Water Utilities and Regulatory Systems: Capacity Building, Networking, and Benchmarking

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1. Introduction

Capacity Building and Networking: performance-drivers in infrastructure sectors

Benchmarking Service Provider Performance

- Information asymmetries limit pressures for reform and can contribute to dysfunctional social conflict

Four sources of conflict in the design and implementation of water policies:

- Authority conflicts (Jurisdictional disputes)
- Cognitive conflicts (Factual disagreements)
- Values conflicts (Priorities differ)
- Interest conflicts (Beneficiaries differ)

Methodologies for evaluating regulatory systems
Point your browser to http://www.regulationbodyofknowledge.org to access the homepage.
Chapters can be used for self-paced learning.
Networks: Organizational Collaborations

- “These government networks are key features of world order in the 21st century. But they are under-appreciated, under-supported, and under-used to address the central problems of global governance.” (Slaughter, 2004: 159)
- Voluntary, consensus driven, generally lacking in formal treaty status, and (often) focusing on technical issues where cross-nation learning (and tracking) is important.
- Focus on Information, enforcement, and harmonization.
- More than 17 regulatory networks formed since 1990
- Similar associations of service providers
<table>
<thead>
<tr>
<th>Date</th>
<th>Organization</th>
<th>Seed Money</th>
</tr>
</thead>
<tbody>
<tr>
<td>1889</td>
<td>NARUC (National Association of Regulatory Utility Commissioners) Telecom, Energy, , Puerto Rico,</td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td>CAMPUT (Canadian Association of Members of Public Utility Tribunals) Energy Water, Gas, Pipeline Utilities, and the</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>SATRC (South Asian Telecommunications Regulators’ Council)</td>
<td>ITU</td>
</tr>
<tr>
<td>1997</td>
<td>IRG (Independent Regulators Group) Telecom</td>
<td>EU (European Union)</td>
</tr>
<tr>
<td>1997</td>
<td>TRASA (Telecommunications Regulators Association of Africa)</td>
<td>USAID, ITU CTO</td>
</tr>
</tbody>
</table>
Table 1. Founding Dates of Regional Regulatory Networks

<table>
<thead>
<tr>
<th>Date</th>
<th>Organization</th>
<th>Seed Money</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>Regulatel (Foro Latinoamericano de Entes Reguladores de Telecomunicaciones)</td>
<td>ITU</td>
</tr>
<tr>
<td>1999</td>
<td>SAFIR (Forum for Infrastructure Regulation) Energy</td>
<td>World Bank, PPIAF</td>
</tr>
<tr>
<td>2000</td>
<td>ERRA (Energy Regulators Regional Association), central/eastern Europe and the newly independent states--Energy</td>
<td>US AID and NARUC</td>
</tr>
</tbody>
</table>
Table 1. Founding Dates of Regional Regulatory Networks Continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Network Name</th>
<th>Description</th>
<th>Supporting Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>ADERASA</td>
<td>Association of Water and Sanitation Regulatory Entities of the World</td>
<td>World Bank, PPIAF</td>
</tr>
<tr>
<td>2001</td>
<td>(Association of Water and Sanitation Regulatory Entities of the )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>OOCUR</td>
<td>Organisation of Caribbean Utility Regulators</td>
<td>USAID</td>
</tr>
<tr>
<td>2002</td>
<td>ERG</td>
<td>European Regulators Group for Electronic Communications Networks and Services, 2004</td>
<td>European Commission</td>
</tr>
<tr>
<td>2003</td>
<td>ARICEA</td>
<td>Association of Regulators for Information and Communication Services of Eastern and Southern with COMESA</td>
<td>USAID</td>
</tr>
<tr>
<td>2006</td>
<td>RERA</td>
<td>Regional Electricity Regulators Association,</td>
<td>SADC (Southern African Development Community)</td>
</tr>
</tbody>
</table>

Table note: EAPIRF is currently supported by the World Bank and the Australian Government. (See www.eapirf.org for more information.)

*Since the focus here is on more organizations created by and for regulatory commissions, the list does not include OLADE, CITEL, ERGEG, and ERG—though those organizations are discussed later.*
Products of Networks

1) Events and meetings
2) Data for benchmarking
3) Public pronouncements
4) Materials for stakeholders
5) Capacity-building for professional staff
6) Best practice laws, procedures, and rules
7) Operating network news
8) Technical studies
Table 2. Regulatory Organizations and Related Associations: Status of Water Networks

<table>
<thead>
<tr>
<th>All Sectors</th>
<th>Global</th>
<th>Africa</th>
<th>Americas</th>
<th>N. America</th>
<th>Caribbean</th>
<th>Asia and Pacific</th>
<th>Europe</th>
<th>Island Nations</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Sectors</td>
<td>IFUR</td>
<td>AFUR</td>
<td>___</td>
<td>CAMPUT</td>
<td>OOCUR</td>
<td>EAPIRF SAFIR</td>
<td>___</td>
<td>ACCC</td>
</tr>
<tr>
<td>Energy</td>
<td>IEA</td>
<td>RERA</td>
<td>OLADE ARIAE</td>
<td>___</td>
<td>___</td>
<td>CEER ERGEG ERRA</td>
<td>___</td>
<td></td>
</tr>
<tr>
<td>Telecom</td>
<td>ITU</td>
<td>TRASA ARICEA WATRA</td>
<td>CITEL Regulatel</td>
<td>ECTEL</td>
<td>SATRC</td>
<td>IRG ERG</td>
<td>___</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>WWC IWA</td>
<td>WUP</td>
<td>ADERASA</td>
<td>AWWA</td>
<td>___</td>
<td>SEAWUN</td>
<td>?</td>
<td>___</td>
</tr>
</tbody>
</table>
Benchmarking Water Utilities

- International Benchmarking Network for Water and Sanitation Utilities (IBNET) has data from 85 nations
- Inter-American Development Bank Project by PURC (Oct 2007)
- Key lessons from Central America:
  1. Data must be viewed as important and useful for the company
  2. Avoid Duplication of data storage files
  3. Formal Responsibilities: Data Position (rather than the person)
  4. Clear variable definitions
  5. Factors external to the company accounted for
  6. Data disaggregation improves decision-making
  7. Better operational data collection procedures are needed
  8. Information technology is necessary, but not sufficient
  9. Transparency: company information needs to be public
  10. Capacity building necessary in the area of metric benchmarking
Benchmarking Systems of Regulatory Governance

- Extensive rankings of agencies have been prepared for states in both Brazil and India
- OECD: recent evaluations of Telecommunications Agencies
- Comparisons
  ◦ Legal systems
  ◦ Regulatory autonomy (centralized & decentralized)
  ◦ Capacity-building
  ◦ Tariff design
  ◦ Financial sustainability of the agency
  ◦ Regulatory strategies towards key stakeholders
- Audiences: Governments and Financial Institutions
Benchmarking Regulatory Systems: Processes

WRI: The Electricity Governance Toolkit: Benchmarking Best Practice and Promoting Accountability in the Electricity Sector

- Level of detail required for data collection seems excessive
- Applications to India: Elevating form over substance

Autonomy, Decision Making, Decision Tools, Accountability—Assessment and Measurement of Brazilian Regulators

- Twenty-one regulatory agencies in Brazil ranked based on agency design and regulatory processes
  1. Autonomy
  2. Decision-making
  3. Decision tools
  4. Accountability/control
- Total of 96 questions (what weights?)
- Focus on process rather than substance or sector performance
Benchmarking Regulatory Systems: Actors and Stakeholders

World Governance Assessment (WGA) - Surveying Local Stakeholders

- United Nations University in 1999 and Overseas Development Institute in London since 2004. Sixteen countries are evaluated in their large study, focusing on six principles in six areas
- Country reporter who interviews leaders from ten stakeholder groups
- “Examines rules rather than results”
- Focuses on political morality rather than economic efficiency

Actors, Arenas and Policies (IADB)

- “Stories” that emerge from different perspectives
- Key socioeconomic interests:
  1. Political Actors (key socioeconomic interests)
  2. Mechanisms utilized by socioeconomic actors in their political demands (including campaign contributions & media campaigns)
  3. Venues: arenas of the policymaking process (including political institutions)
  4. Policy domains (policy areas—time frames, institutions, and historical context)
- “The Political Economy of Productivity”
Benchmarking Regulatory Systems: Institutions and Performance

- World Bank-funded study by Saleth and Dinar
- Comprehensive questionnaire administered to country experts, specialists, and policymakers
  - Water Law, Water Policy, and Water Administration
- Link institutions to actual sector performance.
- Beyond issues of accountability, transparency, and inter-agency conflict resolution to outcomes
  - Physical, financial, economic efficiency & equity performance & progressiveness of water institution (adaptive capacity, scope for innovation, openness for change, and the ability to handle future water challenges)
- “Evaluating Water Institutions and Water Performance” Capital Markets utilize
Infrastructure Regulatory Systems

- *Handbook for Evaluating Infrastructure Regulatory Systems*,
  - The “Gold Standard”

- Three types of evaluations
- Institutional design, the regulatory process, market structure, and other features of the electricity industry
- Substance of rules and Incentives, as well as process
- Sector Performance—could be applied to other sectors
Concluding Observations - 1

Capacity Building: Regulation Body of Knowledge for Infrastructure Regulation

Association Networking: Share Resources, Information, and Lessons

Water Utility Benchmarking helps regulators establish incentives

- Provides a technique for identifying the impacts of those incentives but requires strong technical capabilities

Many approaches for evaluating regulatory systems

**Capacity Building, Networking, and Benchmarking facilitate adaptive work that engages stakeholders in open dialogues**
## Figure 1. Conflict Resolution Matrix

<table>
<thead>
<tr>
<th>Addressed By Research</th>
<th>Technical Work</th>
<th>Adaptive Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict Over Facts</td>
<td>Conflict Over What is important</td>
<td></td>
</tr>
<tr>
<td>Conflict Over Distribution of Gains &amp; Costs</td>
<td>Conflict Over Jurisdiction or Authority</td>
<td></td>
</tr>
</tbody>
</table>

Addressed by Engaging People with Adaptive Challenges in Research And Dialogue

From Mark Jamison
Concluding Observations - III

- **ANE A** as a catalyst: collection/analysis of benchmarking information: Potential for an **EU Water Operator Network (with Benchmarking Task Force) IWA initiatives**
- **Operators** can only manage what they measure
- **Regulators** (local or national) can only provide incentives for good performance if trends are understood
  - Current performance has been quantified and Comparisons made
  - Realistic targets are set *(eg. Uganda)*
  - Benchmarking is necessary, but not sufficient, for sound regulatory decisions
- **Others:** Financial community, international donor agencies, and citizen groups—Regulatory Systems (Brazil, India)
- Recommendation: Initiate **self-assessments**
- Identify the links between institutional constraints, regulatory policies and sector performance.