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

**Office of Infrastructure and Engineering  
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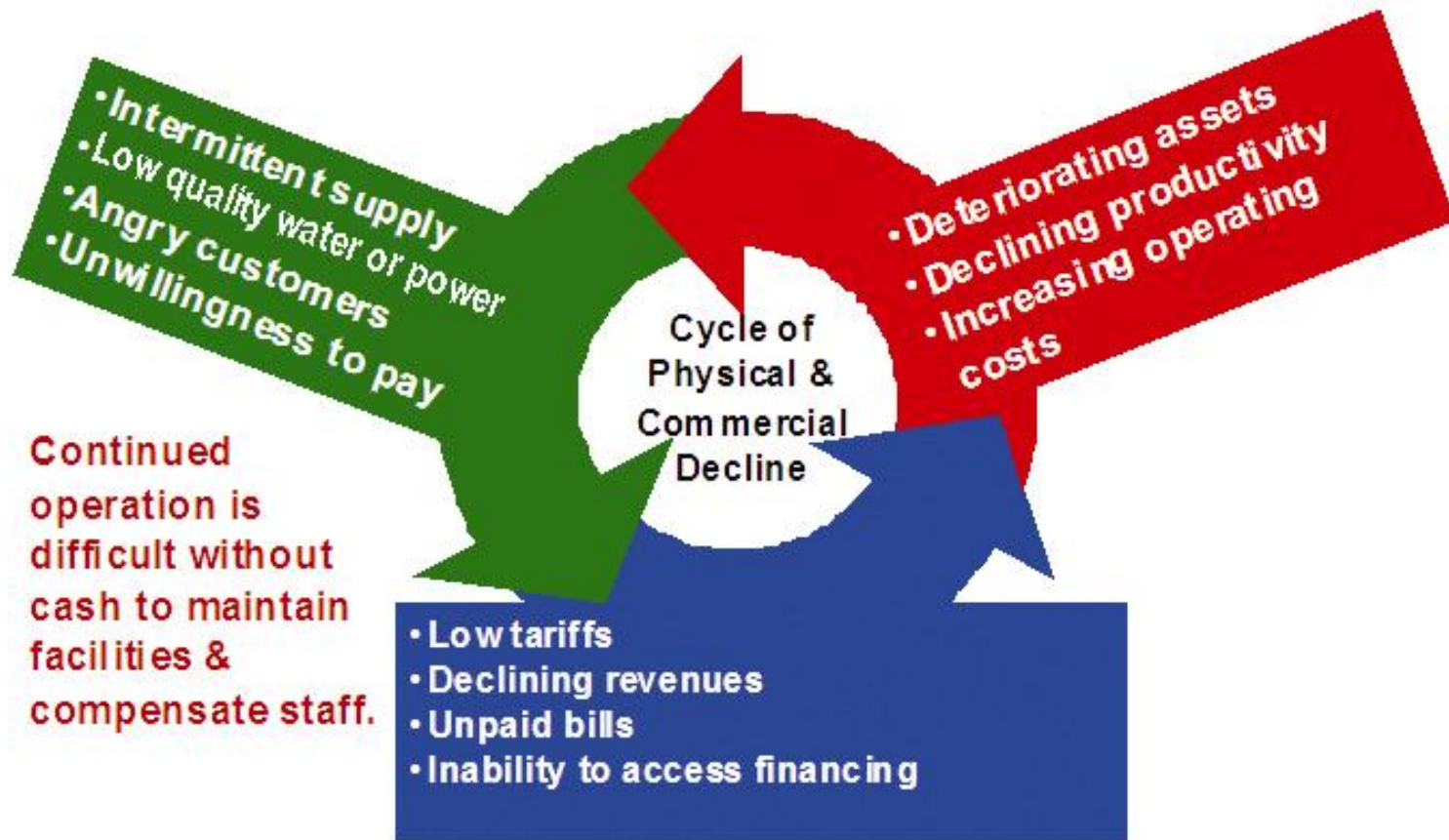
# The need for good water and electricity services:

- 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 credibility of governance.
- USAID and others support electricity & water services, and these services need to be sustainable.



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





## General Comments

- In times of stress (post-conflict, transitions from socialism, or post-disaster), corporate governance of enterprises may deteriorate, and asset stripping accelerates.
- There may be a need to establish a “receivership” in the immediate term, to manage utilities on behalf of the “owners” and “customers”, i.e., the citizens. Similar to bankruptcy proceeding.
- There is a tendency in post conflict situations to concentrate on physical reconstruction and fuel purchases; customer-facing functions are often neglected.
- In the long term, private ownership or concessions may be best, but operating contracts are a good interim solution to provide “discipline” in the interim period.
- Operation contracts are not a silver bullet but one more tool; they have been used successfully for over 150 years.



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# The Problem, Almost Always, is Poor Utility Governance 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 include:

- Rampant corruption
- Weak utility governance
- Bad management



## **USAID reviewed 10 operating contracts to understand how we can use them to improve services. Questions included:**

1. What infrastructure problems were addressed?
2. How were operating contracts tendered and awarded?
3. What responsibilities were given to the operator?
4. What incentives did the operator have to improve performance?
5. Did the incentives work?
6. How were services and cost recovery at the end of the contract?



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## Cases that USAID reviewed:

<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

- **Management contract** – management responsibility, limited operational and commercial control, no private 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** – full management & commercial control, plus operator makes all investments.
  - Examples: Manila wat/san; Pamir, Tajikistan electricity; Buenos Aires wat/san; Argentina electricity distribution; Bhiwandi, India electricity
- **Affermage/ lease** – A lease contract used in Europe for 150 years. Award of a lease (by competitive tender or negotiation) to a private firm to run a system for a period of years. Lessee is responsible for operational and commercial functions, and receives a fixed fee per unit of water or electricity provided to customers. Government provides the fixed capital investment.
  - Examples: Casablanca, Morocco electricity, wat/san; Macao wat/san; Cote d'Ivoire wat/san; Senegal electricity, wat/san



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# Four Cases



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## Uganda – Delegated Area Management Contracts

- **Summary of the problem:** Decline in infrastructure because of political instability, corruption and decapitalization.
- **Type of contract:** 57 “Delegated Area Management Contract” between National Water and Sewerage Corporation and private operators
- **Results:**
  - Uganda-wide, since 2000, private operating contracts with 10 private operators now cover 57 towns and cities in Uganda.
  - Coverage increased from 38% to 70% since '98; NWSC now has a 140% coverage of O&M costs; NRW down from >60% to 30%
- **Lessons learned:**
  - Strong incentives directly linked to performance work
  - 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



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## 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** = share of gross profit above the annual target

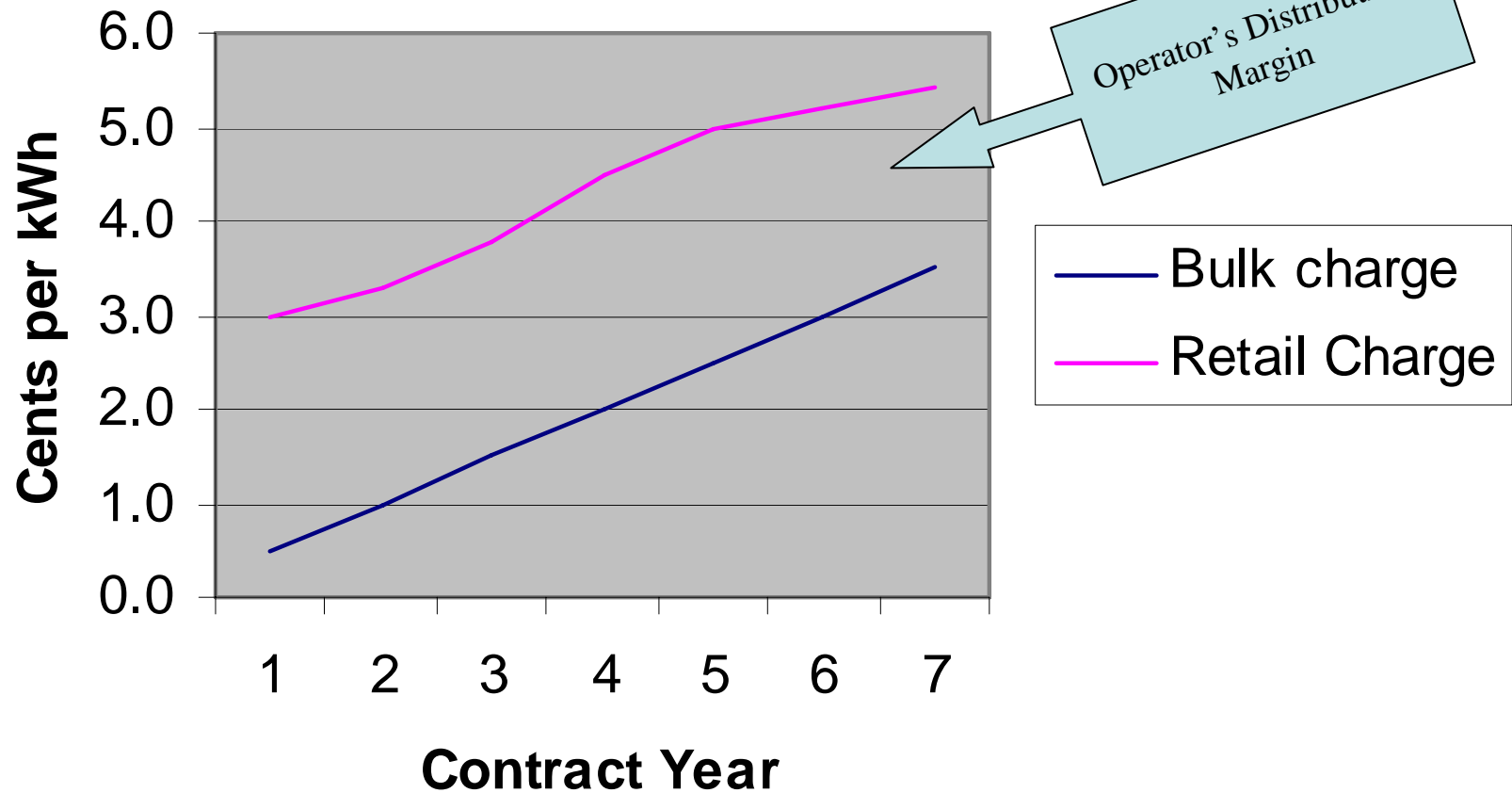


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## Tajikistan –Pamir Energy

- **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, 30% collection rates, 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 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
  - Donor support played key role in securing government commitment
  - Limited incentives (a few percent performance fee) can be sufficient if combined with a good contractor and full operational control.




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## India – North Delhi

- **Summary of the problem:** poor service, poor 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, including theft, reduced in 2005-06 to 28% against a regulatory target of 35%, down from 53% in July 2002. Major improvement in operational and financial condition of distribution system. Significant complaints by consumers, offset by improvements in sustainability.
- **Some lessons learned:** Importance of:
  - A pragmatic valuation of the business
  - High level, consistent and firm government commitment and support for the transaction
  - Realistic multi-year tariff regime with realistic loss reduction targets
  - Bidding on the basis of 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

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

The first term represents technical and commercial efficiency. The second term 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.



## Basic conclusions of the assessment (II):

3. They work in difficult operating environments—post-conflict situations, disaster relief, desperately poor local economies with 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 lease & concession contracts (Pamir; Cote d'Ivoire; Senegal).





## **Basic conclusions of the assessment (III):**

5. Good baseline data—about losses, access, collections, etc.—are key inputs to the incentive scheme for effective performance contracting.
6. Incentive based operating contracts are proving to be effective first steps toward introduction of efficient management and market forces into deeply troubled utilities.

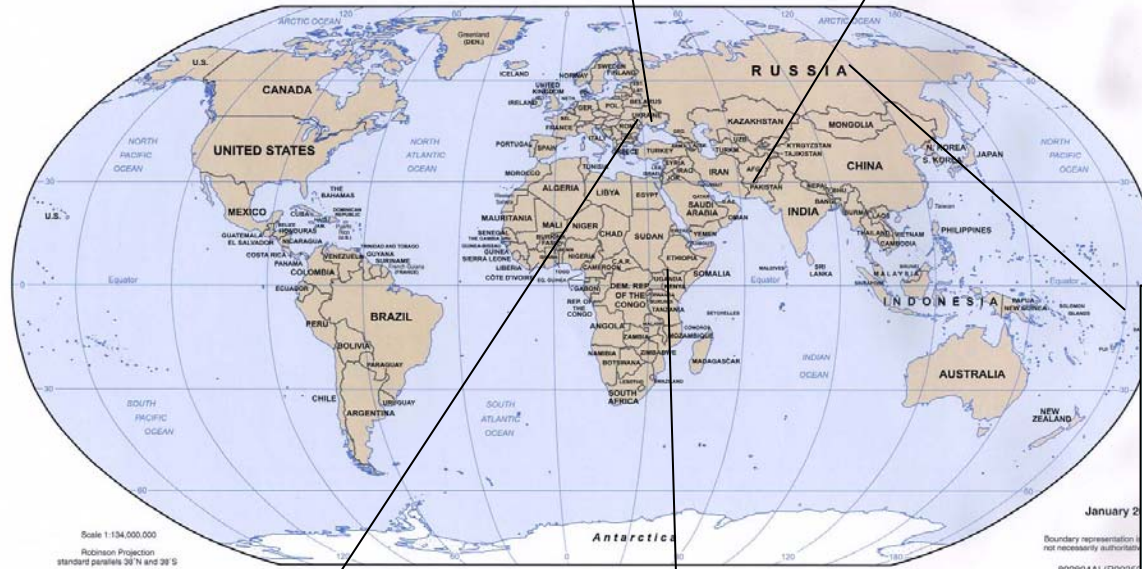


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# Applications of the Operating Contracts Study

Montenegro & Georgia  
Water Reform  
Initiatives

Afghanistan water,  
sanitation & electricity



Nagpur &  
Bhubaneshwar  
water &  
sewerage  
operating  
contracts

Yerevan water &  
sewerage lease

Northern Uganda  
water & sanitation in  
IDP areas



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# Thank You.

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