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# Use of Operating Contracts for Managing Infrastructure Enterprises under “Difficult” Conditions

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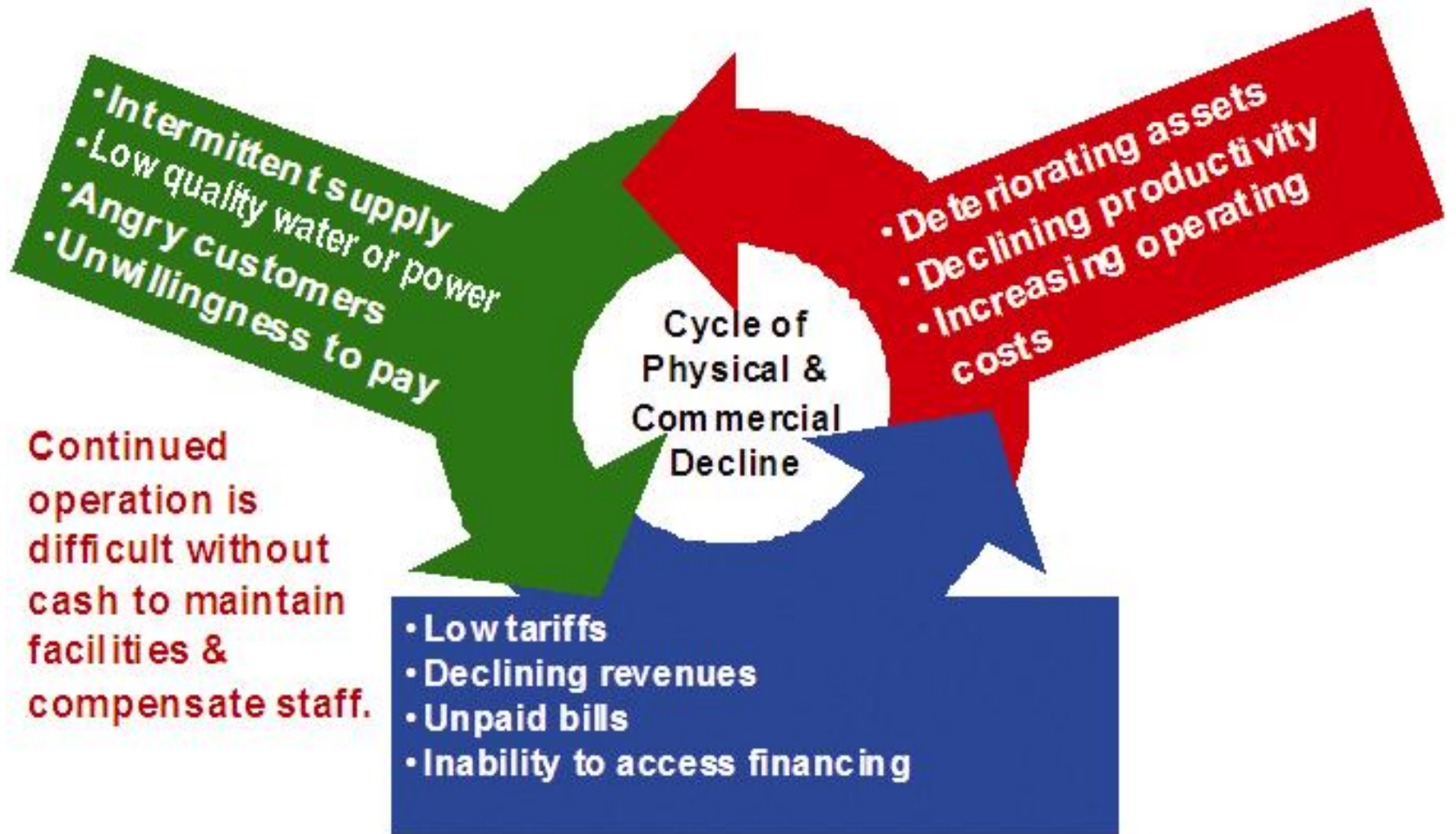
# The need for good water and electricity services:

- The public views provision of good water, sanitation and electricity supply as a key indicator of whether things are moving in the right direction. Providing basic infrastructure services is an important factor in rebuilding public order and establishing the credibility of governance.
- USAID and others are providing major support for provision and expansion of electricity & water services, and these services need to be made sustainable.



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# The Sustainability Challenge for Water, Sanitation & Electricity in Difficult Situations





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## The Problem, Almost Always, is Poor Management:

In most cases, rebuilding infrastructure and turning it over to local public authorities is not enough to ensure improved services. Newly rehabilitated facilities are often not properly operated and managed and will fail over a relatively short period of time. Root causes can include:

- Rampant corruption
- Weak commercial capacity
- Bad management





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## **Main point of this presentation:**

**Well designed operating contracts can be an effective tool in post-conflict situations to “turn around” dysfunctional electricity and water utilities.**



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## Focus of this USAID review:

1. What were the key characteristics that made operation of the electricity or water service difficult prior to the private operating contract? What were the starting levels of service and cost recovery?
2. What was the method of tendering the operating contract and the basis for award?
3. What basic responsibilities were given to the operator?
4. What incentives did the operator have to improve performance?
5. How well did the incentives work? What were the levels of service and cost recovery at the end of the contract?



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<b>Location</b>	<b>Name</b>	<b>Sector</b>
Cambodia	BOT, BOO private water companies	Water
Cote D'Ivoire	SODECI	Water
Georgia	United Energy Distribution Company	Electricity
India – Bhiwandi	Torrent Power Franchise	Electricity
India – North Delhi	North Delhi Power Limited	Electricity
Kosovo	Korporata Energjetik e Kosoves (KEK)	Electricity
Mali	Energie du Mali	Electricity & Water
Senegal	SDC contract with SONES	Water
Sudan	Yei Electric Cooperative	Electricity
Tajikistan	PamirEnergy	Electricity
Uganda	National Water & Sewage Corporation's Mbale Service Area	Water





## Some Definitions - Types of operating contracts (I)

- **Management contract** – management by a separate enterprise, but little or no private sector investment.
  - Examples: Amman, Jordan wat/san; Yerevan, Armenia wat/san; Georgia UEDC electricity distribution; Kosovo electricity distribution; Dar es Salam wat/san; Uganda wat/san
- **Concession** – a legal arrangement in which a firm obtains from the government the right to provide a particular service, taking full responsibility for investment, operational and commercial functions for a specific period of time.
  - Examples: Manila wat/san; Pamir, Tajikistan electricity; Buenos Aires wat/san; Argentina electricity distribution; Bhiwandi, India electricity





## Types of operating contracts (II):

- **Leases** – gives contractor the right to operate and maintain a public utility, but investment remains responsibility of the public. Operator maintains capital assets.
- **Affermage** – A lease contract used in Europe for 150 years. This involves the award of a lease (by competitive tender or negotiation) to a private firm to run a system for a period of years. The lessee is responsible for operational and commercial functions, and receives a fixed fee per unit of water or electricity provided to customers. This usually involves full control of the assets, and freedom for the lessee to determine the commercial strategy.
  - Examples: Casablanca, Morocco electricity, wat/san; Macao wat/san; Cote d'Ivoire wat/san; Senegal electricity, wat/san



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# A Sample of Four Case Studies

More detail on these and on seven others will  
be available in the final report to USAID



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## Uganda – Delegated Area Management Contracts

- **Problem:** Decline in infrastructure because of political instability, corruption and decapitalization.
- **Type of contract:** “Delegated Area Management Contracts” between National Water & Sewerage Corporation and private operator
- **Results achieved:**
  - Since 2000, private operating contracts with 10 private operators now cover 57 towns and cities in Uganda.
  - Connections significantly increased; NWSC covers 100% of operating expenses and 40% of capital investment budget from customer revenues.
- **Some lessons learned:**
  - **Value of strong incentives directly linked to performance**
  - **Local operators will bid if terms are attractive.**
  - **Corporatization is a key part of the process.**
  - **Clear, progressive performance targets**
  - **Use short contracts initially**
  - **Employees gain by allowing them to bid and become operators**



## Incentive scheme in Uganda:

Management Fee =

**Base (Fixed) Fee** = 80% of controllable costs if they achieve the base performance objectives

+ **Performance Fee** = remaining 20% of controllable costs

+ **Incentive Fee** = 50% of gross profit above the annual target



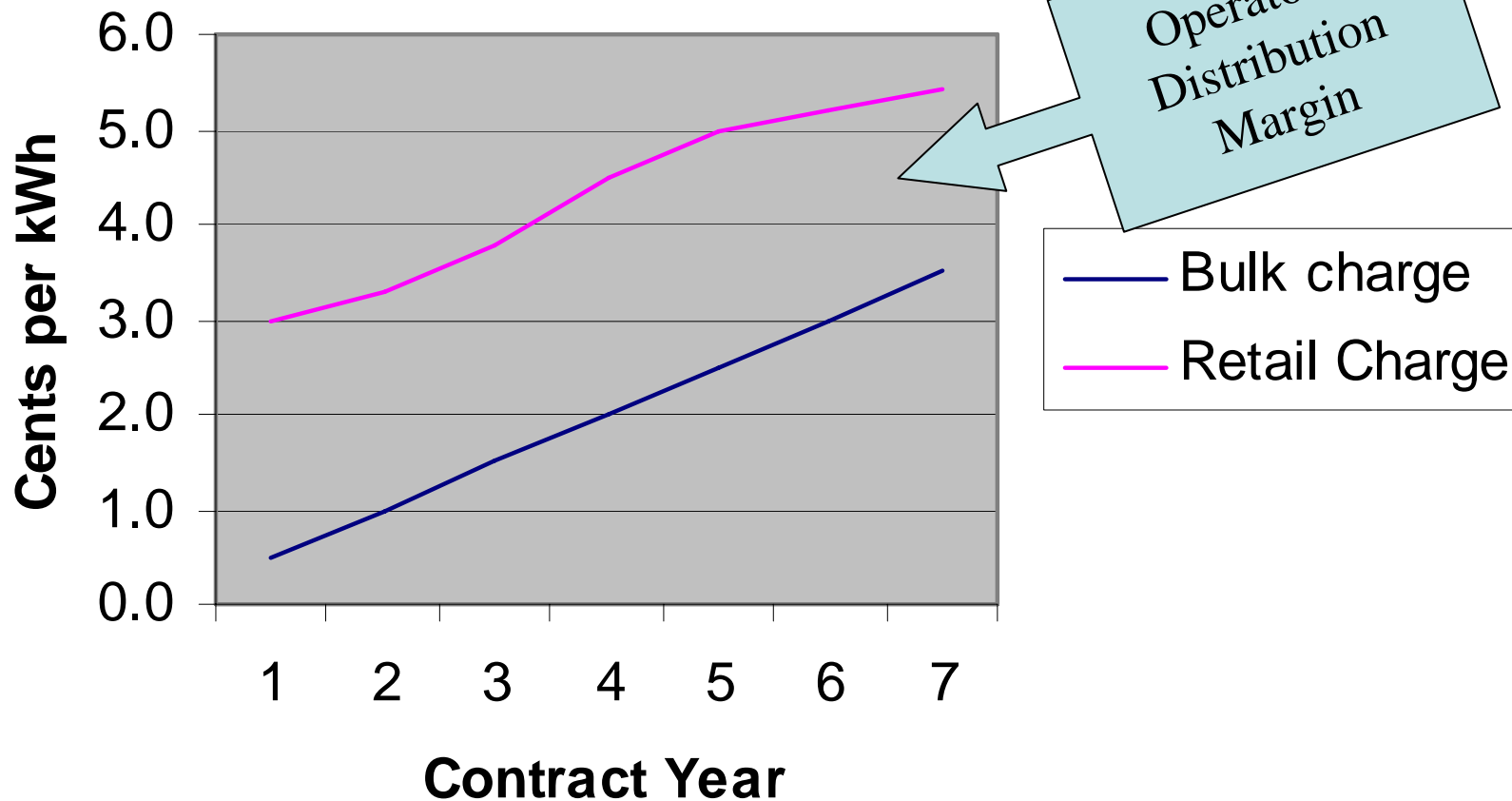
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## Tajikistan –Pamir Energy

- **Summary of the problem:** Difficult situation following Soviet collapse & civil war in Tajikistan
- **Type of contract:** 25 year concession contract for electric power generation and distribution in a predominantly rural area
- **Results achieved:**
  - Commercially oriented management in place
  - Collections increased to 90%
  - Improved service and reduced losses
- **Some lessons learned:**
  - Technical and commercial losses need to be well documented at the beginning of the project
  - Importance of stakeholder consultations in achieving sustainability
  - The need to subsidize bulk energy in declining annual amounts to cover initial operating losses.



## Incentive Margin for Pamir Operator





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## Georgia – United Energy Distribution Company

- **Summary of the problem:** Recovery from Soviet collapse; widespread corruption, declining collection rates, unpredictable supply, steadily declining hours of service, unpaid bulk power and other bills.
- **Type of contract:** Management Contract
- **Results achieved:**
  - Collections increased to approx. 85%
  - 24-hour supply of electricity restored
  - Staffing levels reduced 30%
  - Successful preparation of company for privatization
- **Some lessons learned:**
  - Full executive authority granted to contractor
  - Operator needed support of the national security services to deal with theft, corruption and violence against staff.
  - Solutions fitted to local social and political situation
  - Donor support played key role in securing government commitment
  - Even very limited incentives (in this case, only a few percent performance fee) can be sufficient if combined with a good contractor and full operational control.





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## **Incentive scheme in Georgia:**

- Management contract was funded by USAID.
- Incentives: threat of contract cancellation and potential loss of fee.
- Contractor must carry out its responsibilities “with generally accepted professional techniques and practices.”
- Contractor had full executive control over the company – rights to hire, fire and control all aspects of the company’s operations.



## India – North Delhi

- **Summary of the problem:** poor service, low collections, public dissatisfaction, huge and growing financial losses.
- **Type of contract:** Divestiture sale with 5-year regulatory transition agreement based on Aggregate Technical & Commercial (AT&C) Loss Reduction.
- **Results achieved:** AT& C losses reduced in 2005-06 to 28 per cent against a regulatory target of 35.35 per cent, down from 53 per cent at the time of privatization in 2002. Major improvement in operational & financial condition of distribution system. Significant complaints by consumers, offset by improvements in the sustainability of the system.
- **Some lessons learned:** Importance of:
  - A pragmatic valuation of the enterprise to be privatized
  - High level, consistent and firm government commitment and support for the transaction
  - Realistic multi-year tariff regime with realistic loss reduction targetsThis case shows that bidding on loss reduction is feasible.



## Incentive scheme in North Delhi:

AT&C Loss Reduction Targets	Reductions Achieved	Who benefits or loses?
"Minimum" reductions		Additional revenues split 50-50 between NDP & customers
"Negotiated" reductions		Additional revenues go to customers
		NDPL responsible for short fall in revenues

$$\text{AT\&C} = 1 - \left[ \frac{\text{Energy Units Billed to NDPL Customers}}{\text{Energy Units Purchased From Bulk Suppliers}} \right] \times \left[ \frac{\text{Collection in Rupees}}{\text{Billing in Rupees}} \right]$$

The first term represents technical & commercial efficiency. The second represents collection efficiency. Energy units are kilowatt-hours (kWhs), collections and billings are in Rupees.



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## Basic conclusions of the assessment (I):

1. Incentive based operating contracts reviewed are 'turning around' poorly performing electricity & water utilities and providing reliable services in difficult situations.
2. The contracts are reducing technical and commercial losses, increasing billing rates and collections, and introducing efficient and accountable management.







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## Basic conclusions of the assessment (II):

3. They work in difficult environments—post-conflict situations, disaster relief efforts, desperately poor local economies with a history of weak & corrupt government.
4. No one formula applies to every situation. Successful models include management contracts (Kosovo), divestiture with regulation (North Delhi), incentive-based management contracts with former employees (Uganda) and variations on the lease contract (Pamir; Cote d'Ivoire; Senegal).





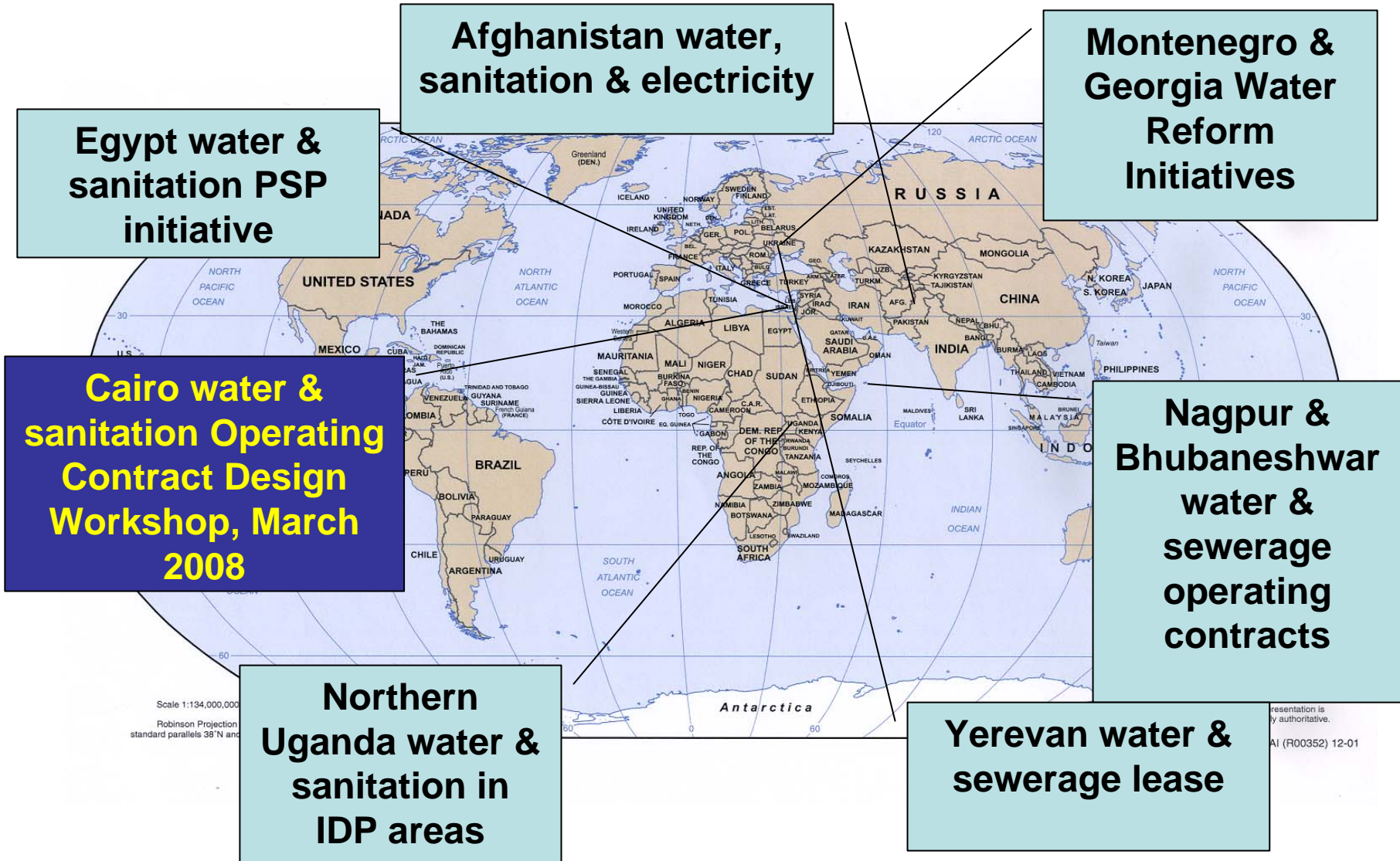
## Going Forward:

- In difficult environments, USAID Missions are advised to pay increased attention to commercial operations when supporting utility services. This presentation shows that operating contracts are a tool to keep the commercial side of the business intact.
- Where USAID takes over utility operations (e.g., Iraq, Afghanistan, Georgia, Sudan), Missions should consider incorporating performance-based provisions within their own contracts
- EGAT staff have case studies, sample contracts and incentive formulae, etc. that can assist Missions to design appropriate contractual provisions and programs to support these efforts.



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# Applications of the Operating Contracts Study







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# Thank You.

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