Chapter 4 Access and utilisation

Introduction

4.1 This chapter considers the third item in the terms of reference:

> The opportunities to maximise access to, and utilisation of, the rail network.

4.2 As indicated in earlier chapters, the rail industry in Australia is in the process of transformation. Reforms introduced under the National Competition Policy (1995) encouraged the restructure and rationalisation of government owned rail bodies, and in some cases, the separation of rail functions. It also provided opportunities, especially through privatisation, for greater participation by the private sector in the rail industry.

4.3 These developments have, in turn, focused greater attention on the need to facilitate improved access to and utilisation of rail infrastructure. To date, third party access to rail infrastructure has largely occurred on an ad hoc basis. A number of private operators obtained access to publicly owned rail infrastructure through agency based access arrangements. In the absence of a legislative program specifically addressing rail access, rail users have increasingly looked to the new provisions of Part IIIA of the *Trade Practices Act 1974* (TPA). Part IIIA provides a mechanism for third party access to essential infrastructure services, and also for owners of infrastructure to certify access regimes. A number of applications have been made to the National Competition Council to obtain the right to negotiate access to rail infrastructure.

4.4 Improving access to rail infrastructure requires more than providing third parties with legislated rights to use that infrastructure. A number of other impediments, including the lack of competitive neutrality between road and rail, existing regulatory requirements, the allocation and availability of pathways, and physical access to infrastructure, also need to be addressed.

4.5 This chapter considers the existing mechanisms for access to rail infrastructure at the Commonwealth and State levels. In particular, it focuses on the national access regime provided by Part IIIA and its applicability to rail infrastructure. This chapter also considers critical aspects of access to rail, namely pricing and non-price factors such as accreditation, operating standards and procedural compliance, path availability and allocation, and competitive neutrality. Finally, this chapter looks at utilisation of rail infrastructure, and in particular the scope for increasing utilisation.

National access perspective

4.6 Application of competition principles, including third party access to the Australian rail industry is still in its infancy. Emphasis on improved access has been driven by the adoption of competition reforms by Commonwealth, State and Territory governments over the past five years.

Hilmer reforms

4.7 In 1993 a National Competition Policy Committee (chaired by Professor Fred Hilmer) was established to review the operation and effectiveness of Australian competition laws. In the same year the Hilmer committee presented a report which advocated six major policy changes. These changes included:

- extending the reach of the *Trade Practices Act 1974* to unincorporated businesses and State and Territory government businesses so that the competitive conduct rules contained in Part IV apply to all business activity in Australia;
- providing for third party access to nationally significant infrastructure;
- introduction of competitive neutrality principles to provide equal treatment for government and private businesses; and
- the restructuring of public sector monopoly businesses to increase competition (Swan 1997, p. 2).

4.8 In response to the Hilmer report, the Council of Australian Governments (COAG) agreed to implement a package of reform measures, known subsequently as the National Competition Policy. This package included many of the Hilmer proposals but also incorporated previous reform commitments in the areas of electricity, gas, water and road transport. Three intergovernmental agreements underpin the National Competition Policy:

- the Competition Principles Agreement 1995,
- the Conduct Code Agreement 1995, and
- the Agreement to Implement the National Competition Policy and Related Reforms 1995.

4.9 Much of the National Competition Policy package remains in the early stage of implementation. For governments to receive competition payments from the Commonwealth, the reforms contained in the Competition Principles Agreement, as well as the specific COAG infrastructure reform commitments must be implemented. Importantly, rail transport was not identified in the COAG infrastructure reform package to be progressed under the National Competition Policy.

Commonwealth access regime

4.10 As part of the National Competition Policy framework, and in line with the Competition Principles Agreement, the Commonwealth in 1995 established a national access regime under Part IIIA. This regime sets out the conditions under which third parties have a right to access a narrow but important range of infrastructure services, and provides mechanisms to ensure that the terms and conditions of that access are fair and reasonable.

4.11 Part IIIA also sets out the roles and responsibilities of the government bodies which administer the regime, namely the:

- National Competition Council (NCC),
- Australian Competition and Consumer Commission (ACCC), and
- Australian Competition Tribunal.

National Competition Council

4.12 The National Competition Council (NCC) was established in November 1995 (under amendments to the TPA) as an independent review and advisory body for governments at all levels in relation to National Competition Policy issues. It has a number of statutory responsibilities under the TPA, including the provision of :

- recommendations to governments on access to significant infrastructure services; and
- recommendations on whether State and Territory governments should be declared for prices surveillance by the ACCC (NCC 1997a, p. 211).

4.13 Apart from these statutory responsibilities, the three National Competition Policy agreements established a role for the NCC in a number of areas, including assessment of Commonwealth, State and Territory progress in implementing competition policy reforms, and the provision of advice to the Commonwealth on rulings on State or Territory exceptions from the TPA (NCC 1997a, p. 211).

Australian Competition and Consumer Commission

4.14 The Australian Competition and Consumer Commission (ACCC) is an independent statutory authority which seeks to improve competition and efficiency in markets, foster adherence to fair trading practices, promote competitive pricing where possible and restrain price inflation where competition is less than effective (Sub 21, *Submissions* p. 21).

4.15 The ACCC performs a range of functions, including provision of compliance education programs, enforcement of undertakings or litigation, and adjudication on business practices. It also has a number of specific roles in relation to implementation of Part IIIA. These consist of:

- arbitrating access disputes arising out of Part IIIA proceedings,
- registering access contracts, and
- assessing and accepting access undertakings from owners of infrastructure facilities (Sub 21, *Submissions* p. 208).

Australian Competition Tribunal

4.16 The Australian Competition Tribunal, formerly known as the Trade Practices Tribunal, is an appointed panel which deals with applications for review of decisions made by

the ACCC on authorisation and notification. It may also hear appeals on certain decisions made by designated Ministers under Part IIIA (see next section).

Part IIIA access mechanisms

4.17 The national access regime contained in Part IIIA sets out three mechanisms to assist third parties to obtain access to essential infrastructure services. These consist of:

- declaration and negotiation (arbitration)
- certification
- access undertakings.

Declaration and negotiation (arbitration)

4.18 Under this approach, a third party seeking access to a particular infrastructure (or more correctly the service an infrastructure facility provides) can apply to the NCC to have the service declared. If both the NCC and the relevant Commonwealth or State Minister decide to declare the service, concerned parties are then required to try to negotiate terms and conditions of access. If they fail to reach agreement, terms and conditions of access are determined through legally binding arbitration (enforced by the ACCC).

4.19 The crucial first part of this process is, of course, determining whether an infrastructure service is 'essential' for the purposes of Part IIIA, and hence subject to legislated right to third party access. To do so, the NCC must assess whether infrastructure specified in an application meets the criteria set out in Section 44G (2) of the TPA, which can be summarised as follows:

- access (or increased access) to the infrastructure service would promote competition in at least one other market;
- it would be uneconomical for anyone to develop another facility (that is it would not be cost effective to duplicate the facility);
- the facility is of national significance with regard to its size, importance to interstate and international trade, and the national economy;
- access to the service can be provided without undue risk to human health and safety;
- access to the service is not already the subject of an 'effective' access regime; and
- access (or increased access) is not against the public interest (ACCC 1995, p. 21).

4.20 The second important part of the process is how, and whether, the designated Commonwealth Minister or State responds to the NCC's recommendation to declare (or not declare) a particular infrastructure service. Under Part IIIA, it is assumed that the designated Minister will consider an application for declaration of a particular infrastructure service with regard to, but not limited to, the criteria outlined in the TPA. Approach notwithstanding, the designated Minister has a specified period (sixty days within receiving the NCC's recommendation) in which to make a decision on an application. Significantly, if the Minister does not announce a decision within sixty days, the service is deemed to be not declared.

4.21 The third key part of the declaration process is response to the Minister's decision (or non decision). If concerned parties accept the decision, negotiation (and arbitration if necessary) proceeds where relevant or the matter lapses. If concerned parties do not accept the Minister's decision, the declaration applicant or the infrastructure service provider may appeal to the Australian Competition Tribunal within twenty one days of the announcement of the decision. The Australian Competition Tribunal may then affirm, vary or reverse the original decision.

Certification

4.22 A second approach for assisting third party access to infrastructure services under Part IIIA is provided by certification of other 'effective' access regimes. This approach enables State or Territory Governments to apply to the NCC to have a regime under their jurisdiction recognised by the Commonwealth as providing adequate or 'effective' third party access to infrastructure services. The NCC's recommendation is then forwarded to the relevant Commonwealth Minister, who must decide whether or not to certify the regime, and if certified, the period for which certification will be in force.

4.23 The significance of the certification mechanism to third party access is two fold. First, in order to obtain certification, State and Territory regimes must be consistent with principles set out in the Competition Principles Agreement 1995 (CPA). Second, once a State or Territory regime is certified as 'effective', an infrastructure service covered by it cannot be made subject of another access regime nor can it be 'declared' under the Commonwealth Part IIIA provisions.

4.24 As with the declaration mechanism, the critical part of the certification process is assessing whether an access regime is 'effective' for the purposes of Part IIIA. In considering an application the NCC must apply principles contained in sections 6(2) to 6(4) of the CPA against proposed access arrangements. In brief, these sections:

- indicate the broad circumstances in which the Part IIIA regime should apply to infrastructure services rather than a State or Territory regime (section 6(2));
- focus on the types of infrastructure services for which a State or Territory access regime can be deemed effective (section 6(3)); and
- identify the features an access regime must exhibit to be effective (section 6(4)) (NCC 1996, p. 44).

4.25 The NCC also takes into account other matters not stipulated in the CPA or Part IIIA in deciding whether to recommend certification of a State or Territory access regime. Some of these matters include:

- whether the regime has to make special provisions to ensure the continued provision of community service obligations (CSOs);
- whether those CSOs are provided in a transparent manner;
- whether the access regime unnecessarily restricts competition; and
- whether the regime has transitional arrangements in place (and if so whether these arrangements are consistent with the CPA) (NCC 1996, pp. 44–5).

4.26 The second important part of the certification process is the Commonwealth Minister's response to the NCC recommendation to either certify or not certify a State or Territory regime as 'effective'. If the Commonwealth Minister decides to grant certification, details of the decision (including length of certification) must be published and held on a public register at the ACCC. If the Commonwealth Minister decides not to certify, the designated State or Territory Minister can appeal to the Australian Competition Tribunal within twenty one days of the decision. The Tribunal may affirm, vary or reverse the original decision (NCC 1996, p. 43).

Undertaking

4.27 Part IIIA provides a third mechanism for assisting third party access to infrastructure services, through undertakings made by infrastructure owners or operators. Using this mechanism, infrastructure owners (or those proposing development of infrastructure) may give a written undertaking to the ACCC which sets out the terms and conditions on which third parties will be provided with access to its infrastructure.

4.28 The purpose of the undertaking provisions is to provide owners–operators of facilities (including those proposing development) with greater certainty about what access conditions will or can apply to those facilities. It is basically an alternative to the declaration process, and differs principally in that the onus for providing access rests with the owner/operator of the facility rather than the access seeker.

4.29 Once an undertaking is accepted by the ACCC, the infrastructure service in question cannot be declared under the Part IIIA regime. Conversely, an undertaking cannot be accepted for an infrastructure service if it is already declared. The ACCC has full discretion to accept or reject an undertaking proposal. In making its decision, the ACCC can make reference to guidelines provided by Part IIIA, which address:

- the legitimate business interests of the owner/operator,
- the interests of potential third parties,
- the public interest (including the public interest in having third party access),
- whether the service is covered by an existing access regime, and
- any other matters the ACCC considers relevant (Sub 21, *Submissions* p. 210).

4.30 These guidelines are similar to those the ACCC must consider in arbitrating access disputes under the Part IIIA declaration process. Other matters the ACCC might take into account include whether the undertaking provides a viable means for third party access to the infrastructure service, whether the terms of the undertaking are sufficiently flexible to cater for foreseeable third party applications, and whether pricing methodologies and principles are adequately specified.

4.31 A number of aspects of the undertakings process are worth highlighting. First, the criteria which the ACCC are expected to consider in assessing an undertaking proposal are less prescriptive than those the NCC must address in considering an application for declaration under Part IIIA. This would appear to give the ACCC greater discretion in deciding whether to accept or reject an undertaking proposal. Second, unlike the declaration process, no mechanism is available to concerned parties to appeal decisions made by the ACCC to accept or reject access undertakings. ACCC decisions are final and binding.

Part IIIA relevance to rail

4.32 The national access regime provided by Part IIIA is relevant to the rail industry for a number of reasons. First, the rail system possesses characteristics, both natural and structural, which have traditionally made access for third parties difficult. Second, unlike other infrastructure, namely gas, electricity, water and road transport, rail is not covered by a specific reform program under the National Competition Policy. Third, mechanisms for third party access at the State level are largely non-existent or in the early stages of development. For rail operators, Part IIIA represents the only formal mechanism available to obtain third party access to rail infrastructure.

4.33 A number of rail groups have already lodged applications with the NCC either for declaration or certification purposes. To date there have been four applications for declaration of particular rail infrastructure services (see appendix 6). Additionally, there has been one application for certification of an 'effective' regime by the NSW Government. These cases highlighted a number of issues which may affect Part IIIA applicability to rail infrastructure, including:

- the definition of 'essential' infrastructure in the context of rail,
- implications for privately owned rail infrastructure, and
- the limitations of the Part IIIA regime in a State based rail system.

Definition of essential infrastructure

4.34 Part IIIA is designed to assist third parties to access key infrastructure in order to improve competition in downstream and upstream markets. However, for the NCC to establish a right to third party access, it must be clear that the facility under application is an 'essential' facility.

4.35 More specifically, section 44(H)4 of the TPA states that:

> The designated Minister cannot declare a service unless he or she is satisfied of all of the following matters:
>
> (a) that access (or increased access) to the service would promote competition in at least one market (whether or not in Australia), other than the market for the service;
> (b) that it would be uneconomical for anyone to develop another facility to provide the service;
> (c) that the facility is of national significance, having regard to:
> (i) the size of the facility; or
> (ii) the importance of the facility to constitutional trade or commerce; or
> (iii) the importance of the facility to the national economy;
> (d) that access to the service can be provided without undue risk to human health or safety;
> (e) that access to the service is not already the subject of an 'effective' access regime;
> (f) that access (or increased access) to the service would not be contrary to the public interest.

4.36 The application of this 'essential' test to rail is complicated by the integrated nature of some aspects of rail operations. Infrastructure elements include both below rail (including rails, sleepering, ballast, formation) and above rail, such as locomotives, rolling stock and maintenance equipment. Rail infrastructure may also include structures such as marshalling yards, platforms and bridges, terminals, fixed communication and train signalling systems.

4.37 The scope of the Part IIIA essential criteria, particularly with regard to the feasibility of economic duplication, may mean that only some elements of an identified rail service are likely to be declarable. For example, while a particular rail line (including track and associated fixed structures such as bridges and crossing loops) may be considered 'essential', the locomotives, rolling stock and terminal facilities needed to operate trains may not.

4.38 In general, the track would seem to be the most likely element of rail infrastructure with natural monopoly characteristics and is, therefore, most likely to come under the provisions of Part IIIA (NCC 1996, p. 23). Facilities such as rail networks require high initial outlays, much of which is sunk cost. They may possess significant economies of scale, traffic density and size. As an example, Shell Coal Pty Ltd cited the coal railways on the Eastern seaboard:

> It is not economically feasible to replicate the rail infrastructure used to transport coal in NSW or Queensland; environmental and legal constraints also prohibit any serious consideration of coal transportation by road. Consequently, the track is a natural monopoly with similar characteristics to transmission and distribution lines for electricity. (Sub 84, *Submissions* p. 1138)

4.39 While track is more likely to meet the 'essential' test of section 44H (4) of the TPA, it is not clear whether other elements of rail infrastructure, such as terminals, could also be considered 'essential' in certain circumstances. For example, in some circumstances there may be limitations on obtaining physical access to the rail track and its environs, such as lack of space for additional terminal facilities in densely populated areas, or access to railheads at port developments.

4.40 Evidence to the inquiry indicated that obtaining satisfactory access to existing terminals, such as South Dynon in Melbourne, may become a more significant issue as new interstate operators enter the market.

4.41 The NCC findings to date suggest that in most cases, above rail elements of rail infrastructure such as locomotives, rolling stock and terminal facilities are likely to be regarded as non-essential for the purposes of section 44 of the TPA. For example, in its consideration of an application for declaration by Carpentaria Transport Pty Ltd of specified rail freight services by Queensland Rail, the NCC ruled that while rail track could be deemed essential, other components of the infrastructure services (such as loading equipment) could feasibly be duplicated and hence were not 'essential'.

Implications for privately owned infrastructure

4.42 The third party access provisions of Part IIIA do not distinguish between privately and publicly owned infrastructure. However, the applicability of Part IIIA provisions to privately owned rail infrastructure remains somewhat unclear, particularly as most private rail operations are subject to agreements with State governments.

4.43 In terms of Part IIIA applicability, some private rail infrastructure is likely to be nationally significant with regard to its size and importance to the national economy and also too costly to duplicate. Such infrastructure may have potential to facilitate (increased) development of economic resources, and promote economic activity in related markets. In this context there may be substantial benefits to allowing third parties to access privately owned infrastructure. Alternatively, there may be a number of practical difficulties, or as noted above, legal impediments which make third party access through Part IIIA unworkable.

4.44 Application of Part IIIA declaration provisions to private rail infrastructure may be complicated by existing legal agreements between State governments and infrastructure owners which allow private facilities to be developed on leased or crown land. For example, in the Pilbara area in Western Australia, both Hamersley Iron Pty Limited and BHP Iron Ore Pty Ltd maintain rail operations that are subject to respective agreements with the Government of Western Australia.

4.45 In the case of Hamersley Iron Pty Limited, the company was permitted under the *Hamersley Range Act 1966* to develop a mine to port rail operation on the condition that it agreed to transport the passengers and carry the freight of the State on reasonable terms at reasonable charges having regard to the cost of the railway to the company (Sub 16, *Submissions* p. 128). However, this arrangement also established that the company was not deemed to be a common carrier. In subsequent evidence it was suggested that the obligations this agreement imposed on Hamersley were not clear, and in fact, have not been tested (*Transcripts,* p. 1007). Hamersley also noted that the agreement could not be substantially altered to clarify the company's rights and responsibilities as it was now bound by the terms of Commonwealth Competition Policy legislation (*Transcripts,* p. 1007).

4.46 On a broader level, the main problem of third party access to private infrastructure is one of accommodating the commercial interests and rights of the infrastructure facility owner. In almost all cases the owner of infrastructure is likely to have made substantial investment, and through that assumed most of the financial risk associated with the facility. Where third party access is deemed appropriate, infrastructure owners would have legitimate grounds to set access prices, terms and conditions that covers that risk, plus compensation for revenue lost by competition from new operators (where applicable).

4.47 An imposed access arrangement (for example, one resulting from arbitration by the ACCC) that did not take into account these factors might infringe on the ability of facility owners to exercise basic property rights.

4.48 A related problem occurs where a private rail facility forms an integral part of a particular operation such as mining. In this case, there may be practical problems in granting third party access, or at the very least devising workable access arrangements. Hamersley argued in relation to its Pilbara iron ore rail operations that:

> Like all stages of integrated and interactive production systems, Hamersley's rail operations are tuned to providing a dedicated service within a much larger operation with tight requirements for product delivery. Inevitably, the integrity of the remainder of the 'assembly line' would be put at risk if another producer were permitted to have access to it. (Sub 16, *Submissions* p. 128)

4.49 This argument was echoed by BHP Iron Ore in relation to its iron ore rail operations in the Pilbara Range:

> We are a conveyor belt upon which the mine, the port and the export of ore relies. If we become congested, or if we get shut down for whatever reason, the whole line stops…Introducing someone else into the train grid has some logistical challenges. This is not an underutilised line, as you may have seen at other locations. That being the case, to introduce some other train to the grid would create problems. It would eat up a train path that we do not have right now. (*Transcripts,* p. 986)

4.50 The potential disruption of third party access to highly integrated operations, such as mine to port hauling operations, may also have implications for future investment in private infrastructure. BHP Iron Ore emphasised that, in respect to third party access to its iron ore railways, it would require assurances that its future ability to grow and handle more business would not be compromised (*Transcripts,* p. 994). One obvious concern is that the private sector may simply stop investing in the development of infrastructure facilities where uncertainty over potential third party access exists.

4.51 While the practical (and perhaps legal) difficulties of providing third party access to privately owned rail infrastructure may be substantial, there may be net costs associated with *not* providing access. In the absence of access to existing rail infrastructure, in part or as a whole, key economic development may not be undertaken, or at best, be undertaken in a manner that is less than efficient in terms of total benefits and costs. On the other hand, third party access may cause sufficient disruption or uncertainty to existing business to cancel out the benefits of increased access.

4.52 A possible example is that of the development of mineral resources in remote, inland areas, where the costs of duplicating existing rail facilities or finding alternative means of transporting from mine to port may simply be too high. The Pilbara iron ore railways may be a case in point.

4.53 These facilities have reached international best practice in terms of efficiency, and as noted above, are regarded as an integral part of each company's iron ore operations. They are also in proximity to other large iron ore deposits, owned by third parties which are presently undeveloped. Given this proximity, and the prohibitive costs of building new rail infrastructure, some might argue that either or both facilities should be considered suitable for declaration under Part IIIA.

4.54 The committee recognises the potential national benefits of granting third party access to privately owned infrastructure of economic significance, such as the Pilbara iron ore railways. However, it also recognises the enormous difficulties in providing for that access without interfering with the property rights and/or material interests of the infrastructure owner. The committee considers that, in general, the benefits to costs ratio of providing for third party access to rail infrastructure, private or public, is unlikely to be positive where that rail infrastructure forms part of a highly utilised, integrated production process (such as mining or milling).

Part IIIA limitations

4.55 It is still too early to comment conclusively on the efficacy of the Part IIIA access regime in relation to rail. The regime has only been in place since April 1995, with the first application for declaration of rail services lodged in December 1996. As noted in the various case studies (see appendix 6), all appeals on declaration decisions either remain under review by the Australian Competition Tribunal or have been withdrawn. Still, it is possible to highlight a number of areas that may limit the effectiveness of the Part IIIA regime in facilitating non-discriminatory third party access to rail services.

4.56 One potential limitation of the Part IIIA regime may relate to the provisions themselves. In evidence to the inquiry, the NSW Minerals Council argued that both the Competition Principles Agreement and the *Trade Practices Act 1974* lack clarity in requiring access regimes to provide equivalent pricing and access outcomes as would be achieved in a competitive environment (Sub 38, *Submissions* p. 450). In other words, access outcomes produced by the Part IIIA process may be potentially no less distorting than previously existing market conditions.

4.57 Given the industry generic nature of the legislation, there also may be difficulties applying the provisions to the particularities of rail infrastructure. For example, section 44B of the TPA establishes that the type of infrastructure services that are declarable under the Part IIIA regime include 'use of an infrastructure facility such as a road or railway line' and the 'handling or transporting of goods or people', however, in the case of rail, these two services may be inseparable. Another potential problem is the difficulty in defining the 'essential' elements of rail infrastructure for the purposes of Part IIIA. As one witness noted, there has tended to be little clarity in what constitutes rail infrastructure, and by extension what constitutes a rail infrastructure service. For example, should rail terminals and related equipment be considered under section 44B of the TPA as a declarable service?

4.58 A second potential limitation of the Part IIIA regime may lie in the length of time of the declaration process, particularly with regard to the appeal and review procedures. There is some concern that rail operators and infrastructure owners might be discouraged from making use of the Part IIIA declaration provisions by the potential costs (in terms of time, resources and uncertainty) involved in the process (Sub 38, *Submissions* p. 450). Of course, the length and uncertainty of the declaration process to date can in part be explained by the relative infancy of the Part IIIA regime. To some extent, all parties, the NCC and ACCC included, are still in the process of learning how the Part IIIA provisions can be applied to rail infrastructure.

4.59 The lengthiness of the Part IIIA processes leads to another potential limitation of the regime, namely the statutory restraints placed on its chief administrative body, the NCC, in affecting change. As a number of declaration cases to date have demonstrated, State and Territory governments have full discretion to disregard recommendations made to them by the NCC. Moreover, these authorities are not obliged under Part IIIA to either make or substantiate decisions taken with regard to relevant sections of the TPA. This flexibility greatly undermines the efficacy and integrity of the Part IIIA declaration process. It also adds to the uncertainty of the access process for rail operators and infrastructure providers.

4.60 Other limitations may be exposed as the Part IIIA process is further tested. For example, an agreed framework for pricing access may not be of much use if the pricing methodologies that underpin it are fundamentally flawed. Similarly, if the Part IIIA regime cannot address non-price factors, access commitments made under the regime may not lead to greater utilisation of rail infrastructure. There is also a large question mark hanging over the application of Part IIIA provisions to privately owned infrastructure.

4.61 The committee considers that the access mechanisms provided by Part IIIA can and should help drive reform in rail. In the absence of a national legislative program specifically addressing access issues in rail, Part IIIA serves as a useful framework for the negotiation and arbitration of third party access to rail infrastructure. It should facilitate the entry of new operators to the industry and the development of consistent State based access regimes.

4.62 However, the committee has concerns that potential weaknesses in the Part IIIA regime may limit the ability of the national access regime to facilitate such change. In particular the committee notes that the latitude the Part IIIA declaration process affords to designated Ministers, in terms of decisions to declare (or not declare) infrastructure services, provides for little certainty, transparency or accountability. For instance, in two of the four NCC declaration cases to date, recommendations referred to the designated Ministers (in both cases, the Premier of NSW) by the NCC have resulted in non decisions, and hence non declaration of services, without adequate explanation or reasoning for action taken. Significantly, in both cases the declaration applicants immediately appealed to the Australian Competition Tribunal to review the (non) decisions made by the NSW Premier (see appendix 6 for specific details).

4.63 The committee sees merit in revising the Part IIIA declaration provisions to engender greater certainty, transparency and accountability in the decision making process. A useful starting point would be to ensure that adequate incentive exists for designated Ministers (be they Commonwealth or State) to announce and publish decisions either to declare or not declare services with the prescribed sixty day period.

4.64 This may involve establishing a legislative requirement that designated Ministers publish a decision within the sixty day period, or more practically, recasting the non decision option under section 44H (9) to provide for automatic declaration after the sixty day period elapses.

4.65 Recommendation 8

The committee recommends that the Commonwealth amend Part IIIA of the *Trade Practices Act 1974* to provide that, where the designated Minister does not publish a decision on a declaration recommendation referred to him or her by the National Competition Council within sixty days of receiving the recommendation:

- **the designated Minister should be taken to have declared the service (rather than the deemed decision to be in the negative), and**
  - **the expiry date of the declaration will be that as recommended by the National Competition Council.**

State access arrangements

4.66 The national access regime provided for under Part IIIA allows third parties to apply for declaration of any rail infrastructure services not already covered by other 'effective' access regimes, including those administered by the States. In this sense, Part IIIA is conceived as coexisting with State access regimes. However, in most States, third party access regimes have yet to be established or are still in the early stages of development.

4.67 Impetus to establish State based third party access regimes was provided by the inter-government Competition Principles Agreement 1995. Under this agreement, State Governments agreed to:

- review their public monopolies to consider separating the natural monopoly elements from the potentially competitive elements (clause 4(3)); and
- consider establishment of 'effective' access regimes for infrastructure within their own jurisdictions, so as to cover the field and thereby avoid the declaration procedures under Part IIIA to services offered by those facilities (clause 6(2)).

4.68 Consistent with these obligations, the States have tended to regard rail infrastructure as appropriate for a separate access regime. The issue of separating the natural monopoly element of the infrastructure, that is track and related infrastructure, has been handled differently by the various States. In Queensland and Western Australia, control and management of access has been retained by vertically integrated rail authorities. In all other cases, some attempt has been made to separate track control and management from that of above rail businesses.

New South Wales

4.69 New South Wales has vested control of the essential facilities of the NSW rail system, including track, signals, bridges and electrification equipment (though not the land corridor) in the Rail Access Corporation (RAC) under the 1996 amendments to the *NSW Transport Administration Act 1996* (Sub 52, S*ubmissions* p. 685). RAC is also responsible for managing access to the NSW Rail network under the NSW Rail Access Regime, which was established by the NSW Minister for Transport and gazetted in late 1996.

4.70 Access disputes are referred to the NSW Independent Pricing and Review Tribunal (IPART). The NSW Government has subsequently sought certification of its rail access regime from the NCC.

4.71 There are currently three main operators on NSW rail, namely: FreightCorp, the corporatised freight services division of the former State Rail Authority; State Rail Authority, which operates urban and intrastate passenger services; and NR, the interstate freight services provider owned jointly by the Commonwealth, New South Wales and Victoria. In addition, there are a number of other small operators providing local freight and heritage services. Specialized Container Transport (SCT) has also signed a preliminary access agreement with RAC to operate freight trains in New South Wales from Sydney to the South Australian border.

Victoria

4.72 The Victorian Government has taken steps to separate out control of the rail track from other functions of the Public Transport Corporation (PTC). Pursuant to the *Rail Corporation Act 1996*, the Victoria Rail Track Corporation (VicTrack) was formed to assume control of certain assets of the PTC, including track and related infrastructure. Under the Act, VicTrack must provide access, on fair and reasonable terms, to railway services declared by the Victorian Minister for Transport. At present, there are at least ten rail operators using Victorian tracks under agreements inherited by VicTrack from the Public Transport Corporation.

4.73 In April 1998, the Victorian Government announced its intention to sell Victoria's rail freight operations (V/Line Freight Corporation) together with a long term lease from VicTrack over the non metropolitan intrastate track, signalling and train control. The land and track will continue to be owned by the Victorian Rail Track Corporation, which will remain wholly in Government ownership. According to a media release issued by the Minister for Transport, the long term lease 'will both protect the network and guarantee that all operators, including V/Line Passenger, have statutory access rights to run their services over the track on fair terms.' (Exhibit 50, p. 40)

Queensland

4.74 Queensland rail infrastructure remains under the control of the vertically integrated Queensland Rail (QR), which has formed a separate Network Access division. At the time of writing the Queensland Government was in the process of establishing a general access regime, to be administered by the Queensland Competition Authority. This regime has been submitted to the NCC for certification. QR is also developing an Access Undertaking in compliance with the provisions of the *Queensland Competition Authority Act 1995* (Sub 40, *Submissions* pp. 519–20).

Western Australia

4.75 Western Australia had no formal access regime at the time of writing. However, Westrail, the trading name of the WA Government Railways Commission, has a practice of allowing third party operators on its intrastate standard gauge line. According to the WA Department of Transport, the 'State is developing an access regime for both inter and intra state rail. However, responsibility for the former may be assumed by any future body put in place to manage the national rail network' (Sub 42, *Submissions* p. 560). It is anticipated that control and management of the State's intrastate network will be retained by Westrail.

South Australia

4.76 South Australia has no formal access regime, although it has imposed access obligations on operators who control the intrastate rail network in that State under the South Australia *Railways (Operations and Access) Act 1997*. This Act was proclaimed to apply to certain railway infrastructure, including yards and sidings, terminals and stations. Access disputes are arbitrated by the regulator appointed under the act, namely the Chief Executive of the SA Department of Transport. Control of the interstate track, which had been vested in the Australian National Railways Commission (AN) Track Access unit, was transferred to the Australian Rail Track Corporation (ARTC) on 1 July 1998.

Pricing access

4.77 Until relatively recently, railways in Australia operated as vertically integrated systems. There was little need to separate out many of the costs associated with providing rail services, for example the marginal cost of hauling an additional unit of freight. Nor was there any need to establish market based pricing mechanisms for use of services. However, with the advent of third party access to essential facilities, and related competition reforms under the National Competition Policy, attention has increasingly turned to the need to effectively price access to rail infrastructure.

4.78 There are a number of important issues underlying the pricing of access to rail infrastructure. One obvious issue is pricing objectives, and in particular the need to price access efficiently. Another issue is whether access pricing should cover total costs or only marginal costs of service provision. Following from this question is the issue of appropriate pricing methodologies to set access charges. Other issues include the extent to which community service obligations are factored into access pricing arrangements, and the extent to which access pricing arrangements provide for accountability and transparency.

Pricing objectives

4.79 The manner in which access prices are set has a crucial bearing on the level of rail utilisation and investment.

- The adoption of pricing models which seek to maximise prices charged will provide for monopoly profit for owners and may stimulate investment. However, they may also discourage competition in upstream and downstream markets (through higher costs) and reduce utilisation of infrastructure services.

- Pricing models which seek to minimise the prices charged for rail services will encourage new entry to the market and lead to lower costs for end users. However, lower charges may also reduce revenue and discourage further investment.

4.80 In evidence to the inquiry, the NCC argued that adequate access pricing mechanisms for rail would need to 'recover the owner's legitimate costs, but not the costs of non-viable investment, inefficient operation or the provision of unprofitable services' (Sub 72, *Submissions* p. 990). Further, it acknowledged that while the fixed costs of such infrastructure are sunk, access pricing will need to cover both the marginal costs attributable to each additional user and as much of the fixed costs as possible, without reducing the level of total demand. While reasonable in theory, this objective may be more difficult to achieve in practice in relation to rail access pricing.

4.81 In general, where the market for the infrastructure service is a natural monopoly, competitive pressures facing the service provider are likely to be weak and prices will be sustainable at levels above the service provider's marginal cost of producing additional units of output. This is, in fact, a fair representation of the market structure and pricing practices of the coal haul services in both New South Wales and Queensland. However, 'first best' efficient pricing occurs where price is equivalent to marginal cost (as occurs in equilibrium pricing in perfectly competitive markets). Higher pricing results in either less of the good being consumed than is optimal from a social welfare perspective, or in monopoly rent for service providers.

4.82 According to the ACCC, the fundamental problem with pricing access at marginal cost in industries with economies of scale, scope, and in the case of rail, density of traffic, is that it tends not to allow facility owners to break even (Sub 21, *Submissions* p. 212). As the NCC explained, the average cost of production (including a return on capital) which will be above marginal costs when costs are declining, must be covered for the owners or regulators of a natural monopoly, such as track infrastructure, to earn zero economic profit. Forcing them to price at marginal cost, then, will result in economic losses (NCC 1997b, p. 28). The dilemma for owners or regulators of a natural monopoly becomes: how to generate sufficient revenue while ensuring efficiency in pricing decisions?

4.83 A related issue is whether pricing should be based on demand, costs of supply or a combination of both. Access prices charged should ultimately reflect the costs of supply; however, the high level of common costs incurred by a natural monopolist with economies of scope and network size requires some method of recovering costs above the attributable costs of access. The ACCC cautioned that 'rules for allocating common costs based on arbitrary rules are likely to be poor substitutes for efficient pricing principles. It may also lead to opportunities for excessive charging for access by infrastructure owners' (Sub 21, *Submissions* p. 213).

Pricing approaches

4.84 A number of approaches have been developed for pricing access to infrastructure, including price caps, efficient components pricing and rate of return pricing. In the context of rail infrastructure, it is possible to concentrate on two approaches which attempt to minimise

the efficiency loss from divergence with marginal cost in the pricing of output produced by natural monopolies (such as rail networks)— two (or multi) part tariffs and Ramsey pricing.

Two part tariffs

4.85 A two part tariff approach involves the application of a fixed charge and a variable price applied to usage. The advantage of a two part tariff in a high fixed cost industry such as rail is that it enables the infrastructure owner to set the variable price at short run marginal cost, while also allowing for a reasonable return on fixed costs (through the fixed charge). It thus provides the allocative efficiency benefits of marginal cost pricing with some of the benefits of rate of return pricing. Further, by linking fees to usage, a two part tariff approach allow prices to be more closely equated with costs, and therefore, more reflective of market forces.

4.86 A two part tariff approach also provides greater scope for non-uniform pricing practices than simpler pricing models (such as price/revenue caps). By allowing the access provider to alter the fixed charge, for example according to network use or proportion of attributable fixed costs, a two part tariff promotes more efficient facility use. This may be a particular advantage in rail, where use, and hence attributable costs, varies greatly within and between networks.

4.87 The major concern with a two part tariff approach to pricing (and in general, cost based approaches to access pricing) is that it may provide little incentive for access providers to improve productive efficiency, and through that, reduce costs. Any effort taken by the owner of an infrastructure facility to reduce marginal costs will ultimately lead to lower variable charges, which in turn will lower revenue. A second concern relates to the potential use of up-front or fixed charges to either discourage new entrants or generate returns on investment that are economically unjustifiable.

4.88 A third practical concern relates to the information costs of establishing and maintaining an effective two part tariff regime, particularly in relation to developing accurate information on fixed and variable costs associated with rail infrastructure. A 1995 BIE report noted that where assets used in provision of infrastructure are both largely durable (that is retain economic value over many years) and unique in nature, there may be difficulties in establishing first, the value of these assets, and second the costs associated with their use (BIE 1995a, p. 19).

Ramsey pricing

4.89 Ramsey pricing differs principally from other approaches to access pricing in that it is demand based rather than cost based. Under the Ramsey approach, a single charge is generated for each group of infrastructure user by generating specific mark-ups over marginal cost which depend on the 'value' of service to the user (NCC 1997b, p. 30). This enables the monopolist to recover variable costs, and approximate recovery of fixed costs (based on user's ability to pay).

4.90 The main benefits of this approach is that it is designed to minimise the efficiency loss associated with pricing of access above the marginal cost of that facility. By linking price to

the 'value' of service to the user, the Ramsey approach limits the ability of the infrastructure owner to generate monopoly rent, while still allowing it to maximise total cost recovery.

4.91 More importantly, Ramsey pricing also enables the access provider to discriminate between high and low value users, improving allocative efficiency and ultimately utilisation of the facility.

4.92 The chief problem that the Ramsey approach presents is that it is administratively complex. Infrastructure providers may lack adequate information on either the cost structure of infrastructure provision or the responsiveness of demand to changes in access price (including in relation to demand for similar or like services) to implement efficient pricing practices. Acquiring necessary information to enable efficient Ramsey pricing may also involve transactional costs, for example, in processing and monitoring data.

Pricing in practice

4.93 In practice, rail access pricing has tended to combine elements of both two part tariff and Ramsey pricing approaches. This reflects the fact that, for the most part, rail infrastructure owners in Australia have not been able to charge flat access rates that fully recover the costs of building and maintaining the track. Access charging has been effectively driven by what the market will bear for use of different segments of the interstate and intrastate rail networks (*Transcripts,* p. 21).

4.94 Publicly available information on the pricing objectives and methodologies that underpin existing access arrangements is largely limited to material supplied by the National Competition Council on the NSW Rail Access Regime and work done by the Bureau of Transport and Communications Economics. At the time of writing, only the Commonwealth and New South Wales had published details of their access pricing arrangements.

4.95 Until recently, the Commonwealth (through the AN Track Access unit) provided third party access to interstate mainline under its control, which extended from Kalgoorlie in Western Australia to Broken Hill in NSW and to Wolseley on the border between South Australia and Victoria. AN also controlled the line from Tarcoola in South Australia to Alice Springs in the Northern Territory. As noted elsewhere, AN Track Access functions, including access pricing, have been transferred to the newly created ARTC. As of 1 July 1998. the ARTC had not released details of its access pricing policy and was still negotiating access arrangements with NSW and WA.

4.96 Under the former arrangements, AN's pricing of access to these lines was based on a two part tariff comprising a flagfall component and a variable charge.

- The flagfall was a fixed amount for each section of track determined by a combination of train type and AN's assessment of market demand for that section of track (reflecting both user ability to pay and demand for preferred paths or slots on AN track).
- The variable charge was a set rate per gross tonne kilometre (GTK) for each section of track which is levied uniformly on all trains (BTCE 1997, p. 40).

4.97 AN's access prices were fully posted (published), however, little information was publicly available on provisions under the AN Track Access pricing regime for review and rescheduling of access pricing.

4.98 Specialized Container Transport Pty (SCT) indicated it had no significant problems with the access rates levied by AN Track Access or the manner in which those rates were determined. With regard to the transparency of AN Track Access, SCT stated:

> We are particularly comfortable with the AN access regime because we know what everyone else is paying. We believe that both the NRC and TNT are also comfortable with the AN regime, whereas no-one seems particularly comfortable with the secrecy of the other access regimes. (Sub 29, *Submissions* p. 314)

4.99 Rail 2000 Incorporated expressed support for the pricing practices of AN Track Access, arguing that 'aspects of its current business, such as the provision of a published set of track access fees along with a track access charging regime...are to be applauded.' (Sub 47, *Submissions* p. 621) It argued further that the current AN Track Access unit should become the basis for the national rail access regime to be provided by the recently established Australian Rail Track Corporation.

4.100 In NSW, rail access pricing is determined by the RAC in accordance with the NSW Rail Access Regime. This regime specifies, in line with the CPA, that commercial negotiation and arbitration will provide the framework for determining an access price (NCC 1997b, p. 20). RAC is required to negotiate with individual prospective operators, on the basis of an indicative price for and availability of access, within a specified period. If parties fail to agree on a price, disputes can then be settled by arbitration.

4.101 The NSW rail access regime provides for an operating band, essentially a floor (marginal cost) and a ceiling (full economic cost, including a rate of return) for access charge revenues (Sub 52, *Submissions* p. 687). Provided it is consistent with the Commonwealth *Trade Practices Act 1974* and the floor test stipulated in the NSW rail access regime, RAC is able to practice price differentiation. That is, it may charge prices such that the contribution to fixed costs varies between customers (BTCE 1997, p. 42).

4.102 In general, RAC's access pricing assumes the form of a two part tariff, comprising the following:

- a fixed component (the network charge), representing purchase of access rights and the allocated costs of the network; and
- a variable component (the usage charge) reflecting those costs that vary with usage of the network, which may be levied on a gross tonnes kilometre (GTK) or net tonnes (BTCE 1997, p. 43).

4.103 RAC pricing may include other charges, such as fixed lump sum or periodic fees, or variable charges based on train paths or train consist. In either case, RAC pricing is aimed at recovering at least incremental costs (the floor test), up to the ceiling limit specified under the regime. The rate of return included in the ceiling limit is currently set at 14 per cent nominal per annum, post tax (BTCE 1997, pp. 42–5). In practice, RAC noted that only users of some class one lines in Hunter Valley are currently paying the ceiling limit of 14 per cent—all other customers are paying within the floor to ceiling band (*Transcripts*, p. 416).

4.104 Unlike AN Track Access pricing, RAC access pricing is not normally posted. Rather, prices are negotiated with individual customers and held confidentially, except as otherwise required by the NSW rail access regime. According to RAC, rail access prices are also subject to review annually, or otherwise as agreed with the customer (NCC 1997b, pp. 23–4).

4.105 The committee received evidence from rail operators and users on the adequacy and deficiencies of existing access pricing arrangements. Great Southern Railway Limited (GSR) argued in general that current access charges are too high, reflecting over recovery of costs and leading to underutilisation.

> If Government wishes to support the use of rail, charging should be at marginal or avoidable cost, on the basis of 'last on'. Rail users should only be asked to pay the true incremental costs imposed on the rail network owner by the additional use. Current charges are considerably higher, and are a severe deterrent to growth of rail traffic. Most existing charging is on the basis of full cost recovery including de facto apportionment of fixed costs. (Sub 88, *Submissions* pp. 1171–2)

4.106 In contrast, a number of rail user groups were highly critical of the NSW rail access regime and in particular, RAC's negotiated 'floor and ceiling' pricing practices. In its submission, Rio Tinto Coal Pty Limited quoted material from a NSW Minerals Council application to the NCC, which described the NSW regime as unduly vague in many aspects, highly discretionary and non-transparent. It also argued that the regime contained significant scope for inefficiency, citing, amongst other features:

> – continued collection of 'rent' from users potentially amounting to several hundred million dollars over a five year period;
> – continued collection of total revenues in excess of true costs, even after a programmed run down of an 'amount' of rent;
> – cross subsidies between lines; and
> – insufficient pressure generally for cost economy in the delivery of service (with particularly adverse consequences for the achievement of technical efficiency in service provision. (Sub 35, *Submissions* p. 430)

4.107 SCT was similarly critical of the NSW access regime, arguing that if the overall Australian approach to access had been to adopt the NSW model, there would be no private operators on Australian rail. Further, it noted that no private interstate operator has yet been able to obtain satisfactory access in NSW and to operate trains under such access (Sub 29, *Submissions* p. 313).

4.108 The NCC for its part, acknowledged that the NSW rail access regime has experienced some difficulties in application. It identified a number of cases where operators had experienced difficulties with RAC's application of the NSW rail access regime to access charging. Both NR and the State Rail Authority have had disputes with RAC over access charges in the past. Similarly, 'both SCT and TNT claim to have had significant difficulty negotiating with RAC on access prices, and their negotiations have extended over quite long periods of time, from 9-12 months' (NCC 1997b, p. 26).

Pricing issues

4.109 In considering suitable pricing arrangements for access to rail, it is necessary to take into account a number of key issues. These include the cost competitiveness of rail services compared with services provided by other forms of transport (that is, the level of substitution), the potential effect of community service obligations (CSOs) on pricing, the market effects of cross subsidisation, and the need for transparency and accountability.

Competing with road transport

4.110 For the most part, rail access pricing questions cannot be considered in isolation from the broader question of rail's cost competitiveness in relation to services provided by other forms of transport, in particular road and sea. A number of submissions to the inquiry argued that, without some effort to address the disparity in treatment of different forms of transport (in terms of cost recovery and capital investment), rail's ability to charge 'viable' access pricing on most parts of the rail network will continue to be limited.

4.111 QR argued that the lack of inter-modal competitive neutrality between road and rail presents rail with a fundamental dilemma—infrastructure access charges sufficient to ensure maintenance and replacement of interstate rail assets are too high to be acceptable in the marketplace (Sub 40, *Submissions* p. 518). RAC acknowledged this dilemma, saying that in NSW, 'market based access prices are supportable for most of the rural line sectors and most general freight only with explicit government subsidies paid to RAC to offset partially the high fixed costs on these rural sectors.' (Sub 52, *Submissions* p. 687)

4.112 QR concluded that the difficulties experienced by existing access regimes in achieving adequate price outcomes, particularly in NSW, emphasised the need for government to financially support rail infrastructure if rail operations are to be viable to above rail operators (Sub 40, *Submissions* p. 518). GSR argued that if growth in rail traffic and adequate investment in rail is to be achieved, ongoing government support of rail infrastructure is required (Sub 88, *Submissions* p. 1172).

4.113 SCT supported this conclusion, arguing that the different characteristics of road and rail transport mean that similarly priced approaches to access alone cannot and will not lead to neutral competition between road and rail over all distances. SCT said that given the particular characteristics of rail, (higher fixed costs but lower marginal costs over distance than road), rail will lack competitiveness over shorter distances, regardless of the equality or inequality of imposts across different transport forms (Sub 29.01, *Submissions* p. 1278).

4.114 The central implication of this argument is that market based access pricing for short and medium line haul services is likely to be insufficient to cover total costs (and is thus 'uneconomical' in the longer run).

4.115 A practical example is provided by freight services on the Melbourne to Sydney rail corridor. In evidence to the inquiry, SCT contended that present rail access rates, and the resulting cost structure of rail freight services, meant that rail was not 'economic' on this corridor. According to SCT, this is reflected by recent history, where rail has continually and steadily lost market share to road (Sub 29.01, *Submissions* p. 1278).

4.116 However, SCT maintained that if access rates were reduced or removed entirely, rail would become more competitive in the freight services market between Melbourne and Sydney. Again, this argument implies the need for some form of support for infrastructure provision.

Community service obligations

4.117 In pricing access to rail infrastructure, infrastructure providers may have to take into account community service obligations (CSOs) attached to service provision, which are required by governments to meet broader policies or social goals. In the past, these CSOs were often funded by cross subsidies between regions or customer groups, a practice typically employed by State rail authorities, which possess significant monopoly power (see section below). CSOs may also take the form of direct funding of the infrastructure provider, direct cash payment to targeted users (including vouchers), or enterprise loss write offs (BIE 1995a, pp. 29–33).

4.118 How CSO arrangements are incorporated into access pricing will, of course, have a bearing on the viability of certain rail services, and in particular, the ability or willingness of private operators to contest certain markets. In some cases, an access price sufficient to ensure maintenance and replacement of rail infrastructure may be too high to be acceptable in the market place. However, there may be justification in providing a 'below rail' or infrastructure subsidy if rail modal share is to be sustained at a level regarded as providing a net social benefit, or if private rail operators are to be attracted to enter the market.

4.119 The issue then becomes one of whether CSOs should be provided to the access provider, rail operators or customer to ensure service delivery, and how or if the CSO obligation is reflected in the access price charged. QR argued that the question of how CSOs are allocated is particularly important in cases where there is under utilisation of rail assets. Specifically, QR noted that where there was substantial excess capacity on a given track, the provision of CSOs to train operators, rather than the track provider, may create problems.

> It places the risk of third party traffic volatility on the last remaining operator, who has no ability to manage the risk. For example, if the second last operator were to abandon the line, the last operator would face an abrupt increase in the access charge as it must pay the entire fixed cost. Any potential for increasing traffic on the line is diminished greatly by the barrier to entry posed by the incumbent's access to subsidy funding. (Sub 40, *Submissions* p. 513)

4.120 In contrast, CSO provision to the infrastructure or access provider generally allows the latter to offset total fixed costs. This appears to be the preferred approach for governments in Australia. Both Queensland and Western Australia provide CSO to their respective state rail bodies, while in NSW, CSO payments are made directly to RAC (*Transcripts*, p. 408). In contrast, the Victorian Government has, in the past, provided CSO funding to the PTC, rather than its rail access entity (PTC 1996, p. 37). The PTC in turn has allocated CSOs for specific rail services, such as the passenger service from Geelong to Warrnambool provided by West Coast Railway (*Transcripts*, p. 803).

Cross subsidisation

4.121 A further access pricing issue related to the provision of CSOs, is that of cross subsidisation which involves the use of income from one operation to support another less profitable operation. It can assume a number of forms, but in the context of rail access, is most commonly associated with discriminatory pricing. That is, charging service users with particular characteristics different prices, irrespective of the largely uniform underlying cost structures associated with service use.

4.122 As such, cross subsidisation can lead to distortions, for example in consumption, production and investment decisions. It can also result in a lack of transparency of the actual costs, and prices charged for providing infrastructure services (BIE 1995a, p. 31). For some rail groups, it is also perceived as resulting in pricing practices that unfairly burdens some users over other users.

4.123 A number of mining interests, including the NSW Minerals Council, Rio Tinto Coal Pty Ltd, and the Queensland Mining Council expressed dissatisfaction at perceived 'hidden' cross subsidisation practices, both through access charges and monopoly rents levied through freight rates. The NSW Minerals Council maintained that:

> …cross subsidisation should be able to be identified by providing full transparency of monopoly access providers costs and revenues by line section. It is then government's responsibility to either fund the cross subsidised service in a transparent manner, or not fund it. (Sub 38, *Submissions* p. 447)

4.124 The Queensland Mining Council argued that:

> The access provider should not be an instrument for wealth distribution. Governments wishing to support non-commercial activities should do so through CSOs that are fully costed ie. commercial traffic should not be loaded up with capital costs and overhead costs that really belong elsewhere. (Sub 81, *Submissions* p. 1119)

4.125 The committee considered a range of evidence concerning alleged cross subsidisation of rail services in Australia. Much of this evidence related to particular, profitable coal hauling operations in two States, NSW and Queensland, which have arguably been used to support other loss making services or to fund investment in infrastructure elsewhere in the network.

4.126 In the case of NSW, the committee heard evidence suggesting that there may be some cross subsidisation between traffics on the NSW rail network. For example, Rio Tinto Coal indicated that it had some concerns with RAC practices:

> Another concern...is cross-subsidies between the coal industry and the rest of the state system. Their annual report implies that there are significant cross subsidies from the coal sector to the remaining network. They have also indicated that coal is the only profitable sector they have. (*Transcripts*, p. 373)

4.127 In subsequent oral evidence RAC refuted claims of cross subsidisation, arguing that it was, in fact, precluded from cross subsidising under the NSW rail access regime. According to RAC, the regime required access pricing for each line sector which recovered not less than the cost of maintaining that line sector, and not more than a stipulated ceiling return on assets.

4.128 Further, it argued that where under recovery occurred, CSOs, not cross subsidies, were used to contribute to total costs (*Transcripts,* pp. 415–16).

4.129 However, in a supplementary submission to the inquiry the NSW Minerals Council challenged RAC's position, again on the basis of RAC's own annual report. It noted that 'while it might be argued that RAC cannot cross subsidise because the terms of the NSW Rail Access Regime do not allow it, RAC's Annual Report also indicates that it is apparently not obliged to comply with that report, noting that the report said Rail Access Corporation operated outside the NSW rail access regime during the year 1996–97 (Sub 38.01, *Submissions* p. 1364).

Transparency and accountability

4.130 Another significant issue related to access pricing of rail infrastructure is the extent to which pricing regimes are transparent, that is the extent to which access seekers are able to obtain adequate information on the prices charged. This could include clear definitions of terms and pricing methodologies used, verifiable costs and revenue breakdowns (that do not conflict with commercial considerations), and information on traffic volumes and procedures. It could also include disclosure on CSO payments for specific services and information on cross subsidisation where applicable.

4.131 In evidence to the inquiry, a number of rail user groups emphasised that price transparency, as much as cost based pricing, will be an important determinant of access uptake and therefore rail utilisation. The Queensland Mining Council noted that transparency should be a basic feature of access regimes, 'there being no legitimate reason for an access provider not to disclose all elements of its costs and returns by each category of traffic' (Sub 81, *Submissions* p. 1118). It argued further that access prices should be posted, and detailed to track segments and train paths. This view was largely shared by the NSW Minerals Council. It argued that rail appropriate access regimes should include published reference prices for access, based on transparent, fully distributed costs of operation (Sub 38, *Submissions* pp. 451–2).

4.132 Rail operators also drew attention to the importance of transparent pricing. SCT argued that to be effective, access pricing regimes required transparent rates, although not necessarily fully transparent costs (Sub 29, *Submissions* p. 314). Patrick Rail Operations Pty Ltd saw value in pricing structures which enabled access purchasers to clearly identify components, such as a flag fall and usage rates (Sub 50, *Submissions* p. 675).

4.133 The need for transparent pricing implies the need for greater accountability in access pricing. A number of rail user groups argued that the chief problem with the negotiated pricing approach adopted by the NSW rail access regime is that it does not provide for sufficient accountability, either in terms of the way access prices are set or the way revenue from access charges is disbursed.

4.134 Improved accountability enables rail user groups to assess more effectively the prices they are paying for access to infrastructure services against the services delivered. This in turn provides for greater business confidence and precision in consumption and investment decisions. Transparent pricing also constrains the ability of infrastructure owners to maintain inefficient practices, by forcing them to commercially justify costs and revenue expenditure.

4.135 The NCC pointed out that transparency and accountability are critical to negotiation/arbitration approaches to access. It emphasised that the national access regime provided by Part IIIA, is 'dependent on the availability of sufficient information to allow a user confidence in the price outcomes reached in negotiation. Without such confidence, a user will bypass the negotiation phase and go straight to arbitration, making the process more cumbersome and costly' (Sub 72, *Submissions* p. 991).

Other factors affecting access

4.136 It is important to recognise that meaningful access to rail infrastructure requires more than the legislated right to use infrastructure. Third parties need to be able to meet the range of regulatory conditions imposed by Commonwealth and State rail authorities. Equally importantly, they need to be able to secure appropriate pathways for their trains. In some cases, constraints on physical access to infrastructure may also affect the ability of third parties to utilise infrastructure.

Regulatory requirements

4.137 Achieving effective pricing arrangements for access to rail infrastructure is central to access. However, other factors, such as the regulatory environment facing rail operators, will also affect opportunities for access. This in turn will affect utilisation of rail infrastructure and the potential for increased investment in rail assets.

4.138 A number of submissions highlighted the access problems created by onerous regulatory requirements, particularly at the level of interstate rail services. NR noted that in addition to the differing access pricing arrangements across the entire interstate rail network, interstate rail operators also had to face a fragmented regulatory system.

> …setting of technical and performance standards for track (axle mass, speed, train length and clearance limits), regulation of safety (including certification of equipment, safety critical personnel, and operating procedures), and environmental regulation are each the province of different organisations. The result is that both existing and potential new rail operators must negotiate agreement with up to thirteen different entities to gain practical access to the whole national track system. (Sub 26, *Submissions* p. 244).

4.139 Meeting the requirements of a multitude of regulatory regimes can impose substantial financial and administrative costs on rail operators. For example, NR noted that the costs of safety regulation alone for trains operating across three jurisdictions—based on a different formula in each state—cost the company more than $140 000 (1997 prices) per year (Sub 26, *Submissions* p. 251). Often these regulatory requirements are inconsistent, or worse, contradictory, leading to multiplicity in compliance costs and constraints on operating ability.

4.140 TNT Rail, a division of TNT Australia Pty Limited (now part of Toll Holdings) gave numerous examples of problems presented by differing regulatory regimes to prospective interstate freight operators, including, differing charges for train operation and safety accreditation across States, anomalies in rolling stock accreditation, and differing speed restrictions imposed on the same locomotive power. As a more specific example, TNT Rail noted that:

> In order for TNT to commence its current rail operation from Melbourne to Perth, negotiations were required with some thirteen different authorities. This process took more than twelve months and imposed excessive legal and resource costs on all parties. (Sub 44, *Submissions* p. 583)

4.141 This argument was echoed by BHP Transport Pty Ltd, which emphasised that the plethora of systems could result in a burden of excessive and inconsistent administration, transaction charges, regulations and standards being placed on rail operators. Further, it made the point that while high standards, for example with regard to safety, are vital, they are not necessarily enhanced by duplication between governments, or between governments and private operators (Sub 33, *Submissions* p. 421).

4.142 CRT Group Pty Ltd (CRT), a transport company involved in the packaging, storage and distribution of plastics, and a significant rail user, argued that onerous regulatory requirements are a significant barrier for potential rail operators. It noted that if it wished to run its own train between Melbourne and Sydney, it would require accreditation in up to six safeworking practices and negotiation of access rates and paths with two State access bodies. CRT also noted that introduction of any new or innovative rolling stock would require certification, further lengthening the approval process.

> This approval path is a huge task. It bars the private or niche operator. It is costly. It guarantees that rail will always be far more complex than road operations. It makes the buying and operating of a truck look easy. It puts the brakes on innovation. It ensures that rail will always be a transport niche. (Sub 36, *Submissions* p. 438)

4.143 The committee emphasises the importance of addressing regulatory, as well as legal and physical impediments to interstate rail operations, particularly where they arise due to inconsistencies across jurisdictions. It notes that the development of consistent safeworking, operational and accreditation requirements for the declared national track (as proposed in recommendations 3, 4 and 5) would improve the efficiency of existing interstate rail operations and provide incentive for new operators to enter the market.

Public liability insurance

4.144 A further regulatory requirement which may hinder third party access to public rail infrastructure is public liability insurance. A number of smaller private operators argued that current public liability requirements imposed by the States are both inconsistent and inequitable. Northern Rivers Railroad Pty Ltd (NRR) maintained that no two States have consistent public liability insurance requirements. It cited differences in the size of liability coverage required of rail operators in three mainland States: NSW ($200 million); Victoria ($50 million); and South Australia ($100 million).

4.145 More specifically NRR points out that as a small operator, it is required to carry the same public liability insurance as an interstate mainline operator.

> As an example FreightCorp operate freight trains through the inner suburbs of Sydney sharing the lines with suburban electric trains as well as freight operations covering the entire State of New South Wales. NRR operates (at present) two trains a week between Grafton and Murwillumbah, a total distance of 246 kilometres. Of this, only 106 kilometres is mainline, the balance being branch line. During the course of our operation, there are no other trains on this branch line. (Sub 89.01, *Submissions* p. 1397)

4.146 NRR argued that the regulatory structure imposed on rail operators by State rail authorities does not provide for appropriate treatment of 'niche' operators, nor take into account the need to ensure the survival of smaller regional branch lines (Sub 89.01, *Submissions* p. 1398). Regulatory imposts, such as public liability requirements, may also affect the ability of new entrants, small and big, to access rail infrastructure, although this may be an unintended result.

4.147 Recommendation 9

The committee recommends that the Australian Transport Council review public liability insurance to ensure more appropriate coverage which reflects the level of risk and responsibility of the owners and operators of public rail infrastructure.

Availability of pathways

4.148 A further factor affecting meaningful access is the allocation and availability of suitable pathways or slots. A number of witnesses drew attention to the constraints placed by existing network arrangements, including train path allocation, on the ability of rail operators to run viable train services.

4.149 In evidence to the inquiry, Patrick Rail emphasised that train paths are a critical factor in the provision of track access services, and that allocation is an issue where network capacity is scarce.

> Paths are a scarce commodity on most corridors in regard to departure, transit and arrival times. Existing timetables favour the established rail operators with multiple train paths at times that suit their operational and commercial interests. New operators are left with train paths that do not meet their operational or commercial needs but still cost the same, or possibly more, than paths purchased by established operators. (Sub 50, *Submissions* p. 667)

4.150 AN Track Access acknowledged that access to the interstate network for new operators is constrained by availability of train paths.

> Whilst it is true for example, that the east-west network is only utilised to approximately 40% of its overall capacity, utilisation in the market driven 'slots' is nearing 100%. Given that all operators are competing for the same market, new operators are reluctant to accept a train path that will have a detrimental effect on their competitive abilities. (Sub 67, *Submissions* p. 889)

4.151 Train path priorities may also impact on the ability or willingness of operators to access track. Westrail noted that utilisation of the interstate track on the east–west corridor is largely dictated by path priorities in major hubs.

> …for short windows of the day, the interstate track (in WA) is totally occupied and then for large periods of the day there is nothing on it. There is no use putting trains on at that time because they cannot get into Sydney in particular. (*Transcripts*, p. 1066)

4.152 Problems with existing track capacity, and the potential barriers they create for new operators were emphasised by a number of witnesses. Patrick Rail noted that insufficient passing loops on single track sections of the interstate network constrained train path flexibility and capacity (Sub 50, *Submissions* p. 667). The Sydney Ports Corporation suggested that port utilisation of freight rail services in Sydney may be influenced by lack of track capacity (and hence suitable paths) through the Sydney metropolitan area (resulting from the curfew on freight trains during peak hours) (Sub 62, *Submissions* p. 840).

4.153 Train path availability and allocation is not just an issue for mainline operators. The Association of Railway Preservation Groups Incorporated (ARPG) argued that gaining access to paths on smaller branch lines may also be hindered by bureaucratic process, which can be both lengthy and inefficient (Sub 32, *Submissions* p. 409).

4.154 To some extent the issue of availability of train paths is not one that access regimes can completely overcome. Existing train paths can be reallocated, or alternatively, use of existing track capacity can be improved through efficiency gains to allow for additional train paths. However, substantial improvement in track capacity is probably only possible through expansion of infrastructure (such as additional and longer passing loops or track duplication).

4.155 Track access regimes are thus presented with the problem of how to manage entry by new operators under 'grandfather' rights, where existing operators have contracts with rail infrastructure owners for the occupation of preferential paths. AN Track Access acknowledged that, given the existence of 'grandfather' rights there may be little that can be done to make prime time train paths more contestable in the short to medium term (Sub 67, *Submissions* p. 889).

4.156 However, in the longer term it may be appropriate to adopt congestion pricing for train paths or track segments which would more adequately reflect demand for rail infrastructure, especially when managing peak traffic periods.

Structure

4.157 The committee was presented with a range of views on the implications for access and improved competition of rail industry structure. To a large extent these views reflected the broader debate on the benefits and costs of vertical integration versus structural separation of rail entities. This debate involves a number of key arguments relating to:

- economies of scope and scale,
- the benefits and costs of competition, and
- the compatibility of vertically integrated enterprises with open access regimes.

Vertical integration

4.158 The chief argument advanced in support of vertical integration of enterprises operating infrastructure services is that they provide for more efficient use of resources, resulting from economies of scope and, in many cases, scale. Economies of scope exist where the resources needed to establish and maintain the facility are closely related to those needed to provide the services which utilise that facility. Economies of scale exist where the average cost of production declines as output or use increases.

4.159 Accordingly, separation of vertically integrated enterprises into discrete functional entities may result in the duplication of resources and/or increases in transactional and administrative costs. It may also lead to less efficient investment in and maintenance of track infrastructure, resulting from the separation of infrastructure owner from the end customer, that is, rail user groups. More practically, as Chuck W. Hoppe Inc noted in evidence to the inquiry, structural separation inevitably leads to greater complexity in the operating environment, which can be as much as a disincentive to competition as natural monopoly industry (Sub 110, *Submissions* p. 1485).

4.160 A second, linked argument in support of vertically integrated rail operations is that they are better suited to small, thin markets such as Australia or New Zealand. Partly this is a result of the efficiency potential created by economies of scope and scale, which enables vertically integrated operations to derive lower costs in the long run. It also relates to the control vertically integrated enterprises have over all elements of operation, including most critically, the interface between wheel and rail. In theory then at least, this enables them to optimise resource allocation and efficiency, and respond more flexibly to shifts in demand.

4.161 While in practice the efficiency advantages of vertically integrated rail enterprises (particularly publicly owned rail operations) are not clear in all cases, there is nonetheless some evidence to support this argument. QR argued that there are numerous examples of competitive and efficient integrated railways, many of which set industry benchmarks. These include North American railways, Tranz Rail in New Zealand and the privately owned iron ore railways in the Pilbara area. QR argued further that:

> Clearly disaggregation in not a prerequisite for best practice. Rail industry structures should be disaggregated only when demonstrable competitive benefits outweigh the benefits of integration. It is not believed that the benefits would outweigh the costs of disaggregation in Queensland. (Sub 40, *Submissions* p. 512)

Structural separation

4.162 Advocates of structural separation argue that efficient provision of certain infrastructure services can be realised best through competition between service providers, and that this requires the elimination of market distorting influences (both upstream and downstream) of vertically integrated enterprises. It can be argued that separating ownership of the natural monopoly element of rail infrastructure (the track and related infrastructure) from above track operations limits the extent to which incumbent operators (usually public sector rail enterprises) can inhibit competition, or maintain inefficient practices through monopoly pricing. Separate functional entities also provide the opportunity for greater transparency and accountability. This, in turn, limits the extent to which cross subsidisation practices or indeed unprofitable operations can be hidden.

4.163 This argument draws a neat relationship between increased competition and increased efficiency. However, it does not address the problem of decreasing economies of scale resulting from additional entrants to the market, or the potential inefficiencies associated with duplicated resources. Further, the argument does not explain why structural separation is necessary for increased competition. It has been noted that vertically integrated rail enterprises do not prevent entry of new firms to particular markets, nor discourage competition from other modes of transport.

Integration implications for access

4.164 The structure of rail enterprises, and in particular natural monopoly rail enterprises, may have important implications for third party access and the viability of open access regimes.

4.165 Advocates of vertical integration have argued that access regimes which provide for access to rail services on reasonable terms and conditions can, in fact, be used to contain the monopoly potential of vertically integrated enterprises. The key phrase in this line of argument is 'reasonable terms and conditions'. While the national regime provided by Part IIIA sets out the mechanisms for the establishment of access arrangements, it does not detail the terms and conditions which must be included in an acceptable arrangement. Rather, terms and conditions of access usually remain the subject of arbitration between the owner of the track and the potential user. As owner of the track, a vertically integrated enterprise would appear to have little incentive to negotiate terms and conditions that undermined its competitive advantage over non-track owners.

4.166 The NCC argued that the Part IIIA access regime is premised on the assumption that economic benefits accrue as the costs of access decrease and these cost reductions are extended to upstream and downstream markets, encouraging new entry and greater competition. These benefits are then passed on to end consumers in the form of reduced prices and improved product quality. The NCC further argued that it is unlikely that new firms will enter downstream markets, and so start the process, unless these new firms are confident that their access terms and conditions are as favourable as those received by the State rail businesses they will compete against. This confidence is more likely to emerge if structural separation takes place.

4.167 The ACCC pointed out that the main advantage of structural separation lies in the fact that it allows for easier identification of the contestable segment of an infrastructure service market, and is therefore more likely to support competition than an integrated structure. More specifically, separation complements the more general objective of achieving clearly specified spheres of responsibility and accountability. These in turn facilitate the separation of cost and profit centres which are important requisites for efficient pricing and investment decisions in a competitive environment. Structural separation may also promote greater transparency in the process of determining access arrangements, particularly with regard to the competitiveness of the access terms and conditions provided by the incumbent firm.

4.168 The committee considers that, on the balance of the evidence, no one structure is necessarily superior with regard to all factors (such as allocative and productive efficiency, transactional costs or even total resource costs).

4.169 The main concern of the committee is that either structure should not inhibit effective competition, and transparency and accountability of public rail infrastructure service provision. It was argued, to some effect, that separation into discrete functional entities better supports increased, open competition. It was also argued that the Australian rail market may not be large enough to support rail to rail competition, and that vertical integration better supports viable rail operations. Whichever structure is adopted, it must meet the essential test of providing rail services that deliver net benefit to the community, and better equip it to compete with road, sea and air.

Interstate rail access

4.170 The committee received considerable evidence on the need to improve the approach to providing access to the interstate rail network. At present, the interstate standard gauge track traversing Brisbane to Perth is controlled by Commonwealth and State based organisations (see figure 2.1).

4.171 The multi jurisdictional nature of interstate track management and control has lead to a fragmented approach to track access. Each State based organisation maintains different access pricing structures, transparency procedures, and commercial terms and conditions for providing access. In addition to price and other commercial terms and conditions, several other aspects of track access management differ across States.

4.172 These include:

- management of track infrastructure assets (maintenance and upgrading);
- setting of technical and performance standards for track (for example, axle mass, speed, train length and clearance); and
- safety and environmental regulation (including accreditation, certification of equipment, safety critical personnel and environmental protection legislation compliance).

4.173 As a result, both existing and potential new rail operators must negotiate agreement with up to thirteen different entities to gain practical access to the whole national track system (Sub 26, *Submissions* p. 244).

4.174 The impracticality and inefficiency of this approach was highlighted by a number of witnesses to the inquiry. Evidence overwhelmingly supported the need to develop a single entity to manage access to the interstate network. The announcement by the Commonwealth of its intention to establish a national track authority to control and manage access to the interstate track system drew wide support from witnesses to the inquiry.

Australian Rail Track Corporation

4.175 Following the Rail Summit in September 1997, Commonwealth and State Transport Ministers agreed to the establishment of a national rail track access company to provide a one stop shop for access to the interstate rail network (Sub 73, *Submissions* p. 1012).

4.176 The Australian Rail Track Corporation (ARTC) was subsequently incorporated under South Australia's Corporations Law on 25 February 1998. The ARTC began operations as a government business enterprise (GBE) on 1 July 1998, and is subject to the oversight and

accountability provisions in the *Commonwealth Authorities and Companies Act 1997* and the governance arrangements for Commonwealth GBEs.

4.177 The ARTC's intended functions, as outlined in its Memorandum of Association, include:

- to provide efficient and seamless access to the interstate rail network by entering into access agreements with track owners directly;
- to manage track maintenance and construction, train pathing and scheduling on track controlled by the corporation; and
- to improve the interstate rail infrastructure through asset management, including a program of commercial and public funded investment for the interstate network.

4.178 As a GBE, the ARTC is expected to manage access to the standard gauge interstate rail network for all operators on a commercial basis. It has assumed control of AN Track Access operations, including management of access to all sections of the Commonwealth owned interstate track and access arrangements previously maintained by AN Track Access.

4.179 At the time of writing, negotiations on control and management of access to the rest of the interstate rail network have yet to be concluded. Victoria and Queensland have ceded control of the interstate track currently under their respective jurisdiction to the Commonwealth. Significantly, negotiations on key sections of the interstate track currently controlled by NSW and WA have not been finalised. The committee notes with some concern that the possible privatisation of the interstate standard gauge in WA potentially adds further complexity to the ARTC's control and management of the track. It would appear that, regardless of the outcome of those negotiations, some sections of the proposed national network will not be controlled by the ARTC in the short term.

4.180 With reference to interstate access arrangements through NSW, RAC has stated that it will be seeking to establish a commercial arrangement with the ARTC 'to allow them to deal directly with customers...running on [RAC] track' (*Transcripts,* p. 1184). However, it has also said that the multi user characteristics of the NSW rail system precludes a transfer of control of the entire interstate network to a single entity.

> If the so-called interstate elements of the New South Wales rail network were transferred to a new organisation, then many intrastate freight movements, particularly export and Countrylink services, would originate in RAC territory, traverse the proposed interstate territory, then terminate in RAC territory. Therefore the concept of an interstate 'one stop shop' would come at the expense of intrastate operators. (Sub 52, *Submissions* p. 695)

4.181 Similarly, WA has made it clear that it does not conceive it essential for a single entity to control access to its interstate track. In evidence to the inquiry, the WA Government indicated that it would not be transferring control of the interstate track between Perth and Kalgoorlie to the ARTC, rather, access to that track will be sold to the ARTC who will on-sell it to operators (*Transcripts,* p. 1043).

4.182 One concern raised in evidence was the potential for continuation of a 'fragmented' approach to access to the interstate network. Toll Rail noted that 'commitment to the ARTC appears less than vibrant having regard to our understanding that rail operators will deal

directly with infrastructure bodies in the States of Western Australia and NSW' (Sub 111, *Submissions* p. 1497).

4.183 SCT argued that a national track authority that was still required to negotiate access with state track owning bodies would be less effective than the current unsatisfactory arrangements.

> …an agency approach that purported to give users a one stop shop but was then responsible for negotiating access details with each of the state track authorities would be a big backward step from the present position. (Sub 29, *Submissions* p. 310)

4.184 It pointed that out that the potential agency costs resulting from additional administrative layering would be borne largely by rail operators, and not infrastructure owners.

4.185 The committee has some concerns that the effectiveness of the ARTC as a one stop shop for access to the interstate network may be limited by the lack of control the ARTC has over certain sections of the network. As noted previously, both NSW and WA have indicated that they are not willing to negotiate with the ARTC to allow it to own, control and manage sections of the interstate network within their respective jurisdictions.

4.186 National access, through the ARTC, to those sections may be obtained by track leasing arrangements, or negotiation of specific train paths with the State track access bodies. In either case, the ARTC will have limited scope to control the access prices it extends to rail operators or track investment and maintenance decisions in those parts of the network.

4.187 The committee recognises that the establishment of the ARTC is an important step toward a truly national track system. However its ability to provide a one stop shop for access to such a system, requires the continued commitment of Commonwealth and State Governments to a continuous (and seamless) interstate network. In particular, it requires continued cooperation between the Commonwealth and States in addressing the problems created by State retention of control of critical sections of the interstate network.

4.188 Recommendation 10

The committee recommends that the Commonwealth ensures the Australian Rail Track Corporation adopts an access regime providing for transparent and accountable pricing. Such a regime should include:

- **access pricing based on a two part tariff, comprising a flagfall and a variable component which allocates costs on a user pays basis; and**
- **posted access pricing by track segment.**

4.189 Recommendation 11

The committee recommends that the Commonwealth ensures that the Australian Rail Track Corporation secures control and management of the national track, including those sections of the interstate network currently controlled by State authorities.

Utilisation

4.190 Improved access to rail infrastructure should facilitate increased utilisation of existing resources. However, increased utilisation will depend on more than just access to infrastructure. It will also depend on the competitiveness of services provided by rail relative to other forms of transport, the adequacy of the rail infrastructure itself, the extent to which rail managers seek innovative ways to change current practices, and the extent to which rail services can become better integrated with other transport forms, particularly at intermodal links such as ports and rail terminals.

4.191 Levels of utilisation of rail infrastructure vary markedly across interstate and intrastate rail networks. The coal railways in NSW and Queensland, for example, have maintained consistently high rates of utilisation, as has the privately owned iron ore railways in the Pilbara area.

4.192 Other parts of Australia's rail networks, however, have become seriously underutilised. Partly, this is due to the small and geographically disparate nature of the Australian market, which cannot generate sufficient demand to sustain high utilisation rates in certain parts of the network, for example regional branch lines. It is also due to a range of other impediments.

4.193 A key impediment to increased rail utilisation is the availability of more effective forms of transport (such as road and in some cases sea) to perform particular tasks. Where rail is not well suited to perform a particular task, such as the transport of non bulk freight over short distances, its market share has declined, leading to reduced utilisation of rail infrastructure. This is evident in the increasing share of the freight market handled by road transport in certain corridors. For example, the Sydney–Melbourne road corridor offers freight haulers a high quality alternative route to rail, the Hume Highway. The highway enables trucks to provide a relatively cheap, reliable means of transporting goods door to door which rail struggles to match in terms of timeliness, quality of service and price. The absence of competitive neutrality between the various forms of transport contributes to rail's disadvantage, but is not the only factor.

4.194 As noted in the previous section, another important impediment to rail utilisation historically has been the lack of access made available to new rail operators. In the absence of open, non discriminatory access and the competition that access implies, there was little scope for new operators to enter the market and make use of rail infrastructure. There was also little incentive for existing operators to improve the way they used available capacity.

4.195 If an existing operator considered a particular service was non viable and chose to reduce services, the rail infrastructure (the train path and hence the track) associated with that service would become underutilised or in some cases, completely idle.

4.196 A further impediment to increased utilisation is the standard or condition of existing rail infrastructure. This includes both fixed assets, such as the track and terminals, and non fixed assets such as locomotives and rolling stock. A number of witnesses argued that the poor standard of existing infrastructure is both a disincentive to increased utilisation of, and investment in, the rail network.

4.197 The inadequacy of the track infrastructure may affect train efficiency, in terms of transit times and capacity, and operating costs. For example, infrastructure limitations in many parts of the NSW network constrain the ability of operators to run long and heavy trains, reducing efficiency and output. This problem is also apparent on sections of the interstate rail network, such as the Melbourne to Adelaide interstate standard gauge line.

4.198 Rail infrastructure inadequacy is also reflected in the development of traffic bottlenecks, for example the Sydney metropolitan area, that affects the efficiency of rail operations and utilisation. In the case of Sydney, the freight bottleneck created by giving priority to passenger services at peak periods in the day means that interstate freight trains can be held over for considerable times. Consequently, for shorter hauls (for example Melbourne–Sydney) potential train delays can reduce service quality and reliability. This in turn enhances the attractiveness of road transport, leading to a shift in freight traffic to road, and resulting in decreased utilisation of existing rail infrastructure.

4.199 A number of witnesses argued that the chronic lack of investment in rail infrastructure over many years, compounded by high levels of spending on road infrastructure, has lead inevitably to a decline in the level of utilisation of rail. Given the considerable sunk cost component of any investment in rail infrastructure, underutilisation of existing assets imposes a serious cost on rail operators, customers and the broader community.

4.200 A further factor affecting rail utilisation is the integration (or lack thereof) of various transport modes. Unlike other countries, particularly in Western Europe, the different parts of the national transport network are not well integrated, which inhibits best use of all modes. In particular, the interstate rail network is not yet connected to major airports, though this will soon change with completion of the Southern Rail link to Kingsford Smith Airport in Sydney. Similarly, standard gauge rail connections into major shipping ports in Adelaide, Melbourne, Sydney and Brisbane have yet to be fully completed.

Costs of underutilisation

4.201 The costs of underutilisation of rail infrastructure are borne not just by the infrastructure owners and rail users, but by the Australian community as a whole. These costs include the ongoing financial costs of supporting infrastructure services that are either uneconomic (in the sense that they cannot recover total costs) or are inefficient. They also include the environmental and social costs associated with greater use of alternative transport, in particular road transport.

4.202 In a narrow sense, the costs of underutilisation are shouldered by the infrastructure owners and the rail operators who use the infrastructure. In the case of public use rail infrastructure, ownership and control has generally been retained by government owned rail bodies. Where rail infrastructure is underutilised, the government (and through it the community) basically supports the costs of latent capacity, through funding, subsidies or some other form of operating write off.

4.203 However, rail operators may also bear the costs of underutilisation through increased infrastructure charges or reduced quality of infrastructure service. For example, if the fixed costs of providing rail infrastructure are fully distributed among all users, underutilisation may lead to inefficient pricing outcomes. Existing operators may ultimately pay for the cost of unutilised capacity. Similarly, underutilisation may constrain the ability of infrastructure providers to generate revenue to cover total costs and track investment. In practice this is essentially the dilemma facing Rail Access Corporation in NSW. The costs of underutilisation may then be passed on to consumers through higher freight rates or passenger fares, reduced service frequency and reliability.

4.204 In a broader sense, the costs of rail underutilisation are borne by the community, through increased use of road transport and consequent congestion, higher noxious gas emissions, increased accidents and higher road construction and maintenance costs (see Chapter 2 for more detail). Chronic underutilisation may also result in eventual closure of facilities, disadvantaging certain user groups such as social security recipients, low income earners and/or the elderly.

Scope for increased utilisation

4.205 Much of the evidence to the committee focussed on the need to increase (and improve) utilisation of Australia's rail infrastructure. Witnesses suggested that increased utilisation can be achieved through a range of strategies, but the most common plea was for more investment to upgrade (and in some cases save) rail infrastructure. In evidence to the committee, a direct link was drawn between the level of investment in rail infrastructure and levels of utilisation.

4.206 Rail operators and user groups argued that improvements to the quality of existing infrastructure, through greater investment, would lead to increased utilisation of those assets. In particular, infrastructure improvements which enable train operators to improve transit time, operating costs and reliability (thus allowing rail to become more competitive with road transport) are likely to facilitate increased utilisation.

4.207 For example, FreightCorp argued that improvements to the load bearing and grading of certain sections of the NSW rail network would substantially improve train carrying capacity and operating speeds (Sub 43, *Submissions* p. 573). NR echoed this point, arguing that track infrastructure upgrades on key sections of the interstate rail network would lead to improved service quality, reduced operating and maintenance costs (Sub 26, *Submissions* p. 238). This would also lead to improved efficiency and utilisation rates.

4.208 The SA Government argued that the expenditure of relatively small amounts of capital on track improvements could result in a dramatic increase in productivity, reduction in costs, and hence increase in utilisation.

> In particular, bringing the Victorian section of the interstate network up to standard and removing the worst grades on the eastern side of the Adelaide Hills would reduce travel time by some four hours for the average freighter service, thus making it comparable to road haul times and allowing return daylight services utilising the same locomotives. (Sub 69, *Submissions* pp. 931–2)

4.209 Additions to existing rail infrastructure may also provide scope for improved utilisation. For example, the construction of more and longer crossing loops on existing tracks was identified in the evidence as providing for better utilisation rates, through improved train frequency and payload capacity. (See box 5.2 for the committee's suggested priorities.)

4.210 While improvement to the standard of existing infrastructure is likely to result in some increase in utilisation, although this is by no means guaranteed, more substantial gains may result from reforms to the way the existing infrastructure is used. This could include improvements to train management systems, including train control, scheduling and path allocation, safe working procedures, and communications and signalling systems.

4.211 Many of these improvements can be achieved through technological upgrading of existing systems. Sydney Port Corporation noted the potential for application of information technology systems to train operations.

> Computerised systems that provide safety mechanisms such as automatic controlling and satellite monitoring should be extended. Supplementary information systems for logistics planning, controlling and tracking of the movement of the goods would be beneficial. Improved consignment information would be available in a computerised environment. (Sub 62, *Submissions* p. 843)

4.212 Development of improved train management systems may enable more efficient use through dense rail traffic zones, such as the Sydney metropolitan area, which currently impacts on utilisation of the interstate network across Australia. While segregated freight paths are generally regarded as a first best option, it may be adequate in the short term to attempt to increase utilisation through reorganisation of scheduling, train path allocation (including curfews) and train operating procedures. For example, better train control, signalling and communications systems may enable reductions in train separation, better use of crossing loops and through that increased train frequency.

4.213 Patrick Rail argued that 'if the point to point transit times can be reduced at all by fine tuning the current systems, this will immediately reflect in reduced fuel and labour costs per train trip.' (Sub 50, *Submissions* p. 675)

Intermodal links

4.214 Increased utilisation also requires greater integration of rail infrastructure and services within a national transport system, and in particular, more attention to the development of efficient intermodal linkages such as sea ports, road and rail terminals and airports. This will require effort to improve the logistics of intermodal operations, the adoption of innovative technologies, and incentives to encourage greater multimodal use (such as vehicle parking facilities at rail stations).

4.215 To date, intermodal linkages have tended to be developed in a piecemeal fashion. Rail infrastructure at port facilities has often possessed differing operating characteristics to the interstate rail network, creating the need for land bridging or the development of transfer facilities. Similarly, until recently intraurban and interstate rail networks have not been extended to airports in major cities. In the absence of intermodal coordination and cooperation, investment in and development of transport infrastructure has tended to be made in isolation, creating inefficiency and waste.

4.216 Improving the logistics of intermodal operations, such as the transfer of freight from vessel at port to rail (and vice versa) is a crucial element in improving rail utilisation. In its submission to the inquiry, Sydney Ports Corporation noted that rail connections servicing the ports of Sydney Harbour and Port Botany are currently underutilised, accounting for only ten to twelve per cent of sea cargo moving through Sydney (*Transcripts*, p. 455). It argued that port utilisation of rail services could be improved by developing additional infrastructure, but also by addressing the efficiency of loading and unloading operations (*Transcripts*, p. 462).

4.217 The efficiency of intermodal operations can also be improved by more strategic approaches to terminal locations. A number of submissions argued that the development of rail terminals in areas (such as the periphery of major cities) that maximise access to rail feeder services and distribution points, should improve inter-modal efficiency and rail utilisation. To some extent, this approach is already being adopted by transport planners. Sydney Ports Corporation cited the example of recent development of the Sydney Freight Terminal at Chullora in Sydney's western suburbs. It noted that this terminal provides an efficient intermodal freight transfer point for the Sydney metropolitan region, linking with distribution centres in the greater west and Port Botany in the east (Sub 62, *Submissions* p. 843).

4.218 Improvements to intermodal linkages also can be achieved through closer coordination of communication systems used by transport operators. For example, the development of electronic data interchange (EDI) systems offers scope for improving the logistics of transport consolidation, whether it be within rail, between road and rail, or rail and sea transport. To a degree this is already occurring. As noted in chapter 2, both NR and FreightCorp in NSW have developed computerised ordering and tracking systems which link into other communications systems (such as the internet), and which provide for more efficient coordination of rail, road freight and shipping operations.

4.219 The adoption of other innovative technologies can also facilitate the development of more efficient intermodal linkages, and through that provide for increased utilisation. In evidence to the inquiry, RailRoad Technologies Pty Ltd indicated that it has developed a proposal for a trailer rail freight service between Sydney and Melbourne that allows road trailers to be loaded onto rolling stock and line hauled (effectively a roll–on roll–off approach). Other operators, including NR, are also developing similar trailer rail concepts.

4.220 There is further potential for increasing rail utilisation through improvements to intermodal linkages for passenger services, particularly in regional areas where alternative forms of transport are unavailable. This could involve improved coordination of scheduling for bus and train services and single ticketing systems to allow for a continuous multimodal service. The Public Transport Users Association (PTUA) argued that even modest service improvement and coordination, such as that carried out by the Victorian public transport operator (V/Line) during the 1980s, can improve utilisation. Citing the Victorian example, PTUA noted:

> Rail services were speeded up, permitting an increase in service frequency (generally from two to three trips per day), and some existing bus services were recast as coordinated feeders to rail. The result was a substantial increase in patronage and an improvement in cost recovery. (Sub 100, *Submissions* p. 1263)

4.221 Another way to increase utilisation of intraurban passenger services may be through greater use of drive/ride approaches to transit. To help commuters avoid worsening road congestion and lack of parking in central city centres, a sensible development would be to increase the frequency of rail services and provide secure parking facilities at suburban stations. These developments may be accompanied by economic incentives to increase public transport use (such as discounted train fares or parking vouchers), or conversely, disincentives such as restrictions on parking in urban centres, toll roads or car pool requirements.

Rail corridors

4.222 A further factor affecting rail utilisation is the extent to which rail corridors are dedicated for specific purposes, or are multi purpose (for example freight and passenger services). Where rail corridors are multi purpose, there may be difficulties for either freight or passenger service operators in obtaining desired or satisfactory train paths. The necessity for path allocation procedures, particularly on high density sections of a rail network, may lead to inefficient use or underutilisation by certain categories of traffic.

4.223 A number of witnesses to the inquiry argued that in certain circumstances, dedicated rail corridors may provide the most effective solution to network density problems arising from multi purpose use. The State Rail Authority of NSW, for example, argued that 'metropolitan railways work best when all lines are segregated and certainly where freight and high speed long distance passenger services use segregated lines'. (Sub 23, *Submissions* p. 225) This view was supported by the Sydney Ports Corporation, which argued that dedicated freight lines from Port Botany to the Chullora terminal in Sydney would result in increased utilisation of rail freight services from port (Sub 62, *Submissions* p. 843).

4.224 In other circumstances, multipurpose rail corridors may provide for the most efficient use of rail infrastructure. This is particularly the case where no single category of traffic utilises the full capacity of the corridor, or utilises corridor capacity consistently. Of course,

it can be argued that the development of a dedicated line which improved transit time, payload capacity and reliability, would generate sufficient demand to meet expanded capacity.

4.225 The adoption of a national approach to the interstate rail network should, in turn, lead to greater focus on the need to improve rail utilisation rates, particularly in the north–south corridor. Many witnesses argued that upgrading this existing rail infrastructure alone would yield substantial benefits in terms of utilisation. However, there are a number of other strategies which could contribute to increasing utilisation, including improvements to intermodal logistics and existing train operating systems.

Conclusion

4.226 Improved access to and utilisation of rail infrastructure are essential if rail is to continue to play an important part in the national transport system.

4.227 Competition reforms, including the establishment of the national access regime under Part IIIA of the *Trades Practice Act 1974*, have provided the impetus for more transparent, consistent approaches to access. Significantly, access and the increased competition it allows, is now recognised as a critical part of the rail reform process.

4.228 However, progress in the rail reform process is likely to continue to be slow, and in some cases, difficult. Application of the national access regime (embodied in Part IIIA) in rail to date has facilitated some change, but this has been modest. Use of the declaration process has, indirectly, lead parties to privately negotiate access arrangements in one case, while in two other cases, appeals remain pending with the Australian Competition Tribunal.

4.229 More encouragingly, the national access regime has provided a framework for States to develop their own access regimes under the certification process. NSW has recently had its rail access regime certified, and other States have indicated that they intend to follow.

4.230 Legislated access to rail infrastructure is only part of the equation. Other impediments to an open, competitive industry—including the price of access, the level and cost of regulatory requirements, accreditation, and the allocation of pathways—also need to be addressed. As evidenced by the 1997 Rail Summit and the subsequent work of the Australian Transport Council, Commonwealth and State Governments have begun to address some of these issues, in particular the need for greater consistency in operational and safety requirements imposed on interstate rail operators. However, further efforts are required by the Australian Transport Council to review the full range of regulatory problems, in particular the impost of public liability insurance on rail operators.

4.231 The establishment of the Access Rail Track Corporation (ARTC) to manage access to the designated interstate network should overcome some of the basic problems associated with the fragmented nature of existing access arrangements. It is hoped that the national body can also address some of the regulatory and standards problems associated with the current multi jurisdictional approach to the interstate rail network. However, to achieve a truly national interstate network which provides for a seamless service from Brisbane to Perth, the ARTC requires the full commitment of and cooperation between the Commonwealth and State/Territory Governments to ensure it secures control and management of the interstate track.

4.232 Efforts to improve access to rail infrastructure, both in terms of pricing and other factors such as accreditation and standards requirements, should facilitate increased utilisation, particularly at the interstate level. However, increased utilisation will also depend on improvements to the condition and standard of the existing rail infrastructure, and improvements to intermodal logistics, train control and communications systems. Perhaps most importantly, increased rail utilisation will depend on the extent to which governments address the current imbalance in the treatment of road and rail transport, in terms of funding, regulatory requirements and taxes and charges.