

Regulatory Systems and Sector Overview

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Sector regulation plays a key role in PPPs and they cannot be developed without reference to the regulatory system in place. This section looks at key issues to think about when designing a regulatory framework and then provides links to materials on sector regulation. This is NOT intended to be a definitive reference on Regulation but rather an introduction to regulatory design. A key initiative on regulation is the [Body of Knowledge on Infrastructure Regulation](#).

Key Considerations in Design of Regulatory Framework

By Sector

GENERAL MATERIALS:

- [Contracting Out Regulatory Functions](#)
- [Infrastructure Regulation: Developing Countries](#)

GENERAL:

- [What is Regulation?](#)
- [Why regulate?](#)
- [Regulation is a means to an end](#)
- [Benefits of regulation must exceed cost of Regulation](#)

BASIC DESIGN QUESTIONS:

- [What entities should be regulated?](#)
- [What activities should be regulated?](#)
- [What are the functions of Regulator\(s\)?](#)
- [Is there to be more than one entity regulating the sector?](#)
- [How much discretion should the Regulator have?](#)
- [What are powers of Regulator?](#)
- [What recourse is there against Regulatory decisions?](#)
- [What is the source of the regulatory powers?](#)
- [Is the Regulator to be independent?](#)
- [Should Regulatory functions ever be contracted out?](#)
- [Is a multi-sectoral Regulator appropriate?](#)

ENERGY:

- [Sample Legislation and Regulation](#)
- [Electrification and Regulation in rural areas: Principles and a Model Law](#)
- [Regulation by Contract—a new way to privatize electricity distribution?](#)

TRANSPORT:

- [Better Regulation of PPPs for Transport Infrastructure](#)

Railways

- [Track Access Laws and Regulations](#)
- [Regulatory Authorities](#)
- [Railway Reform: Toolkit for Improving Railway Sector Performance](#)

WATER AND SANITATION:

- [Water Sector Regulation](#)
- [Key Topics in the Regulation of Water and Sanitation Services](#)
- [Regulating Water Services for all in developing countries](#)

General

What is Regulation?

Regulation is the monitoring and control of a sector or business by Government or an entity appointed by Government. Direct and indirect controls and limitations are imposed upon the regulated entity. Regulation tends to be categorized into economic regulation and other forms of regulation.

Why regulate?

(a) To protect consumers against monopoly abuse

Most utility and infrastructure providers have traditionally been natural or legal monopolies. A natural monopoly arises where it is much more efficient for one supplier to provide services, such as a water utility. A legal monopoly is a supplier that has been granted the sole legal right to supply services.

In any monopoly supply situation, whether involving the private sector or otherwise, there is potential for consumers to be adversely affected by the monopoly supplier, whether through excessive charging or in terms of poor service, interruptions in service, etc. Effective regulation can protect against abuse by the monopoly and create incentives to improve services.

(b) To protect investors

Whether they are private investors or community-based organizations—the investors need to know:?

- what price they will be able to charge for their service;
- the service standards they will be required to meet;
- how long they will have a license to operate;
- whether that license is exclusive or not;
- whether the Government's commitments are going to be honored and will not be subject to political opportunism or public pressure.

Many of the risks associated with these issues can be addressed through Regulation.

(c) To monitor performance of service provider and reduce asymmetry of information.

Government must monitor services outsourced under a PPP arrangement. Therefore, the Government needs to retain sufficient capacity to monitor and enforce the operator's obligations. A Regulator can provide a home for such capacity and a mechanism to enable the Government to monitor and enforce.

When services are outsourced to the private sector, there is a natural asymmetry of information between the regulated entity and the Government. Regulation can help to restore the balance of information.

(d) Other interests

As explained below, there are other interests which are deemed important to protect through regulation, such as the environment, service standards, consumer services, asset maintenance and replacement, etc.

General Principles for Design

Regulation is a means to an end—what matters are outcomes and not regulatory rules. Care should be taken when designing a Regulatory Framework to avoid developing a series of comprehensive and sophisticated rules which look great on paper but which are difficult and impractical to implement and are not necessarily tailored to the circumstances at hand. In developing countries, in particular, the most effective rules are likely to be simple and easy to implement, with a light burden imposed on both regulator and regulated entity.

The benefits of regulation should exceed the cost of regulation

When designing the [Regulatory Framework](#), the potential costs of monitoring activities and data collection to all parties involved should not be forgotten. Where there are a number of regulatory bodies responsible for regulating the sector, care should be taken to try and reduce duplication of information to be collected, audits required, etc. While it may be economically viable in the UK market to have separate audited accounts drawn up for company registration and for regulatory purposes, this may not be sensible in a developing economy.

Where an economic regulator is requiring information on operations, thought should be given to the fact that an environmental regulator may be seeking similar information also. What is appropriate for municipal utilities may not be appropriate or cost effective for rural or dispersed utilities with relatively few customers and a high cost base.

Basic Design Questions

What entities should be regulated?

Is it appropriate to regulate all potential service providers in a sector or only the monopoly service providers?

If a sector is to be liberated, i.e., the monopoly be extinguished or reduced, will the entrants to the sector be required to meet similar service standards, etc?

What activities should be regulated (coverage)?

Should all activities of the regulated entity be regulated, or only those that relate to the monopoly service?

- For instance, if a monopoly service provider such as a water utility has land which it rents out, should its rental activities be regulated?

Traditionally in regulation there is a distinction between regulated and non-regulated activities and the assets that relate to those activities (for example, in England and Wales, regulated entities are permitted to dispose of non-regulated assets, and engage in non-regulated activities).

However, for service providers providing essential services such as water and/ or electricity, there is a view that regulated assets should be ring-fenced from any high risk enterprises and where the utility carries out non-regulated activities these should be limited to a small percentage of the utility's overall business, or should be carried out in a separate limited liability company.

What are the functions of Regulator(s)?

Regulation of Infrastructure is usually discussed in the context of economic regulation. The functions of Economic Regulation are typically:

- Setting of tariff levels and structures;
- Registration of companies/ company reporting and auditing of accounts;
- Monitoring costs of operation;
- Setting entry and exit requirements into the sector;
- Creating level playing field—nsuring operators compete fairly.

Economic Regulation should not be considered in isolation from other regulatory functions that may be relevant to infrastructure projects:

- Setting of quality standards and monitoring performance;
- Setting environmental and planning rules and enforcement;
- Setting procurement rules for contracting out by "public utilities" and enforcement;
- Health and safety regulations and monitoring/ enforcement;
- Use of natural resources.

Is there to be more than one entity regulating the Sector?

- In designing a regulatory framework, once the Government has determined what regulatory functions are desirable, it needs to determine which entity is to carry out each function and to set out the parameters of each function clearly in the constitutional document of that body.
- Ideally one body should be responsible for each function, but it is unlikely that one body will be responsible for all functions. There may already be an entity carrying out a function, such as a companies registry that requires auditing and submission of accounts.
- As regards Economic Regulation, is a Regulator to have the function of tariff setting, or is this to be left to the Government? It might be decided that this function should be split, so that the Regulator collects the necessary data and then makes recommendations for tariff setting, with the decision resting with the Government. The private sector will be anxious to have tariff setting mechanisms firmly established and not subject to political interference (see Independence of Regulator below).
- Is the entity carrying out Economic Regulation to monitor and enforce performance? It may be more appropriate, for instance in the case of water and sanitation services, for the environmental regulator to monitor performance. This will also depend on the capacity of each institution.
- Thought should also be given to the plan for the specific sector. If it is intended that the sector is to be opened up to competition, then the roles of the regulator in setting entry and exit rules and overseeing and nurturing competition in the Sector are important. Often countries have competition commissions that are separate entities from the sector regulators. In this case thought needs to be given to coordination between them and how their responsibilities should be divided.
- Overlaps in responsibilities should be kept to a minimum to ensure that the regulated entity does not receive conflicting instructions or suffer multiple sanctions. However, where one body is responsible for Economic Regulation and another is responsible for Environmental Protection, for example, the Economic Regulator will need to take into account the cost implications of the regulated entity meeting its obligations in relation to environmental protection. This has been illustrated in European Union states where increased requirements for effluent treatment triggered necessary investment in costly wastewater treatment facilities, the cost of which needed to be reflected by economic regulators in higher tariffs charged to customers.

How much Discretion should the Regulator have?

If the Government is seeking to encourage investor confidence in a sector then the level of discretion that a regulatory body enjoys (particularly a new body that has no track record) in carrying out its functions is of crucial importance. Private investors will be looking for checks and balances to be built into the legal framework of regulation, and even for assurances from Government, such as:

- building into the license/ PPP agreement of the operator and new entrants detailed “frozen” formulae for tariff setting and the frequency of tariff reviews;
- specifying in the license/ PPP agreement the tariffs for the initial review period;
- where Government is to provide subsidies to the sector, have these set out in an implementation agreement between the Government and the operator/ included in secondary legislation.

Balanced against this desire for certainty is the interests of consumers and the benefit of giving the Regulator discretion to adapt tariff formulae to changing circumstances over time.

The level of discretion to be granted to the regulatory body also depends on the level of resource that the regulator is to be granted.

What are Regulator's powers?

When determining the powers that the Regulator should have, consideration should be given to the Basic Principles of Design; i.e. Regulation is a means to an end and its cost should not exceed its benefits.

The Regulator will need to be empowered to do the following:

- gather information and data
- establish rules and change rules
- monitor implementation of rules
- enforce the rules—What will be the regulator’s enforcement powers? Can it impose fines and sanctions for breach of rules, or does it need to apply to a different agency to have its decisions enforced?

The regulatory designers may seek to put limits on these powers, however, or impose general obligations of fairness and proportionality on the Regulator, and determine how often functions such as tariff setting and reviews can take place.

In particular, investors/ operators will be anxious to ensure that there are limits on the extent to which the Regulator can change the rules, such as amend the license of the operator.

Consumers will also want to know how they are going to have an input into regulatory decisions. Thought should be given as to whether the Regulator should be required to consult consumers and whether consumer bodies should be formally recognized.

What recourse is there against Regulatory decisions?

There needs to be a method of regulating the Regulator and being able to amend its powers from time to time also.

Stakeholders such as investors and customers will also be anxious to know how the Regulator can be brought to account for its actions and whether there is recourse against the Regulator or its decisions. In particular, will recourse be through the courts, if so, under administrative law rules and courts or through the general court system or through arbitration? What remedies are available?

What is the source of the Regulator's powers – legislation, contract?

In developed countries, there has been a difference in approach to the source of the Regulator's powers. In the UK and US, a separate regulatory body is established under legislation and the relationship between the regulator and the regulated entity is set out in legislation and in a license. In France, the tradition is for regulation to be by contract, with the local government contracting party overseeing the activities of the operator through the contract.

These are not the only two possible models, and there is a growing trend, in developing countries in particular, to combine these models. In a number of the sample agreements included on this site (for an example, click on [Power Purchase Agreement \(Example 1\)](#), this combination is reflected as follows:

- a third party board is established by contract to monitor performance under the contract, and make recommendations for tariff setting;
- there is a provision in the contract that in time the powers of the board will be transferred to a regulatory body, established by statute.

In addition, there is a growing trend to reduce the amount of discretion that the regulatory body can apply by setting the principles and formulae for tariff setting, etc in "stone". For more on this, go to [Regulation by Contract: A New Way to Privatize Electricity Distribution](#).

Thought should also be given to the content of primary legislation and what can be left to secondary legislation. Secondary legislation is generally subject to less parliamentary scrutiny and can be changed more easily than primary legislation and so investors may be less comfortable with key issues being left to secondary legislation.

Is the Regulator to be independent?

There is a general proposition that the more independent the regulator is, the more effective it is going to be. Whether true independence can ever be achieved is debatable. There are examples of good regulation by regulators that are not independent and of bad regulation by independent regulators. However, investors are more likely to trust a regulatory system which has more certainty and independence.

Some key issues to consider are:

- are the respective functions of minister and regulator clearly established? Are ongoing day-to-day regulatory functions to be left with the regulator, with key strategic decisions being taken by the Government?
- can the decisions of the regulator be overridden by Government?
- are there circumstances where Government can dictate how utilities are used, such as at times of war or state emergency?
- how is the regulator appointed? Is this an individual or a board? Can the regulator be hired and fired by the Government? Will the regulator feel beholden to the Government?

- how is the regulator funded? Does the funding come from general taxation or from revenues from the regulated services (i.e. out of operator revenues)?
- is the regulator going to have the capacity to be effective? How is the regulator to be staffed? Can the regulator recruit from outside the civil service and pay salaries outside the civil service pay scales?
- what will be the regulator's enforcement powers? Can it impose fines and sanctions for breach of rules, or does it need to apply to a different agency to have its decisions enforced?

Multi-sector regulator?

For a discussion of the advantages and disadvantages of multi-sectoral regulators in the Telecoms sector, which has more general relevance, go to page 30 of [Telecommunications Legislation in Transitional and Developing Economies](#).

Further Reading and Resources

- The report, [Benchmarking Infrastructure Development: PPP Regulatory Landscape - Assessing Quality and Exploring Reform](#), examines the crucial role that the quality of PPP regulatory frameworks.
- For a discussion on Contracting Out of regulator functions, go to ViewPoint Note on [Contracting Out Regulatory Functions](#)
- [Infrastructure Regulation: Developing Countries](#), by Satheesh Sundararajan and Sara Ahmed, Public-Private Infrastructure Advisory Facility (PPIAF), February 2015.

Related Content

- [Laws and Regulations](#)
- [PPP Legal Foundations - Further Reading](#)
- [Legislation and Laws - General and Sector Specific](#)
- [Regulatory Systems and Sector Overview](#)
- [Country Profiles](#)

Additional Resources

- [Gender Equality & PPPs](#)

- [Sub-national and Municipal PPPs](#)
- [Procurement Processes and Bidding Documents](#)

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