

PPP and other financing instruments in water and sewage management

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Contents

Water and wastewater sector overview

Financing instruments

PPP as an opportunity in water and wastewater sector

Case study

Water and wastewater sector - overview

- Not substitute
- Natural monopoly (competition irrational)
- Most of companies still publicly owned
- Regulation (tariffs, quality of services, sanitary requirements)
- Usually insufficient funds for investments (long term and capital-intensive programmes)
- Political sensitiveness



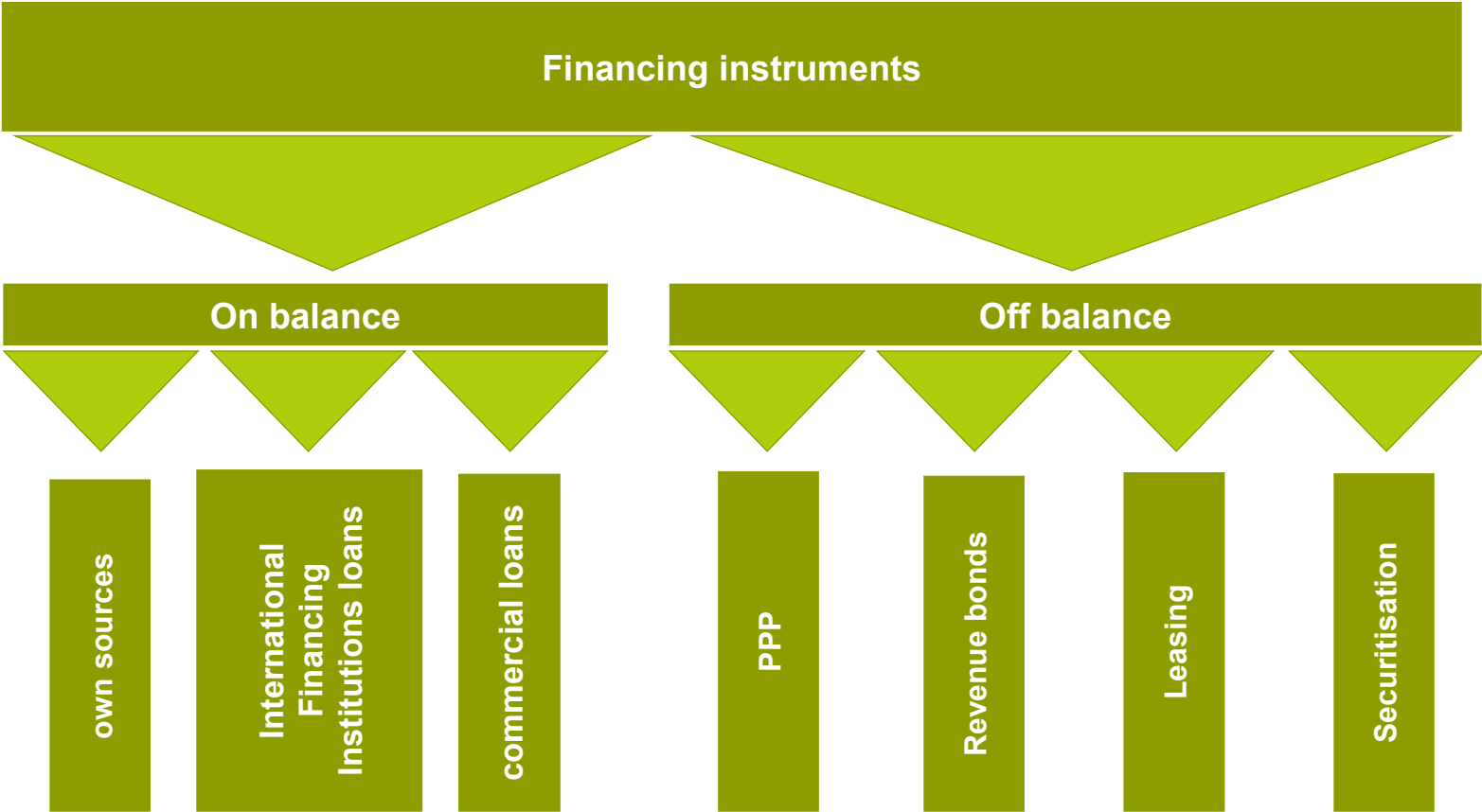
Water and wastewater sector in the EU

- The European Union promotes the challenge to find a way to improve technology and knowledge to achieve the integrated and sustainable management of water
- The Water Framework Directive is innovative in that it brings a “holistic” and modern approach to water management across the EU
- The European Union provides financial aid for Acceding Countries, Candidates and Potential Candidate Countries in order to support the investments in water and wastewater sector (Cohesion Fund, Structural Funds, environmental funds e.g. LIFE+)

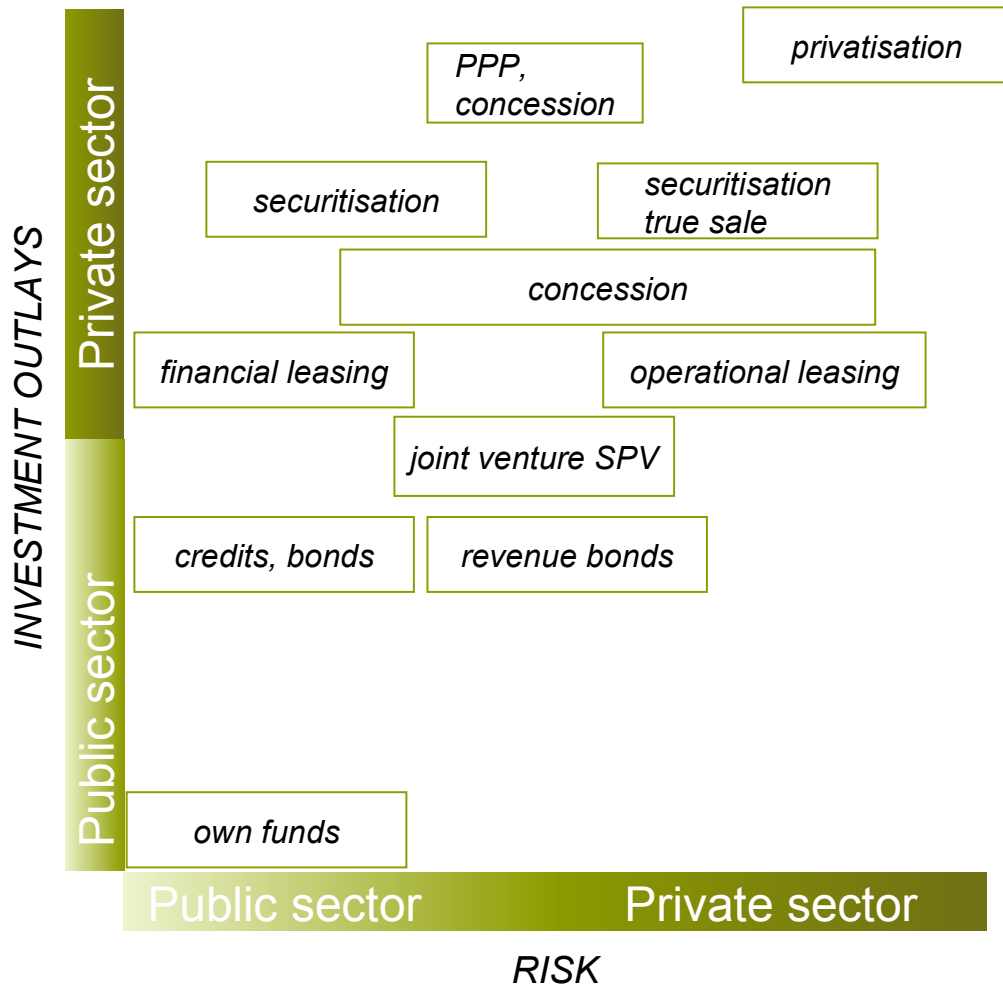
“while specific measures targeted at wastewater treatment and drinking water provision will continue to be a priority, such actions must be seen as part of an overall strategy for ensuring the ecological status and chemical quality in the entire river basin. Integrated programmes for river basin management, including the development of the management plans foreseen under the Water Framework Directive, will also be eligible for support.”

European Commission’s Revised Indicative guidelines for the Structural Funds and their coordination with the Cohesion Fund (COM(2003)

Financing instruments from the public sector perspective



Goals of public and private entities may be combined depending on chosen financing structure and cooperation model



The possibility of cooperation with private partners shall be foreseen by public sector during preparation of investment plans

ATTENTION: This chart is simplified and presents mixed categories e.g. execution models with financing models in order to aggregate various models with use of two factors

Commercial / IFI investment loan

- The most popular and simplest instrument of debt funding
- Elasticity in connection with debt restructuring
- Long term funding usually restricted to IFIs and specialised banks
- Detailed monitoring of project implementation in terms of covenants included in the loan agreement
- Relatively low cost
- Usually own contribution necessary
- Procurement issues (in most countries public procurement process required)

Bonds

- Long term maturity
- Numerous variants of ex ante structuring possible (maturity, interest, currency, grace period, amortisation etc)
- Credit rating usually required
- Public or non-public issue possible
- Different markets (local, euro bonds)
- Monitoring not very restrictive
- Lesser possibility of ex post structuring
- Usually allow for generation of larger amount of funding than in case of a loan



Revenue bonds

- Special type of municipal bonds whose repayment is guaranteed by revenues generated by the project, associated with the purpose of the bonds;
- Recourse limited to earmarked part of assets of the issuer, constituting all or part of assets specified in the contract between bond holders and the issuer;
- Usually carry a slightly higher interest rate than general obligation bonds;
- Used for large construction and expansion of revenue generating assets, such as: water and sewer utilities, toll roads and bridges, airports, power plants.

Leasing

- Allows for procurement of assets against payment of a series of contractual periodic payments;
- Operational and financial leasing;
- Used for funding public building – especially lease and sale back) and/or rolling stock, automobile fleet (specialised vehicles) or equipment

Securitisation

- Transfer of rights of financial or non-financial assets or future revenues for SPV and then bond issue (collateral by means of payables).
- Possibility of securitisation of revenues from lease of real estate or local taxes in exchange for cash (in market value of securitized revenues) to be spent on any public investment.



Forfeiting

- Based on the contract bank or financial institution takes over the obligation of payment of current invoices for expenditures connected with public investments. Public entity concludes agreement with the bank for the repayment in instalments in the long term.
- Available for any type of public investment



How to chose the best financing model? - analysis



- Ability to generate revenues
- Potential amendments → contract renegotiation in the future
- Key performance indicators (KPI)
- Value and scope of the project
- Type of investment (real estate, equipment)
- Ability to separate an asset and revenue generated
- Optimisation of cost and time to be spend on obtaining financing
- Elasticity
- Risk

Public Private Partnership - definitions

European Parliament Resolution:

PPP can be described as a **long-term, contractually regulated cooperation between public authorities and the private sector to carry out public assignments**, in which the requisite resources are placed under joint management and project risks are apportioned appropriately on the basis of the risk management skills of the project partners.

European Investment Bank:

Public-Private Partnership' is a generic term for the relationships formed between the private sector and public bodies often with the aim of introducing private sector resources and/or expertise in order to help **provide and deliver public sector assets and services**. The term PPP is, thus, used to describe a wide variety of working arrangements from loose, informal and strategic partnerships, to design build finance and operate (DBFO) type service contracts and formal joint venture companies.

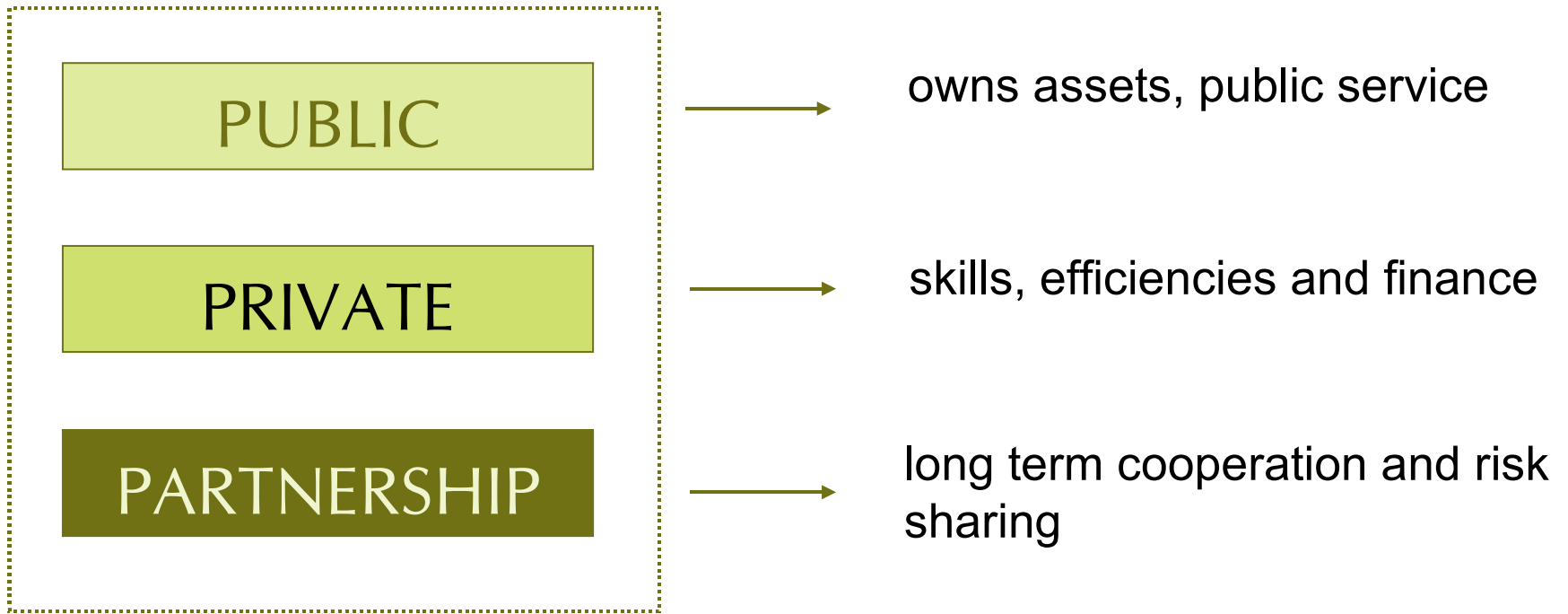
New Polish PPP Act (Dz. U. z 2009, No 19, Item 100):

Public Private Partnership project is a **cooperation based on share of tasks and risks between private and public sector**.

Public private partnership – definition

- Usually to carry out public assignment
- Public sector purchases services not assets
- Private sector is usually responsible for a design, construction, maintenance and financing
- Public sector specifies key performance indicators of the services purchased
- Optimal sharing of risks between public and private sector leading to better risk management
- Payments for the private sector may come from national or local government budget or directly from end users
- Payments for the private sector are based on performance evaluation
- Proven *value for money*

What are PPPs? – definition



ANY TRANSACTION STRUCTURE INVOLVING BOTH
PRIVATE & PUBLIC PARTIES WORKING TOGETHER
TOWARDS A COMMON GOAL

The main options for private sector participation and their allocation of responsibilities

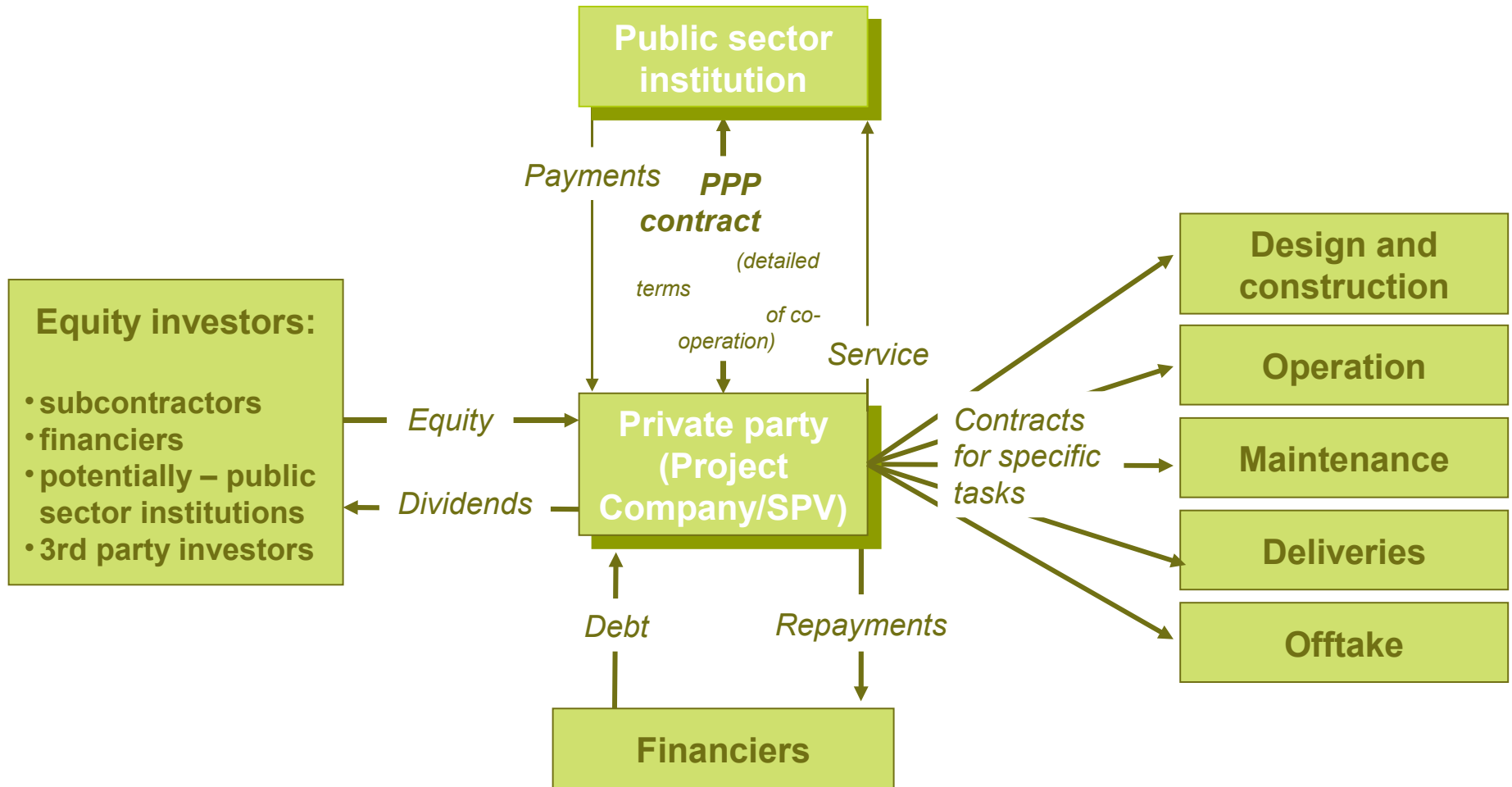
Option	Asset ownership	Operations and maintenance	Capital investment	Commercial risk	Duration
Service contract	Public	Public and private	Public	Public	1–2 years
Management contract	Public	Private	Public	Public	3–5 years
Lease	Public	Private	Public	Shared	8–15 years
Build-operate-transfer	Private (bulk services)	Private	Private	Private	20–30 years
Concession	Public	Private	Private	Private	25–30 years
Divestiture	Private	Private	Private	Private	Indefinite

Source: World Bank

PPP as an opportunity in water and sewage system

- There are **five core PPP models** generally recognised within the water sector: management contracts, lease/operate contracts, Design Build Finance Operate (DBFO) contracts, concessions and divestiture.
- The choice of PPP option will vary on the extent to which the public sector wishes to **pass responsibility** for operation, maintenance, capital investment and/or financing to the private operator and the willingness of the private sector to accept project specific and other risks.
- **Contract terms** vary from 3-5 years for management contracts to more than 30 years for DBFO or Concession contracts. Divestiture involves the outright sale of a stake of the affected utility to a private operator.
- **DBFO contracts** are particularly well suited to the development of new “greenfield” facilities and have been successfully used in the UK and elsewhere as a means to meet increasingly stringent environmental treatment standards.
- The **concession** model is widely regarded as the most effective PPP model in the water sector involving the maximum transfer of operational responsibility to the private operator without the additional political difficulties associated with full privatisation

PPP Structure



Value for Money (VFM)

- As a principle all PPP projects must generate VFM.
- The principal method of determining VFM is an evaluation of the bidders proposal against a Public Sector Comparator (PSC).
- The PSC provides a risk-adjusted costing of the PPP scheme assuming that the public sector were providing the service and that the scheme was publicly financed.

finance costs more than public sector borrowing
+
Increased bid costs
+
Private sector profit

Therefore how can it offer value for money?

The Public Sector Comparator (PSC)

A hypothetical costing that:

- uses the public sector as a supplier
- meets the output specifications of a PFI procurement project for the whole life of project
- is risk adjusted
- is expressed in net present value terms.

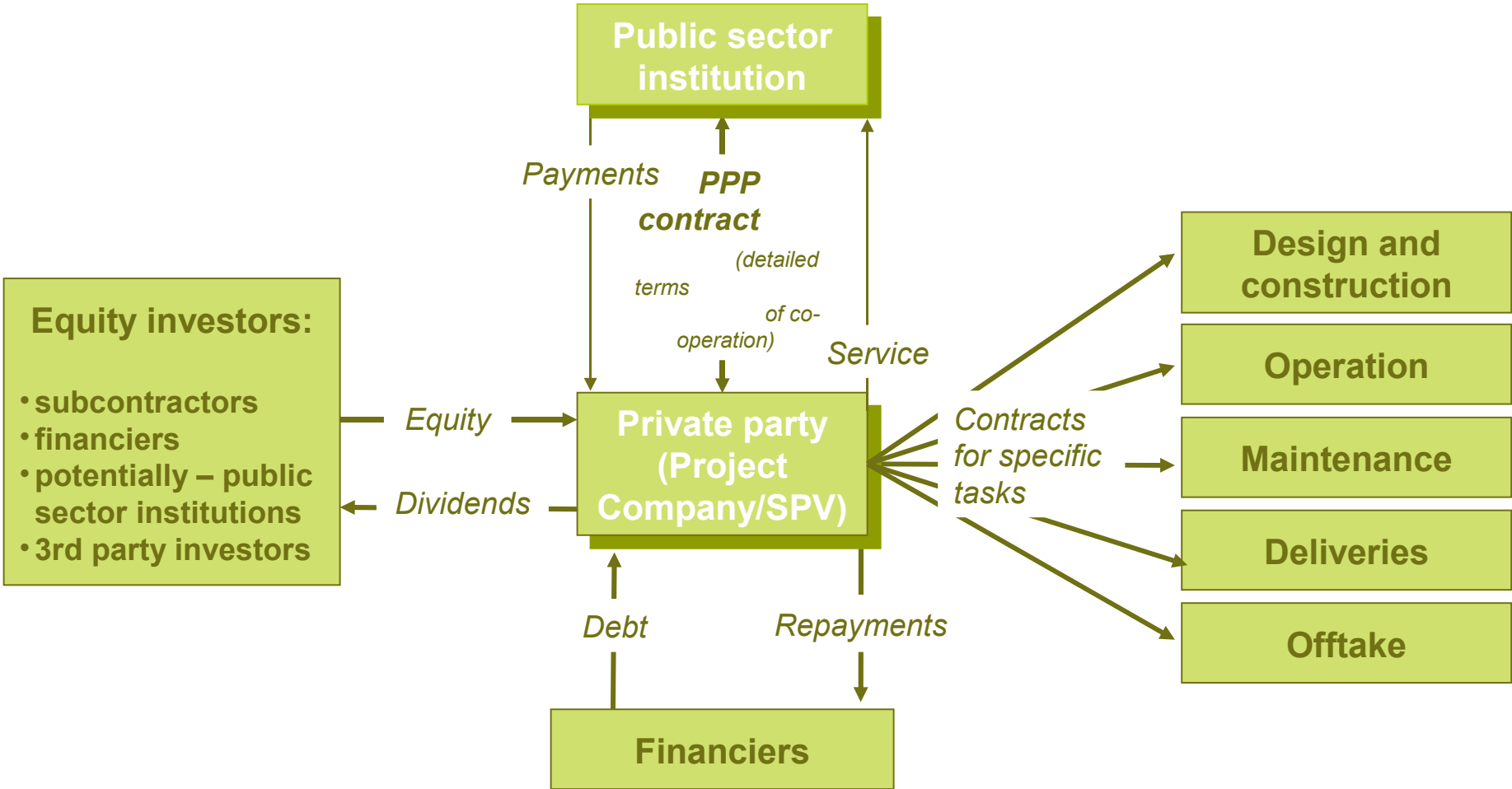
Purpose:

- to provide a benchmark against which to judge whether PFI bids are VFM

Procurement process in PPP projects

- Transparency
- Negotiated procedure (competitive dialog is believed to be the best way of procurement procedure in PPP projects)
- Well structured and detailed output specification prior to the commencement of bidding
- The experience of PPP timetables differs across Europe with some regions (e.g. UK) achieving timetables competitive with traditional procurement alternatives

PPP Structure



Hybrid PPPs

Hybrid PPPs mean combining EU financing with Public-Private Partnerships

”The EU will support PPPs by providing finance, via the Structural and Cohesion funds, where the projects meet all the necessary criteria. For larger projects the Commission will encourage MS to include assessment of its suitability for a PPP scheme.”

Communication from the Commission: Cohesion Policy in Support of Growth and Jobs: Community Strategic Guidelines, 2007-2013: Brussels, 05.07.2005, COM(2005) 0299

Examples:

Athens International Airport
Perpignan Figueras rail link
N1/M1 Dundalk Bypass

Public Private Partnership has a long history

- First BOT was performed on Greek island Eubea in 4th century b.c. , where engineer named Chairephanes received 10 year concession for draining from Dystos lake
- In 19th century first in our era operation & maintenance contracts for maintenance of waterworks in France
- *Generale des Eaux* – the biggest French operator dates back to 1852 (now services 25 million clients in France; owned by Veolia)



Case study

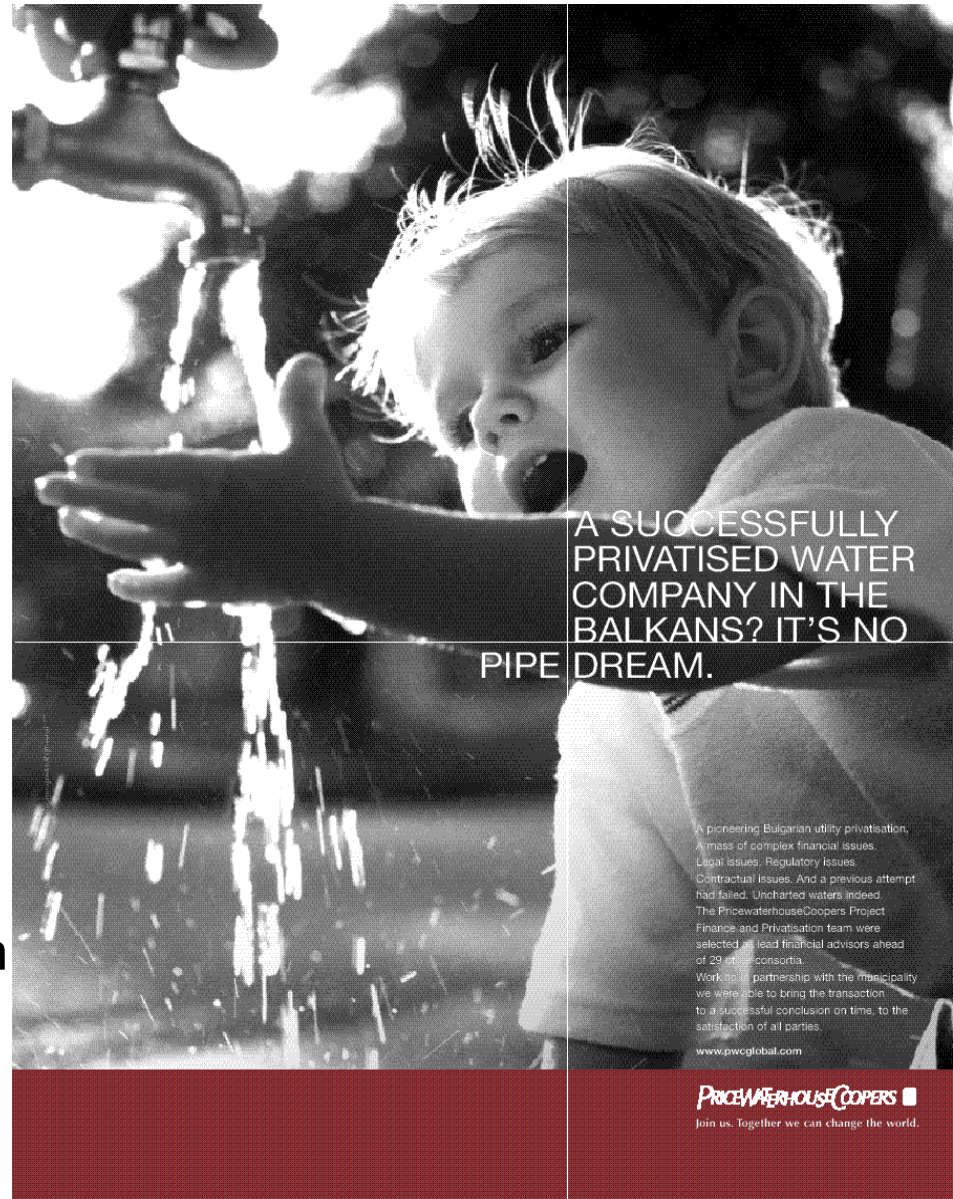


Sofijska Voda, Bulgaria

A ground-breaking transaction:

- 1st water privatisation in Bulgaria
- 1st major municipal concession in Bulgaria
- 1st limited recourse financing in Bulgaria

- Best international PPP of the year (Public Private Finance Awards 2001);
- Deal of the Year, Central & Eastern Europe (Privatisation International, January 2001)



A SUCCESSFULLY
PRIVATISED WATER
COMPANY IN THE
BALKANS? IT'S NO
PIPE DREAM.

A pioneering Bulgarian utility privatisation. A mass of complex financial issues. Legal issues. Regulatory issues. Contractual issues. And a previous attempt had failed. Uncharted waters indeed. The PricewaterhouseCoopers Project Finance and Privatisation team were selected as lead financial advisors ahead of 29 other consortia. Working in partnership with the Municipality we were able to bring the transaction to a successful conclusion on time, to the satisfaction of all parties.

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Sofijska Voda, Bulgaria

PROBLEMS:

- Lack of investment
- Ageing infrastructure
- Low operating efficiencies
- High staffing levels
- Outdated management techniques
- Poor capital structure
- Low revenue collection



SOLUTION

Private sector participation:

- Take-over responsibility for existing infrastructure assets;
- Operate, maintain and develop the water supply and waste water systems to meet required service levels;
- Design, finance, construction and commissioning of Works required to rehabilitate and upgrade existing systems;
- Meet contracted service levels & performance standards

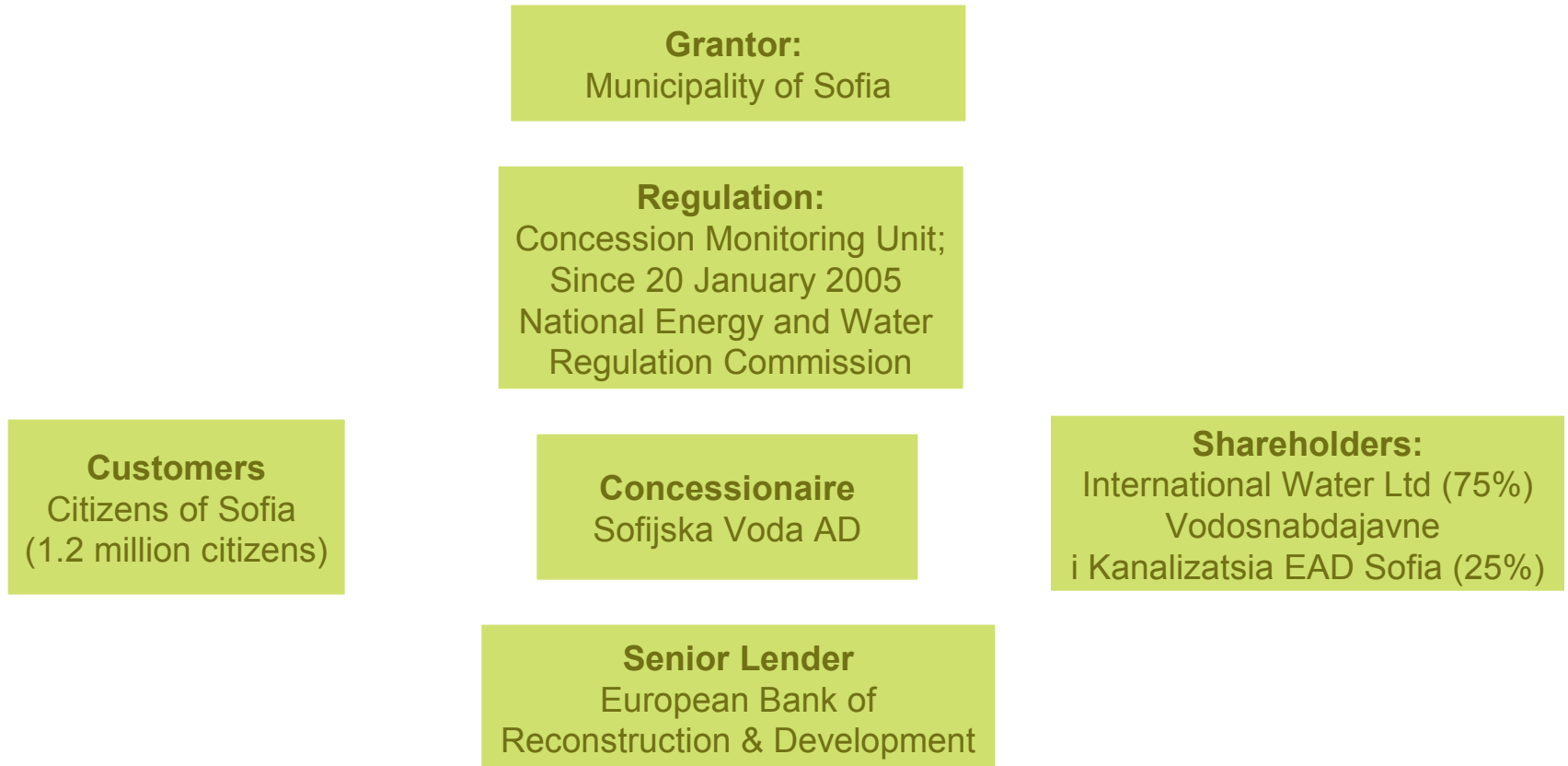
Sofijska Voda, Bulgaria

Key dates

EBRD Concept Paper	October 1998
Appoint Advisers	May 1998
Launch Round 1	February 1999
Pre-qualify bidders	April 1999
Launch Round 2	June 1999
Select Preferred Bidder	November 1999
Commercial Close	December 1999
Financial Close	October 2000

- Goal:** Establishing a self-financing utility delivering a world class service to consumers
- Client:** Municipality of Sofia
- Concessionaire:** Sofijska Voda AD
- Concession period:** 25 years (until 2025)
- Financing:** 32 million EUR from EBRD within first 5 years of concession; 20 million EUR as International Water's equity
- Payment:** Users' (private, commercial) fees
- Characteristics:** investment obligations of private partner amounted 150 million USD within 15 years; operational risk transferred to SPV; max 15% tariff increase during concession period
- Current status:** Water treatment plant modernised, water losses reduced by 22m/m³, 200km of pipes exchanged, client service and billing systems improved

Sofijska Voda - Transaction structure



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