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**International
experiences in
energy regulation,
development trends
and issues to be
considered**

ENERGY REGULATION-20

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□ **CORE FUNCTION-PURPOSE** = Regulation of prices/tariffs & financial structure of a *monopolistic public service (energy, water, transport, telecom)* for certain level of technical-commercial quality & coverage

=> **Economic regulation under technical-operational constraints**

- *Difficult work ? requires setting quantitative & optimal relationships between Costs - Quality - Coverage of the service, with the aim of fixing prices of different service uses*
- *Regulation required only in monopolistic market conditions : regulation should simulate competition conditions to avoid potential negative effects of monopolies (excess profits/economic rent or excess losses due to distorted prices/tariffs ; production restrictions; lower service quality)*

- How to simulate (perfect) competition effects? Regulation should aim at satisfying some basic economic *substantive objectives*:
 - *Economic & Financial Sustainability: Tariffs should generate enough revenue so as to give an efficient firm the opportunity to cover economic costs including a fair and reasonable return on its investment, and generate enough cash-flow to allow service financing*
 - *Productive efficiency: Minimize service production costs over time (dynamic)*
 - *Allocative efficiency: different tariffs should reflect the different costs of the different service uses (optimal point for consumers and producers)*

- As we are considering regulation of *public* services, other essential objectives should be considered when regulating:
 - *Social objectives: no user/household should be excluded from the service because of its income (or location or other characteristics) - but potential subsidies should be well targeted (e.g. none high income users do not need subsidies and should not receive them & all low income users who need subsidies should receive them)*
 - *Simplicity & Non-controversy: price/tariff structure should be simple enough so that all users can understand and accept them*

REGULATION? A Long History



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- Regulation of monopolies? Back to the end of the 19th century
 - *US Interstate Commerce Act of 1887 : regulating railways (stating “reasonable & just return”; setting up federal regulator)*

- *Form of regulation (regulatory regime/framework) ? For 100 years, fixing tariffs/required revenues was based on = historical cost of service + return on assets ; but this simple regulatory regime is subject to intrinsic issues:*
 - *No incentives to reduce costs & No incentive to optimize asset values/volumes (as higher asset value and spending meant automatically higher return in terms of absolute monetary amount)*

REGULATION?

The 80s/90s Revolution



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- Waves of markets Liberalization and Privatization in the 80s stimulated the need for new approaches for the control/regulation of privatized public services;
- In 1983 : major step with approach & recommendations developed by professor *Littlechild* in the context of British Telecom privatization =>
 - *Independent regulation*
 - *Forward-looking Incentive regulation*
 - *Focus on welfare of existing and future service users (in terms of prices/service quality/security of supply*
 - *Promotion of competition when relevant & possible*



□ Examples of major challenges?

□ *Independent regulation*

- Usually a long term goal closely related to the development of a country's institutional and political culture & environment - it should still be an objective

□ *Forward-looking approach with performance incentives:*

- Requires specific methodologies & processes
- Requires specific data (Obtaining these data from the operators requires processes and tools) ;
- Requires specific analytical assessments of operational and capital costs efficiency (specialized skills and tools);
- Requires *business planning approach/state of mind* from all stakeholders.



REGULATION?

Challenges for Mongolia

- ❑ **Tariff methodology:** theoretically relevant *but* still room for improvement in terms of its *practical* application; e.g. in terms of asset valuation and assessment of cost efficiency (requires additional data, analysis and tools)
- ❑ **Corporatized utilities have to pay and be responsible for their own Investments** (*only possible if tariffs recover all costs*)
- ❑ **Shifting from current historical cost approach (tariffs based on past costs) to forward-looking approach (tariffs based on future costs) with incentives (bonus & penalties) for improving operational performance = Major step and the future of regulation in Mongolia - *requires new processes & tools, and to build understanding & consensus about new approach and state of mind***



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THANK YOU

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