

# Making (Water) Projects Bankable A Commercial Lender's Perspective

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Financing Municipalities & Sub-National Governments  
The Role of Specialized Local Funds and Financial Intermediaries

Washington DC, October 1, 2004

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**Astris Finance, A Subsidiary of Dexia Credit Local**

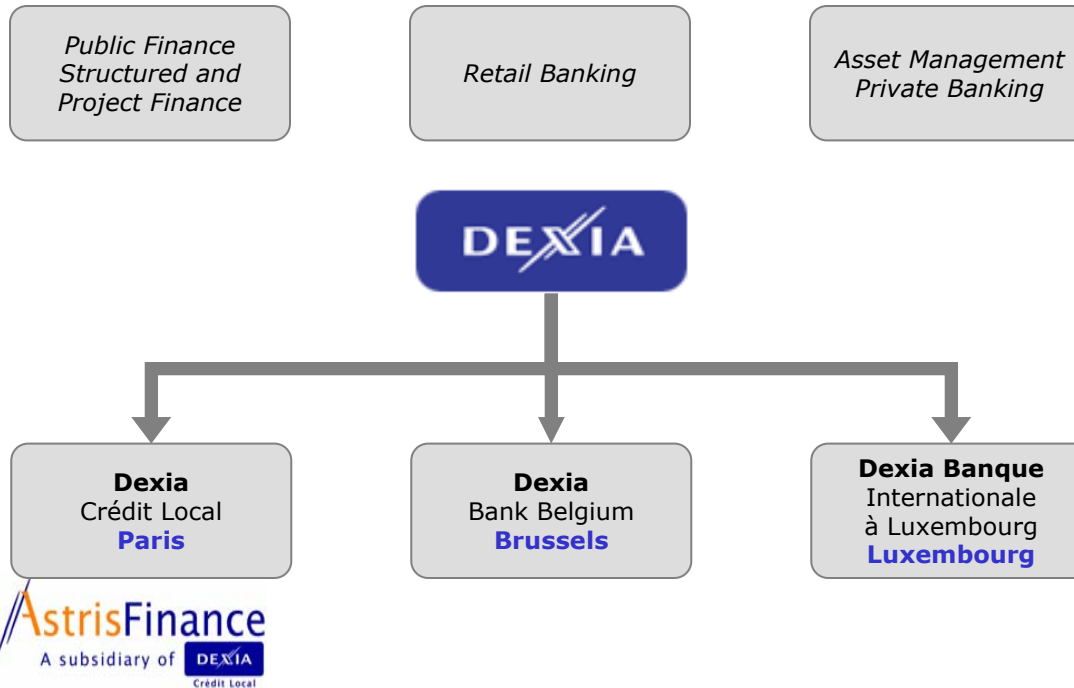
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1. Who we are
    - Dexia Crédit Local
    - Astris Finance
  2. PPP Structures in the Water Sector\*
  3. Risks and Mitigating Factors\*
  4. Key Bankability Factors

\*Note: Sections 2 and 3 are drawn from René Kassis, May 2003.

René Kassis, Infrastructure Director, Dexia Crédit Local

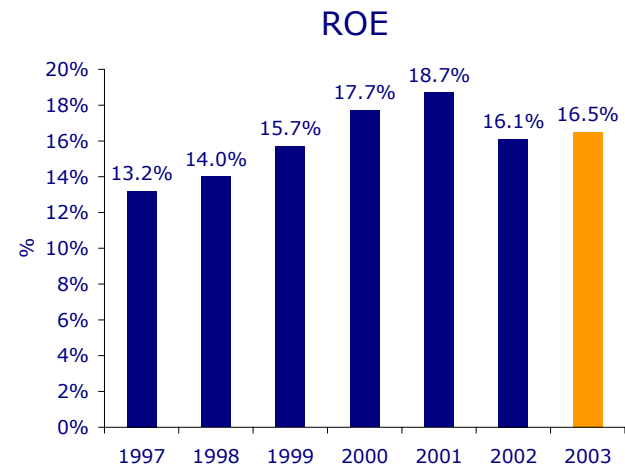
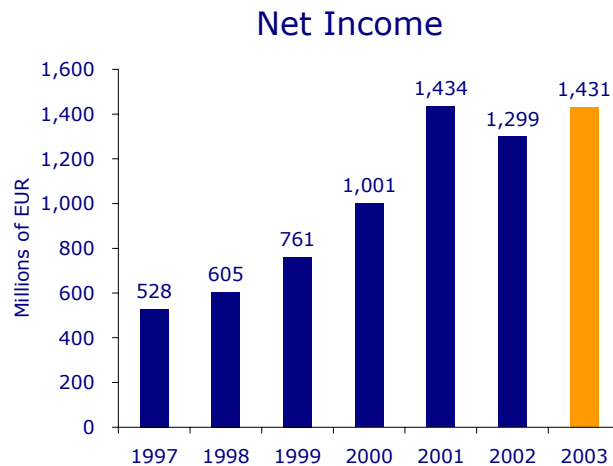
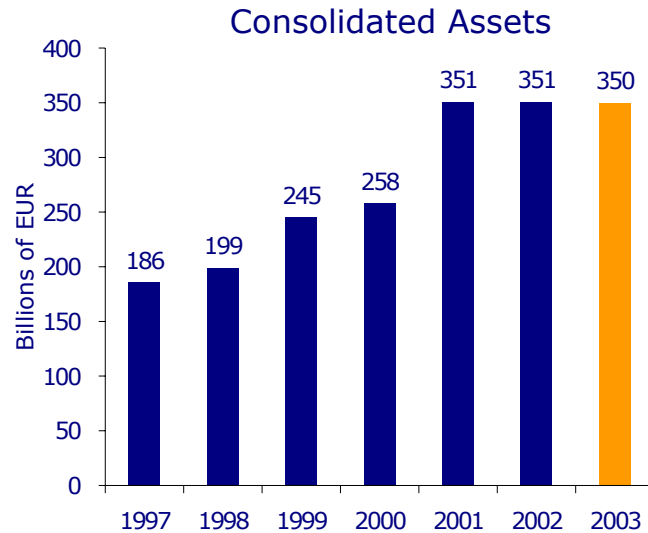
# Dexia Group

## The World Leader in Infrastructure Finance



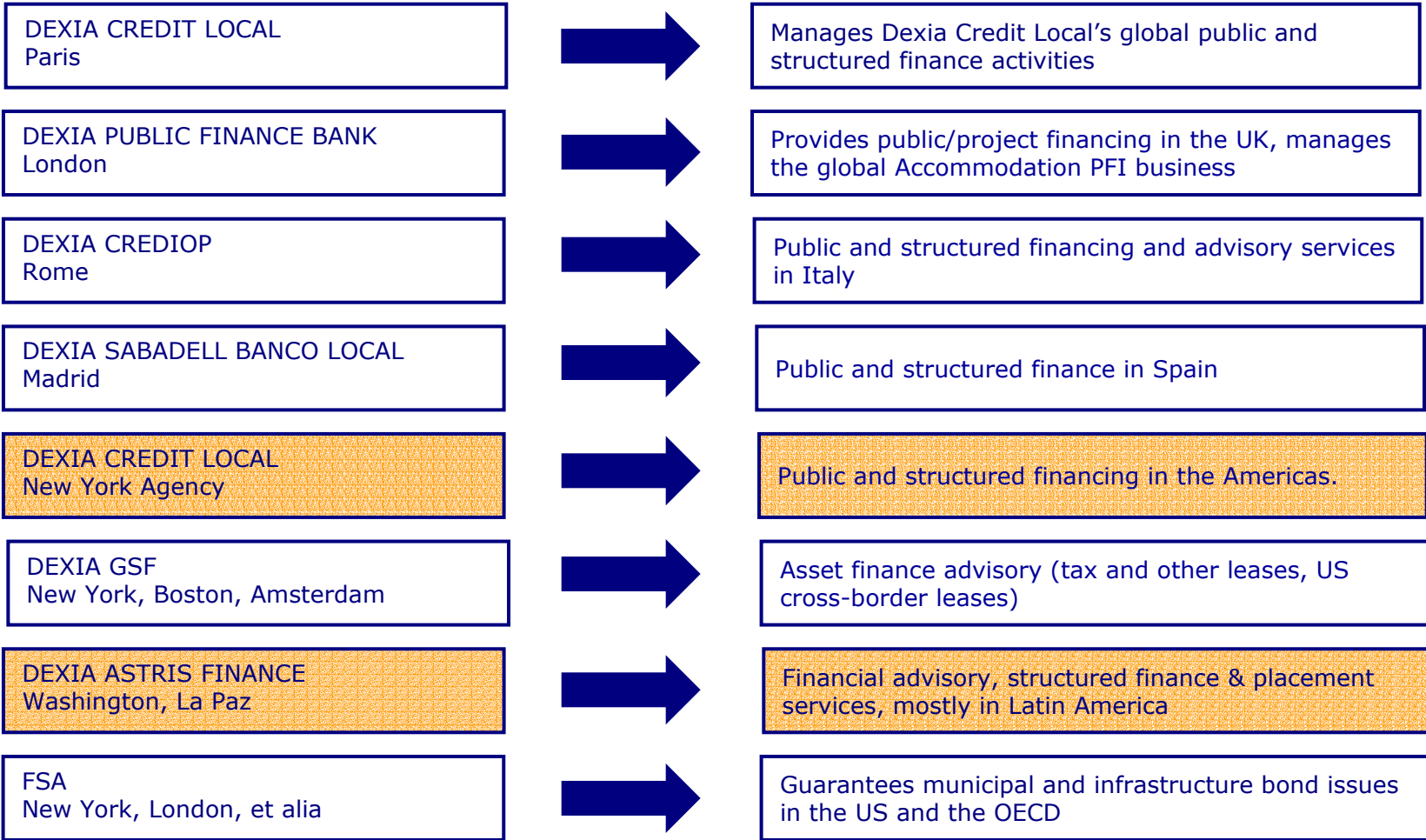
**Presence in 25 countries  
Over 25,000 employees**

# Dexia: Key Financial Indicators



# A Strong Track Record In Public And Structured Finance

**The world leader in public and private infrastructure finance**  
**17% market share in Europe / 25% market share in the US**



## Public Sector

- Design, structuring, implementation of Public Private Partnerships and concessions of infrastructure and public services
  - Urban transportation
  - Mass transit systems
  - Water and sewage
  - Solid waste
  - Power
  - Urban parking
- Privatizations
- Structuring and placement of public financing in local and international capital markets
  - Project-related public debt
  - Innovative solutions for local government financing
- General Advisory services
  - Public financial management
  - Tax administration

## Private Sector

- Structuring and placement of comprehensive project financing packages
  - Senior debt
  - Subordinated debt
  - Third party equity
- Advisory services to bidders in privatization and concession processes
- Advisory services to private project developers, including upstream design and negotiation of project structure
- Refinancing of existing projects
  - Possibility to take cash out of projects with a successful track record
  - Restructuring of projects in distressed situations
- Mergers and Acquisitions in the infrastructure sector

## Astris Finance: What Sets Us Apart

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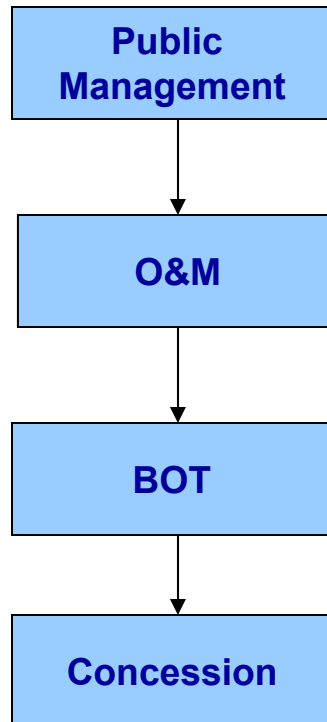
- Astris Finance provides the entire range of financial advisory services that investment banks usually provide.
- But unlike the others, we bring a wide scope of experience and knowledge together to help our clients meet their financial and policy goals.
  - We specialize in complex structures, in particular in areas where traditional markets have difficulties, or simply do not finance
  - We have first class relationships with virtually all non-traditional sources of debt, equity and quasi-equity that specialize in Latin America and emerging markets
  - We have privileged access to multilateral and bilateral credit institutions, including the Inter-American Development Bank, the World Bank, and the Andean Development Corporation, and can use them to fund investments and help to support "upstream" advisory work
  - We have a thorough knowledge of Latin America's public policy framework and decentralization process and
  - We benefit from Dexia's worldwide presence and expertise in project and public finance
  - We are "deal-movers", a small and very agile structure. When we take on a project, we assign a first rate team to work in complete symbiosis with our client and under a remuneration structure which gives us a strong incentive to be successful

## Dexia: 2003 Deals of the Year

- Six “Deal of the Year” awards from Project Finance/Euromoney in 2003, including two in Latin America.
- Ranked #2 Financial Advisor/Americas by Thomson Financial in 2003 with 13 mandates, including a significant contribution by Astris Finance.

Delfluent Water Treatment Netherlands	Metronet London Underground U.K.	Systemas Energeticos Cando Wind Power Spain	Lake Bonney Wind Power Australia	Tlanelpantla de Baz Water Treatment & Conservation Mexico	Gasoducto GasAndes Gas Pipeline Chile
<p>EUR 388 million Dexia Credit Local: Mandated Lead Arranger</p>  <p>European Water</p>	<p>GBP 2,650 million FSA: Financial Guarantor Dexia Public Finance Bank: Arranger</p>  <p>European Bond</p>	<p>EUR 62 million Dexia Credit Local: Mandated Lead Arranger</p>  <p>European Renewable Energy Acquisition</p>	<p>AUD 166 million Dexia Credit Local: Co-Arranger</p>  <p>Australian Renewable Energy</p>	<p>MXP 96 million Dexia Credit Local: Financial Guarantor</p>  <p>Latin America Municipal Finance</p>	<p>USD 136 million Dexia Credit Local: Mandated Lead Arranger</p>  <p>Latin America Oil &amp; Gas</p>

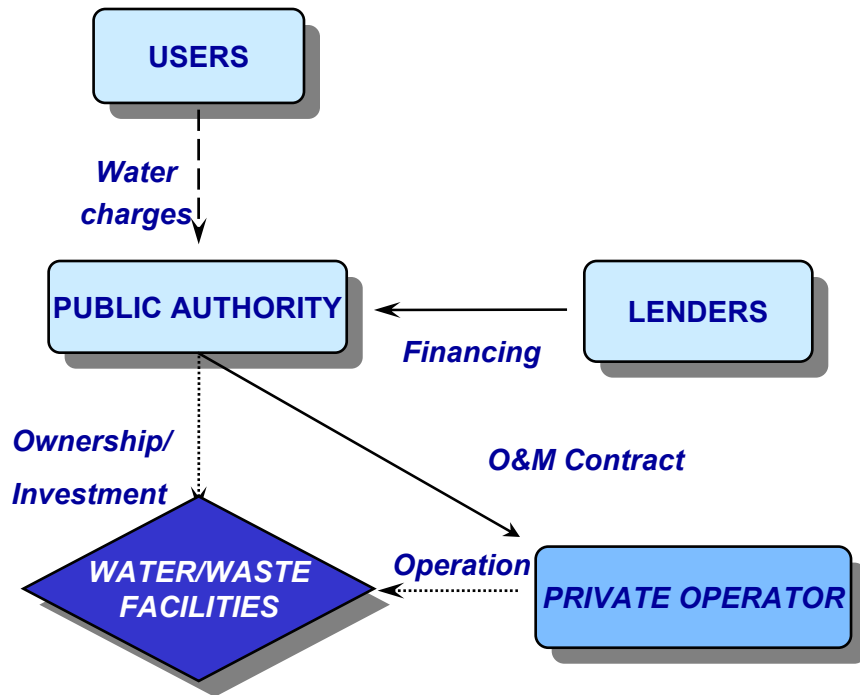
## PPP schemes in the Water sector



- The PPP concept: a broad range of schemes involving different degrees of PSP
    - **The O&M model:** Outsourcing operation and management of water & sewage services to private operator.
    - **BOT:** Private sector responsible for construction and operation of bulk water/wastewater treatment facilities.
    - **The Concession scheme:** All investment and operation responsibilities transferred to private sector (production + treatment + distribution).
- **Each scheme involves a different set of merits and challenges from a risk and financing perspective.**

# PPP Schemes in the Water sector

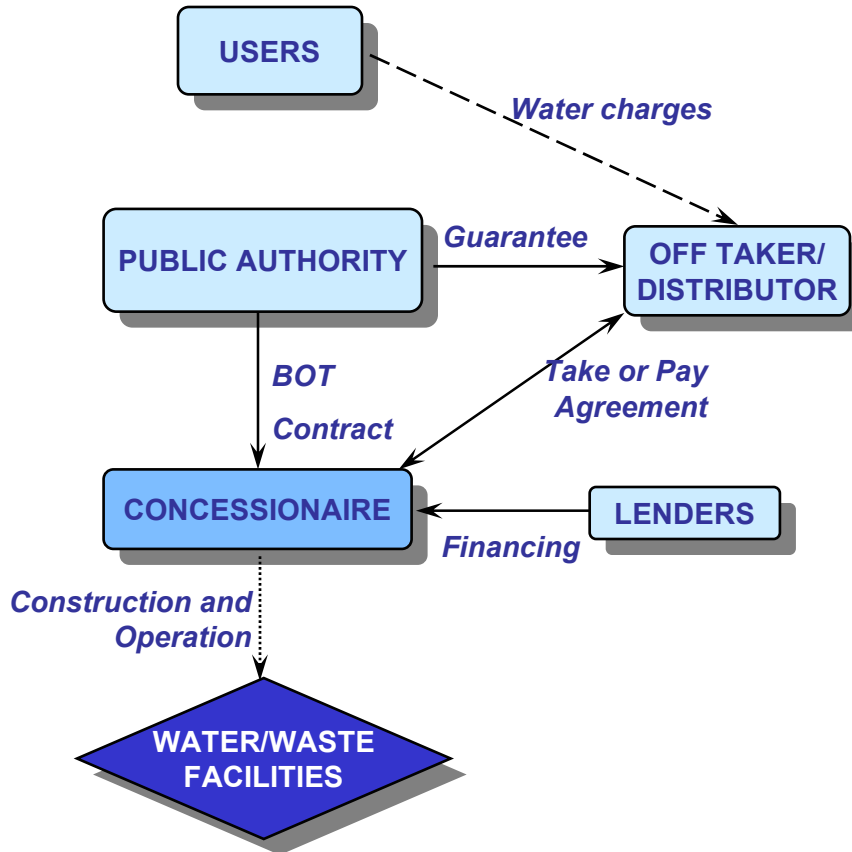
## The O&M Model



- Public sector retains control over and ownership of assets and their upgrading/renewal.
- Private sector adds value through management/efficiency skills.
- Private operator is paid by end-users (taking revenue risks) or by public authority through a fixed fee (or both).
- Can be first step of collaboration between private and public stakeholders.
- Capital expenditure management and financing is a public sector responsibility.

# PPP Schemes in the Water sector

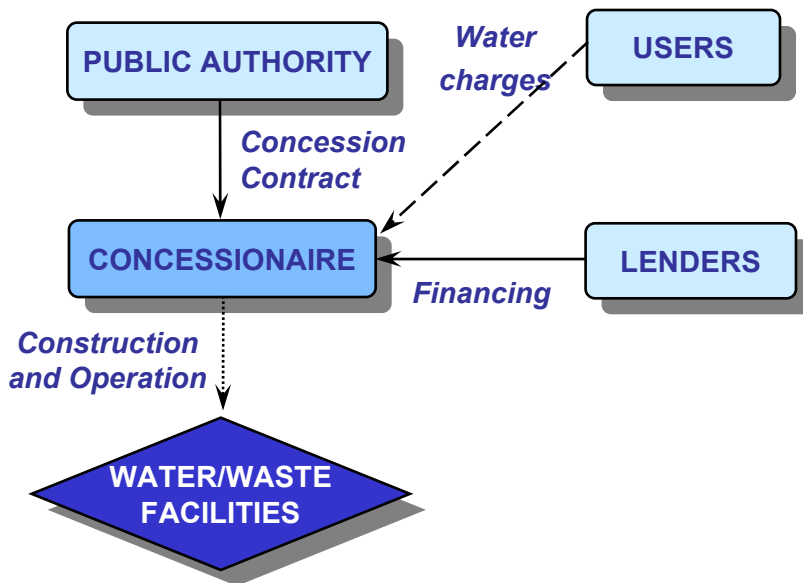
## The BOT Scheme



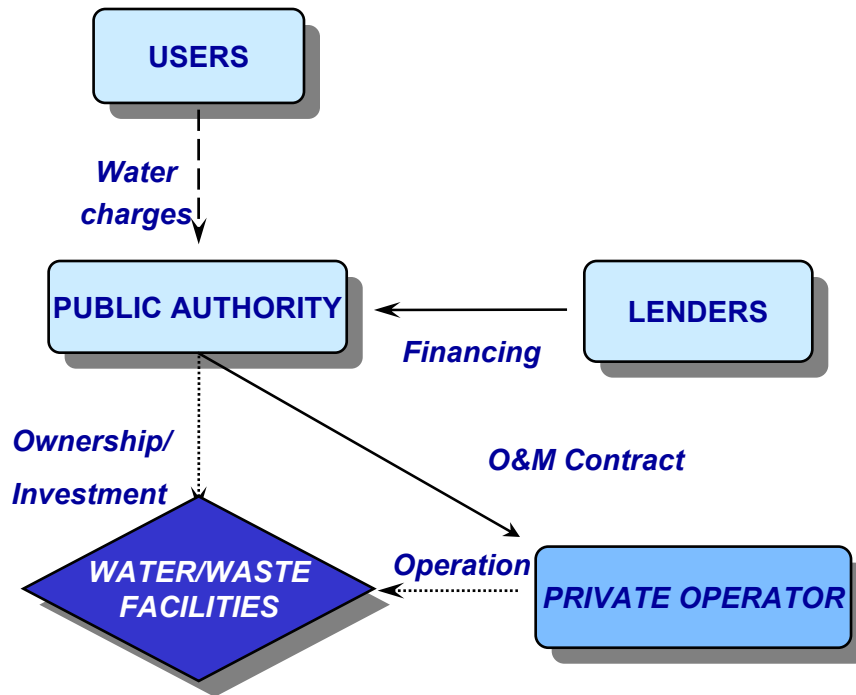
- Private sector undertakes the construction and operation of bulk water or wastewater treatment facilities.
- Private sector bears no volume risk.
- Public sector retains control over distribution networks; interface with end-users.
- Private sector adds value through competition-based and cost effective project management skills.
- Capital expenditure financing borne by the private sector.

# PPP Schemes in the Water sector

## The Concession Model

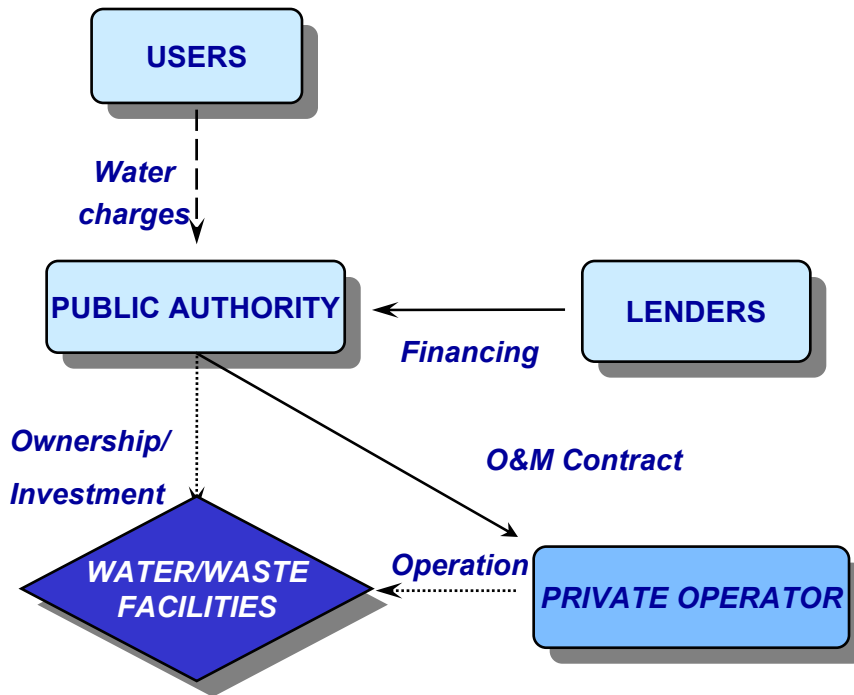


- Private sector responsible for whole range of water related services and facilities: operation, investment and distribution.
- Public sector retains control through contractual and regulatory enforcement: performance, coverage and service quality targets set in the concession agreement.
- A comprehensive solution offering maximum flexibility to the private sector in terms of investment and operations.
- A more challenging scheme both in terms of financing and political acceptability.



## • Capital expenditure

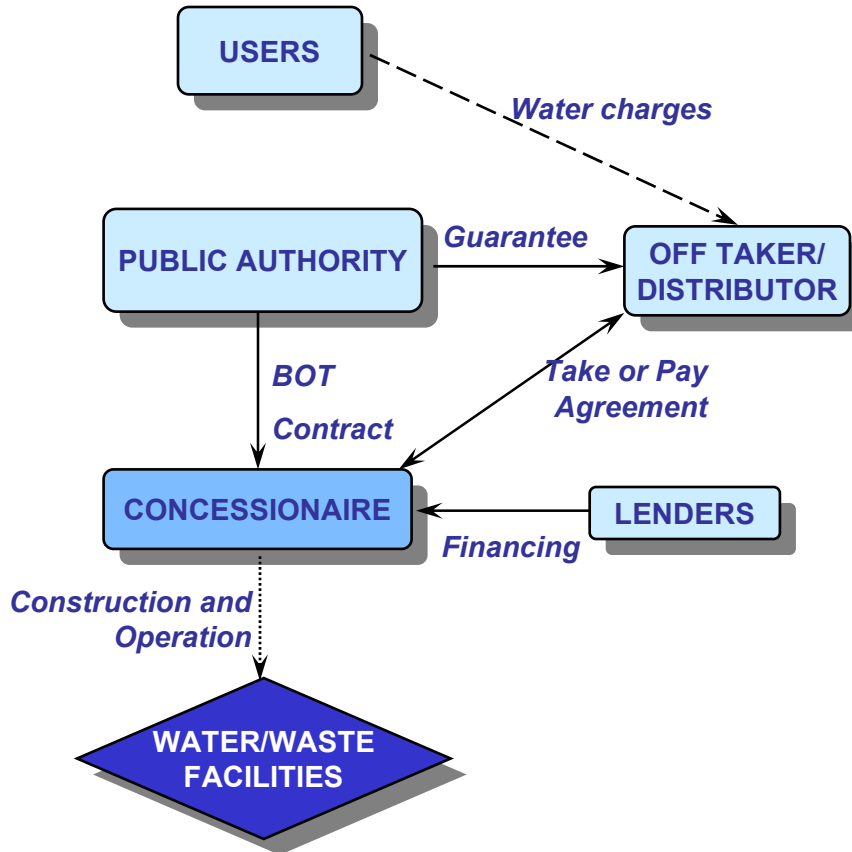
- Risks related to asset ownership, upgrading and major refurbishment borne by the public sector.
  - Contract must draw clear lines between operating expenditure (operator) and capital expenditure (public).
  - Public sector must contract out its capital expenditure obligations under EPC Contract (fx price, date certain).
- **Private operator must be comforted re. condition, availability and performance of assets** – must be consistent with operator’s own operating plans and obligations.



### • Operations and Revenues

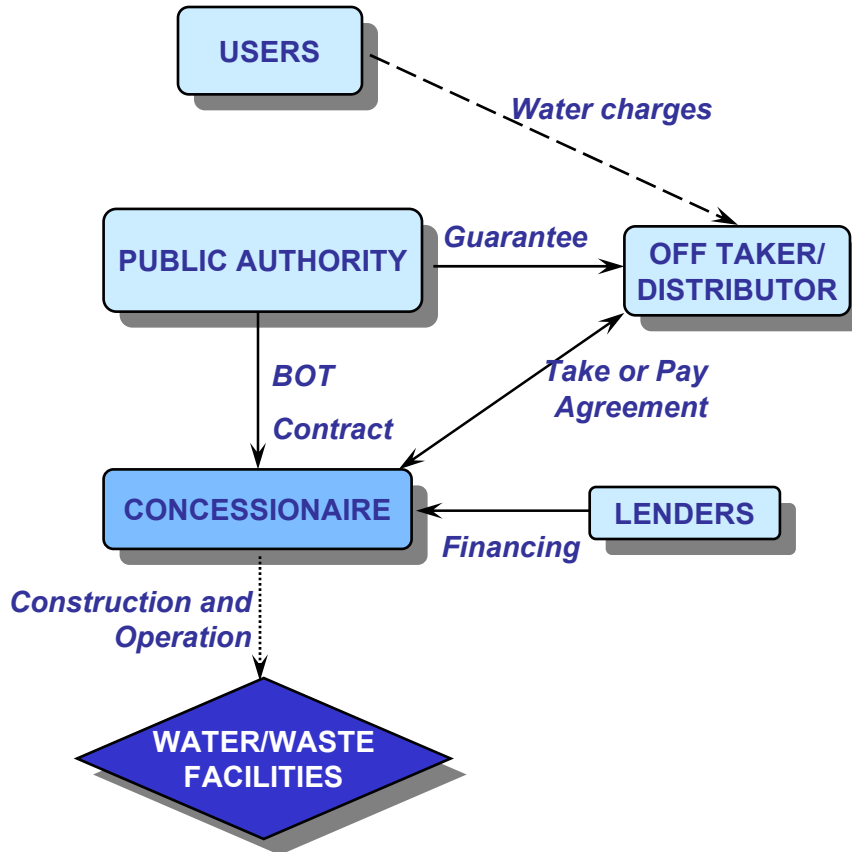
- Volume risk borne by operator when it receives revenues directly from end-users.
- In such case, contractual structure must protect operator from extraordinary costs/revenue losses beyond its control (e.g. structural conditions of assets, change of law/regulations, etc.)

→ **In all cases, clear interface arrangements are required between public water authority and private operator**, in order to optimize the overall cost of operating and maintaining the systems.



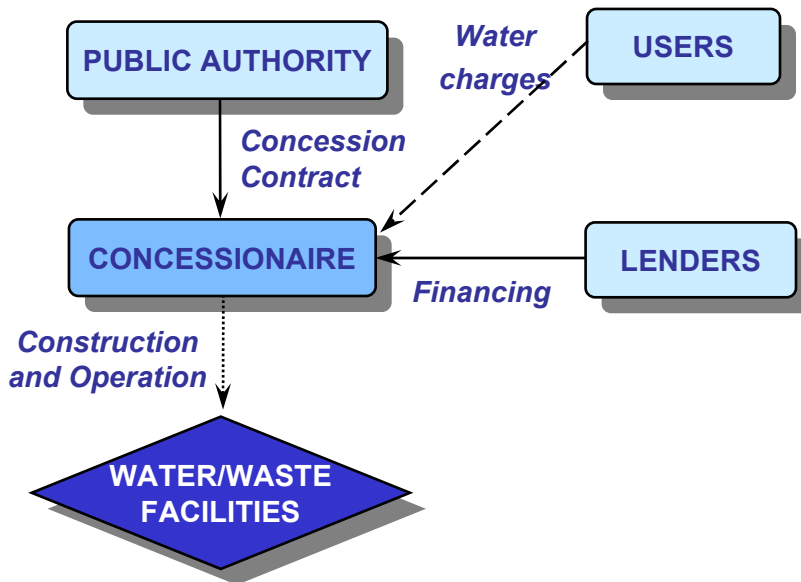
## • Construction/Completion

- Single reputable contractor to wrap up all the capital expenditures of the project under a single EPC contract.
- Fixed price, date certain, turnkey EPC contract.
- Security package, including LDs for delay and minimum technical performance.
- Adequate contingencies amount in the project's budget.
- If and when required, additional support from the sponsors.



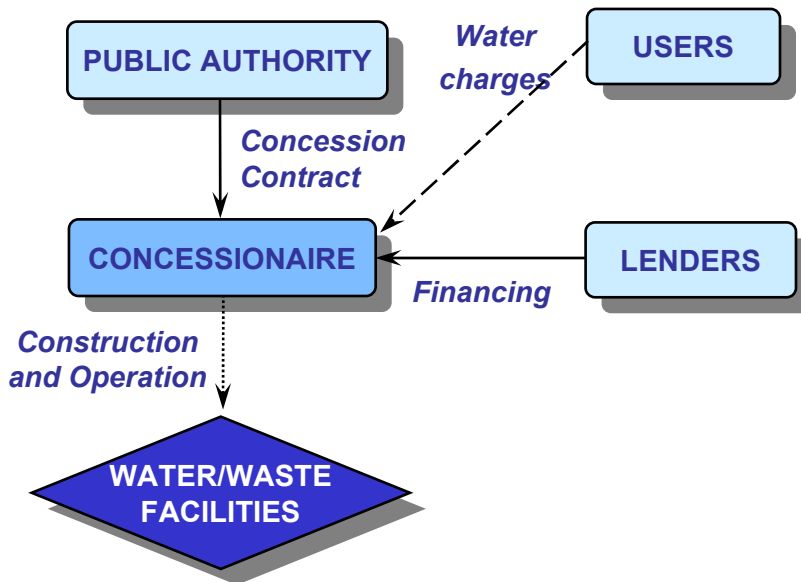
## • Operations and Revenues

- Revenue risk mitigated through take-or-pay contract.
  - Bulk water tariff formula must allow for adjustments to key parameters such as inflation, foreign exchange rate (!?!), change in law or regulations, etc.
  - Economic viability a function of off-taker's ability to absorb/distribute additional treatment capacity.
  - Project is financially viable only if bulk treated water tariffs can be sustained by off-taker (i.e. in comparison with end-user tariffs.)
- **Off-taker's creditworthiness a key issue.**



## • Construction/Completion

- On-going capital expenditure program, partially financed by existing revenue stream.
  - Overall capital expenditure program cannot be handled by a single contractor; must be monitored by the concessionaire itself.
  - Concessionaire often has the flexibility to adjust roll-out of capex program provided concession agreement performance/coverage targets are met.
- **Sponsor's experience in managing complex inv. programs is key.**
- **Financing plan must provide for sizeable contingencies, and be phased.**



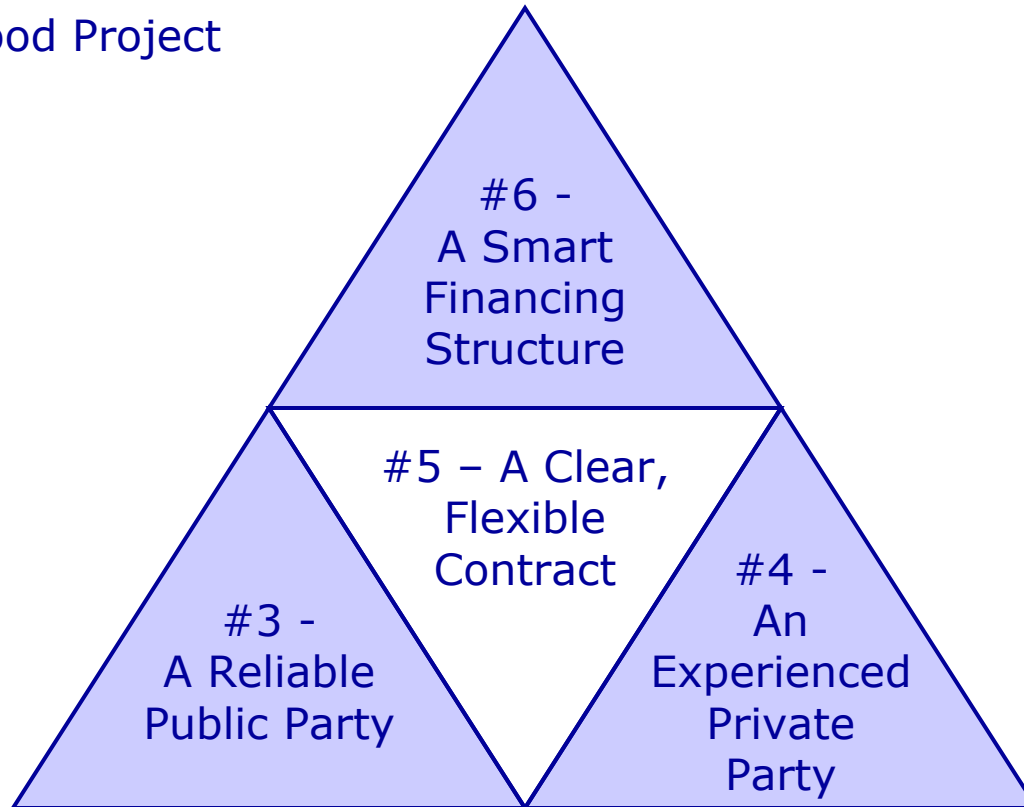
- **Operations and Revenues**

- Concessionaire exposed to:
  - Revenue/volume risks.
  - Social acceptability risk
  - Overall regulatory risk.
- Concessionaire benefits from the high flexibility available under this scheme, allowing an on-going adjustment of its expenditure plans to match its actual cash flows.
- **Experience and track record of private operator in managing similar large and complex utilities is key.**
- **Limited recourse mechanisms are often required to ensure that the project benefits from adequate Sponsor support during critical early years.**

# Six Key Factors of Bankability

## #1 – A Enabling Framework

### #2 - A Good Project



# Bankable Project – Factor #1

## An “Enabling Framework”

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- Legal
  - Legal system (contract law, securities law, guarantee law, etc.)
  - Dispute resolution system (Courts, Arbitration)
    - Predictable
    - Timely
    - Transparent
- Regulatory (sector level)
  - Clear and stable regulations
  - Transparent application/enforcement of regulations
  - Competent, non-politicized regulator
  - Clear subsidy policy at sector level
- Political
  - Political acceptability of proposed set-up
  - Private sector participation, if any
  - Tariff, etc.

## Bankable Project – Factor #2 A Project with a Strong Rationale

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- Proven social & economic need
  - Willingness to pay
  - Participation of future beneficiaries in investment decision
  - Alternative solutions, projects
- Correct investment size
  - Dimensioning
  - Phasing
- Proven technology
  - Cost
  - Performance

## Bankable Project – Factor #3 A Reliable Public Party

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- Ability to make decisions swiftly to act under the contract (governance, non-politicization)
- Ability to sustain project-related undertakings
  - If off-take contract, credit-worthiness of the off-taker
  - In any case, ability to meet implicit obligations/contingent liabilities (monetary or not) under the contract
- Adequate involvement of public authorities
  - Management of social and political impacts of the project
  - Ability to finance subsidy policy, if any

# Bankable Project – Factor #4

## An Experienced, Committed Private Partner

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- Ability to sustain project-related undertakings
  - Strong track-record
  - Solid financial situation
- Interest in the success of the project
  - Appropriate risk/reward scheme
  - Short-term vs. long term

# Bankable Project – Factor #5

## A Well Structured, Flexible Contract

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- Clear and stable rules
- Door open for adjustments in the course of the contract
  - Include provisions for discussion between the parties
  - Define circumstances/conditions under which parties may request adjustment
  - Define broad methodology for adjustment – principle of compensation
  - Don't define actual compensation or detailed mechanism for adjustment
- Market Benchmarks
  - Termination
  - Force Majeure
  - Arbitration
  - Economic-Financial Equilibrium
  - Etc.

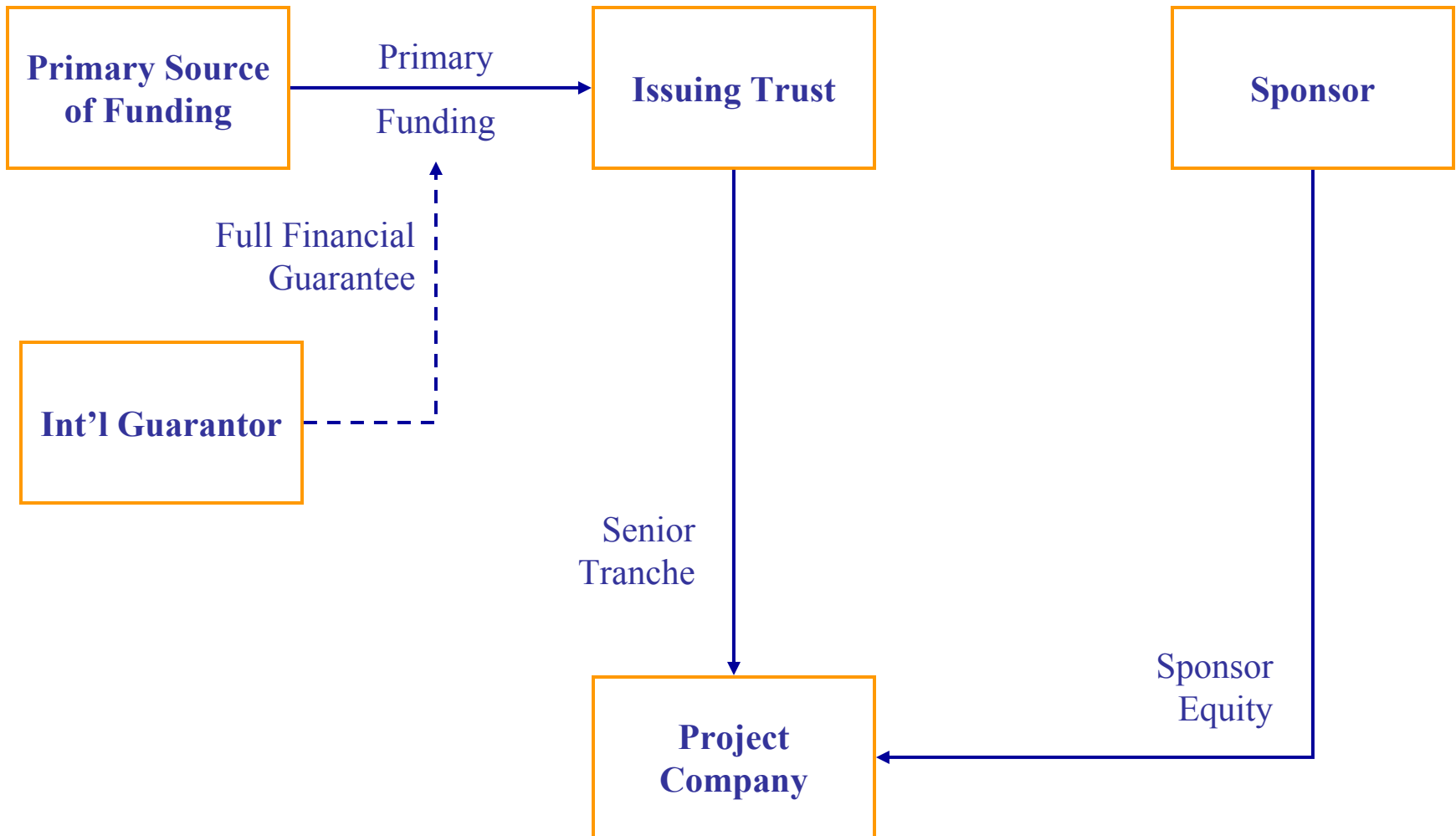
# Bankable Project – Factor #6

## A Smart Risk Allocation and Financing Structure

- Efficient management and allocation of risks
  - Exhaustive identification of the risks
  - Allocation to the party best able to manage it
  - Mitigation mechanisms
- Eliminate FOREX risk to the greatest extent possible
- Market Benchmarks
  - Security Package
  - O&M and EPC Contracts
  - Etc.

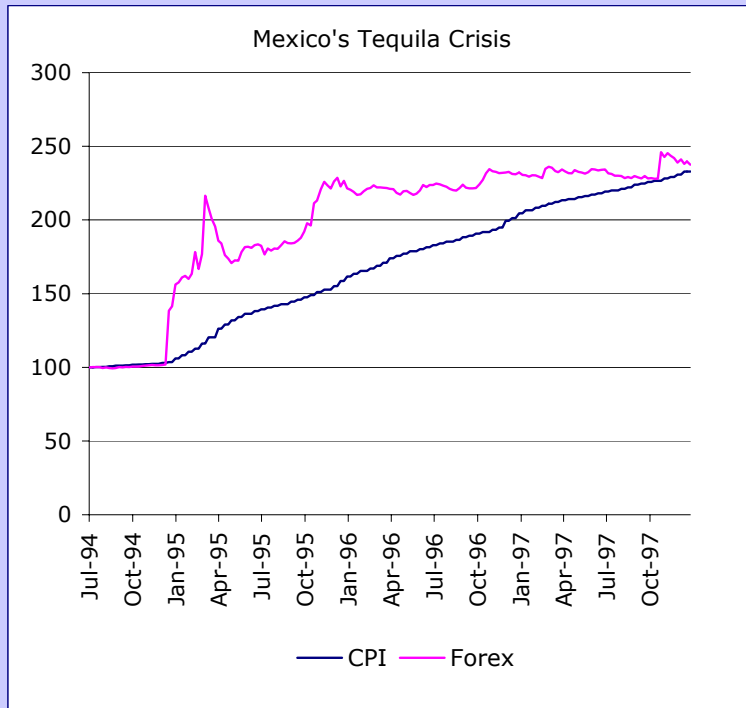
	Public Sector	SPV	EPC Contractor	O&M Contractor	End-Users	Financing Institution	Out (!)
Construction Risk		x	<u>x</u>				
Operating Risk		x		<u>x</u>			
Demand Risk	<u>x</u>	<u>x</u>					
Exchange Risk							x
Inflation Risk					<u>x</u>		
Interest Rate Risk						<u>x</u>	

# Eliminate FOREX Risk: Local Currency Financing Enhanced by Above Country-Ceiling Credit



## Benefits of an Enhanced Local Currency Financing

~> **Mexico:** Inflation/Forex lag



~> **Brazil:** The internal rate of return of a US\$ loan taken at  $\text{Libor} + 50$  basis points in January 1999 would be **35% in Reais versus only 5.6% in US dollars** in December 2002 due to the devaluation of the Real...

- Attract longer maturities in the local markets – e.g. inflation indexed bond
- Overkill of enhancement means very low local funding margins (better than Sovereign?)
- Project risk and devaluation risk are de-linked.
- Guarantee is not exposed to devaluation risk:
  - Financing won't cause project to fail.
  - When project fails, guarantee is exposed on a nominal amount denominated in local currency.

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- **BOT schemes** are easier to structure, but don't offer solutions on the distribution side and require a "bankable" credit from the offtaker.
  - **Concession schemes** provide a more comprehensive solution, enjoy a higher built-in flexibility for the private operator, but are more capital intensive and challenging to finance.
  - **O&M models** allow the private sector to focus on enhancing and optimizing system operations. It is best complemented by innovative solutions to finance the assets with minimal impact on the public sector budgets (e.g. future flow securitization, etc.)
- All schemes require: **(1) an enabling framework; (2) a well dimensioned, economically relevant project; (3) a responsible, reliable public party; (4) a motivated, experienced private party; (5) a clear and flexible contract; and (6) a smart financing structure.**

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