Access regulation

Submission to the Productivity Commission's

2013 National Access Regime Inquiry

by

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Some quotes…

Down the track, perhaps Australia will once again debate whether we were right to introduce economic regulation and access regimes. I would be astounded if it is concluded at that time that the process of corporatisation, privatisation and structural separation was wrong or should be reversed. To my mind, the only interesting argument is whether competition would have developed more with less regulation.

(Quote by Rod Shogren, May 2002, *in "Economic Regulation —the necessary evil"* Network, Issue 10).

You can put lipstick on a pig. It's still a pig.

- *Part IIIA has pretty much failed.*
- *Doomed bit of legislation.*
- *Slow process.*
- *Legislative interpretation of criteria that has lost the economics*

(Slide number 4 of a presentation by Stephen King "*Whatever Happened to National Competition Policy"* at 11th ACCC Regulatory Conference, Gold Coast, 29 July 2010).

.....the agency with the experience in administering legislation invariably has valuable knowledge of the shortcomings of the regime it regulates. It is also well placed to suggest improvements. In making our recommendations to decision makers we and they must be aware of the context within which we operate. We need to understand where advocacy, policy and the regulatory role intersect – and understand the limits!

(Quote from a speech by Mark Pearson, Regulatory Reform Conference, Melbourne 12 April 2011, 'Exploring the latest issues in regulation').

Key Messages

1. The rationale for any regulation is to influence and/or change behaviour. Access regulation is no different. Access regulation aims to change a monopolist's or access provider's behaviour by ensuring that they negotiate with third parties (i.e. access seekers) to share the use of certain infrastructure services covered (i.e. declared) for access.

2. Access regulation is about facilitating and enabling commercial negotiation not supplanting it. The design of an access regime, its principles and more importantly the operationalisation of its principles into practice has been the most challenging aspect of the current Part IIIA regime especially in relation to the declaration process.

3. The key difference between the *declaration process* and the *undertaking process* under Part IIIA is that under declaration once a service is declared, all an access seeker has is *simply a right* to negotiate but with no parameters or foundations upon which to negotiate the terms and conditions of access. It has been evident in recent appeals regarding various National Competition Council (NCC) declaration recommendations and Ministerial decisions that the process for even getting to the starting point of just having a right to negotiate access has taken a very long time.

4. Much of the debate about Part IIIA tends to focus on the declaration aspects while the undertaking aspects are often ignored. On balance it would appear the undertaking avenue for access at the Commonwealth level (but more predominately at the State level) has been more successful in facilitating access and promoting competition. Access undertakings *have* facilitated competition and entry into markets for example, the recent Commonwealth wheat access undertakings, the Australian Rail Track Corporation (ARTC's) access undertakings, and, at the State level, the Queensland Rail access undertaking, the Dalrymple Bay Coal Terminal access undertaking and the Victorian rail access regime all have led to entry and further competition in the market.

5. The purpose of an access undertaking/access arrangement is to facilitate negotiations to get to an access agreement (i.e. a commercial contractual agreement). Undertakings provide up-front parameters and set out proposed terms and conditions of access which can be used as a basis for commercial negotiation providing guidance and clarity as to the negotiation process thus reducing uncertainty and potential disputes. A number of features of access regimes (particularly at the State level) appear to have worked well. The Productivity Commission may wish to consider these in developing its advice to the Government.

Key Messages (cont'd)

6. Access undertakings are often accompanied by a pro-forma or template access contract called a standard access agreement. An access agreement, once signed by the access seeker and access provider become the binding terms and conditions of access. Even if the legislative access regime itself changes, access contracts struck under an undertaking will stay in place for the duration of the contract term. Hence access regimes can and do provide certainty for investment by recognising the primacy of existing contractual agreements.

7. Administering access regimes and economic regulation is rarely simple. It requires complex economic, legal and financial judgements by the regulator. Ambit claims are usually put forward by both access provider and the potential access seekers (users of the infrastructure) often at polar extremes which exacerbate the assessment process. Extensive consultation with affected parties and significant information gathering is also required to understand the issues so that decisions can be transparent and appropriately balance the assessment criteria required to be taken into account.

8. The National Access Regime (Part IIIA) doesn't distinguish between facilities — it was intended to be a generic 'catch all' regime. Perhaps one of Part IIIA's greatest benefits has been that it has acted as a catalyst for the development of industry and State based regimes which clause 6(2) of the *Competition Principles Agreement* explicitly provides for. State based access regimes have added to and improved the body of knowledge relating to the process of access and economic regulation in general.

9. There is a tendency by policy makers and some regulators to only see market power issues through the lens of price. However, non-price issues (that is the terms and conditions and processes upon which access is ultimately provided) can be crucial to ensuring fair and reasonable access. In the access context then, market power includes not only the ability to charge high access prices above the efficient cost of supply but it can also manifest itself in the bargaining power that an access provider or monopolist may possess in negotiating the non-price terms and conditions of access.

10. Access regulators and economic regulators in general are criticised when it comes to administering economic regulation and access regimes. It should be remembered however that regulators *administer* the access regimes and regulatory rules given to them. Regulators do not develop, design or determine the policy or legislative frameworks that access regimes are based on — policy makers do. Regulators may fill in some of the detail but this is in reference to the policy and legislative framework set by the policy makers. The debate about regulation needs to move away from scapegoating the regulators and focus on the issue of whether we have the right policy (read, form of regulation and access regime) for the context.

Key Messages (cont'd)

11. The timeliness of decisions is what has attracted most attention regarding Part IIIA. It is clear the declaration process seems to have gone on for much longer than originally intended which has been mainly due to the rehearing and appeal processes. It is unclear why decisions by the NCC or economic regulatory umpires need to be subject to merits review (however limited) when such decisions are made over an extended period with numerous rounds of transparent consultation and numerous opportunities for stakeholders to submit their views at the issues paper and draft decision stages and at public and targeted consultation processes. Perhaps their needs to be a refocussing of the legislation/framework towards accepting the independent umpires (e.g. economic regulators and NCC) decisions with avenue of appeal only based on judicial review. Otherwise, why have the umpires in the first place?

12. In terms of the timeliness and assessment of access undertakings, most assessments (both at the Commonwealth level and at the State level) now appear to be completed within the six (6) month time-frame if not earlier (for example, Victoria completed three separate rail access undertaking assessments concurrently within three (3) months). Moreover, economic regulators both at the Commonwealth and at the State level have built up considerable expertise in the area of access and price regulation which over time should assist expedite assessment processes and lead to greater harmonisation of regulatory approaches.

13. Both the Exports Task Force Report and the *Competition Infrastructure Reform Agreement* (CIRA) have a "*presumption in favour of commercial negotiation and light handed regulation*". There are two issues here: firstly, such a presumption assumes that in commercial negotiations there is equal bargaining power between access provider and access seeker, which is often not the case. Where parties enjoy the same degree of market power then it makes sense for them to be left alone to negotiate. However context matters - one cannot simply assume equal bargaining power across the board. Where a monopolist has greater market power, commercial negotiation is not always possible and regulation may be needed to facilitate a competitive outcome. Secondly, light handed regulation while well intended in theory can end up being heavy handed regulation in practice if it is poorly designed and not appropriate for the context or so light that it is ineffectual. It is therefore crucial that when designing regulatory regimes that policy makers do not have blanket presumptions but first understand the context in which they creating policy for regulators to administer. Any proposed form of regulation should be subject to a context based cost benefit assessment, be pragmatic and fit for purpose.

GLOSSARY OF TERMS

Access	The right to use the infrastructure service owned and/or operated by another party.
Access price	A price/charge paid in return for access to an infrastructure service.
Access Agreement	A standard (template) agreement between an access provider and an access seeker that sets out the contractual terms and conditions of access. Provides a starting point for negotiations between the parties or can be adopted 'off the shelf'. Once signed becomes contractual.
Access undertaking	Also called access arrangements — they set out the process and protocols and information for facilitating the negotiation of access to a service. It includes the access agreement.
Access provider	A provider of a declared service or service covered by an access undertaking.
Access regime	The overarching legislative framework for access for example Part IIIA of the Competition & Consumer Act or the Victorian Rail Access Regime as contained in the *Rail Management Act*).
Cost of service regulation	A regulatory methodology whereby the costs associated with supplying the regulated service are estimated then a tariff structure set to recover the (efficient) costs from users of the service. Sometimes also referred to as the building block method.

National Access Regime	Part IIIA of the *Competition and Consumer Act 2010.* The terms National Access Regime and Part IIIA are used interchangeably in this submission.
Non-price matters	Non-price matters of access include certain information that an access provider must make available to persons seeking access, such as information regarding capacity of the service, protocols and procedures regarding the governance and provision of access, negotiating processes, interconnection and capacity expansions provisions.
Price matters	Matters relating to how much an access seeker should pay to use (access) the service. Traditionally access pricing has been determined via a cost of service approach and includes tariff setting.

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1. Markets, competition and Hilmer — some basics

The starting point to understanding any form of regulation whether it is access regulation or otherwise are markets and competition.

Markets

Markets are processes, systems, institutions and procedures by which individuals and businesses exchange within and trade, with price representing the value of the good or service traded. The logic of the market is simple — the more people want or demand a good or service then the more they will be willing to pay for it; and the higher price that consumers are willing to pay sends a signal to firms to produce and supply more of the good or service in question. However, the more expensive a good or service becomes the more people look for alternatives— enter the role of competition.

Competition

Competition is a *dynamic* process that centres on the active efforts of firms to keep ahead and seek profits by reducing costs, developing new products and enhancing the quality of their goods and services. It is a process that forces businesses to offer "more for less" by improving quality and/or lowering prices. At the broad level, competition also helps to ensure that the community's scarce resources are used in the most valuable way now and through time.

So why do economists promote the merits of competition? Because competition *improves the efficiency* with which resources are used. This is crucial because improvements in efficiency and productivity are one of the keys to increasing the welfare of society, that is, our living standards.

Competition does this by:

- focusing firms on keeping ahead by reducing costs (called productive efficiency in economics);
- encouraging firms to allocate resources to produce what is demanded or sought by consumers (referred to as allocative efficiency); and
- providing incentives for firms to invest and innovate in order to create new products and improve services so that they can capture more business (what economists call dynamic efficiency).

1.1 The objective of efficiency

It is typically argued that by focusing on promoting or improving efficiency that this will lead to the promotion of the long term interests of consumers. It is also argued that by focussing on the objective of efficiency[1], the regulator can avoid the need to make value judgements about distribution and equity.[2]

The concept of efficiency however has increasingly been questioned in the context of utility regulation. For example, the recent Stage Two Expert Panel report "*Review of the Limited Merits Review Regime"* (RLMRR) for electricity and gas networks states that: [3]

> *"….there are multiple definitions of the concept of efficiency and, at least in relation to the definitions and measurements usually adopted for practical policymaking purposes; it is not the case that higher efficiency* ***necessarily*** *promotes the long-term interests of consumers."* [4]

The panel go on to say:

> *"…just as effective competition has been defined as ' competition that works well in the long terms interests of consumers,' so effective regulation can be defined as 'regulation that works well for the long terms interests of consumers'. In both cases, there is an intentional, distributional tilt in public policy. This distributional tilt is common to competition and regulatory policies around the world."*[3]
>
> *…regulators and NSPs alike should not put their heads in the sand, ostrich like, and pretend that they are only required to think about efficiency. In reality, efficiency is more likely to be advanced if those involved think early and think clearly about distributional effects and how they can be addressed, since in that case politicians are likely to be presented with solutions rather than problems by the regulatory system."* [5]

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[1] Typically by maximising consumer surplus (i.e. the difference between the value obtained and the actual price paid for the good or service) and producer surplus (i.e. the price received by the producer less the costs involved in producing the good or service).

[2] It is clear that a substantial increase in a regulated price for utility services does have distributional implications. However, elected Governments are best placed to make judgements and decisions on distributional and equity issues given that have the policy levers (taxes and expenditures) to address these matters.

[3] Review of the Limited Merits Review Regime (RLMRR): Stage two report by Professor George Yarrow, Michael Egan and Dr John Tamblyn, 30 September 2012 p.26.

[4] The panel give a good example – that is, where a monopolist that practices perfect price discrimination produces outcomes that are more efficient than those of (a) non-discriminating monopoly, but which are much less favourable to consumers' interests in the long term as well as the short term. More 'total economic benefit' is created by the efficiency of price discrimination, but it is all captured by owners while consumers derive little or no benefit from trading in the relevant market p.26.

[5] Review of the Limited Merits Review Regime: Stage two report by Professor George Yarrow, Michael Egan and Dr John Tamblyn, 30 September 2012 p.65.

The expert panel's comments do raise some interesting points about what it is regulators should focus on and what objectives are relevant and does open up, at least to my mind, the old 'positive' versus 'normative' debate in economics.[6] As many *practitioners* of economics understand, economics is not value free. That is, the application of the 'positive' science of economics to real public policy problems is a 'normative' issue.[7] While regulators generally look to promote the long term interests of consumers through focusing on efficiency, being conscious of and at least understanding the impact those assessments may have in equity and distributional sense can add to the robustness and practicality of the decisions.

1.2 Objects clauses

While the RLMRR expert panel suggests that there has been too little attention to the long term interests of consumers in past merits reviews, the issues raised are relevant for the current review of the National Access Regime and objectives of regulation more broadly.

The objects clause in the National Access Regime (Part IIIA) is different to the objects clauses in access regimes for electricity and gas. In the energy regimes, the objective is explicitly directed towards the long-term interests of consumers and end users. For example, the national electricity objective, as stated in the National Electricity Law is:

> *"To promote the efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, safety, reliability and security of supply of electricity; and the ability, safety and security of the national electricity system."*

[6] Positive economics is the branch of economics that concerns the description and explanation of economic phenomena. It focuses on facts and cause-and-effect relationships and includes the development and testing of economics theories. Normative economics is that part of economics that expresses value judgments (normative judgments) about economic fairness or what the economy ought to be like or what the goals of public policy ought to be.

[7] The distinction between the positive and the normative is usually traced to David Hume, who believed that there is a watertight distinction to be made between the realm of facts and the realm of values. This is obviously complete nonsense; as the Nobel Prize willing economist Gunnar Myrdal argued: "*the implicit belief in the existence of a body of scientific knowledge acquired independently of all valuations is naïve empiricism. Facts do not organize themselves into concepts and theories just by being looked at; indeed, except within the framework of concepts and theories, there are no scientific facts but only chaos. There is an inescapable a priori element in all scientific work. Questions must be asked before answers can be given. The questions are all expressions of our interest in the world; they are at bottom valuations. Valuations are thus necessarily involved already at the stage when we observe facts and carry on theoretical analysis and not only at the stage when we draw political inferences from facts and valuations.* " (Gunnar Myrdal (1953), The Political Element in the Development of Economic Theory).

Whereas the key objective in the National Access Regime is:

(1) to promote the economically efficient operation of, use of and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets; and

(2) provide a framework and guiding principles to encourage a consistent approach to access regulation in each industry.

The debate about objectives and in particular whether:

- economic efficiency should be the main objective of Part IIIA; or
- the Part IIIA objective should have an objective of "*promoting the long term interests of consumers*"; or
- the long term interests of consumers is the outcome of actions that promote economic efficiency[8],

are important questions that should be further explored as part of the Productivity Commission's review and within economic regulation more general.[9]

1.3 The Hilmer Report

The benefits of competition were indeed the basis for many if not all the recommendations made in 1993 by the National Competition Policy Report by the Independent Committee of Inquiry (known as the Hilmer report). The Hilmer report stated:

> *"Competition offers the promise of lower price and improved choice for consumers and greater efficiency, higher economic growth and increased employment opportunities for the economy as a whole. For Australia to prosper as a nation, and maintain and improve living standards and opportunities for its people, it must improve the productivity and international competitiveness of its firms and institutions".*

[8] Of note is another expert panel report, *The Expert Panel on Energy Access Pricing Report to the Ministerial Council on Energy* (April 2006) which argues that the achievement of efficiency in an economic sense will maximise the long term interests of consumers.

[9] Paul Kerin (see *Network,* Issue 43 March 2012) argues State economic regulators are faced with too many objectives and legislators should narrow down the number of objectives that they assign to regulators. Kerin argues the objectives of State and Territory regulators should be reformulated and have a single simple objective namely economic efficiency. Stephen King at his presentation to the 2012 ACCC Regulatory Conference also touched on the objectives of regulators arguing: "the first objective of the regulator should be to work out how to get out of the way of competition…only if competition is inappropriate should the regulators intervene in a limited way".

The Hilmer report noted that sheltering industries from competition had impaired Australia's productivity and thus reduced Australia's living standards.[10] Hilmer also recognised that:

> *"competition policy is not about the pursuit of competition per se. Rather, it seeks to facilitate effective competition to promote efficiency and economic growth while accommodating situations where competition does not achieve efficiency or conflicts with other social objectives".*[11]

This recognition is often forgotten by those who seek to argue competition is an ideology and should be introduced regardless of context or circumstance.

Market failure

However, in some industries, markets do not work and competition is not feasible giving rise to market failure and an *a priori role* for government. As every economist starting out is taught the mere existence of market failure is not sufficient by itself to warrant regulation. Rather the costs of any proposed regulation or existing regulatory regime need to be weighed against the potential benefits that may flow from regulation as regulatory failure can be just as damaging as market failure. Only where the benefits of regulating outweigh the costs, should regulation proceed because government (intervention) failure can be just as bad if not worse than any market failure.

Market failure is common in infrastructure industries, for example, rail and ports whereby it is unlikely to be profitable or efficient for more than one firm to compete by building its own infrastructure (i.e. those that cannot be duplicated economically). Such industries are said to be monopolies or more precisely, natural monopolies.[12]

The great economist (and philosopher) John Stuart Mill was one of the first to use the term 'natural' monopoly referring to the natural or inherent features of such industries, namely their large capital costs which give rise to economies of scale and scope as opposed to artificial monopolies created by some form of government mandate or legislation.

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[10] The Hilmer Report recommendations were accepted by CoAG in February 1994. In April 1995 all State and Territory Governments along with the Commonwealth signed the *Competition Principles Agreement* (CPA) which set out the road map for implementing the recommendations. Two other agreements were also signed namely the *Conduct Code Agreement* and the *Agreement to Implement National Competition Policy and Related Reforms* with the former agreement requiring States and Territories to pass legislation in their own jurisdiction to implement competition reforms whereas the latter agreement provided tranche payments from the Commonwealth to the States based on progress in implementing competition reforms. It was argued that while the Commonwealth may see much of the benefits from competition policy they would not incur much of the costs – hence the tranche payments (inducements) to States.

[11] See page xvi of the Hilmer Report.

[12] Technically, a natural monopoly refers to a technology and not a firm and exists if a cost function is subadditive – that is, for a given level of quantity or output, any division of that output among two or more firms results in greater costs of production than if one firm produced that output.

In the absence of any threat of competition from substitute services, an incumbent infrastructure provider may enjoy substantial market power. Market power allows firms to engage in monopolising behaviour such as charging excessive prices and/or restricting supply thus leading to economic inefficiency. The inefficiency results from the poor resource use due to excessive pricing and constrained supply.

The exercise of market power in infrastructure services can be particularly damaging as these providers may supply key inputs or essential services to other firms. For example, firms must buy electricity to produce their products, communications services to communicate with their suppliers and customers, and in the case of railways, purchase track capacity in order to compete and move products in the freight haulage market. Where such services are priced excessively or restricted, this will affect related firms production costs and competitiveness and ultimately prices paid by consumers.

Hilmer's rationale for access regulation

In relation to access, Hilmer highlighted that introducing competition in some markets requires competitors to be assured of access to certain infrastructure that cannot be duplicated economically — referred to as "essential facilities". [13]

Consequently, Hilmer recommended that a legal but generic access regime (potentially applicable to any sector of the economy) be established to provide a mechanism for individuals and firms to share the use of certain infrastructure services on fair and reasonable terms. As King (1997) notes, the Hilmer Report approached the essential facility problem by recommending that where a facility produces a service which involves natural monopoly technology and is essential to competition in another market, then the owner of the facility must allow access to that service.[14] The National Access Regime was subsequently established in 1995 through Part IIIA of the *Trade Practices Act* (now the *Competition and Consumer Act*).

2. Rationale and objectives of access regulation

Rationale for access regulation

The rationale for any regulation is to influence and/or change behaviour. Access regulation is no different. Access regulation aims to change a monopolist's or access provider's behaviour by ensuring that they negotiate with third parties (i.e. access seekers) to share the use of certain infrastructure services subject (i.e. declared) for access.

In the event the parties cannot agree the access terms and conditions independent arbitration exists to resolve any dispute. The terms and conditions of access include the price aspects (i.e. the

[13] Hilmer report. xxxi. An essential facility involves natural monopoly technology and the good or service produced by the facility must be an input into further production.

[14] King, S. (1997), Pricing for Infrastructure Access, *Competition and Consumer Law Journal,* p.204.

access price paid by an access seeker to the access provider to use the service) and the non-price aspects (i.e. processes and procedures) around how access is provided.

Objectives of access regulation

In terms of objectives, access regulation can be said to have two main objectives:

(i) to promote competition in related markets— by opening up access to certain infrastructure facilities such as electricity grids, ports and railway networks to promote competition in a related market. For example, facilitating access to rail tracks may promote competition in a related market such as agricultural or mineral production or freight haulage. The alternative but more costly and less efficient option would be for firms in related markets to build their own railway network.[15]

(ii) to prevent the misuse of market power (both price and non-price) by providers of facilities — an infrastructure provider could potentially deny access, charge excessive prices or otherwise impose unfair terms and conditions (i.e. non-price aspects) to businesses wishing to access its infrastructure. This could harm competition in related markets and adversely affect consumers in end markets.

The above issues may be exacerbated when the owner or access provider of the service is vertically integrated - that is, it competes in a related market or business. For example, in the case of rail, where a business not only operates a rail track (below rail) but also competes in the freight haulage market (i.e. above rail market). This is because a vertically integrated provider could potentially offer itself preferential access prices or terms and conditions, or even deny access, to other competing access seekers. The prospect of such behaviour may deter other businesses from entering related markets and thereby limit competition.

2.1 Overlap of objectives — an important issue

Certain regulatory processes, for example, constraining monopoly pricing or the monitoring of market power can and does exist quite independently from access regulation.[16] However, in the case of access regulation, monopoly (access) pricing issues are often central to the objective of access regulation.

This is an important point as there is a tendency by policy makers and access regulators to only see market power issues through the lens of price. However, non-price issues (that is, the terms, conditions and processes upon which access is ultimately provided) can be crucial to ensuring fair and reasonable access. In the access context then, market power includes not only the ability to

[15] Suffice to say that access should not be imposed in circumstances where it is merely convenient. Only where necessary to promote the efficient use of infrastructure.

[16] For example, the independent setting of water prices in Victoria to prevent monopoly pricing and poor service quality.

charge high access prices above the efficient cost of supply but it can also manifest itself in the bargaining power that an access provider or monopolist may possess to negotiate the non-price terms and condition of access. This bargaining power issue is further addressed in section 7 of this submission.

3. Is there still a need for a National Access Regime?

To answer this question, the Productivity Commission (PC) should consider (and quantify where possible) the costs and benefits of the current regime.

Benefits and Costs

Benefits include the curbing of market power, promoting competition in upstream or downstream markets and increased innovation and other 'dynamic efficiency' gains. While the costs would involve development/implementation costs for Government in setting up the initial regime (often these are one off costs) and administration costs (which would be on-going), costs would also include compliance costs for business associated with complying with the regime.

Importantly the PC should look to observed market behaviour (i.e. conduct) in recent years, and in particular, the entry of new competitors into related markets where access has been provided. The case of rail comes to mind, for example in Victoria and in Queensland whereby access *has facilitated* competition in the above rail market via entry of various above rail operators.

In presenting the benefits and costs however the PC should take care in how they attribute the benefits and the costs. As Allan Fels said writing on access in 2001:

> *The benefits of reform can be indicated by the extent to which retail prices have fallen, service quality has improved, consumer choice has increased and new entry or increased competition has emerged. Indicators of the transparency of regulatory processes and the degree of regulatory accountability might also be considered. Of course, these benefits are associated with the reform process as a whole, not just the access regime* [17]

Perhaps one of the biggest benefits of Part IIIA has been that it has spurred the development of State based access regimes given the threat of potential declaration through Part IIIA.[18] Many industry specific access regimes have emerged since the introduction of Part IIIA, many which have been designed to meet the various contexts and circumstances of the industry being regulated. These regimes include, the Commonwealth telecommunications access regime (Part XIC), electricity and gas codes (now law), and State based access regimes for example the Victorian Rail Access Regime and State based generic access regimes for example Part 5 *Queensland Competition Authority Act* (QCA Act) and Part 3A of the *Essential Services Commission Act*.

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[17] Alan Fels, *"Regulating access to essential facilities," Agenda, Volume 8, Number 3, 2001, page 201.*

[18] One could even argue that Part IIIA in many ways is responsible for the creation of the independent State regulators and the professional and impartial approach to State economic regulation that exists today. After all, much of energy (electricity and gas) economic regulation has its origins in the concepts of access.

The PC could review aspects of each regime to ascertain what aspects work best (see section 3.1 below) to identify what improvements could be made to the current National Access Regime.

3.1 Some features of access regimes that work well

A posteriori, the discussion below sets out a number of features of current access regimes which appear to work well along with some ideas for potential reforms to Part IIIA.

 # Ministerial and regulation based declarations

Various State governments approach to the coverage (declaration) issue appears to work more effectively than the Part IIIA approach.[19] In some State access regimes, for example the *Queensland Competition Authority Act* and Victorian Rail Access Regime, the coverage question is determined by regulation and Ministerial decision. The recent Commonwealth wheat access undertakings may also be a relevant model whereby instead of going through the declaration process, the Commonwealth required that in order to be accredited, vertically integrated handlers (ie those who operated port facilities and also exported wheat) must submit an access undertaking and have it approved by the ACCC.

Reform options

⇨ Two forms of declaration could be considered:

(i) *Regulation based declarations* — certain infrastructure services could be made subject to access immediately via Ministerial decision through regulation.[20] By reducing the number of steps and or bodies involved in the coverage decision this would increase certainty and streamline the coverage process. This option may work best or be applied only where the infrastructure is Government owned. This option may also be more aligned with the original thinking of the Hilmer report whereby most essential facilities identified by Hilmer were publicly owned.[21]

(ii) *Threshold based coverage* — to apply to privately owned infrastructure and applied (sparingly) once certain criteria are met but with an obligation that once declared an undertaking must be developed by the access provider and approved by the relevant regulator. A revised set of appropriate criteria could be developed to streamline this process. It would seem

[19] The recent amendments to the Commonwealth telecommunications access regime also provide for the ACCC to deem which services are to be declared. In Part XIC there is no appeal from an arbitration decision of the ACCC to the Tribunal.

[20] Alternatively, the NCC could be the final umpire, with the Ministerial step of accepting or rejecting the NCC's recommendation removed.

[21] See p.239 of the Hilmer report.

timely, given the High Court's recent ruling and interpretation of declaration criterion (b) namely, 'uneconomical for anyone to develop another facility' – (the High Court noting that it should be interpreted through the 'private profitability test' that is, whether it would be profitable for a second facility to be built rather than through the 'natural monopoly test' or the 'net social benefit test') that a review of these criteria be undertaken.[22]

 # No merits appeal

The declaration model under Part IIIA has proven to be very long and time consuming mainly due to the rehearing and appeal process. The decision to declare (cover a service) for access by the Minister or approve an access undertaking by the regulator should only be appealable from a judicial point of view. No merits or limited merits review should be provided for.

Reform options

- ⇨ Merits and or limited merits review should be removed. The process by which the NCC and regulators adopt in coming to their decisions are both rigorous and transparent with extensive consultation. It seems unnecessary to open that up to what is effectively 'cherry picking' and 'gaming' behaviour (see section 3.2).

 # Adopt a 'receive /respond/determine' model for access undertaking assessments.

The receive/respond/determine model which is used in some State access regimes whereby regulators receive a proposal and then *respond* with the matters it believes (after extensive consideration and consultation) need to be addressed in order for the proposal to be approved. If the access provider fails to comply, the regulator can itself *determine* what should be included in the undertaking.

Reform options

- ⇨ Part IIIA is based on a 'accept or reject' model whereby the access provider submits a proposal to the regulator and the regulator is required to assess the access provider's proposal against the relevant criteria and to decide first whether to accept the proposal. Under this model, the task of the regulator is to assess whether a proposal meets the criteria in an overall sense, not whether the proposal is better or a more preferable set of arrangements.

- ⇨ Reforming the 'accept or reject' aspects of Part IIIA and replacing it with the receive/respond/determine model allows the regulator (through its extensive and transparent consultation process), to detail what it believes to be the preferable decision

[22] The High Court ruling does raise issues of consistency though at least from a policy perspective and the objective of access regulation in the first place, that is to say - from what perspective do we regulate – the public interest or the private interest? For example, something can be economically viable (efficient from society's point of view) but not necessarily commercially viable (ie privately profitable) and vice versa.

(and call for submissions on this) thus minimising the likelihood or need for potential merits appeals.

 # Timelines

Clock-stopper provisions — specifically, the clock is stopped where the regulator either publishes a notice inviting public submissions or gives a notice requesting information about an application. The 'stop the clock' provisions within Part IIIA and in State access regimes appear to work well.

Clock-stopper provisions provide both the regulator and the parties some flexibility in dealing with issues that require further consideration. In the past, where no 'stop the clock' provisions existed, regulated entities would sometimes delay the decision making process by not providing the regulator with the information it required or providing inadequate or incomplete information. As a result, this delay tactic would eat into the formal assessment time period thus encouraging the regulated business to cry foul that the regulator has taken too long to make a decision (see section 6.1).

 # Access undertakings, access agreements and guidelines help facilitate commercial negotiation

Access undertakings should be the preferred method of access as they provide parameters and terms and conditions for negotiating access. Standard access agreements (i.e. template contracts) provide a basis upon which contracts can be struck or negotiated thus assisting commercial negotiation and reducing the time for seeking access.

Reform options

- ⇨ Voluntary undertakings should be encouraged and or become a mandatory complement to when a service is declared. Commercial negotiation is fine, but some parameters may help its success. Parties involved in potential access negotiations must have some idea of the terms and conditions they would be willing to agree access on. These terms should be embodied in an undertaking and included at the time a declaration application is made.

- ⇨ Standard access agreements or other guidelines which aid the commercial negotiation process should be considered and published.

3.2 Can the courts do a better job?

It is also worth considering the effects (costs and benefits) of not having a National Access Regime and whether industry specific legislation and/or the general provisions regarding the abuse of market power (section 46) of the *Competition and Consumer Act* can effectively deal with the 'essential facility problem' adequately.

Clearly, in 1993, the Hilmer report argued that the general provision of s.46 of the then *Trade Practices Act 1974* was not sufficient on its own to address the essential facility problem. This was

also New Zealand's experience in the 1990s in relation to the Clear Communications case.[23] As Pengilleny[24] states:

> *"…not only did the New Zealand High Court, the New Zealand High Court of Appeal and the Privy Council all come up with different access formulae but also each court clearly demonstrated its incapacity to translate general access principles into specific price formulae. The Privy Council, the final court of appeal, could only urge the parties to return to the negotiating table – hardly a solution to the problem at hand…."*

This case, while now dated, demonstrates the major difficulties with leaving the enforcement of access regimes to courts rather than to regulatory agencies.

3.3 Appeals

Related to this issue is the appeal process under Part IIIA. There are two forms of review of decisions made under Part IIIA namely:

(i) the Tribunal — which undertakes merits reviews of ministerial and ACCC decisions; and

(ii) the court system — where matters of law relating to decisions are reviewable by the Federal Court, and subsequent appeals can be submitted to the High Court. In otherwords, while Tribunal decisions cannot be appealed they are subject to judicial review, that is, an application may be made to the Federal court to determine whether the Tribunal made its decisions in accordance with the law.

There are important distinctions between these two forms of review. Generally, merits reviews are based on whether the 'correct or preferable' decision has been made whereas judicial review considers whether the decision maker used the correct legal reasoning or followed the correct legal procedures.[25]

Given the long running number of re-hearings and legal appeals and decisions made by various courts in relation to the declaration aspects of Part IIIA, one could be forgiven for thinking that the courts *would not* do a better job.

A key issue here is — do we want a system that provides a framework such that access decisions are ultimately decided by the courts irrespective of the decisions made by the independent regulatory umpires namely the NCC, ACCC and State economic regulators?

While appeal mechanisms such as merits and judicial review are important elements of natural justice, as the former head of the Australian Energy Regulator (Steve Edwell) stated:

> *I can appreciate why industry is strongly supportive of merits review; they see it as providing more certainty. It also provides them a "second innings." Or in tennis parlance,*

[23] Telecom Corporation of New Zealand Ltd v Clear Communications Ltd (1994)
[24] W. Pengilley. 'Access to essential facilities: a unique antitrust experiment in Australia' *The Antitrust Bulletin,* Summer (1998).
[25] National Access Regime Issues Paper, Productivity Commission, November 2012, p .25.

> *"replay the set with a different umpire". My essential message on merits review is that judicial review is entirely appropriate but that the policy makers need to carefully consider the costs and benefits of broader merits review.* [26]

Mark Pearson (Deputy CEO of Regulatory Affairs at the ACCC) writes:

> "*From my viewpoint, the ability for businesses to judicially cherry pick through the regulator's decisions coupled with the regulator carrying the burden of proof, creates the very real risk that overall outcomes are likely to be too weighted in favour of the regulated entities."* [27]

Perhaps it's time to reform the appeal framework and review its incentive properties to create an environment where the umpires decisions are accepted. Otherwise, why have the umpires in the first place?

The RLMRR expert panel cite:

> *"(tribunal based) merits review is unlikely to be appropriate for major decisions that are made over an extended time period, involve an extensive inquiry and consultation process, have implications for a wide range of different interests groups and involve a significant degree of policy making".*[28]

Although the panel clearly states that the purpose of merits review is to assess whether the decision made is *the preferable decision* when a *range of decisions were available,*[29] I would argue providing the assessment process undertaken by the regulatory umpire was extensive and consultative and transparent (which in general they are), there should be little need for merits reviews.

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[26] Steve *Edwell,* Chairman of the AER - ESAA Residential School Lecture University of New South Wales *'The National Regulatory Regime'* (Monday 30 January 2006).

[27] Mark Pearson, 'Exploring the latest issues in regulation', Regulatory Reform Conference, Melbourne 12 April 2011, p.15.

[28] Review of the limited merits review regime (RLMRR): Stage two report by Professor George Yarrow, Michael Egan, Dr John Tamblyn, (30 September 2012) p.5. quoting the Administrative Review Council of 1999 publication of '*What decisions should be subject to merits review?*'

[29] It is possible, as the expert panel state, that a decision can be made in accordance with the law and the rules yet still not be a preferred decisions (p.31) 'Review of the limited merits review regime: Stage two report' by Professor George Yarrow, Michael Egan, Dr John Tamblyn (30 September 2012).

4. Ex-ante and Ex-post access regimes

Understanding the difference and implications of ex-ante and ex-post approaches is helpful in providing insights into the current National Access Regime and any future recommendations regarding reforming the regime.

In general, access regimes may be conceptualised as either ex-ante or ex-post regimes.

- An *ex-ante access regime* is where the terms and conditions of access are prescribed up front for example in legislation or in regulatory instruments.

- An *ex-post access regime* relies on minimal prescription up-front but requires the terms and conditions of access to be either negotiated between the access seeker and access provider or determined via an arbitration in the event of a access dispute. These types of regimes are often referred to as the 'negotiate/arbitrate' models.

4.1 Advantages and disadvantages of ex-post and ex-ante regimes

The main advantage of **ex-ante models** is that both the access seeker and access provider are provided with *greater certainty* upfront as to the basis upon which access will be provided. The disadvantage however is that the access provider may need to conform to certain regulatory requirements and a regulatory process even when there may be little likelihood of an access dispute.

In terms of the **ex-post model,** the main advantage is that the access provider is not subject to regulatory intervention unless and until the access seeker is unable to obtain access on acceptable terms. However, under this approach, access seekers have *greater uncertainty* since the access seeker must independently negotiate its own terms and conditions of access without an understanding of how a regulator or arbitrator may resolve any potential disputes. Also the delay or length of negotiations and the time taken to resolve disputes may further delay access or contribute to the uncertainty. These factors may actually deter access seekers to seek access and potentially result in more disputes.

In practice a mixture of the ex-ante and ex-post approaches is common – the challenge is striking the appropriate balance between the ex-ante (prescriptive) and ex-post (generic) regimes. In general, where the concerns about market power are minor, less ex-ante prescription up front is needed regarding terms and conditions of access and how prices are set. In this case, what is needed is a clear framework that facilitates the negotiation of access, particularly in relation to non-price issues.

4.2 The difference between access undertakings and declarations

Access undertakings set out the terms and conditions (both price and non-price) upon which an owner or operator of a service will provide access to third parties. Access undertakings provide an alternative to the declaration route. Under the declaration route under Part IIIA,a service must meet a number of tests before the National Competition Council (NCC) can recommend to the relevant minister that a service be declared.[30]

Under Part IIIA, access undertakings are submitted to the ACCC by the owner or operator of the service for assessment by the ACCC against a number of criteria. If the undertaking is accepted, it then forms the basis upon which the access provider and the access seeker negotiate access and the service cannot be declared. Fall back arbitration exists where parties cannot reach agreement and a dispute arises.

Using the ex-ante and ex-post distinction above, it would appear the declaration aspect of Part IIIA is more ex-post in nature whereas the undertaking avenue more to ex-ante. That is to say, access undertakings tend to set out up-front all the terms and conditions of access both price related and non–price related such that the ground rules and/ or boundaries for negotiating access are clear to all parties. Whereas the declaration avenue is more ex-post in nature such that an arbitrator or as we have seen in practice, the courts, will resolve access disputes after they arise.

The current delays under the declaration process of the National Access Regime relate to *just getting to a point where the access seeker has the right negotiate access* versus actually getting access. It would appear that based on the time it has taken and the number of appeals that have faced the declaration avenue of Part IIIA, one could argue that this aspect of the National Access Regime is not working as well as perhaps it could. Simply requiring a facility owner to provide access (and providing a right to an access seeker to negotiate access) is unlikely to result in access. Other complementary measures to facilitate the negotiation are required.

On the other hand, the undertaking aspects of Part IIIA and at the State level (see section 5 below), have on balance, appeared to work quite well. For example, the 2002 and 2008 Australian Rail Track Corporation (ARTC) Interstate Access Undertakings and Hunter Valley Coal Network undertakings, the Commonwealth wheat access undertakings (which resulted in over twenty traders entering the market for export wheat)[31]and various State approved access undertakings including Queensland Rail's access undertaking, the Dalrymple Coal Access Undertaking[32], Victoria's rail access arrangements.

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[30]Once a service is declared, an access seeker has legislative right (backed up by arbitration if an access dispute arises) to negotiate access to the service with the access provider.

[31] Rod Sims, *'Opportunities and challenges with infrastructure reform'* Speech to IPART 20th anniversary conference (10 August 2012),p.9. The Commonwealth Wheat Access Undertakings were mostly about non-price aspects of access.

[32] The Dalrymple Bay Coal Terminal access undertaking assessment process has been wrongly characterised as a failure of economic regulation in general whereby critics cite the time it took for the regulator to make a decision and the queuing of ships waiting off the coast of Mackay to be loaded with coal. The main reason for queues of ships at DBCT was that the providers of the relevant infrastructure services underestimated the upsurge in the demand (for coal) and their services.

5. State based access regimes versus the National Access Regime

Under the National Access Regime, there is a distinction between the 'coverage role' that is the question of what should be declared for access (which is currently made by the NCCC), and the 'regulatory role' of administering access regimes and resolving access disputes (which is carried out by the (ACCC)).[33] As mentioned above, declaration and undertakings are *alternative* mechanisms to provide users with access to the services of a facility.

However these roles are not necessarily distinct at the State level. For example, in Victoria, in the case of rail, the Governor in Council (on recommendation of the Minister) may declare a service to be a declared service for access. Once declared, the access provider of that service must submit an access undertaking[34] to the Victorian independent economic regulator (the Essential Services Commission) for assessment and approval. That is, the process of declaration imposes an obligation on the access provider to submit an access undertaking.

5.1 Access Undertakings and access agreements

The purpose of an access undertaking is to facilitate negotiations to get to an access agreement i.e. a commercial contractual arrangement. Access undertakings are often accompanied by pro-forma access contracts (called standard access agreements). An access agreement, once signed by the access seeker and access provider become the binding terms and conditions of access. Even if the legislative access regime itself changes, access contracts struck under an undertaking will stay in place for the duration of the contract term. Thus, access regimes recognise the primacy of existing contractual agreements providing certainty for investment and minimal regulatory uncertainty.

The key advantage of access undertakings is that they provide a road map for negotiations and reduce the scope for disputes between access seekers. Moreover, where disputes arise about getting to access, they also provide a greater degree of certainty in resolving disputes as any arbitration or determination made by the regulator must be done in accordance with the approved access undertaking.

At the State level therefore, undertakings and declarations are not necessarily separate and distinct processes. The PC may wish to explore the merits of removing the declaration process of Part IIIA and replace it with a State based approach whereby declarations are in effect decisions made by the Minister accompanied by some rules of the game in the form of an access undertaking.

[33] It should be noted that the ACCC can only resolve access disputes under approved access undertakings. It does not have a role in resolving disputes *once access agreements (ie contracts) have been signed*. These are resolved in accordance with the access contract processes.

[34] called access arrangements in Victoria.

6. Administration of access regimes and the parable of The Cave

Regulators, both State based and Commonwealth based, have come in for heavy criticism regarding the way they administer their economic regulations and access regimes. For example criticisms revolve around whether regulators are tough enough on regulated businesses; whether the consumer interests are given sufficient weight in regulatory decisions; and in particular, the time it takes regulators to assess and make decisions.

As Plato's parable of the cave illustrates, most of humanity is content with mere appearance, the equivalent of the flickering shadows on the wall of the cave. [35] And so it is with such criticisms of regulators – while such criticisms appear true they fail to take account of a number of realities.

6.1 Realities – policy versus regulation

Firstly, regulators do not develop or design the overarching economic regulations and access regimes they administer – rather, this is the realm of the policy makers.

The debate regarding economic regulation needs to move beyond one of the regulator versus the regulated. The real debate needs to be had at the policy level where questions as to why we are regulating in the first place and whether the current regulatory regimes developed by the policy makers are working for the context. As Yarrow et al[36] (2008) argue:

> *"(it) is generally acknowledged in the Courts and in those parts of economic analysis that have avoided the Ricardian Vice[37], the same principles applied in different contexts can lead to quite different implications for economic policy decisions. As Sir Christopher Bellamy has put it, in a lecture on the work of the Competition Appeals Tribunal: 'Context is everything; circumstances alter cases.' Sound policy development is consequently generally grounded in an appreciation of the specifics of the relevant context.*

[35] Plato's parable of The Cave is explained by Nigel Warburton in his book, *Philosophy the Classics* — imagines a cave and prisoners are chained facing its far wall. They've been kept there all their lives and their heads are held fixed so they can't see anything except the wall of the cave. Behind them is a fire and between the fire and their backs is a road. Along the road various people walk casting their shadows on the cave wall. Some of the people carry models (puppets) of animals which also cast shadows. The prisoners inside the cave only ever see the shadows. They believe the shadows are real things because they don't know any better. But in fact they never see real people. Then one day, one of the prisoners is released and allowed to look at the fire. At first he is completely dazzled by the flames but gradually he starts to discern the world around him. Then he is taken out of the Cave into the full light of the sun, which again dazzles him. He slowly begins to realise the poverty of his former life: he had always been satisfied with the world of shadows when behind him lay the brightly lit world in all its richness.

[36] Yarrow, G; Appleyard, T; Decker, C; and Keyworth, T; 'Competition in the Provision of Water Services', (April 2008), *Regulatory Policy Institute*.

[37] The Ricardian Vice refers to the tendency of some economists to make and test theories that aren't troubled by the complexities of reality. It refers to focussing on abstract model-building and mathematical formulas with unrealistic assumptions.

Secondly, administering economic regulation and access regimes is rarely simple in practice. It requires complex economic, legal and financial judgements by the regulator. Moreover, regulators are dependent on other parties for information. For example, the length of time between the lodgement of an access undertaking and the release of a decision can reflect the time needed to gather, review and assess information. Ambit claims are often put forward by both access providers and the potential access seekers (users of the infrastructure) often at polar extremes which further exacerbate the assessment process. Extensive consultation with affected parties and significant information gathering is also required to understand the issues so that decisions can be transparent and appropriately balance the assessment criteria required to be taken into account.

Thirdly, it should be recognised that the degree of uncertainty and length of time it takes to make decisions would appear to be diminishing for example, the Victorian economic regulator completed its access arrangements assessments for three regulated business (ie V/Line, VicTrack and South Dynon) simultaneously within three (3) months. Moreover, economic regulators both at the Commonwealth and at the State level have built up considerable expertise in the area of access and price regulation which over time should assist expedite assessment processes and lead to greater harmonisation of regulatory approaches. [38]

7. Form of regulation – the presumption in favour of light handed regulation

The term 'light handed' is often used to contrast more prescriptive 'heavy handed' regulatory approaches. The term does not itself have a precise meaning and in practice, regulatory frameworks operate on a continuum between prescriptive and light handed. However, light-handed regulation is generally interpreted to mean a form of regulation (see appendix 1):

- where the regulator does not control prices directly
- that emphasises commercial negotiation and information transparency
- involves regulatory intervention through arbitration or dispute resolution where access seekers and providers are unable to agree to the terms and conditions of access.[39]

The Exports Task Force Report[40] recommended and CoAG agreed at its 10 February 2006 meeting (and subsequently in CIRA) on a presumption in favour of commercial negotiation and light handed regulation. Specifically, the exports taskforce recommended that:

[38] It would be possible for regulators to complete their decisions more quickly if a less open, rigorous and transparent process with less consultation was adopted however this is not desirable.

[39] A guide to functions and powers of the NCC under the National Gas Law, The National Competition Council (NCC) August 2008.

[40] *Australia's Export Infrastructure Report to the Prime Minister by the Exports and Infrastructure Taskforce*, May 2005.

'in regulating export oriented infrastructure, the presumption should be that commercial negotiation between users and providers would be the natural starting point, with only light handed regulation when needed, and heavier handed regulation as a last resort'.

7.1 The bias within the presumption

There are two main issues with the presumption in favour of light handed regulation.[41]

Firstly, such a presumption assumes equal bargaining power between access provider and access seeker which, in practice, is often not the case. Where parties enjoy the same degree of market power then it makes sense for them to be left alone to negotiate. However context matters - one cannot simply assume equal bargaining power across the board. Where a monopolist has greater market power, commercial negotiation is not always possible and regulation may be needed to facilitate a competitive outcome. Regulation by negotiation is often characterised as light handed but by itself may not be enough.

Secondly, light handed regulation, while well intentioned in theory can end up being heavy handed regulation in practice if it is poorly designed and not appropriate for the context or so light, that its impact is ineffectual. It is important therefore that when designing regulatory regimes policy makers do not have blanket presumptions but first understand the context in which they are regulating and ensure any proposed regulation be relevant for the context and subject to a cost-benefit assessment to ensure the costs do not outweigh the benefits.

In designing, redesigning or indeed reforming an access regime or any proposed regulation for that matter, it is important to distinguish between the regulatory principles from the administrative processes that are developed and applied to give effect to those principles. There are examples of regulatory regimes that were intended to be light-handed by the policy makers who developed them but in practice turned out otherwise because the process of administering the regulatory principles became increasingly burdensome. Where a regime fails to get the balance right between the ex-ante and ex-post approaches, the regulator may be forced to undertake most (if not all) of the steps involved in a detailed assessment of proposed prices in order to resolve a dispute and make a determination.

[41] To be clear, I am not implying light handed regulation is bad, rather, the point is before any regulation is introduced either light, heavy, or mid-strength, thought should be given to the problem or context that the regulation is supposedly trying to fix and the questions asked – do we understand the context we are proposing to regulate within and is this the right form of regulation (if any)?

Appendix 1 — Forms of Economic Regulation

There are several types of economic regulation which are generally presented along a spectrum of light handed through to heavy handed.

Heavy handed forms of economic regulation typically are highly prescribed and include some form of price control whereas light-handed forms of regulation generally involve no direct price control but rather some kind of monitoring or notification role. How heavy or light handed a form of regulation should be is usually determined by the context and degree of market power and the scope to misuse that power.

The following are the most common forms of economic regulation:

i) **Formal price/revenue control (cost of service regulation)**— this form of regulation is aimed at controlling the prices charged and revenue collected by monopolists via the regulator capping prices and/or setting the amount of revenue a regulated firm may raise such that it only covers the expected efficient costs associated with providing the regulated service. This form of regulation is based on cost of service regulation.

ii) **Negotiate-arbitrate models or access regulation**— this form of regulation provides customers with a legislated right to negotiate access with a provider of an essential facility so that a business or firm can compete in a related market. For example, a train operator wishing to compete in the market for hauling freight would need access to the rail track. This form of regulation is usually backed up by arbitration where disputes occur or negotiations fail. Negotiation-arbitrate regimes are often supported by some form of access undertaking/arrangement and pricing principles which set out up front the terms and conditions for negotiating access. Can be light handed but often heavy handed in practice.

iii) **Monitoring regimes** — this form of regulation includes price monitoring, public reporting and service quality regimes. This form of regulation requires regulated firms to disclose certain business and financial information to facilitate the monitoring of prices, service quality and performance standards. Generally, this form of regulation is appropriate where the market is contestable, or in transition from conditions of substantial market power to more competitive conditions.

iv) **Index based regulation** — combines the initial cost base and subsequent escalation of prices in line with a broad based price index. This approach is generally less information intensive than cost of service regulation. It generally relies on existing cost and price levels and escalates in line with an index such as CPI or an industry-wide price index.

v) **Pricing principles or general guidelines** – used where flexibility or high level guidance is needed and a generic application warranted.