



# Toolkit for Structuring Private Sector Participation (PSP) Contracts for Small Scale Water Projects

PPP in Infrastructure Resource Center – [www.worldbank.org/pppirc](http://www.worldbank.org/pppirc)

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# Toolkit for Structuring Private Sector Participation (PSP) Contracts for Small Scale Water Projects

## Why have a toolkit?

- Gap in the market for simple guidance focused on smallscale PPP
- Part of a broader series being developed by WSP - other publications will include value for money analysis and financial modelling focused on smallscale projects

## What is the PSP Contracts Toolkit based on?

- A review of over 20 PSP contracts developed under WSP or other World Bank funded projects in Sub-Saharan Africa, Asia & Latin America
- Findings of a WSP survey that looked at PSP in rural water supply in several African countries and feedback from practitioners in the field
- Reports on arrangements for PPPs in rural water sanitation supply in Benin and Senegal

## How is the Toolkit organised?

### Contract Preparation

**A. General issues that project designers will need to consider before drafting a contract**

### Contract Drafting

**B. Key contractual provisions of a PSP contract, including sample language and examples**

**Annex 1** – Comparison of key provisions in contracts reviewed

**Annex 2** – Term sheet for a DBO agreement

**Annex 3** – Sample BOT agreement for building and operating an entire scheme

**Annex 4** – Sample provision for management and updating of a Capital Investment Plan

**Annex 5** – Term sheet for an Operation and Management agreement

**A**

**Project preparation (prior to drafting)**

## PSP Contract Pre-Drafting Checklist



**Conduct Technical & Legal Due Diligence**



**Select the Appropriate Contract Type**



**Consider Clustering Projects**



**Establish a Competitive Procurement Process**



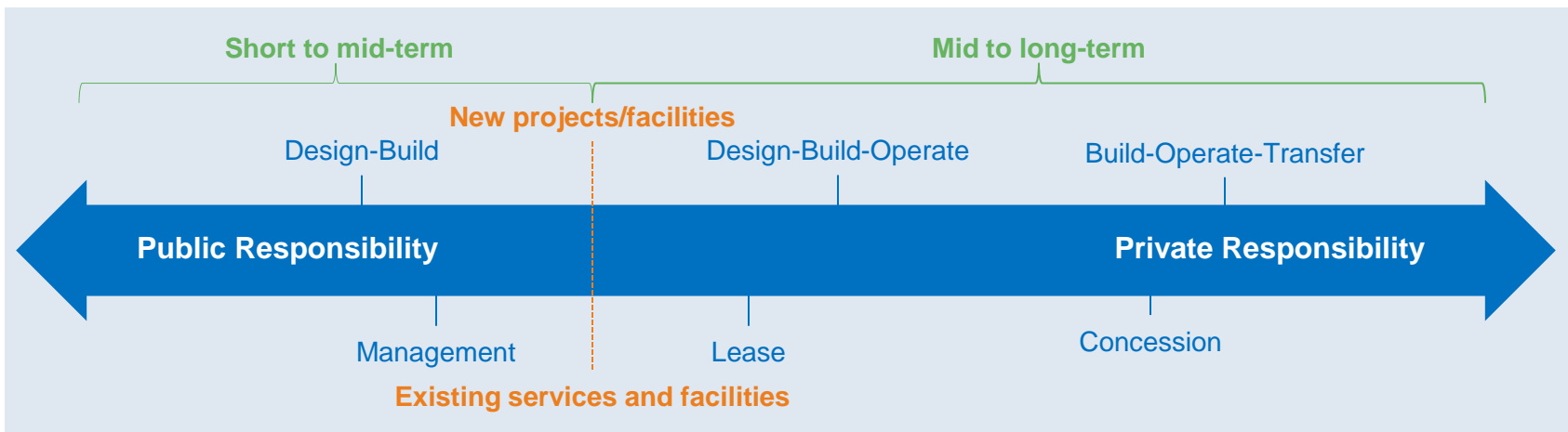
**Consider Key Issues to Include in Contract**

# What is the problem? This then helps frame what would be the appropriate form of contract



## Select the Appropriate Contract Type

Major Contract Types	Key Responsibilities of the Operator	Operator Cost Recovery
Management	Management of assets	Performance based fee
Affermage	Operations & Management of supply within pre-defined area; limited repairs	Fee as percentage of tariffs
Lease	Exploitation of assets for a fixed period of time; extensive repair & renewal	
Design-Build-Operate	Design, construction, and service delivery	Upfront payment & periodic fees for operations



## Consider clustering small projects to reduce transaction costs and achieve economies of scale



### The Potential Benefits of Clustering

- Attracts more experienced operators
- Reduces transaction costs for the contracting authorities during procurement process
- Achieves economies of scale during implementation, which increases the financial viability of the project

### How to Initiate Project Clustering

Clustering could be specified in the Request for Proposals (RFP) and in the contract for the project.

### Key Considerations

- Are there a number of potential schemes located in the same geographic area?
- Is there a commercial logic to such clustering (i.e. economies of scale)?
- Can the operator pool revenues from users or does it need to keep them separate?
- Are there legal restrictions on the form of contract/ risks that can be transferred to the private sector?



### Sample Contract Language

Wording used in a Niger Request for Proposals (translated from French):

“An Operator of the service, whether an individual or a private company, is responsible for the technical, commercial and financial operation of the service. He will be selected, scheme by scheme, and an operator can even be selected to operate a number of schemes.”

## Ensure that the procurement is a simple and transparent competitive bidding process



### Prepare the RFP for Competitive Bidding

- Develop and provide a description of the bidding process, including potential pre-qualification process
- Identify the authority
- Determine key dates and submission deadlines
- Provide address for submitting bids and other correspondence
- Determine required documents for inclusion with bid
- Determine evaluation criteria and include them in the RFP
- Draft contract and specifications
- Determine steps for filing procurement-related complaints

### Key Consideration: Pre-Visits

Consider organizing a “pre-visit” for interested parties to ensure that all bidders clearly understand the infrastructure context in which the project will operate and can tailor their technical and financial proposals appropriately.

### Benefits of Simple & Transparent Processes

- Reduces complaints against the bidding process
- Increases number of bidders and competitiveness of proposals
- Minimizes time delays, reducing procurement costs

### Key Consideration: Civil Society Participation

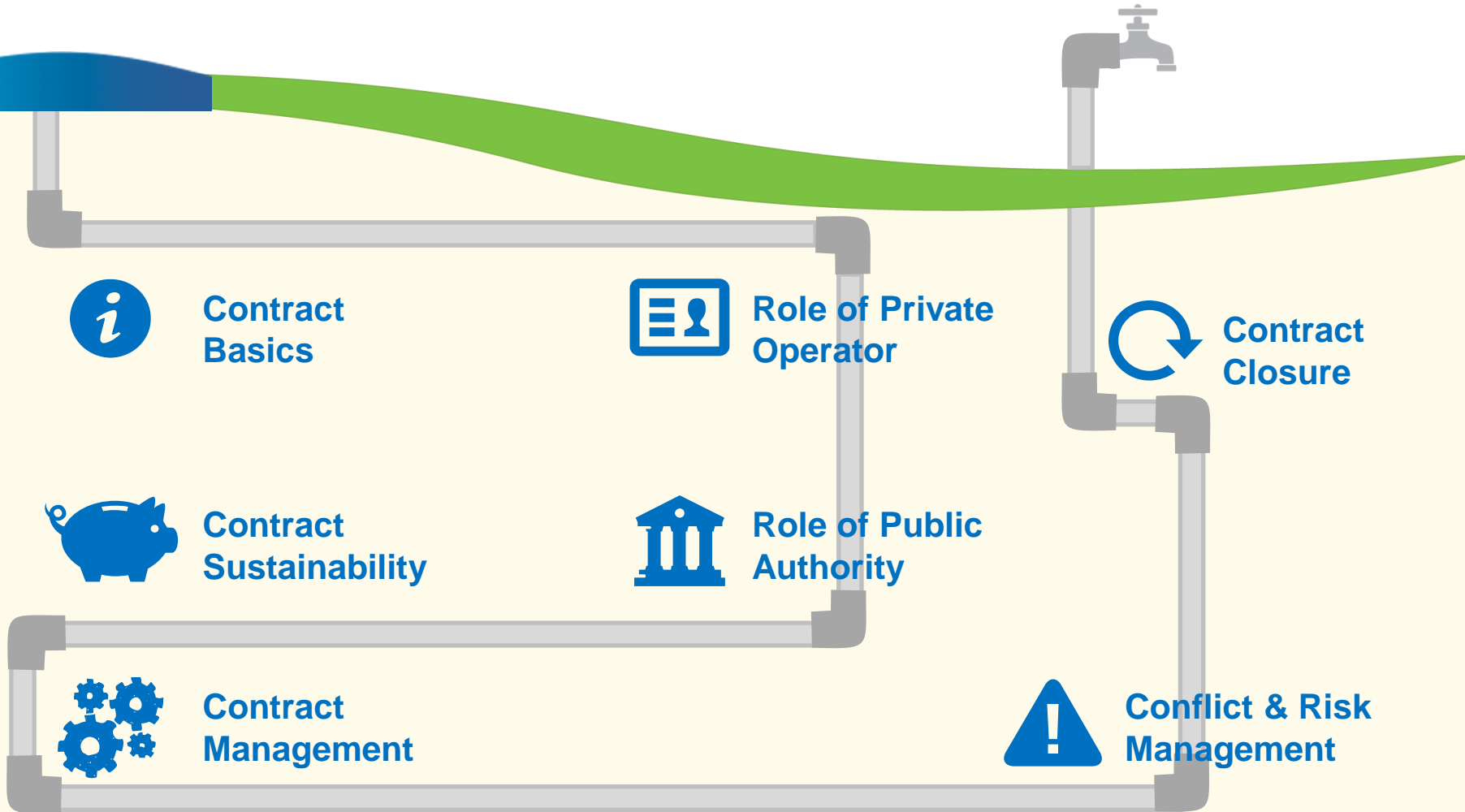
Consider inviting a diverse group of key civil society stakeholders, with special attention to gender dynamics, to serve as public interest group observers of the procurement process for increased transparency and attention to social and environmental impacts.



**B**

**Key Contractual Provisions**

# PSP Contract Drafting Roadmap



# Role of Operator: Define performance parameters for the private operator



## Operator Performance Parameters

### Functions

- Service delivery
- Operate and maintain facilities
- Specific repairs
- Preparation of business /asset management plan
- Meter maintenance and calibration
- Routine reporting
- Payment of fees to public authority
- Asset renewal & extension\*
- Monitoring water quality

### Targets

- Reduced losses
- Increased connections
- Increased supply continuity
- Improved bill collection rates
- Improved alignment with WHO quality standards

### Penalties & Bonuses

- Penalties for missing targets
- Bonuses for surpassing targets

## Benchmark Examples:

### Benin



Benin's affermage contract requires the operator to cover regular repairs for all water assets, including maintaining a supply of spare parts and paying an annual preventative maintenance fee.

The operator must also pay a penalty in the event of unjustified service interruptions (50% of estimated loss revenues during service interruption).

### Senegal



In Senegal rural water lease contracts include efficiency and bill collection ratio targets and revenue reduction penalties or bonuses for when operators fall short of or surpass said targets.

\*Does not apply to all types of contracts

# Contract Sustainability: Establish processes related to revenue, tariffs and cost recovery



## Key Steps in Tariff-Setting

### Identify Cost Drivers

- Energy costs to drive the pumps
- Manpower
- Spare parts
- Minor repairs
- Operator return

### Establish Tariff Setting Methodology

- Financial modeling & scenario planning
- Base tariff adjustment formula
- Legal framework
- Roles and responsibilities

### Establish Tariffs to Recover Costs

- Cost of water production (O&M)
- Volume of water sold
- Depreciation of infrastructure

## Benchmark Examples:

### Benin



Operator may request tariff increases, commune may request tariff decreases, but requests must be based on objective elements.

### Mali



Operator is required to submit adequate justification (records, inventory, capital investment plan) for tariff adjustment requests.

### Niger & Mali



Authorities leveraged independent auditors to verify accounts and vet adjustment requests

## Contract Management: Establish accounting and reporting requirements and processes



### Accounting & Reporting

Reporting requirements in a small scale project should not be too burdensome. The following should be considered:

#### Establish Reporting Requirements

- The information that needs to be included in reports
- The frequency of reports
- Whether any form of verification or audit will be required for reports
- The limited capacity of the operator and the authority to prepare and review reports

#### Common Reporting Challenges

- Small-scale operators often lack basic accounting and reporting skills
- In practice, the receiving entity does not always read the reports.

#### Benchmark Examples:



##### Mali

To compensate for the limited M&E skills of small operators, Mali's National Water Supply Directorate created a technical and financial monitoring program, STeFI, with data collection field visits every 3 months as well as data monitoring and analysis. STeFI tracked the performance of rural water facilities and financial transactions in small-scale schemes. Both Mali and Senegal have also explored mobile-to-web data collection and analysis platforms for technical and financial M&E.



##### Niger

In Niger the government authority did not read reports provided by the operator. To address this challenge, the Niger PPP contract obliges the authority to examine reports and provide comments to the operator within one month of receipt.

## Conflict & Risk Management: Establish dispute & risk management mechanisms



### Dispute & Risk Provisions

#### Dispute Provisions

- Traditional judicial court dispute resolution mechanisms
- Negotiated settlements
- Conciliation or mediation by a third party
- Expert determination
- Arbitration by a panel or individual arbitrator

#### Liability Provisions

- Establish consequences (penalties) for contract breaches
- Clarify whether breach of contract penalties should cover full or partial loss and/or damage
- Establish operator liability and potential cap (or a cap on penalties) within a period (such as a year)
- Consider environmental liabilities as environmental laws are tightened and increased resources are devoted to prosecution

#### Indemnification Provisions

- Indemnification is typically for loss or damage caused to property of third parties or for liability suffered due to the negligence or willful default of the other party.

#### Insurance Provisions

- Insurance may or may not be available or feasible for many of these projects but as projects are clustered together, and if more experienced and larger operators emerge, insurance may be appropriate.

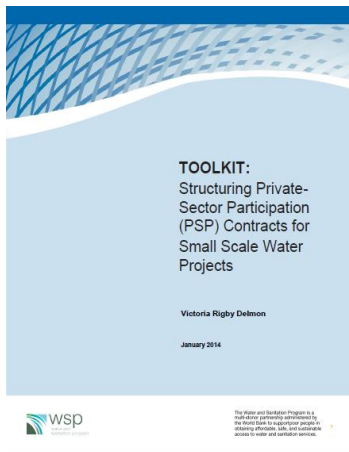
## Annex Information & Templates

- **Annex 1:** Comparison of key provisions in contracts reviewed
- **Annex 2:** Term sheet for a DBO agreement
- **Annex 3:** Sample BOT agreement for building and operating an entire scheme
- **Annex 4:** Sample provision for management and updating of a Capital Investment Plan
- **Annex 5:** Term sheet for an Operation and Management agreement

### For more detail:

## **Toolkit: Structuring Private-Sector Participation (PSP) Contracts for Small Scale Water Projects** By Victoria Rigby Delmon, 2014

<http://www.wsp.org/sites/wsp.org/files/publications/PPP-Contracting-Toolkit.pdf>



Home » PPP by Sector » Water & Sanitation » Small Water Providers

## Smallscale Water Projects - Rural and Peri-Urban

- ▶ [Introduction to Rural Water Supply Issues](#)
- ▶ [Toolkit: Structuring PSP Contracts for Small Scale Projects](#)
- ▶ [Affermage Contracts and Variations](#)
  - ▶ [Benin](#)
  - ▶ [Mali](#)
  - ▶ [Niger](#)
- ▶ [Management Contracts Under Common Law](#)
  - ▶ [Uganda](#)
  - ▶ [Kenya](#)
- ▶ [Water PPP Rural - Further Reading](#)



### Water & Sanitation

- [Water Agreements](#)
- [Water Laws & Regulations](#)
- [Toolkits](#)
- [Small Water Providers](#)
- [PPPs in Irrigation](#)

## Introduction

A key challenge faced by water authorities in developing countries is how to manage their service delivery obligations to rural communities. Even in decentralized sectors the water authorities may find it hard to provide services to remote rural communities. It is recognized that water user associations and/ or local private operators may be the best placed to provide services as they are close to the users. This page looks at some jurisdictions in Sub-Saharan Africa where private operators are being used to meet some of this demand and the forms and models of simplified agreements that they have developed for this purpose. The majority of the agreements currently in place are short term (1 to 3 years) management or operation and maintenance contracts for existing



# PPP in Infrastructure Resource Center (PPPIRC)

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### Highlights

- 23 October 2014: PPP sessions at the World Bank's LJD Week
- NEW: PPP Reference Guide
- NEW: Water PPPs in Africa
- "Handshake" - IFC's PPP Journal

- [Energy & Power](#)
- [Transportation](#)
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## A World Bank Resource for PPPs in Infrastructure

### Are you financing or structuring public-private partnerships in infrastructure?

The Public-Private Partnership in Infrastructure Resource Center for Contracts, Laws and Regulation (PPPIRC) contains sample public-private partnership (PPP) agreements and concessions, checklists and sample clauses, terms of reference, risk matrices, standard bidding documents developed by government agencies and sample PPP and sector legislation and regulation. It is designed for government officials, project managers and lawyers involved in PPP infrastructure projects and will help you address contractual and legal issues related to infrastructure legal reform and PPP projects, with reference materials in English, French, Spanish, Portuguese, Arabic and more recently Mandarin Chinese, drawn from reform initiatives around the world.

### What are public-private partnerships (PPPs)?

There is no one widely accepted definition of public-private partnerships. Broadly, PPP refers to arrangements between the public and private sectors whereby part of the services or works that fall under the responsibilities of the public sector are provided by the private sector, with clear agreement on shared objectives for delivery of public infrastructure and/ or public services. [More on public-private partnerships...](#)

### Latest Documents

Title	Sector	Region	Country	Document Type
<a href="#">Resource Financed Infrastructure: A Discussion on a New Form of Infrastructure Financing</a>			Global	PPP Reference Material

### Sign up for updates

Email:

### Related PPP Resources

- [PPP Laws by Country](#)
- [Hiring Advisors - Sample Terms of Reference \(TORs\)](#)
- [PPP Checklists and Matrices](#)
- [PPP Insights](#)
- [Procurement and Standard PPP Bidding Documents](#)
- [Transparency, Good Governance and Anti-Corruption](#)

[Private Participation in Infrastructure Database](#)  
GLOBAL TRENDS

# PPPIRC – [www.worldbank.org/pppirc](http://www.worldbank.org/pppirc)

- Sample laws, regulations and contracts
- Summaries and annotated agreements
- Links to publicly available materials (eg South Africa PPP unit materials, UK Treasury standard documents, actual project documents– eg India and Manila Water), Toolkits
- Checklists and guidance
- Risk matrices
- Terms of Reference for advisers
- English, French and Spanish documents and pages + Chinese, Arabic and Portuguese

# Water & Sanitation PPPs

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- ▣ **Water and Sanitation Laws and Regulation**
- ▣ **Water and Sanitation Utility Reform**
  - ▣ *Empresas Mixtas / Joint Ventures*
- ▣ **Water and Sanitation Agreements**
  - ▣ Water Management, Operation, Maintenance Contracts
  - ▣ Water Concessions and Build-Operate-Transfer
  - ▣ Lease and Affermage Contracts
  - ▣ Water and Sewerage/Wastewater Bulk Supply Agreements
- ▣ **Smallscale Water Projects: Rural and Peri-Urban**
- ▣ **PPPs in Irrigation**
- ▣ **Theft / Non-Technical Losses**
  - ▣ **Legislation and Practical Measures**
    - ▣ Cambodia
    - ▣ Colombia
- ▣ **Toolkits - Water and Sanitation**
- ▣ **Further Reading**

## Water and Sanitation Concession/BOT/DBFOs

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### Existing Network - Concession

**Water and Sanitation Concession - Example 1** - concession agreement for concessionaire to run water and wastewater services previously run by a municipality. Long-term concession. Prepared by international law firm.

Prepared for African country and contains provisions covering formalization of informal connections, extension of service to new areas, failure of authority to increase tariffs in accordance with assumptions. Suitable for common law or civil law jurisdictions, subject to modification and local legal advice. English language.

**Wastewater Concession - Example 2** - concession agreement for concessionaire to establish and operate wastewater services in country where existing arrangements consisted of private septage and haulers. Long-term concession. Prepared by operator with input from international law firm and adapted by World Bank staff. Suitable for common law or civil law jurisdictions, subject to modification and local legal advice. English language.

### Sample Publicly Available Documentation for Concession:

**Philippines - Manila Water - Concession Agreement for Water and Sanitation Services (pdf)** serving East Zone of Metro Manila - go to web site of [Manila Water](#) for more information. The Metropolitan Waterworks and Sewerage System was mandated to enter into PPP arrangements under [Republic Act No. 8041](#) (National Water Crisis Act of 1995). For more on the Manila water concession, see World Bank paper entitled [The Manila Water Concession - A Key Government Official's Diary of the World's Largest Water Privatization](#)

**Romania, Bucharest - Concession Agreement for Water and Sanitation Services** (in Romanian) provided by Apa Nova București (a subsidiary of Veolia Water). The Bucharest Municipality assigned the rights and obligations to manage the public water supply and sewerage services as well as the related public assets to the company Apa Nova București, at the company's own risk and expense, in exchange for a fee payment referred to as "royalty". More information in English is available on the website of [Apa Nova București](#). For a description of the project and key features see the [IFC Advisory Note](#) as well as the [Private Participation in Infrastructure \(PPI\) Project Database project summary](#).

**Peru - Concession Agreement for Water and Sanitation Services in Piura Y Paita** - final version (May 2006). Documentation in Spanish. Public concession contract to rehabilitate, improve, enlarge, maintain, operate and exploit Water and Sanitation infrastructure in provincial towns in Peru between the State and a legal private entity. The agreement is for a term of 30 years (extendable, subject to review). The State provides existing

# Other materials:

PPPs for Urban Water Utilities – Experiences in Developing Countries – WB  
– <http://water.worldbank.org/publications/public-private-partnerships-urban-water-utilities-review-experiences-developing-countri>

Approaches for Private Participation in Water – a Toolkit –  
<http://siteresources.worldbank.org/INTINFNETWORK/Resources/Approaches-toPrivateParticipationWaterServices.pdf>

ADB – Developing best practice for promoting private sector development – water  
<http://www.adb.org/publications/developing-best-practices-promoting-private-sector-investment-infrastructure-water-supply>

Maharastra, India – Urban Water Toolkit -  
<http://www.adb.org/publications/toolkit-public-private-partnerships-urban-water-supply-state-maharashtra-india>

# Other materials:

Please send feedback, suggested materials or links to:

- Contact us button on PPPIRC
- Email me at [vdelmon@worldbank.org](mailto:vdelmon@worldbank.org)

Thank you