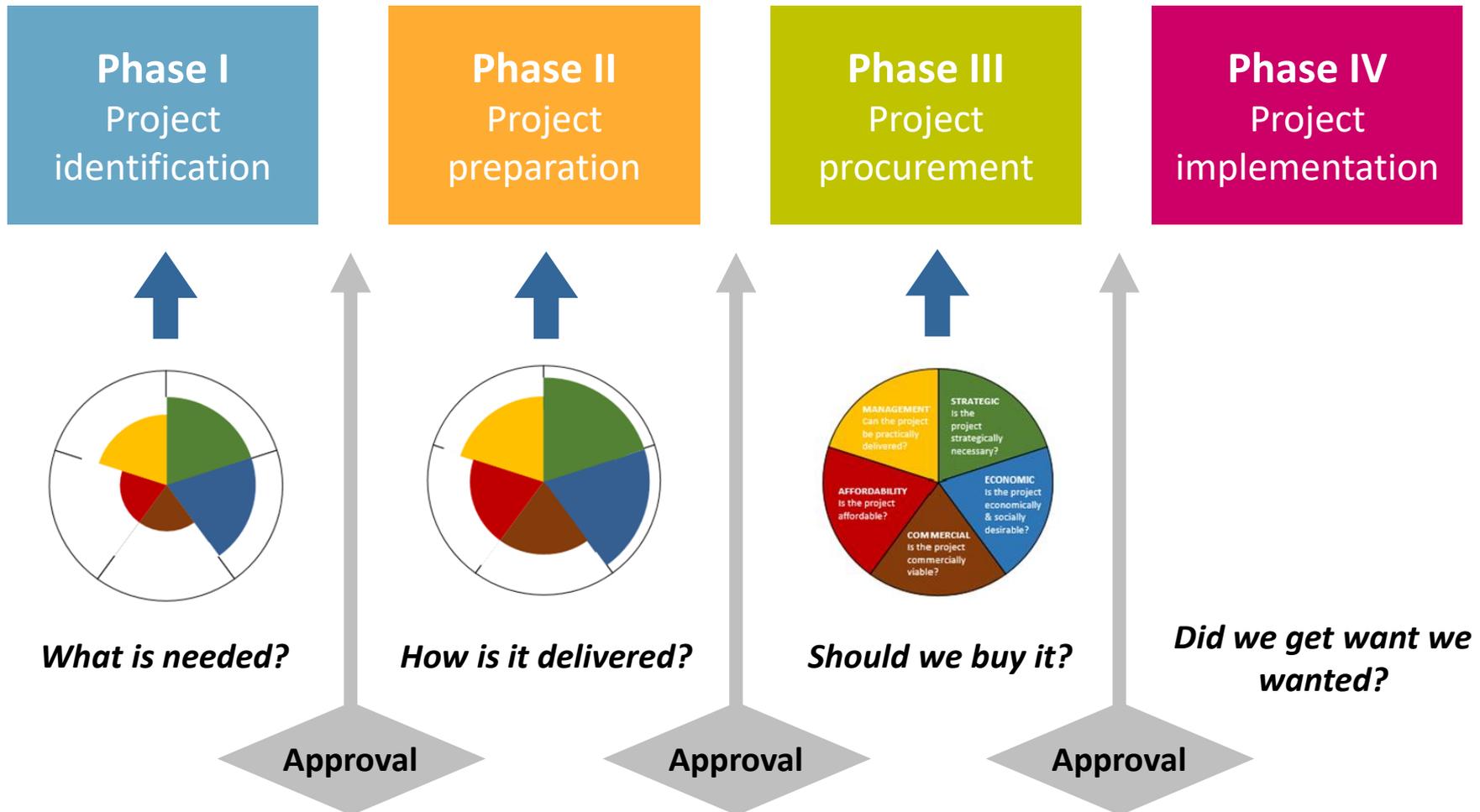
Issues may often conflict with each other



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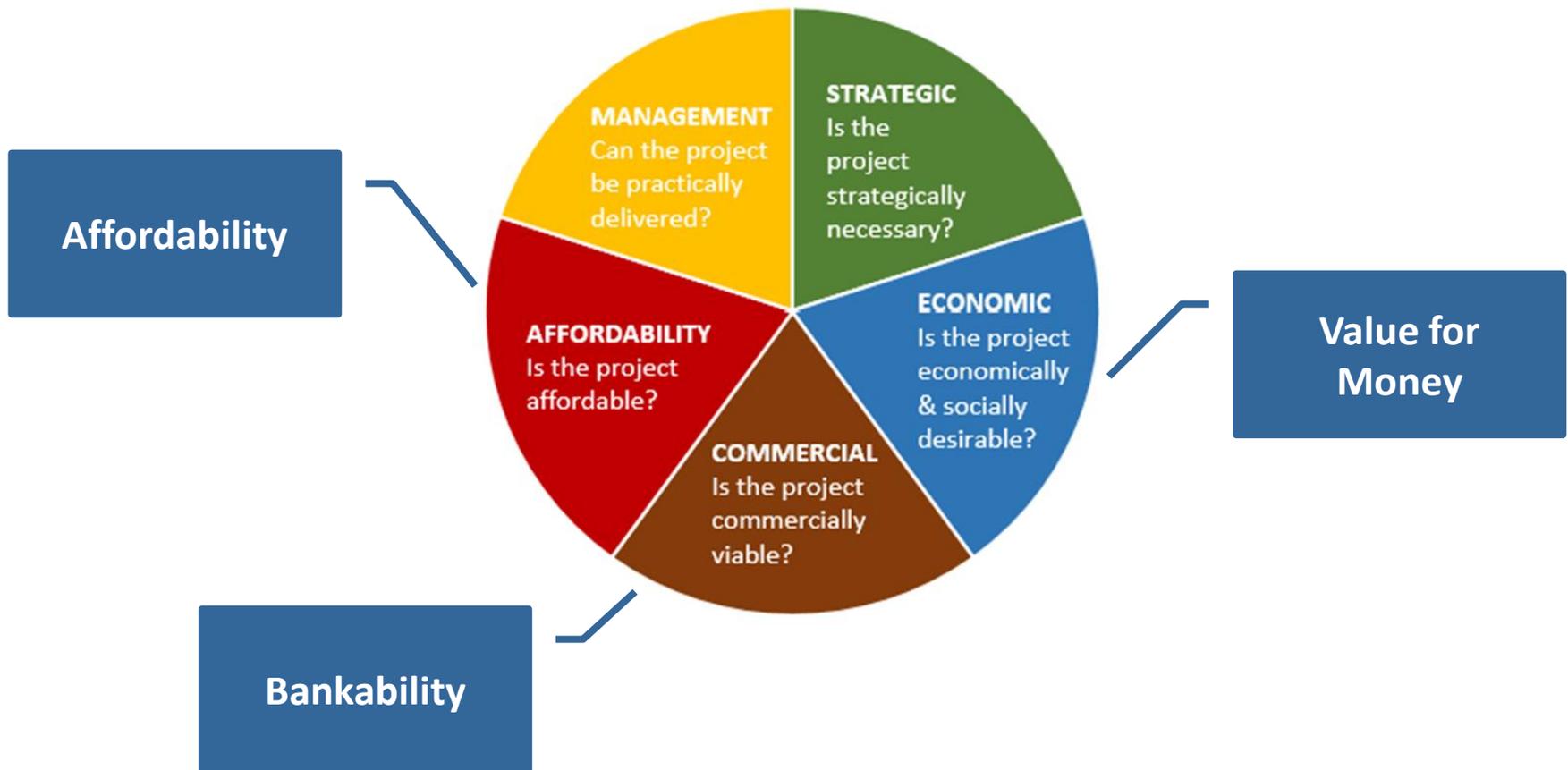
PPP: lifecycle perspective on projects



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Key PPP concepts for discussion



Comparing Value for Money versus affordability

Value for Money

*Should we deliver this
project as a PPP?*

Affordability

*Can we afford to deliver
this project as a PPP?*

Value for Money concept

- The relationship between value and the cost
- For project delivery options:
 - Value = quality and quantity of the service
 - Cost = cost of delivery of the service
- A relative concept: something has VfM when compared to something else...
- VfM assessment = which delivery option represents the optimal balance of value (long-term and risk-adjusted) and cost?
- Not be confused with affordability: you might be able to pay for a terrible PPP!

Value for Money along the project lifecycle

Phase I
Project
identification

What is needed?

VfM assessment:

- Does the project have potential as a PPP
- Should we commit time and resources to prepare it as a PPP?

Phase II
Project
preparation

How is it delivered?

VfM assessment:

- Should we launch the public procurement of the project as a PPP?

Phase III
Project
procurement

Should we buy it?

VfM assessment:

- How do we compare the private sector bids and decide to award the PPP contract?

Phase IV
Project
implementation

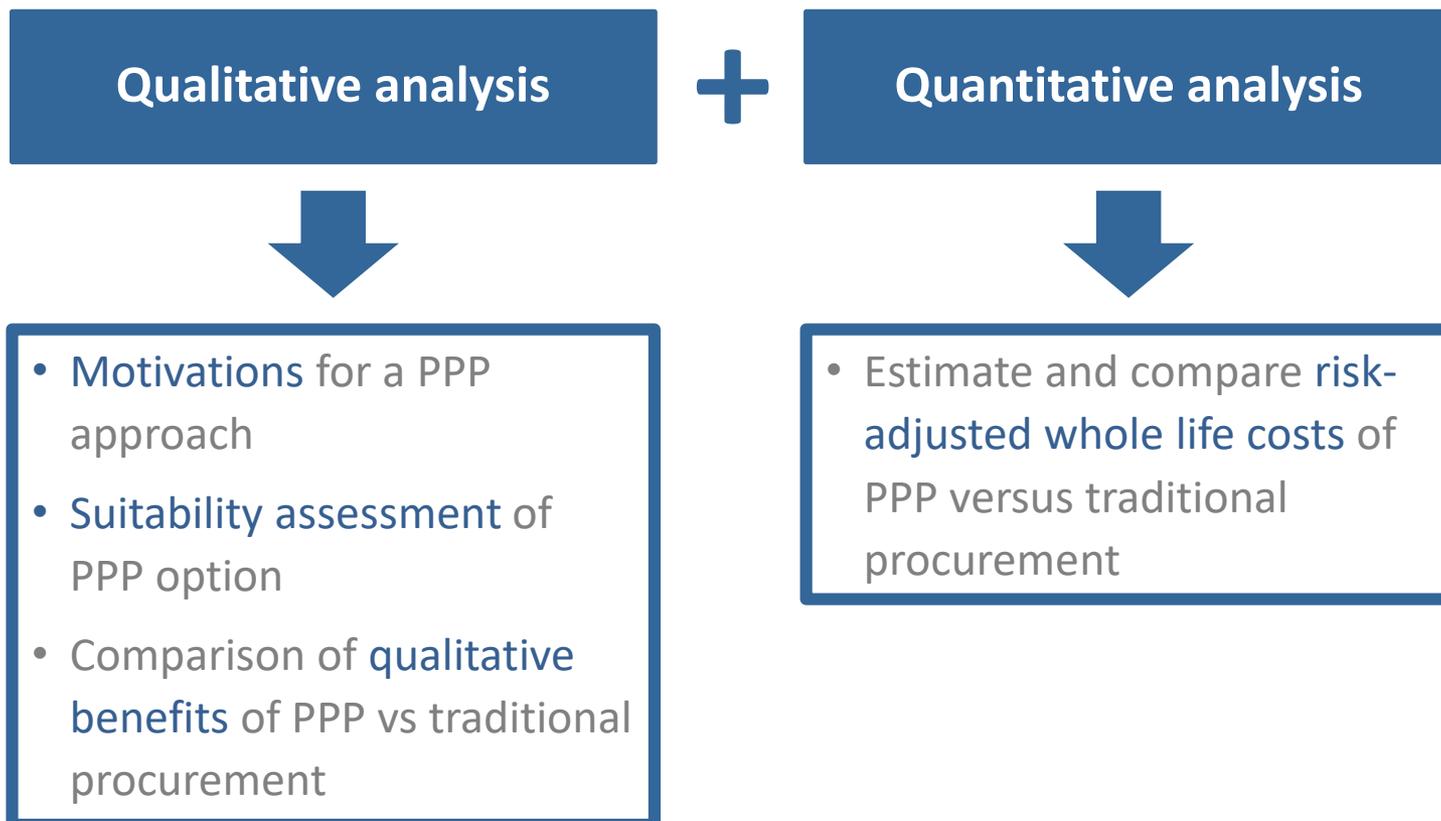
Did we get what we wanted?

VfM assessment:

- How is the PPP performing against its objectives?

Value for Money assessment

- Typically a combination of two approaches



Value for Money – qualitative assessment

- Motivations for a PPP approach

What are the main issues I want to address using a particular project delivery mode?

- Suitability assessment of PPP option

Is the PPP approach viable for the project?

- Comparison of qualitative benefits of the PPP option

What are the constraints of a PPP approach? And how does PPP compare with traditional procurement when measured against the motivations?

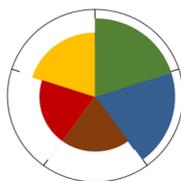
Value for Money – quantitative assessment

Net Present Value of cost
(from public perspective) of
implementing the project as
a PPP

versus

Net Present Value of cost
(from public perspective) of
implementing the project
through traditional
procurement

Phase II
Project
preparation



Compare the estimated costs of a PPP delivery option (shadow bid model) with those of a traditional delivery option (public sector comparator)

Phase III
Project
procurement



Compare the costs of actual PPP bids with the public sector comparator

Value for Money – quantitative assessment

High level summary of a typical methodology and practical implementation issues

Public Sector Comparator	Issues	Shadow PPP
Step 1: develop 'raw PSC' cashflow model of expected capex, opex and revenues of the project	<i>Access to reliable cost info esp. opex that reflects delivering the same service levels for both PSC and PPP options</i>	Step 1: Cashflow model of expected capex, opex and revenues for PPP. Possible efficiency factors may be added
Step 2. Adjust the project costs and revenues for risks (using tools such as VAR, optimism bias factors)	<i>Access to reliable risk valuation data – this is highly assumption based and can be open to challenge.</i>	Step 2: add Authority costs (eg transaction and contract management costs) and any funding requirements
Step 3: Adjust for competitive neutrality between the PSC/PPP (e.g. taxation)	<i>Theoretically assumed and actual tax arrangements are often quite different.</i>	Step 3: determine level of availability payments (revenues) = financial viability
Step 4: Discount cashflows to arrive at NPV of PSC using a justified discount rate	<i>Often controversial : choice of rate has significant impact on result with higher rates favouring the PPP option (due to later payments). Rates also reflect underlying policy choices that may not be so obvious.</i>	Step 4: Discount availability payments (revenues) to arrive at NPV of PPP
Step 5: Compare with NPV of the shadow PPP	<i>Difference can often be quite small (and smaller than the accuracy range of the underlying assumptions)</i>	Step 5: Compare with NPV of the PSC

A Guide to the Qualitative and
Quantitative Assessment of
Value for Money in PPPs
Public-Private Partnerships in the Western Balkans

2018

Affordability concept

- How much money will we need? Where will the money come from?
- Helps define real project options
- Forces debate on who should pay for the project, the funding sources
- Informs the budgetary process and encourages long-term lifecycle budgetary thinking
- Avoids longer-term fiscal problems
- Improves contracting authority's negotiating strength
- Reduces the risk of procurement/project cancellation
- Protects the country's credibility in the market

Affordability assessment

- Estimating project costs over lifecycle (CAPEX, OPEX, financial) to determine long-term service costs
- Building a public sector financial model
- Inflation assumptions
- Public sector demand and revenue analysis
- Sensitivity analysis to calculate an “affordability envelope”
- Estimate other public sector costs: preparation, contract management, upfront subsidies, land purchase, etc

Affordability, funding and financing

- Important not to confuse funding and financing
- Beware of the “affordability illusion” coming from the availability of financing sources...
- Private finance is a bridge to the time that you will need to pay



“Pay as you build, or pay as you use, but you must pay!”

Affordability, budgeting and statistical treatment

Affordability

Can we afford to deliver this project as a PPP?

- *How much money will we need?*
- *Where will the money come from?*

Budgeting

How do we ensure future payment obligations are budgeted for?

How do we avoid future fiscal shocks?

Statistics

How do we reflect the PPP in statistical reporting on national deficit/debt?

Bankability assessment

- Analysis of **potential financing sources**: domestic and international banks, multilaterals (EIB, EBRD...), infrastructure funds, pension funds, insurance companies
- Analysis of **project features**: risk allocation, size, duration/tenor
- **Market sounding** including:
 - Disclosure of **project overview** (objective, economics, tech specs)
 - Check lenders **project financing experience**
 - Check **lenders' reaction to risk profile**, including construction risk, demand risks (if any), Authority payment risk, etc
 - Check **availability of hedging products** to mitigate interest rate and exchange risk (if any)

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So what is a successful PPP project for the public sector?

1. A project that fits the needs identified: it is economic, effective and efficient
2. It has positive CBA and has VfM if delivered as a PPP
3. It can be delivered by the private sector, is bankable and technically viable
4. It is affordable within a long term budget, and without “surprises”
5. It can be effectively monitored and managed by the public sector
6. It delivers as expected according to technical specs and budget during implementation phase (construction and operation)

So what is a successful PPP project for the public sector?



Public sector good practices for success

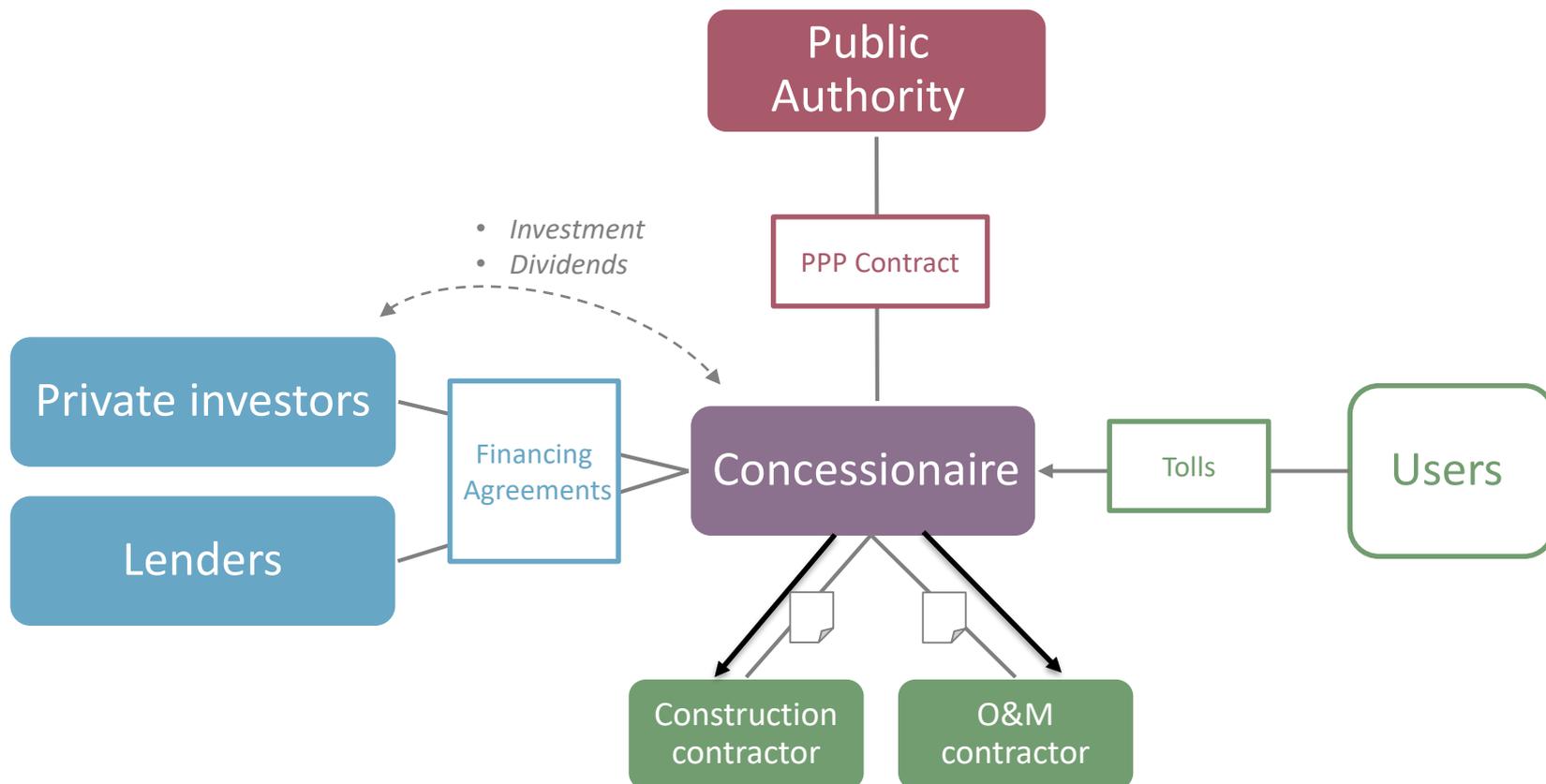
- Understand PPP lifecycle challenges
- Robustness and clarity of the legal and institutional framework
- Clear and well established public administration procedures
- Adequate capacity and resources of public administrations along the lifecycle
- Coordinated action of public administrations and seamless information flows, project lifecycle perspective
- Good communication with the general public, private partners, press, etc
- Promote transparency and disclosure of information

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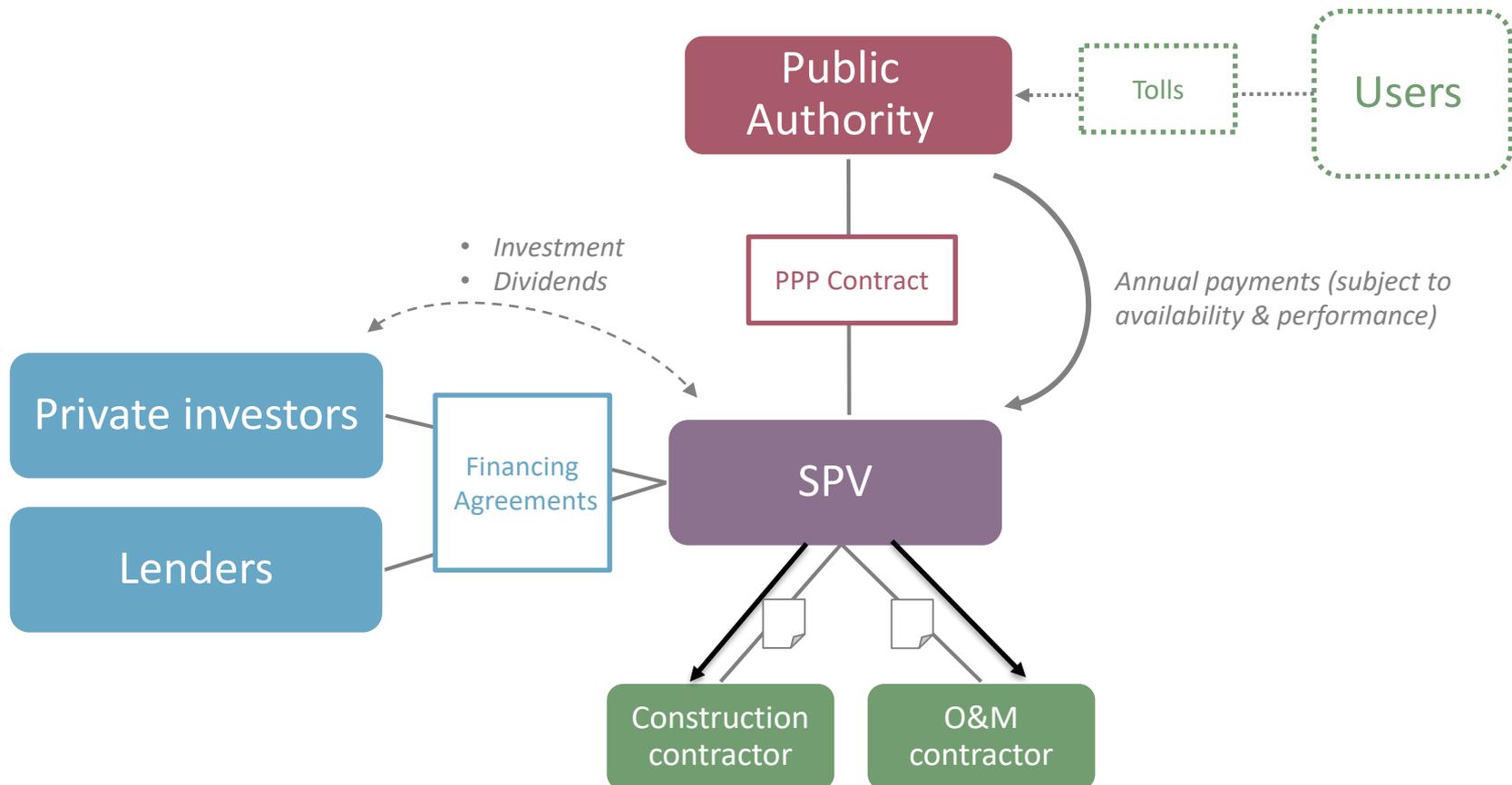
Road sector PPPs

- Concession (user paid)



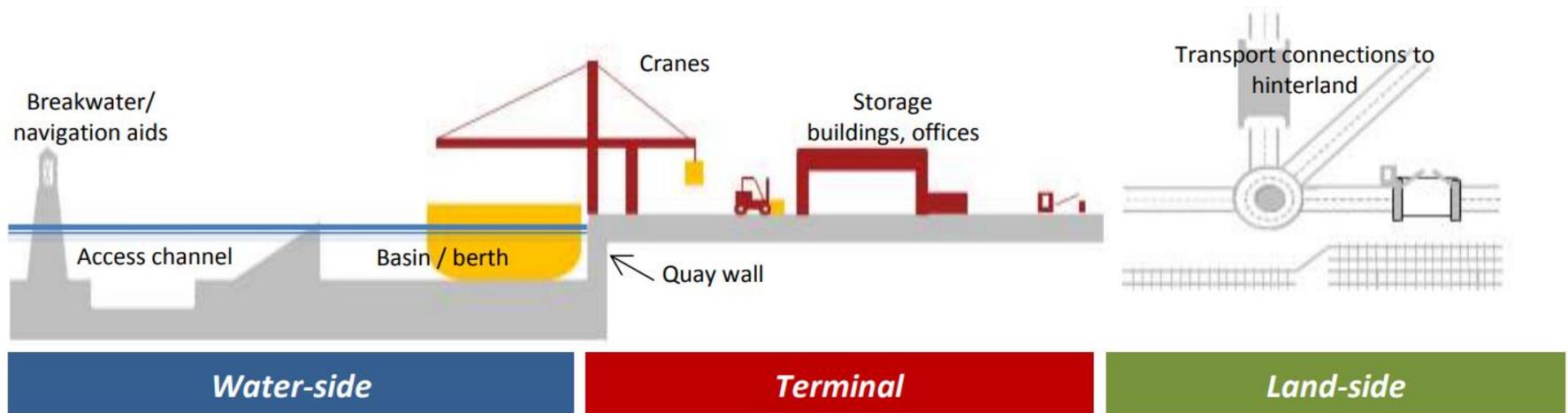
Road sector PPPs

- Availability based PPP (public sector paid)



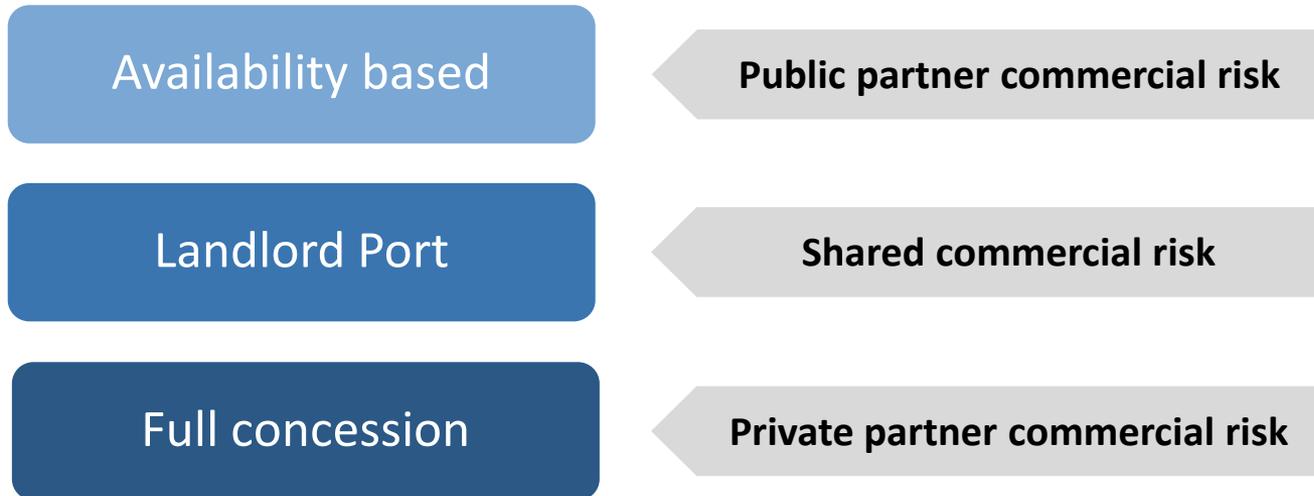
Port sector PPPs

- Assets of port infrastructure



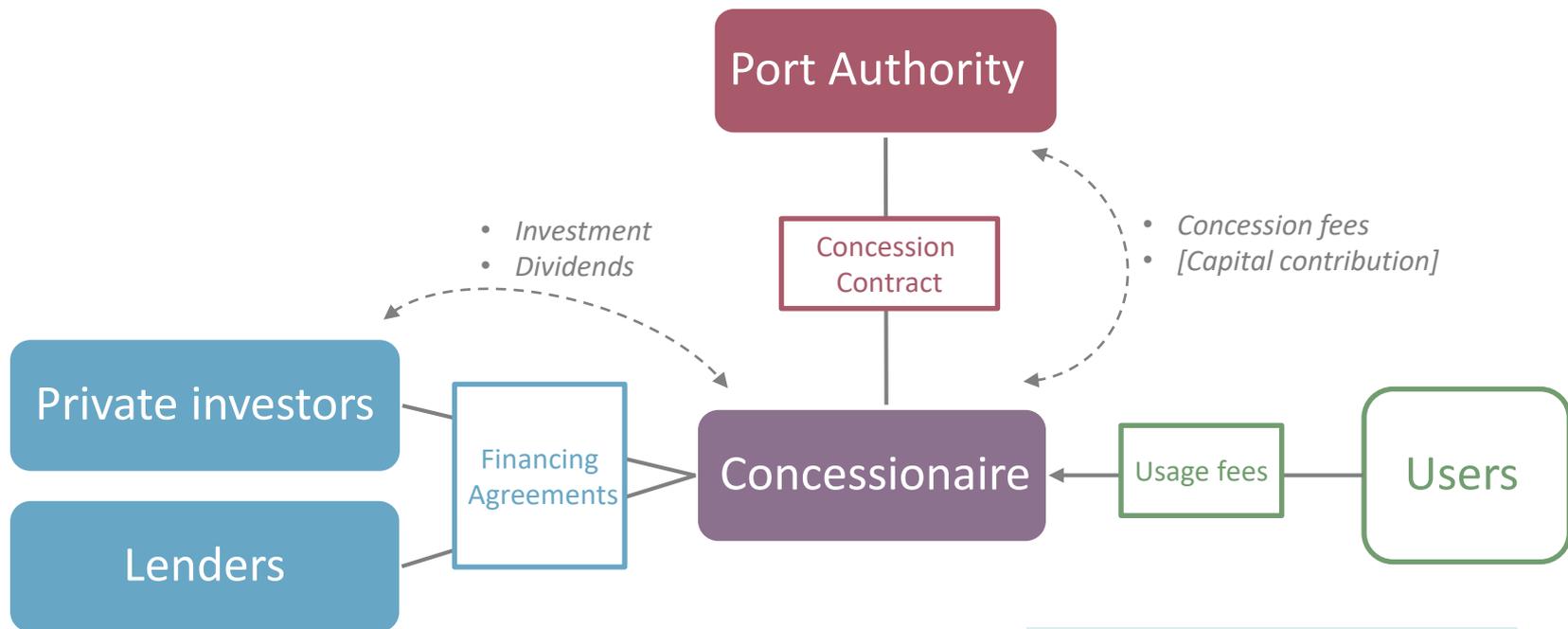
Port sector PPPs

- Three typical PPP models in the port sector



Port sector PPPs

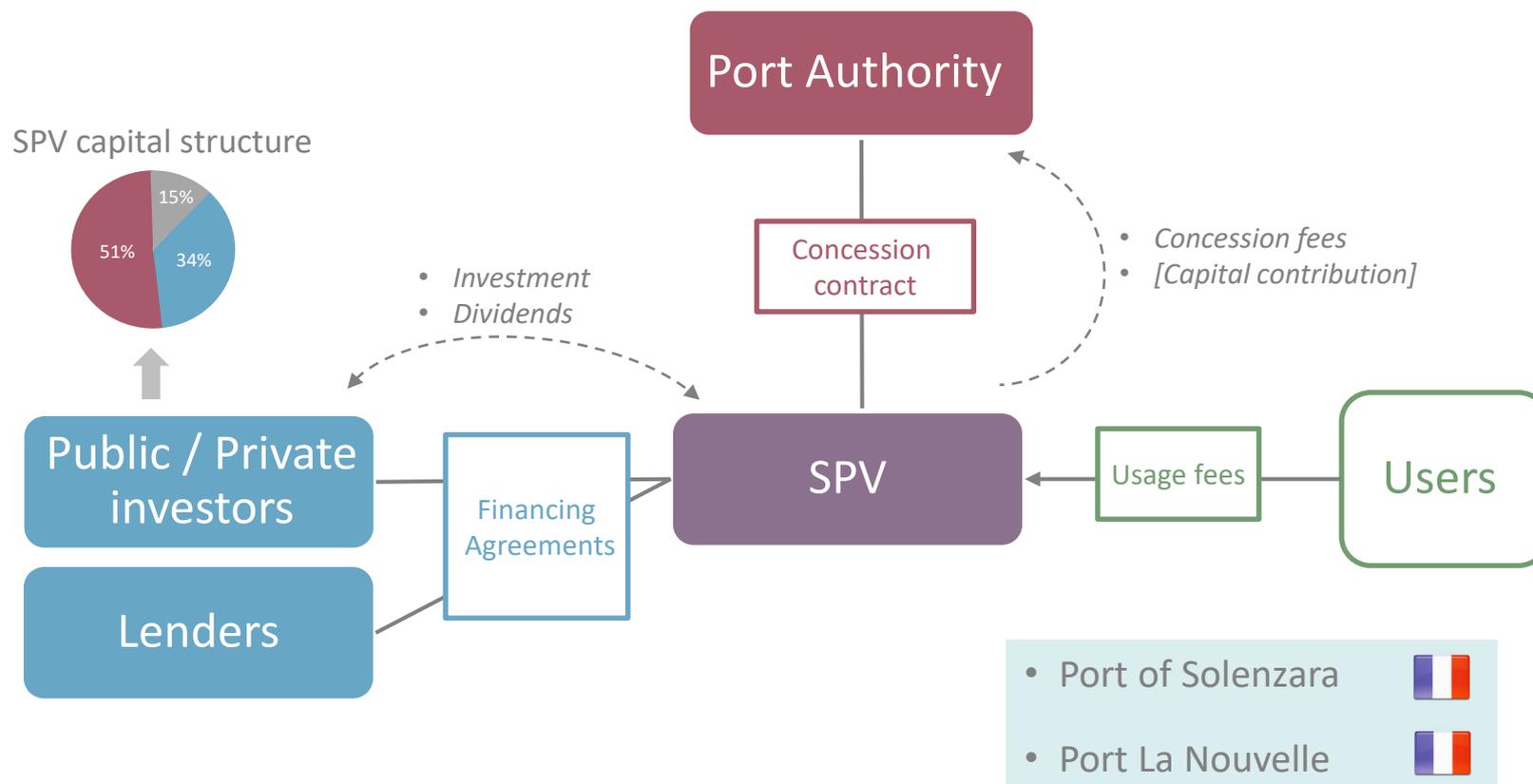
- Landlord model concession



- Leixões Port 
- Sines Terminal XXI 

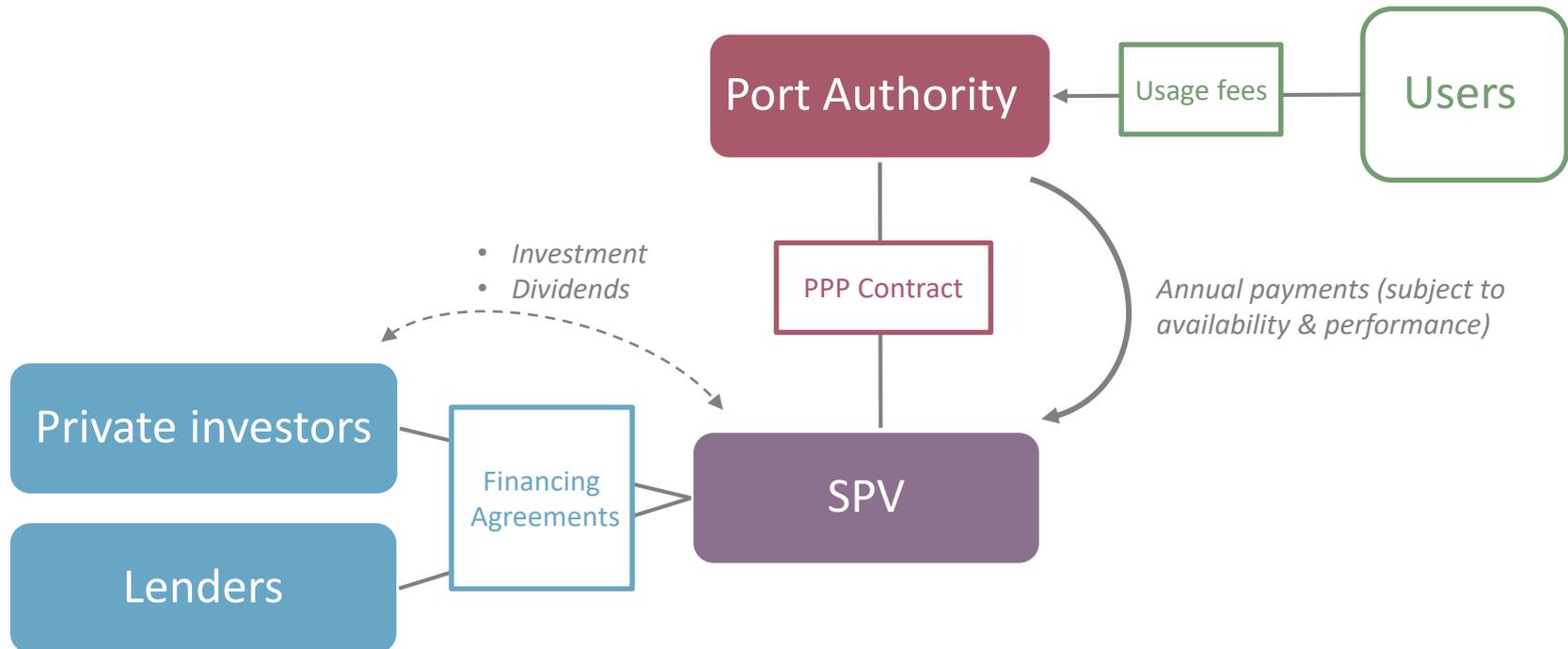
Port sector PPPs

- Institutional PPP



Port sector PPPs

- Availability based PPP



- Ijmuiden Sealock 
- Cotinière Port 

Railway sector PPPs

- Assets of railway systems



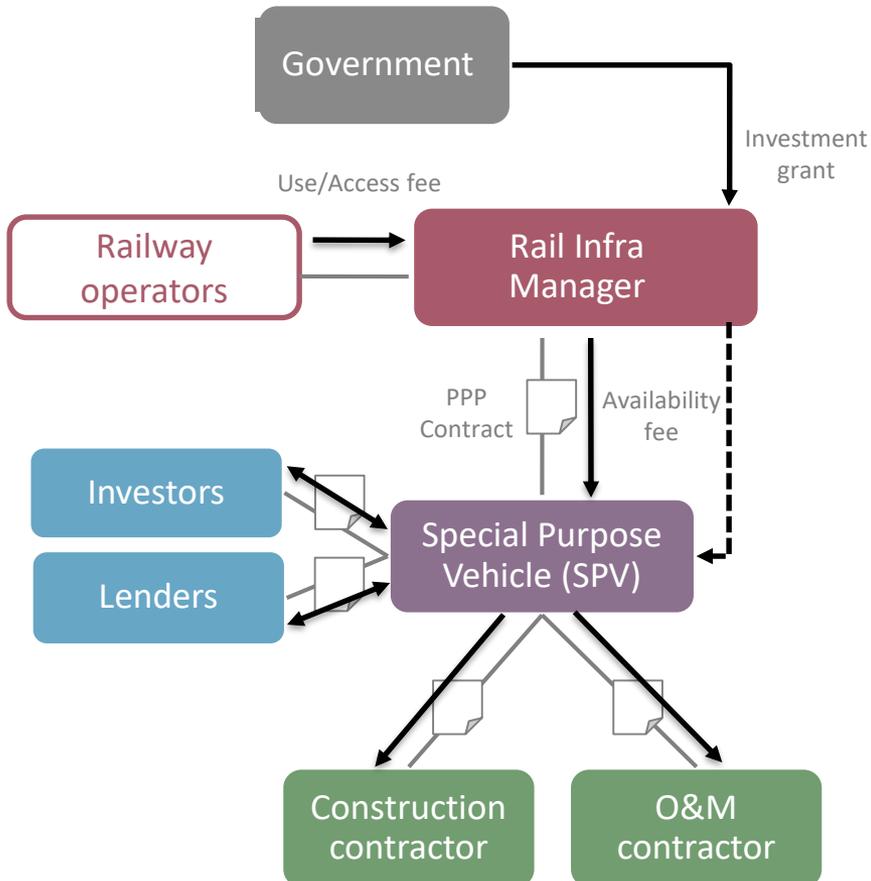
- Substructure: embankments, earthworks, drainage, ballast
- Superstructure: ties, rails, signaling, communications, safety equipment, catenary
- Stations, tunnels, bridges
- Marshalling yards, depots
- Rolling stock

Railway sector PPPs – some examples

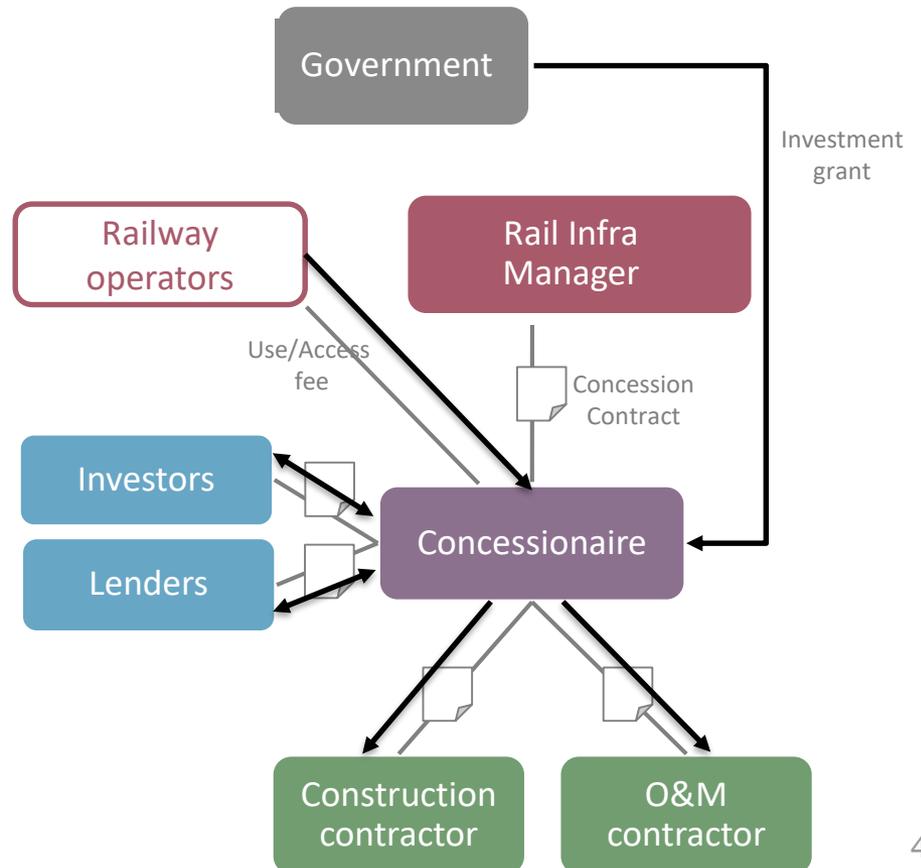
Project	Assets in contract scope	Contract	Paymech
HSL Zuid (NL)	Superstructure (substructure excluded)	DBFM	Availability
HSL Sud Europe Atlantique (FR)	Full infrastructure	Concession	Traffic
HSL Bretagne Pays de la Loire (FR)	Full infrastructure	DBFM	Availability
Northern Diabolo (BE)	Tunnel + station (upgrade connecting lines excluded)	DBF	Traffic
Liefkenshoek Rail Link (BE)	Civil works of tunnel (superstructure & connecting lines excluded)	DBFM	Availability
Albacete-Alicante HSR (ES)	ETCS track-side equipment	DBFM	Availability
Metro Sul do Tejo (PT)	Full infrastructure and rolling stock	Concession	User fees
Lisbon Tagus River crossing (PT)	Heavy rail rolling stock and its O&M (provision of transport services)	Concession	User fees

Railway sector PPPs – infrastructure

Infrastructure availability-based PPP



Infrastructure concession



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