

# **Sustainable Water Integrated Management (SWIM)**

## **Regional Training Event**

Funded by the EU European Neighbourhood and Partnership Instrument  
(ENPI) South/Environment.

## **Day 3 – Session 1**

# **Main Elements of a Good PPP Contract for Depollution Infrastructure**

*by*

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# Potential Objectives for a (Water) PPP

- ◆ to obtain sustainable improvement in the provision of, and access to, water and sanitation services, particularly in un-served and low-income areas
  - ◆ to achieve significant progress in terms of productivity and sustained managerial autonomy resulting in higher operational efficiency
  - ◆ to create enabling environment conducive to sector growth
  - ◆ to leverage on private capital and state-of-the-art technology
- ➔ to create gradually conditions to attract private lenders and equity investors to finance an increasing part of future investment needs through new financial instruments

# More specifically - I

- ◆ Improve quality of service
- ◆ Increase effective use of existing infrastructure
- ◆ Introduce and enhance technical and managerial expertise
- ◆ Introduce improved commercial management
- ◆ Improve operating efficiency & system performance

## More specifically - 2

- ◆ Introduce net cost savings in service provision
- ◆ Reduce or eliminate public subsidies to the sector for recurrent expenditure (operating subsidies)
- ◆ Increase efficiency of capital investment
- ◆ Mobilize private financing for investment
- ◆ Restructure troubled public enterprise
- ◆ Reduce political interventions in utility operations

# Attributes of a sustainable framework - Public or Private

- ◆ **Roles, Responsibilities** and **Risks** must be clearly assessed and allocated, and **Incentives** and **Accountabilities** must be internally consistent.
- ◆ Risks should be allocated to the party that is most capable of managing such risks.
- ◆ Agreements should be Enforceable.
- ◆ There must be an appropriate Balance of Power – No One Party should have overwhelming authority.

# ... not a Panacea, ... nor a Substitute for Reform

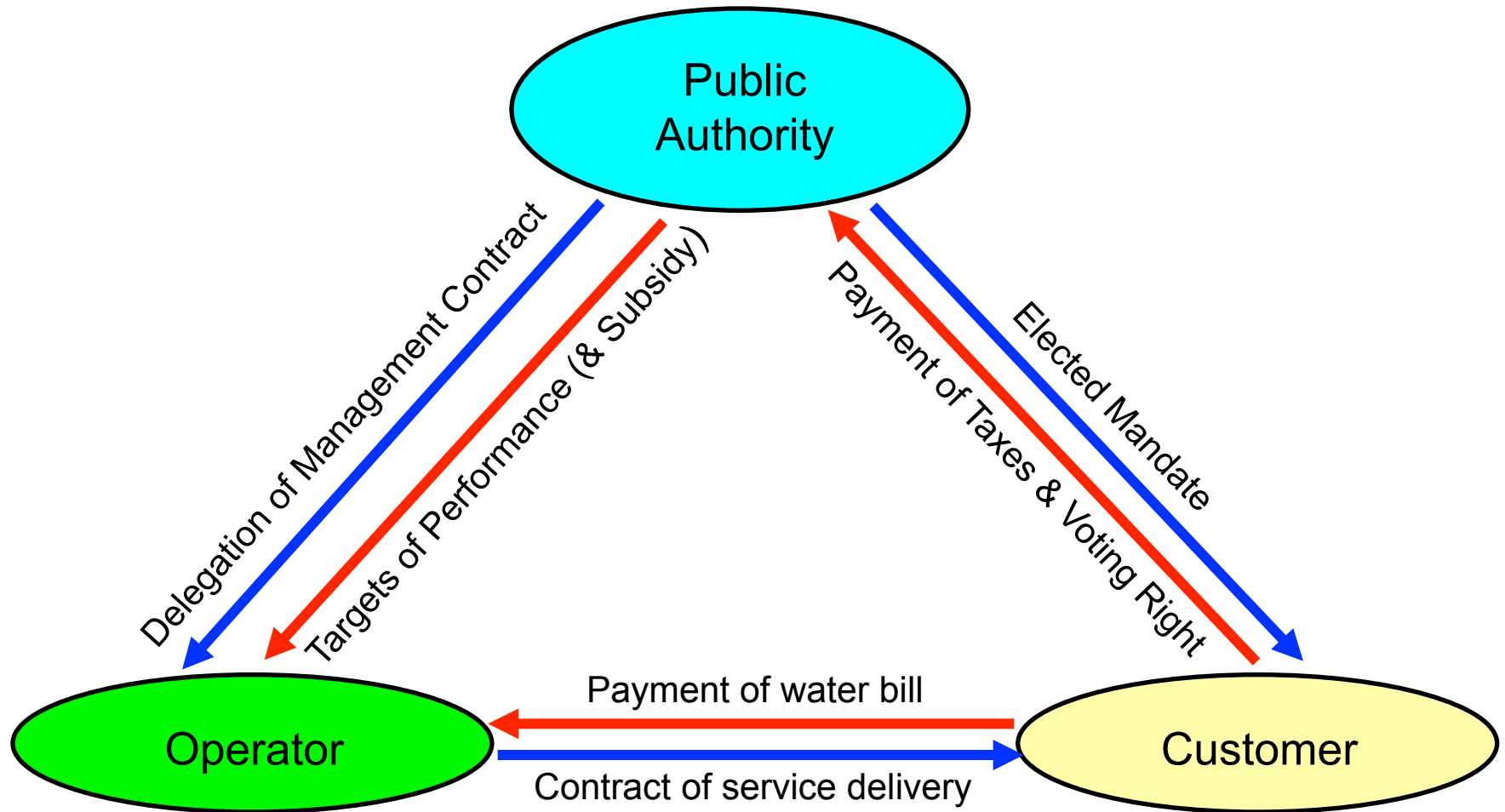
- ◆ **Empowered operator:** no matter the PPP option, he can only succeed if given the control on the means to achieve performance targets
  
- ◆ Operator needs:
  - Freedom from political interference, and, micro management
  - Autonomy in decision making and on personnel issues
  - Financial security

# Two main approaches for PPP ...

1. The **Project Finance Initiative (PFI)**
  - Green field projects
  - Brown field projects
  
2. The **Delegation of a Public Service (DPS)**

# The triangle of delegation of public service (DPS)

*A repartition of responsibilities*

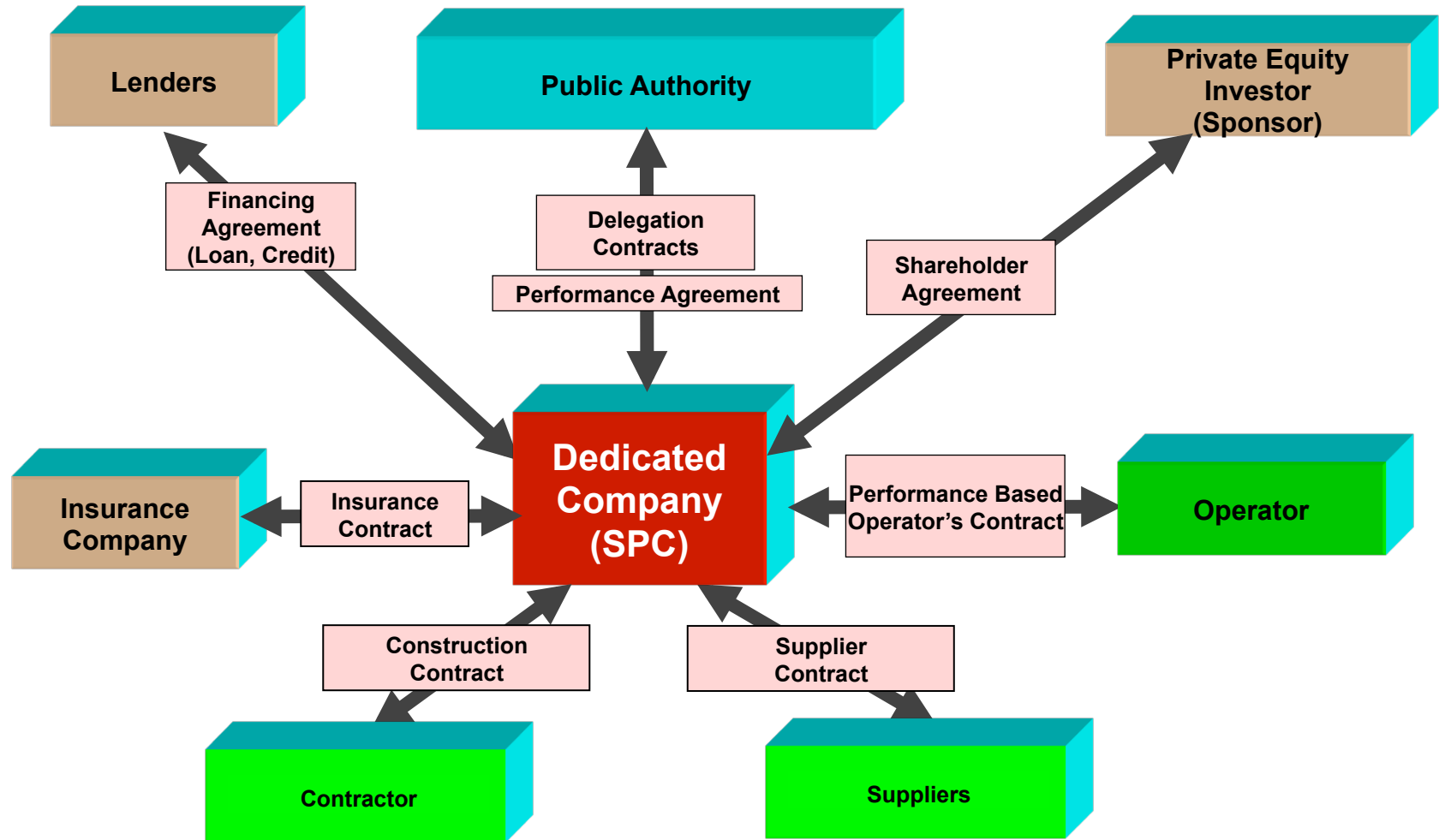


Source: Sarah Botton (CEFEB), 2011



# The structuring of PPP in Project Finance (PFI)

*A repartition of risks*



Source: Sarah Botton (CEFEB), 2011

# Different contracts for different objectives - 1

## 1. PPPs for supporting reform and change, and/or, improve utility management performance to reform

- > Contracts of delegation of management (*contrats de gestion déléguée*)
- > Concession, Lease/Affermage
- > Management contracts

## 2. PPPs for improving efficiency of operations

Performance based service contracts, e.g. for Non-Revenue Water (NRW) reduction (outsourcing contracts)

# Different contracts for different objectives - 2

## 3. PPPs to respond to specific challenges and circumstances

-> Small scale independent (domestic) private operators in peri-urban and low income communities

## 4. PPPs for water infrastructure finance

-> Build – Operate- Transfer (BOT) contracts

-> the Design – Build – Finance (DB[X]) options

# Typical types of contract (1)

## Service Contract

Utilities/ municipalities commonly source goods and services from private sector third parties, whether to purchase spare parts or stationery, or to procure civil works such as laying pipes or cables or to install meters. Utilities may also contract out a particular service, such as customer service.

Typical features:

- Good or service specified focused on inputs
- For fixed fee or bill of quantities

Pros – Straightforward and relatively simple to manage - can be attractive to private sector as little end user risk

Cons – Not typically considered as a PPP but more of a traditional public procurement. Very little transfer of risk

# Typical types of contract (2)

## Management Contract

- Operator required to perform specific task such as manage an asset or a network (input rather than output focused)
- Operator paid a fixed fee
- For short time period (typically 2 – 5 years)
- Operator with no or little risk in asset condition or investments
- Operator with no or little end user risk (can tie performance to collection)

Pros - Often seen as way of introducing private sector/ improving operating practices without giving private sector control of assets

Cons – Little opportunity for improving quality of service or efficiencies.

## Operation & Maintenance

- Operator required to operate and maintain network or asset
- Operator typically paid a fixed fee + a performance based fee
- Longer term (typically 5 – 10 years)
- Operator with some risk in asset condition and investments
- Operator with no or little end user risk (can tie performance to collection)
- Staff seconded or transferred to operator

Pros – Greater scope for improved service and efficiency than management contract and can be attractive to private sector as little end user risk

Cons – Less scope for efficiency than next forms of contract

# Typical types of contract (3)

## Affermage/ Lease

- Operator required to operate and maintain business and takes some end user risk
  - Operator pays a portion of receipts to grantor to go to rehab and extension
  - For short time period (typically 3 – 5 years)
  - Operator with no responsibility for financing investment
  - Affermages extensively used in Francophone West Africa
- Pros - Often seen as way of improving operating practices without giving private sector control of assets + cost recovery
- Cons – Little room for improving efficiencies

## Concession Agreement

- Operator given long term right (often exclusive) to provide a service to end users and to charge them for that service
  - Operator typically pays a concession fee to grantor
  - Longer term (typically 20– 30 years)
  - Operator with responsibility for operation and investment
  - Operator takes end user risk
  - Staff seconded or transferred to operator
- Pros – Greater scope for improved service and efficiencies. In practice operators have invested less than had been expected. Cost recovery
- Cons – Extensive risk accepted by operator – data needs to be good and certainty as to revenues – effective takeover by private sector

# Typical types of contract (4)

## BOT – Build Operate Transfer

- Operator required to build, finance, operate and maintain asset for the contract term
  - Operator receives a fee for this or enters into an off-take agreement to ensure revenue stream
  - For long time period (typically 15 – 30 years)
  - Operator with full responsibility for financing investment
  - Typically new build – “green field” or extensive rebuild
- Pros – Where Government is looking to private sector to provide technical solution for a given output and for private financing
- Cons – Complicated projects – set up costs are high + Government needs to consider balance sheet issues

## Joint Ventures/ part divestiture

- Existing asset or new venture
- Government transfers part of interest in SOE or a new vehicle is established with shareholding shared between government and private sector
- Can also be a joint venture established by contract
- Private sector and government parties each have specific role to play
- Government may have management control or right of veto
- Private sector usually has day to day management role

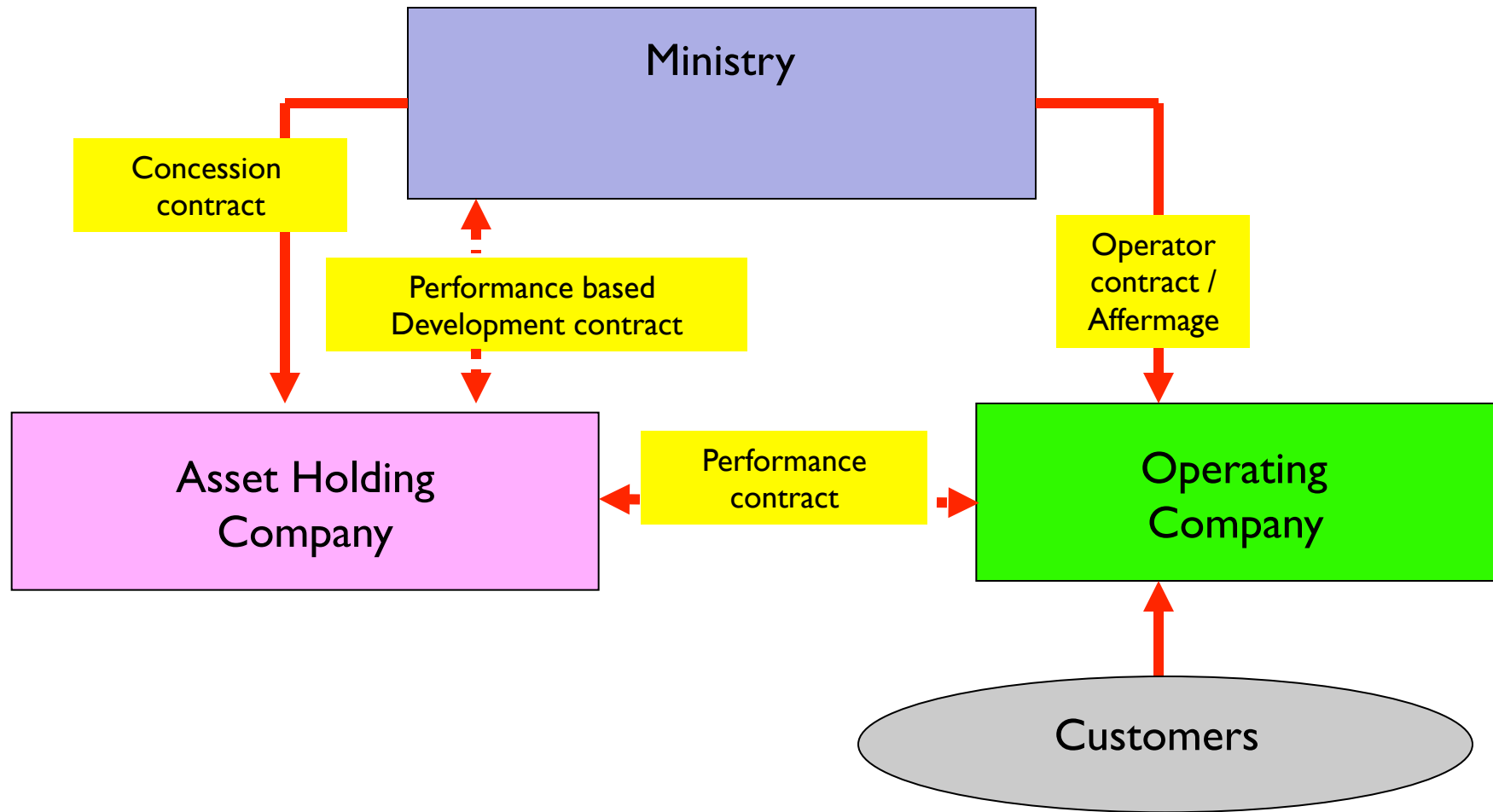
# Why Affermage/Lease Contracts ?

- ✓ When private equity and commercial debt are not available
- ✓ 'Affermage'/Lease second best option to Concession:
  - combines public financing and attracts private efficiency
- ✓ Preferred to 'Management' Contracts:
  - because transfer of commercial risk is believed to create incentives to perform.



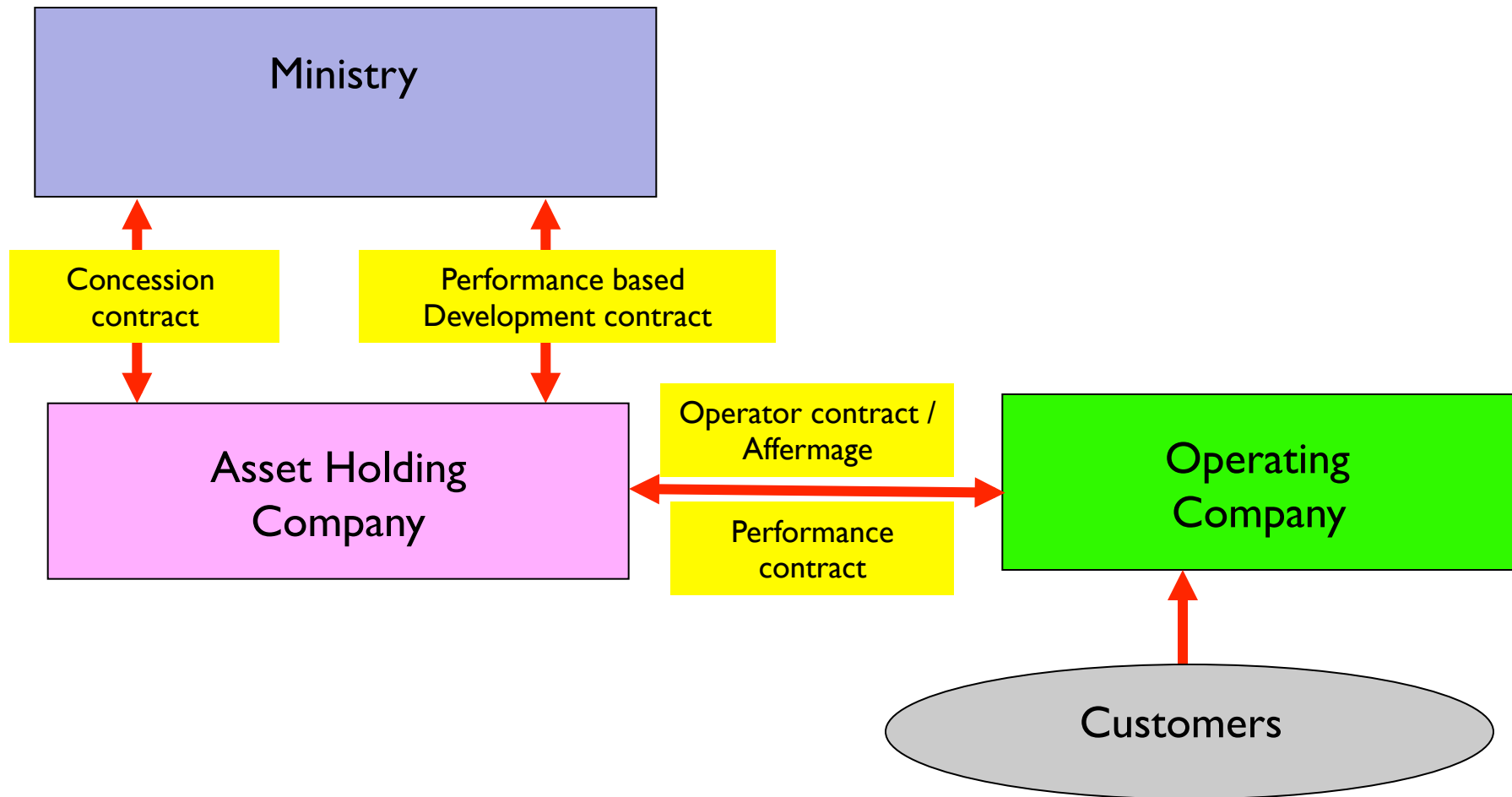
# The *asset holding company* option

**Scenario 1: contractual framework:  
Government is signatory of operator contract**



## The *asset holding company* option

**Scenario 2: contractual framework:  
Asset Holding Company is signatory of operator contract**



# The AHC: pros and cons

- ◆ **CONs: Separation decision making on CAPEX from OPEX constitutes a risk,**  
hence due attention should be given to well defining responsibilities and accountabilities between the asset holding company and the operating company.
- ◆ **PROs: An asset holding company is a good instrument to attract finance,**  
e.g. grant, concessional (multi-lateral & bi-lateral) and commercial.

# PPP Options Summary

|                    | Service/mgt contracts | Affermage | Concession | BOT                 | Divestiture |
|--------------------|-----------------------|-----------|------------|---------------------|-------------|
| Asset ownership    | public                | public    | public     | private then public | private     |
| Investment finance | public                | public    | private    | private             | private     |
| Commercial risk    | public                | shared    | private    | public/shared       | private     |
| Operational risks  | public/shared         | private   | private    | private             | private     |

|                     |                                   |   |                              |                       |                    |
|---------------------|-----------------------------------|---|------------------------------|-----------------------|--------------------|
| Government revenues | Tariffs minus service fees, taxes | tariff minus affermage operating price, taxes | concession fee, taxes        | Tariffs minus offtake | sales price, taxes |
| Private revenues    | service fees                      | affermage operating price                     | tariffs minus concession fee | bulk water sales      | tariffs            |

|            |     |      |       |       |    |
|------------|-----|------|-------|-------|----|
| Term (yrs) | 1-5 | 8-15 | 20-30 | 20-30 | na |
|------------|-----|------|-------|-------|----|

# Mapping PSP options to government objectives

| Objective<br>Option  | Technical<br>Expertise | Managerial<br>Expertise | Operating<br>Efficiency | Capital<br>Investment<br>Efficiency | Funding<br>Investment<br>in Bulk | Funding<br>Investment in<br>Distribution |
|----------------------|------------------------|-------------------------|-------------------------|-------------------------------------|----------------------------------|--|
| Service Contract     | ✓✓✓                    | ∅                       | ∅                       | ∅                                   | ∅                                | ∅  |
| Design-Build-Operate | ✓✓✓                    | ✓                       | ✓                       | ✓                                   | ∅                                | ∅  |
| Management Contract  | ✓✓✓                    | ✓✓✓                     | ✓✓                      | ∅                                   | ∅                                | ∅  |
| Lease                | ✓✓✓                    | ✓✓✓                     | ✓✓✓                     | ∅                                   | ∅                                | ∅  |
| BOT                  | ✓✓✓                    | ✓                       | ✓                       | ✓                                   | ✓✓✓                              | ∅  |
| Concession           | ✓✓✓                    | ✓✓✓                     | ✓✓✓                     | ✓✓✓                                 | ✓✓✓                              | ✓✓✓                                      |
| Divestiture          | ✓✓✓                    | ✓✓✓                     | ✓✓✓                     | ✓✓✓                                 | ✓✓✓                              | ✓✓✓                                      |

# Key questions for Governments

- ❖ What problem are we trying to solve?
- ❖ What are the implications for tariffs, and are we prepared to deal with these?
- ❖ Is the regulatory framework sufficient?
- ❖ Can key stakeholders be brought on board?
- ❖ Is information about utility assets good enough to serve as a base for a long-term contract?

# Mapping PPP options to prerequisites

| <b><i>Requirement Option</i></b> | <b><i>Political Commitment</i></b> | <b><i>Cost-recovering tariffs</i></b> | <b><i>Developed Regulatory Framework</i></b> | <b><i>Good information on the system</i></b> |
|----------------------------------|------------------------------------|---------------------------------------|--|--|
| Service Contract                 | Low                                | Low                                   | Low  | Low  |
| Management Contract              | Moderate                           | Moderate                              | Moderate                                     | Low  |
| Lease                            | Moderate                           | High                                  | High   | High   |
| BOT                              | Moderate                           | High                                  | High   | High   |
| Concession                       | High                               | High                                  | High   | High   |

# A new generation of Water PPPs - 1

*not about tapping private money ...*

- ❖ Many successful water PPP schemes were largely based on public financing (leases or hybrid schemes), combined with efficient private operation
- ❖ The biggest financial contribution from a private operator is not direct private investment, but lies in improving the financial viability of the WSS services



# A new generation of Water PPPs - 2

The “large concession” model has worked in some place, but seems unsuited to most developing countries, but:

- \* Concessions that rely largely for investment on reinvested cash flows for revenues (Cote d’Ivoire, Morocco, Gabon)
- \* (Subsidized) concessions with public grants to spearhead investment and reduce impact on tariff (Colombia, Guayaquil, Salta in Argentina)

# A new generation of Water PPPs - 3

*many models available*

- \* Performance-based Management contracts (incorporating lessons)
- \* Mixed-ownership companies (“*empresa mixta*”) (with sub-national lending)
- \* Affermage model as developed in Western Africa (e.g. Senegal) (gradual move to financial sustainability)

# Emerging Performance Based Affermage / Lease Contracts

- ◆ Profit-sharing for incentivizing overall performance
  - Based on technical & operational performance
  - Based on financial efficiency
  - Asset management integral part of incentive/remuneration structure
  
- ◆ Open book operations
  - Increased accountability to consumers & civil society
  - Provides real choice of options for transition to next generation PPP

# Perf. Based service & management Contracts: *challenges*

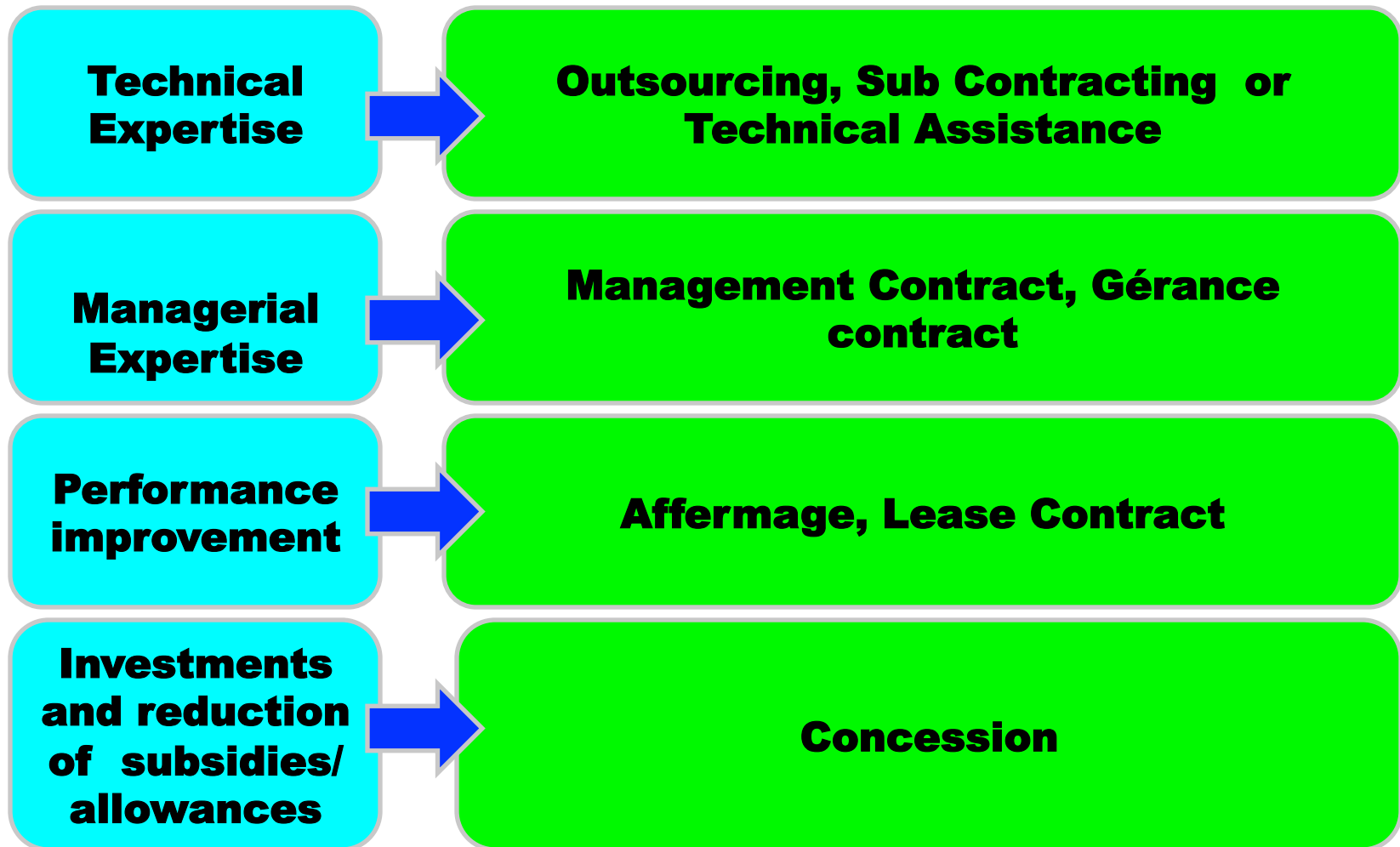
- ◆ To have a ***validated*** base-line information is a precondition for an effective incentive structure with realistic time-bound performance targets
  - Sequential, progressive PPP contracts ?
  - Evolving from a contract of means (input based) towards a contract of results (output based) ?
  
- ◆ How to make gains of efficiency ***sustainable***
  - Through an effective performance benchmarking process ?

# The rise of private operators from emerging and developing countries

## Challenges

- ◆ The “market” is expecting a mid-size offer, better calibrated to address the challenging issues of the water sector in small towns and secondary cities, and towards the low-income areas, based on the observation that the international private operators are too large, and the SSIPs are too small.
- ◆ Medium-sized domestic companies would seem to have many of the advantages that advocates for private-sector participation, without many of the disadvantages that opponents criticize.
  - ✓ Helping create the market competition considered as an essential ingredient of PPP.
  - ✓ Occurring in three ways: spin-off of large multinationals, diversification of local business, or, development from smaller enterprise (e.g. SSIP).

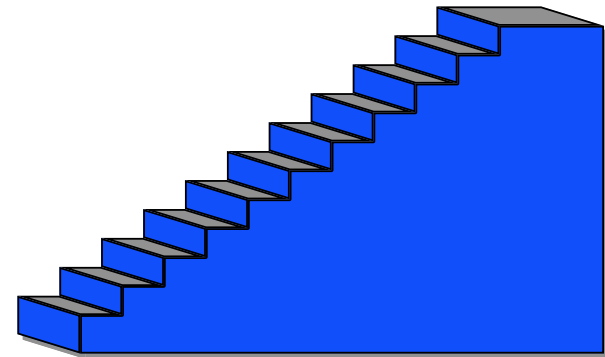
# Selected PPP option as a function of effective need & demand



- ✓ Define goals and constraints
- ✓ Build stakeholder consensus
- ✓ Get advice
- ✓ Consider industry structure first
- ✓ Sound the market early
- ✓ Define doable service targets, with specific approaches for the poor
- ✓ Assemble background information
- ✓ Pre-qualify few, credible firms
- ✓ Build regulatory capacity
- ✓ Prepare draft bid docs, get feedback
- ✓ Prepare the utility
- ✓ Tender and negotiate the contract
- ✓ Manage the transition
- ✓ Communicate at all times !

# Steps

Effective PPP takes time to prepare and implement, especially in forms that involve private financing



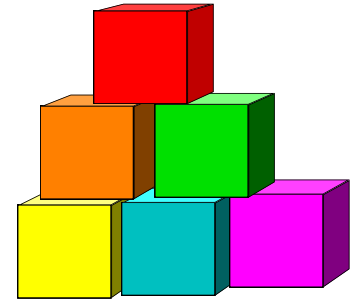
# Defining the problem

## – before jumping into a transaction ...

- ✓ What is wrong with the existing arrangements?
  - operational efficiency?
  - deficient investment?
  - fiscal impact / government exposure?
- ✓ What are the main improvement goals?
- ✓ What are the city/country's strengths and weaknesses?
  - administrative capacities, experience with PSP
  - country's rating, macroeconomic stability etc.
- ✓ What is the legal environment?
  - are all forms of PPP compatible with the country's laws?
  - which models can one build upon?
- ✓ What are the political constraints?
  - labor, tariffs, views on foreign investors etc



# Consider structural options first

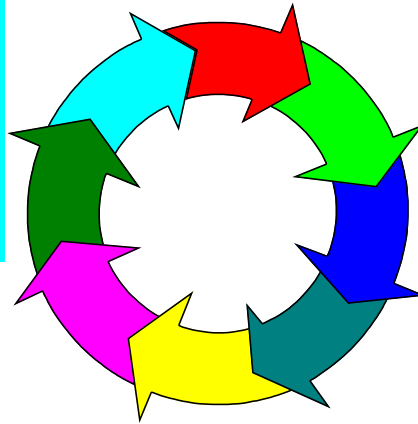


- multiple/regional systems?
  - size (economies of scale), separability
  - legal and political feasibility of inter-communal arrangements
  - optimize individual deal vs. long-term industry structure
  
- Multi-services firm?
  - economies of scope
  
- does the utility run non-core services?
  - eg. construction, engineering, bottled water
  - does it make sense?

# Understanding participants goals

## *Customers want:*

- dependable, quality service
- affordable tariffs
- tailored service for the poor



## *Governments want:*

- budget savings, no operating subsidies, minimal investment grants
- happy customers
- fast environmental cleanup
- happy public utility employees
- jobs for domestic firms
- private investment with reduced liabilities for the state

## *Investors want:*

- steady, long-term returns
- market share, reputation, geographic presence
- mitigation of risks not under their control, or profits commensurate with risks
- spin-off benefits for parent supplier firms

# A Stepwise Approach ?

- ✧ An intermediate PPP step may be needed while institutional, operational efficiency, and/or financial viability problems are tackled, to
  - Raise tariffs,
  - Build Government commitment and regulatory capacity,
  - Gain better information about the system
- ✧ **But a stepwise approach:**
  - May never go beyond the first step ...
  - May involve complex re-bidding issues

# Critical success factors



- ❖ Continuing high-level commitment in central and local government
- ❖ Clear, realistic goals
- ❖ Stakeholders informed and involved
- ❖ Build upon local assets: population, small enterprise, NGOs
- ❖ Risks assessed and assigned to most capable parties
- ❖ Time and capacities to prepare
- ❖ Near-cost tariff prior to a concession
- ❖ Transparent bidding and award process
- ❖ Build regulatory capacity early

# PPP : the « hidden » question : what's after ?

- ✓ Is it possible (in a realistic manner) to switch back to public operation after a PPP ?
  - **Three main obstacles**
    1. **Information system** not owned by utility or utility not able to manage it
    2. **Staff** : skills can go away with private operator
    3. **Procedures**, good practices and certifications (ISO 9001, etc.) can go away with private operator
  
- ✓ Can ***well designed contracts*** overwhelm these obstacles ?
  - Through fully addressing information system issues (ownership, etc) in contract
  - Through the capability of an early preparation of the transition (put in contract)
  - Through a “permanent control” of the private operator

## **Often a key problem :**

weak capacity to design and implement reforms,  
especially at the decision making level of the  
urban water sector

# a PPP success formula - R X 6 + R

- \* **Roles,**
- \* **Responsibilities,**
- \* **Rights,**
- \* **Recourse,**
- \* **Risks**
- \* **Rewards of parties**

The **6 R's**

+ ***Respect***

Source: J. Moss (AquaFed), 2008

# Lessons

- ◆ Pattern of development of water PPP has changed: a new generation private operators from emerging economies and developing countries
- ◆ Main contribution of private operator lies in improving service quality and operational efficiency, and contributing to financial viability
- ◆ Social considerations need to be incorporated explicitly in PPP design
- ◆ Boundaries are getting blurred, with public utilities, e.g. going for IPOs in financial markets, or signing PPP contracts outside of their jurisdiction





**Thank you**

