PRICEWATERHOUSECOOPERS

Economic Regulation Authority

Review of Proposed Part 5 Instruments of *The Pilbara Infrastructure Pty Ltd*:

Costing Principles

Final report (draft)

July 2009

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Disclaimer

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Summary Comments

In the period between 3 July 2008 and 15 August 2008, The Pilbara Infrastructure Pty Ltd (TPI) submitted to the Economic Regulation Authority (ERA) segregation arrangements and four Part 5 instruments (Train Management Guidelines, Train Path Policy, Costing Principles and Over-payment Rules) for approval under the WA Rail Access Regime.

This report by PricewaterhouseCoopers (PwC) addresses TPI's proposed Costing Principles (CP). Separate PwC reports address TPI's other proposed Part 5 instruments and its proposed segregation arrangements.

The Part 5 instruments, along with the segregation arrangements, are to help provide access to monopoly infrastructure with reasonable quality of service at fair prices, and to prevent below rail infrastructure owners from extracting monopoly rents from third party above rail operators. At the same time, these arrangements are to recognise the need for infrastructure owners to achieve fair and reasonable returns on their investments.

The definition of Part 5 instrument, and the requirement for a railway owner to have in place such instruments, is set out in the Railways (Access) Code 2000 (the Code). In broad terms, the Part 5 instruments comprise:

- the Train Management Guidelines (TMG), which are a statement of the principles, rules and practices that are to be applied and followed by a railway owner in relation to the real-time management of services;
- the Train Path Policy (TPP), which is closely related to its TMG, and deals with the allocation of train paths and the provision of access to train paths that have ceased to be used;
- the Costing Principles, representing principles, rules and practices that are to be applied by the railway owner to determine the floor and ceiling price tests, and to keep and present the railway owner's accounts and financial records pertaining to the determination of these costs; and
- the Over-payment Rules (OPR), which in effect, are to provide for the 'wash-up' of any over-recovery of total costs by the railway operator at the end of each successive period of 3 years from the commencement of access.

The Code also sets out the power of the regulator to approve the instruments - with or without required amendments, or to direct a railway owner to amend or replace an instrument with an instrument determined by the regulator. The ERA is the regulator in respect of the WA Rail Access Regime, which is comprised of the Railways (Access) Act 1998 (the Act) and the Code.

The ERA has requested that PwC assess TPI's proposed Part 5 instruments from the perspectives of: the legislative requirements set out in the WA Rail Access Regime; the relevant technical and financial issues covered in TPI's documents; and the nature of the new railway, including any issues relevant to the particular circumstances relating to its operation.

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PwC's assessment involves considering whether the provisions of TPI's Part 5 instruments as proposed can be accepted by the ERA as complying with the legislative requirements, or whether particular changes, or further information in relation to the instrument provisions, are considered necessary in order for the ERA to be able to approve the individual instruments.

On 14 July 2008, the ERA called for public submissions on the TPI Segregation Arrangements and on TPI's TMG and TPP. TPI's Segregation Arrangements, TMG and TPP were submitted to the ERA on 3 July 2008.

On 20 August 2008, the ERA called for public submissions on the TPI CP and OPR, which were submitted by TPI on 15 August 2008 and 24 July 2008 respectively.

Public comments were received on the CP (and OPR) on 1 October 2008. On 14 November 2008, TPI provided a response to the ERA on selected issues raised in the public comments. This report concerns only TPI's proposed CP and addresses issues raised in the four public submissions received by the ERA, and in TPI's response to the public comments, in relation to the proposed CP.

A summary of the results of our assessment is provided below and details of our approach and assessment are provided at sections 1 and 2 of this report.

Below are our key recommendations in relation to TPI's proposed CP as submitted to the ERA on 15 August 2008. We have not set out below all of our recommendations, in terms of suggested amendments, or further information in relation to particular provisions, that we consider would be required in order for the ERA to approve the individual instruments. All of our recommendations are discussed in section 2 of this paper and are listed in the Appendix.

General Issues

- As TPI is a vertically-integrated rail freight entity (compared to WestNet, which is vertically-separated), and given that there is a sound prospect of third party interest in using the TPI network, the extent of protections to access seekers and operators in the TPI Part 5 instruments should at least equal to those in the WestNet instruments.
- It appears that TPI has developed its Part 5 instruments based on an evaluation of the WestNet Part 5 instruments, as evidenced by replication in the TPI instruments of a significant number of WestNet provisions. However, we note that TPI has, in a number of cases, sought to apply more light-handed approaches than in the WestNet instruments.

Specific Issues

- Section 46(1) of the Code requires a railway owner "to prepare and submit to the Regulator a statement of the principles, rules and practices ("the costing principles") that are to be applied and followed by the railway owner" in determining floor and ceiling costs and in preparing financial records in relation to those costs.

In a number of respects, the TPI CP provides views to adopting particular measures, or options that will be considered, rather than principles and practices that are to be applied. A number of our recommendations in relation to the CP deal with this issue that the principles and rules to be applied are not sufficiently prescribed (eg in relation to section 2, on the development of a costing model, and section 3.1.1, on determining Gross Replacement Value (GRV)).

- TPI has not developed its costing model, but commits to develop such a model within 18 months. We consider that at least the framework for the costing model should explained in the CP in order for the model to be assessed as being part of the principles, rules and practices to be applied by TPI (in accordance with section 46(1) of the Code). Such explanation should cover how the cost elements in the CP are incorporated into the model. We also suggest that the model should be developed within a significantly shorter period of time than proposed by TPI (we suggest within 6 months), given the importance of modelling results to determining floor and ceiling costs, to preparing financial records and to the review to be conducted within three years. (**CP Recommendation 4**. See also **CP Recommendation 37** as listed below).

- TPI defines only one route section for its network, whereas the WestNet CP prescribe multiple route sections. Stakeholders present that there is demand from prospective operators for access to only parts of the overall network. The ability to negotiate access in relation to part of the network in that case would be consistent with the interests of users. Further, the pricing of such access on the basis of the costs associated only with those parts of the network (rather than the overall network) is considered to be consistent with economic efficiency principles. Given this, we suggest that, similar to the WestNet CP, the TPI CP specifies multiple route sections on its network. The TPI route sections should be the discrete sections of track between sidings, passing loops and terminals. (**CP Recommendation 5**). This recommendation also applies to the TPI OPR.

- In determining a GRV, TPI equates its actual costs to greenfields costs. In light of this, we suggest that TPI:

  - demonstrates to the ERA that the assets created comply with clause 2(4)(c) of Schedule 4 of the Code and verifies the escalation in input costs since the assets were created (**CP Recommendation 13**);

  - defines greenfields costs consistently with the greenfields principle as reflected in section 2.3 the WestNet CP, in that costs incurred in working around existing infrastructure are not to be included in any greenfields costs. (**CP Recommendation 12**);

  - in order to more fully explain the principles and rules for applying the Modern Equivalent Asset (MEA) concept in the CP, TPI should adopt the MEA principles and rules from section 2.3 of the WestNet CP (**CP Recommendation 14**);

  - sets out details of the process by which it will apply greenfields values, MEA values and market tested rates to arrive at a GRV to a similar level of detail as provided in the WestNet CP (**CP Recommendation 15**); and

- consistent with the three yearly reviews of the CP (see **CP Recommendation 37**) and with similar provisions in the WestNet CP, we suggest that the TPI CP should specify that the GRV will be reviewed by the ERA every third year. (**CP Recommendation 21**).

- TPI seeks to prescribe particular WACC component approaches in the CP. In this regard, the WACC to be applied in determining capital costs under clause 2 of Schedule 4 of the Code is to be determined by the ERA under a separate process to approval of the CP. Given this, it is not considered appropriate that WACC component approaches should be prescribed in the CP and we suggest that provisions setting out approaches to WACC should be deleted. (**CP Recommendation 24**).

- The CP also provide that, if an allowance for asymmetric risk is not included in the WACC, TPI would include the cost of such risks in operating costs. We do not consider these to be matters that can be addressed in the CP, given that:

  - the WACC is established by separate ERA determination, and the ERA's recent 2008 WACC determination provides no allowance for asymmetric risk, nor includes a consideration of such risk as a matter to be incorporated into cashflows; and

  - the definition of "operating costs" in clause 1 of Schedule 4 of the Code would not, in our view, encompass the asymmetric risk allowance proposed by TPI. (**CP Recommendation 25**).

- Because TPI proposes to include working capital costs in its cost calculation, in order to be treated on a consistent basis with WestNet and with the principle established in the 2008 WACC determination, the TPI annuity calculation should be on an annuity due basis. (**CP Recommendation 26**).

- We recommend that TPI adopt a GTK allocator for railway infrastructure indirect costs, and train movements as an allocator of network management indirect costs, in both cases replacing train kms, given that these measures, which are also used in the WestNet CP, are considered to represent better measures of causation of the relevant costs. (**CP Recommendation 32**).

- We suggest that section 7 of the CP, entitled Review and consultation, includes a regular review commitment, as per the WestNet principles. We consider a regular review commitment to be more important for the CP than for the other Part 5 instruments. Although it is recognised that the railway owner, with the approval of the ERA, can amend or replace the CP at any time, and that the ERA can direct the railway owner to amend or replace the principles, we consider that a commitment to periodic reviews provides a general benefit of certainty of regulatory process and ensures that the interests of railway owners and users will be balanced on a regular basis. We consider that three yearly reviews, as provided in the WestNet CP, to be sufficient for these purposes.

- The reviews would be conducted every three years commencing from the date of the ERA's approval of these CP. (**CP Recommendation 37**).

Recommendations in relation to minor suggested amendments, or general requests for further information in relation to specific provisions (where such information is considered relevant to the ERA in deciding whether to approve a proposed provision), are not set out above. All recommendations are included in the assessment in section 2 and in the Appendix to this report.

Our general recommendations include a suggested requirement for TPI to provide a complete list of the definitions used in the CP. Such definitions should be consistent with the definitions in the Act and the Code, and with the definitions in the WestNet CP, where appropriate.

1 Background

The Pilbara Infrastructure Pty Ltd

The Pilbara Infrastructure Pty Ltd (TPI) is a wholly owned subsidiary of Fortescue Metals Group Ltd (FMG).

FMG is developing iron ore mining operations in the vicinity of the Chichester Range in Western Australia's eastern Pilbara (through a wholly owned subsidiary, FMG Chichester Pty Ltd). It is also establishing port facilities at Anderson Point in Port Hedland and a railway link between the port and mine via its subsidiary, TPI.

The railways network owned and operated by TPI is to operate trains between the Pilbara and Point Anderson to facilitate the export of FMG's iron ore. The network has been constructed using specially profiled concrete sleepers and a process of continually welded rail, to ensure the track is up to the task of carrying trains which will weigh some 30,000 tonnes and be in the order of 2.5 kilometres long.

Statutory requirements summary

A regulatory regime to facilitate third party access to Western Australian railway infrastructure is provided under the Railways (Access) Act 1998 (the Act), the object of which is to establish a rail access regime that encourages the efficient use of, and investment in, railway facilities by facilitating a contestable market for rail operations. The Act provides for the Minister to establish a code governing the use of certain facilities for rail operations by persons other than their owners. The Railways (Access) Code 2000 (the Code) made by the Minister, which represents subsidiary WA legislation, was gazetted in September 2000. The Western Australian Rail Access Regime, comprising the Act and the Code, became fully effective on 1 September 2001.

The Economic Regulation Authority (ERA) is the regulator in respect of the access regime provided by the Act and Code. The ERA is responsible for monitoring and enforcing compliance by railway owners with the Act and Code and is otherwise to perform the functions and exercise the specific powers as set out in the Act and Code.

On 1 July 2008, the Railway and Port (The Pilbara Infrastructure Pty Ltd) Agreement Act 2004 (the Agreement Act) amended the Act and the Code to bring TPI's railways network under the Western Australian Rail Access Regime.

The Agreement Act required TPI to submit to the ERA segregation arrangements (in terms of Division 3, Part 3 of the Act) and the four “Part 5 Instruments” set out in section 40(3) of the Code (train management guidelines, statement of train path policy, costing principles and over-payment rules) no later than seven days after the Act and the Code applied to TPI’s railway network.

TPI’s initial proposed segregation arrangements and Part 5 instruments in response to the legislative requirements were submitted to the ERA in the period from 3 July 2008 and 15 August 2008 as follows:

TPI Arrangement/Instrument	Submission Date
Segregation Arrangements	3 July 2008
Train Management Guidelines	3 July 2008
Train Path Policy	3 July 2008
Costing Principles	15 August 2008
Over-payment Rules	24 July 2008

This report addresses only one of TPI’s proposed Part 5 instruments, being its proposed Costing Principles. Separate PwC reports consider TPI’s proposed segregation arrangements and consider its other proposed Part 5 instruments in the form of the Train Management Guidelines, Train Path Policy and Over-payment Rules. In this paper we have not addressed the issue of compliance with submission requirements under the Agreement Act.

2 Discussion on Statutory Compliance

2.1 Approach

Statutory Requirements – Part 5 Instruments

The Part 5 instruments and the segregation arrangements are to facilitate access to monopoly infrastructure with reasonable quality of service at fair prices, and to prevent below rail infrastructure owners from extracting monopoly rents from third party above rail operators. At the same time, these arrangements are to recognise the need for infrastructure owners to achieve fair and reasonable returns on their investments.

Section 40 of the Code sets out the Part 5 instruments that are required to be approved by the regulator. The key provisions are as follows:

> **40. Interpretation**
>
> "(2) For the avoidance of doubt it is declared that a Part 5 instrument relating to a part of the railways network and the associated infrastructure is binding on the person who is for the time being the railway owner in respect of that part.
>
> (3) In subsection (2)—
>
> "Part 5 instrument" means —
>
> (a) the train management guidelines;
>
> (b) the statements of policy;
>
> (c) the costing principles; and
>
> (d) the over-payment rules,
>
> for the time being approved or determined under sections 43, 44, 46 and 47 respectively."

A railway owner is also required to have in place approved Costing Principles (CP), representing principles, rules and practices that are to be applied by the railway owner to determine the floor and ceiling price tests, and to keep and present the railway owner's accounts and financial records pertaining to the determination of these costs. Quantification of floor and ceiling costs and assessment of whether TPI's costs are appropriate are not part of the ERA's current assessment of the TPI Part 5 instruments. The key provisions of the Code in this regard are as follows:

46. Costing principles

"(1) As soon as is practicable after the commencement of this Code each railway owner is to prepare and submit to the Regulator a statement of the principles, rules and practices **("the costing principles")** that are to be applied and followed by the railway owner—

(a) in the determination of the costs referred to in clauses 7 and 8 of Schedule 4; and

(b) in the keeping and presentation of the railway owner's accounts and financial records so far as they relate to the determination of those costs."

Clauses 7 and 8 of Schedule 4 of the Code define the Floor Price Test and Ceiling Price Test respectively.

Section 46 of the Code sets out the power of the regulator to approve the CP (and sections 43, 44 and 47 set out the power of the regulator to approve the other Part 5 instruments) - with or without required amendments, and to direct a railway owner to amend or replace an instrument with an instrument determined by the regulator.

In addition, section 46(5) of the Code sets out that CP must be consistent with the requirements of the Corporations Law relating to financial administration, and are of no effect to the extent of any inconsistency.

Under sections 41 and 44 of the Code, the ERA must undertake public consultation before approving a railway owner's proposed TMG and TPP. Public consultation is not required before the CP and OPR are approved. We note that in previous assessments, the ERA has subjected all four Part 5 instruments to the same public process.

In relation to its general exercise of powers under the Act or Code, the regulator is to take into account the factors in section 20(4) of the Act. The factors in section 20(4) include the interests of the railway owner, the interests of access seekers and the benefit to the public from having competitive markets. We note that the regulator has discretion in the way in which it balances, or attaches weight to, the various matters and interests in section 20(4) – for example, where the different interests are in competition or where tensions exist between them.

Stakeholder Comments

On 14 July 2008, the ERA called for public submissions on TPI's proposed Segregation Arrangements (SA) under section 28 of the Act and on its TMG and TPP under sections 43 and 44 of the Code respectively. TPI's proposed SA, TMG and TPP were submitted by TPI on 3 July 2008.

On 20 August 2008, the ERA called for public submissions on the TPI CP and OPR under sections 46 and 47 of the Code respectively. TPI's proposed CP were submitted on 15 August 2008 and its proposed OPR were submitted on 24 July 2008.

Submissions on TPI's proposed CP (and OPR) were received from the following parties on 1 October 2008:

- North West Iron Ore Alliance (North West Alliance, or NWIOA);
- United Minerals Corporation (UMC);
- Hancock Prospecting Pty Ltd (Hancock Prospecting) – submission comprising a report by ACIL Tasman (ACIL); and
- Australian Rail Track Corporation (ARTC).

On 14 November 2008, TPI provided a response to the ERA on selected issues raised in the public comments.

PwC's assessment of TPI's proposed CP and addresses issues raised in the above submissions.

PwC Assessment Approach

To assist in the exercise of its powers, the ERA has requested that PricewaterhouseCoopers (PwC) prepare an assessment of TPI's proposed Part 5 instruments.

PwC's assessment of TPI's proposed Part 5 instruments is from the perspectives of: the legislative requirements above: the relevant technical and financial issues covered in TPI's documents; and the nature of the new railway, including any issues relevant to the particular circumstances relating to its operation.

In assessing these matters PwC has been guided in part by the provisions of the WestNet Part 5 instruments as approved by the ERA. While there are differences between the practical arrangements of the different networks of TPI and WestNet, the approved instruments provide a useful starting point for assessing many of the provisions of the TPI instruments.

The WestNet instruments provide a useful starting point for assessing many of the provisions of the TPI instruments, given:

- the similarity of many of the provisions in the respective instruments; and
- that the approval of the WestNet instruments embodies the ERA's preferred balancing of the matters in section 20(4) of the Act.

However, it should be noted that as TPI is a vertically integrated rail freight entity (compared to WestNet, which is vertically separated) and given that there is a sound prospect of third party interest in using the TPI network, we consider it reasonable that the extent of the protections to access seekers and operators in the TPI Part 5 instruments should at least equal those in the WestNet instruments. We note in this regard that a number of the comments and recommendations in the stakeholder submissions seek amendment to the TPI instruments by incorporation of operator protections and other measures from the WestNet instruments.

Our assessment considers whether the provisions of the TPI CP as proposed can be accepted by the ERA as complying with the legislative requirements, or whether particular changes, or further information in relation to the instrument provisions, are considered necessary in order for the ERA to be able to approve the CP.

2.2 PwC Assessment of TPI Costing Principles

This section 2.2 below sets out our assessment of TPI's proposed CP which are to represent principles, rules and practices to be applied by TPI to determine the floor and ceiling price tests, and to keep and present its accounts and financial records pertaining to the determination of these costs.

Quantification of TPI's floor and ceiling costs and assessment of whether TPI's costs are appropriate are not part of the ERA's current assessment of the TPI Part 5 instruments[1] and are not part of PwC's assessment in this section 2.2.

Our assessment of issues is in the general sequence in which the particular issues arise within TPI's CP.

A total of 37 recommendations are made in relation to particular changes or further information required in relation to the instrument provisions that we consider necessary in order for the ERA to be able to approve the CP.

For ease of reference, we have also set out our recommendations in the Appendix to this report.

Headings used in this section are as per TPI's proposed CP.

Section 46(1) of the Code requires a railway owner "to prepare and submit to the Regulator a statement of the principles, rules and practices ("the costing principles") that are to be applied and followed by the railway owner" in determining floor and ceiling costs and in preparing financial records in relation to those costs.

In a number of respects, the TPI CP provides views to adopting particular measures, or options that will be considered, rather than principles and practices that are to be applied. A number of our recommendations in relation to the CP deal with this issue that the principles and rules to be applied are not sufficiently prescribed (eg in relation to section 2, on the development of a costing model, and section 3.1.1, on determining Gross Replacement Value (GRV)).

1 Introduction

We note that this section sets out relevant requirements of the Code and that this is generally consistent with sections 1.1 and 1.6 of the WestNet CP of August 2006, which were approved by the ERA.

We also note that these CP do not contain a definitions section, but TPI proposes to apply the terms defined in the Act and Code.

The CP, however, contain terms that are not defined in the Act and Code and for which specification is required in order to clearly set out how the principles will apply. Examples of terms that are not defined in the Act or Code for which a definition is required in order to prescribe the operation of the principles are:

- Major Periodic Maintenance (see CP Recommendation 28);

[1] This is also consistent with ERA's determination of the WestNet Costing Principles, Final Determination and Approval of the Proposed Costing Principles, 28 August 2006, page 4.

- Cyclical Maintenance (see CP Recommendation 28);
- Routine Maintenance (see CP Recommendation 28);
- Working Capital (see CP Recommendation 30); and
- Greenfields (see CP Recommendation 12).

The North West Alliance, UMC and ACIL for Hancock Prospecting, at pages 15, 4 and 2 of their respective submissions, suggest that a definitions clause similar to that in section 8 of the WestNet CP should be added to the TPI CP. ACIL recommend that TPI include a comprehensive set of definitions, along the lines of the definitions included in WestNet's CP. To this effect, ACIL lists the following terms from the WestNet CP:

> "…Access Agreement, Act, Ceiling, Ceiling Price Test, Code, Contractor, Costing Principles, CPI, Cyclical Maintenance, Efficient Costs, ERA, Floor, Floor Price Test, GRV, GTK, MEA, MPM, Network Management, Overheads, Over-payment Rules, Rail Safety Act, Route Section, Routine Maintenance, Total Cost, WACC, Costing Model and Working Timetable."

CP Recommendation 1
We recommend that TPI adds a definitions section, similar to that in section 8 of the WestNet CP, to provide a complete list of the definitions used in the principles. The definitions should be consistent those in the Act and the Code. Terms used that are not defined in the Act and Code and that have a key bearing on the application of the principles should also be defined. The terms should cover at least the list of terms as noted in paragraph 1 of page 2 of the submission from ACIL for Hancock Prospecting.

CP Recommendation 2
The document contents list at the end of section 1 omits reference to section 7, Review and consultation. Reference to this section should be added.

The TPI CP do not have equivalent provisions to the following from the WestNet CP:

- section 1.2, which includes the statement that "These Costing Principles have been developed on the basis that they are a set of principles and that they will need to be supported by databases and costing models containing considerable detail, which will change from time to time."; and

- section 1.3, Relevance of the Costing Principles, which sets out that the Code allows negotiation of prices between upper and lower bounds of floor and ceiling costs and that clause 13 of schedule 4 of the Code provides the pricing principles on which access prices negotiated under the Code are to be based.

ACIL for Hancock Prospecting, at page 2 of its submission, recommends provisions to the effect of the above in order to provide useful reference to the railway owner's obligations and to the regulatory framework in which the CP apply. We also consider such information as contained in the WestNet CP to be useful in order to clarify the application of the TPI CP.

CP Recommendation 3
We recommend that the TPI CP incorporates the same provisions as in sections 1.2 and 1.3 of the WestNet CP in order for the CP to provide further information on TPI's obligations and on the regulatory framework in which the CP apply.

2 Timing and route sections

In contrast to WestNet, which had a developed costing model at the time of the ERA's assessment of the WestNet CP, TPI presents in paragraph 1 of section 2 that it will develop such a model within 18 months of the approval of the CP.

In relation to this issue, the North West Alliance, at page 11 of its submission, states as follows:

> "In view of the planning timeframe and the certainty required for access pricing the Alliance would request that this timeframe be shorter and suggest 6 months."

UMC, at page 4 of its submission, expresses a similar view, except that it does not suggest specific timeframes for lodging the model – only that the timing of the model "could be reduced significantly". Similarly, ACIL for Hancock Prospecting, at page 5 of its submission, recommends that:

> "TPI should commit to providing the Costing Model within a reasonable time period, ie a month or so, after approval of the Costing Principles. TPI should also indicate that floor and ceiling costs may be re-determined in the light of improved data."

In its response to public comments, TPI states as follows:

> "The standalone building block approach applied across energy and transport infrastructure sectors in Australia is based on actual costs, so the suggestion that its application provides scope for a shorter period to develop a costing model is not valid."

We consider the costing model to comprise a key element of the CP given that the model would set out the detailed application of the principles and also provide the base data for future determinations of the ERA. In our view, the absence of such a model from the proposed CP means that the document as submitted does not represent a sufficient statement of the principles, rules and practices to be followed by the TPI in determining floor and ceiling costs and in preparing financial records in relation to those costs.

CP Recommendation 4
We consider that at least the framework for the costing model should explained in the CP in order for the model to be assessed as being part of the principles, rules and practices to be applied by TPI (in accordance with section 46(1) of the Code). Such explanation should cover how the cost elements in the CP are incorporated into the model. We also suggest that the model should be developed within a significantly shorter period of time than proposed by TPI, (we suggest within 6 months) given the importance of modelling results to determining floor and ceiling costs, to preparing financial records and to the review to be conducted within three years (see section 7 below). The costing model should incorporate a track maintenance model as discussed in relation to section 4.1. TPI should also indicate that floor and ceiling costs may be re-determined in the light of improved data from the costing model.

Paragraph 2 of section 2 is broadly similar to paragraphs 2 to 3 of section 1.4 of the WestNet CP, subject to a difference approaches to prescribing the routes and route sections to which the two CP apply, where TPI prescribes only one route section for its network, whereas the WestNet CP prescribe multiple route sections. Section 1.4 of the WestNet CP includes additional information on the definitions of “route” and “route section” in the Code and on the application of these terms in the determination of floor and ceiling.

Attachment C shows the single route section to which the TPI CP is to apply, in terms of providing a description of the full extent of the TPI railway infrastructure.

Elements of the TPI CP are, however, drafted on the presumption of there being more that one route section. For example, the cost allocation principles in sections 4.3 and 5.2, and in Attachment B, are for the express purpose of allocating costs between different route sections. While these provisions are, in effect, made unnecessary by the prescription of a single route section in Attachment C, we consider that those provisions should be retained (and also that the provisions should incorporate amendments as described in relation to section 4.3 below).

In relation to the TPI CP (and also in relation to other Part 5 instruments and Segregation Arrangements) stakeholders present that there is demand from prospective operators for access to only parts of the overall network. The ability to negotiate access in relation to part of the network in that case would be consistent with the interests of users. Further, the pricing of such access on the basis of the costs associated only with those parts of the network (rather than the overall network) is considered to be consistent with the principle of economic efficiency. Providing access in accordance the demand and costs associated with an individual operator’s use of the network could also be considered to be consistent with the object of the Act “to establish a rail access regime that encourages the efficient use of, and investment in, railway facilities by facilitating a contestable market for rail operations.”

Views expressed by stakeholders emphasise the importance of the principles identifying multiple route sections on the TPI network.

In relation to this issue the North West Alliance, at page 4 of its submission, states:

> "… This approach [the single route section as proposed by TPI] overly aggregates costs and does not provide transparency or fairness to access seekers as it is likely that there will be many access seekers, based upon existing mining and exploration tenements, between Cloudbreak and Port Hedland.
>
> A fairer and more transparent approach would be to define sections of the entire railway between Cloudbreak and Port Hedland by those sections of track, including multiple line track, between sidings, passing loops and terminals. In this way access charges will more fairly reflect the costs over which the access occurs."

A similar suggestion to the above is made at page 8 of the UMC submission.

The North West Alliance, at page 11 of its submission, in commenting on section 3.1.2 of the CP also highlights that flexibility sought by TPI in relation to the treatment of asset lives is consistent with disaggregated costing and pricing of the network though adopting multiple route sections:

> "TPI also propose a shorter life for a time limited project but once again by having only one section of line this means that there is a main line to multiple locations and spurs to a single terminal. Therefore the shorter life application should be for non-main line extensions or expansions, for example if a rail spur was put in off the main line to cater for a project-limited-expansion with a reduced economic life then after project termination this should not affect the main line as further capacity is needed over time."

ACIL for Hancock Prospecting, at page 5 of its submission, also comments that to meet the needs of access seekers requiring access to only part of the network, disaggregation of the network into different route sections would be required. To that effect, ACIL recommends the following:

> "TPI should reassess its route sections as proposals for access are received, in addition to reassessments made following expansions and extensions of the current railway. The Costing Principles also needs to define the process whereby Route Sections would be re-defined and associated ceiling and floor costs re-calculated."

In its response to public comments, TPI states that no clarity on the matter of route sections has emerged since TPI submitted its proposed CP (and OPR) to the ERA, with only some general approaches having been made by possible operators. TPI states that it prefers to define route sections on the basis of existing rail usage and that there will be future opportunities for route sections to be redefined as the situation changes.

As TPI's instruments are to facilitate a contestable market for rail operations and as demand for use of the railway facilities by third party operators may relate to only part of TPI's overall network, we consider it important for the facilitation of a contestable market that different route sections are specified up front.

The North West Alliance, page 10 of its submission, suggests text to be used in place of the TPI provisions at paragraph 2 of section 2 (and, in effect, revisions to Attachment C). The text proposed by the NWIOA appears to be an adaptation of section 1.4 of the WestNet CP. As noted above, section 1.4 of the WestNet CP provides information on the Code definitions of “route” and “route section” and, similar to the TPI CP, specifies that floor and ceiling costs will be calculated at a route section level before aggregating to the total floor and ceiling costs for the route section nominated by an access seeker. In this case, we do not consider that adoption of the details of section 1.4 of the WestNet CP would materially add to the information already provided in paragraph 2 of section 2 of the TPI CP. Accordingly, we do not consider it necessary for the CP to incorporate the text suggested by the NWIOA, and that TPI’s changes to the text of paragraph 2 of section 2 need only be confined to the effects of adopting CP Recommendation 5 below.

CP Recommendation 5
We suggest that, similar to the WestNet CP, the TPI CP specifies multiple route sections on its network. The TPI route sections should be the discrete sections of track between sidings, passing loops and terminals. This recommendation also applies to the TPI OPR.

We consider that CP Recommendation 5 above, by requiring the network to be defined in terms of its basic route section ‘building block’ elements from the outset, would address ACIL’s underlying issue, and hence a process in the CP for defining route sections is not considered necessary.

3 Determination of capital costs

This section is generally consistent with provisions in the WestNet CP (at paragraphs 1 to 3 of section 2.1).

3.1 Infrastructure included

Paragraph 1 is generally consistent with the equivalent paragraph in the WestNet CP describing the railway infrastructure assets included as capital costs.

The items listed in paragraph 1 represent an incomplete listing of the facilities necessary for the operation of a railway set out in the definition of "railway infrastructure" at section 3 of the Act. The WestNet list also includes, from the list in the Act, stations and platforms, and buildings and workshops. If such items from the definition in the Act are included in the TPI railway infrastructure covered by the Code, they should be added to the list of items at paragraph 1 of this section.

CP Recommendation 6
Because the CP are to apply under the WA Rail Access Regime, and that all of the tracks that are part of the railway constructed pursuant to the TPI Railway and Port Agreement are covered by the Regime, the wording “or is otherwise required to provide access under the TPI Railway and Port Agreement” is not required and should be deleted.

While paragraph 2 of this section sets out the broad Code requirement (that land value should be excluded from capital costs), this paragraph does not accurately portray the condition (at clause 2(2a) of Schedule 4 of the Code) whereby cuttings or embankments may be included as railway infrastructure, where such were made after the commencement of the Code and the values of such included do not incorporate the value of land of which the cutting or embankment forms part.

In its response to public comments, TPI states as follows:

> "Consistent with the Westnet precedent, TPI considers that the initial capital value should include the value of all earthworks, including cuttings and embankments, but should exclude the value of the land of which they form part. We believe that the costs associated with assembling land for a corridor and associated costs should be recoverable. Leasing costs for corridor land should also be recoverable as an operating cost. … "

While TPI's response is considered to be consistent with the Code provision, this position should be clearly set out in the CP. The issue of the recovery of lease costs is discussed in relation to CP section 4.1 below.

CP Recommendation 7
We suggest that sentences 2 and 3 are deleted from paragraph 2 and are replaced by wording from clause 2(2a) of Schedule 4 of the Code.

Paragraph 3 is consistent with paragraph 3 of section 2.2 of the WestNet CP.

3.1.1 Gross replacement values

In this section TPI sets out that, in arriving at a Gross Replacement Value, assumptions will need to be made in relation to a number of matters as listed. The equivalent section of the WestNet CP (section 2.3) has a different emphasis, in that it sets out the assumptions made by WestNet in relation to each of the matters.

The TPI CP in this context is framed in terms of options to be considered in developing its principles, rule and practices, rather than the specific principles and practices to be applied.

ARTC, at page 3 of its submission states as follows:

> "It is ARTC's view that TPI, being a vertically integrated entity, should be required to provide detailed information in its Costing Principles in relation to determination of capital costs."

The issue that the CP, as currently proposed, sets out general intentions and options in some areas – rather than details of specific principles and practices that will be applied – is addressed by specific recommendations in this paper, and by the general recommendation, CP Recommendation 8, immediately below.

CP Recommendation 8
It is recommended that principles, rules and practices explained in the CP are presented as measures that are to be applied by TPI. This general recommendation relates to a number of areas of the document. Requirements for greater specificity in relation to particular principles and processes are also addressed by specific recommendations in this paper.

Section 3.1.1, dot point 1, paragraph 1 - capacity of infrastructure. This dot point is consistent with the similar provision in section 2.3 of the WestNet CP (except for sentence 2 of this dot point, which is an assertion relating to the TPI network as a greenfields development).

The North West Alliance, at page 14 of its submission, notes that

> "TPI states "TPI considers that the network as constructed can meet current and reasonably projected demand". WestNet in its Costing Principles has an exact same sentence except it adds to the sentence by stating "for all users taken together" "

UMC, at page 4 of its submission, also requests that the words "for all users taken together" are added to the sentence referred to by the North West Alliance above.

We consider an equivalent statement to that at paragraph 3 of section 2.3 of the WestNet CP should be included in the TPI CP in order to clarify the extent to which the capacity of the railway infrastructure can meet the demand of all users taken together.

CP Recommendation 9
We suggest that the words "for all users taken together" are appended to sentence 1 of dot point 1, paragraph 1 of section 3.1.1.

ARTC, at page 4 of its submission, comments in relation to this dot point that:

> "ARTC would not expect TPI to over-engineer its assets, and it would not make good commercial sense to do so, however, it would be prudent to have an independent assessment made to ensure that this is not the case. It could be that TPI may have a particular standard of track for its own business which may not be a 'standard' track in relation to other above rail operators."
>
> "ARTC notes that the ERA has in the past sought independent advice in regard to these issues in making determination on floor and ceiling limits. ARTC supports the continued use of independent advice in this regard."

We do not consider it necessary for the CP to specify that TPI must obtain an independent assessment of whether the network is optimised. In performing its functions in relation to the CP (eg in approving the CP, or in approving revisions to the CP and during floor and ceiling cost determinations), the ERA may wish to obtain an independent assessment of whether the network is optimised. We consider that the CP should make clear that the ERA may obtain such an independent assessment (this optimisation issue is addressed in CP Recommendation 11 below).

CP Recommendation 10
We suggest that the assertion in relation to greenfields developments is removed.

Section 3.1.1, dot point 2, paragraph 1 - route optimisation. The route optimisation provisions in this dot point appear to be adapted from the equivalent provision of the WestNet principles. However, TPI implies that route optimisation is a direct outcome of its network being a greenfields development.

CP Recommendation 11
We suggest that dot point 2, paragraph 1 of section 3.1.1 is amended to:

- set out that the ERA may obtain an independent review of whether the TPI network represents an efficient, optimised network; and

- clarify the meaning of "the existing corridor of the land" in this context of this dot point (where this wording is from the WestNet CP, but would have a different context in relation to the WestNet network).

Section 3.1.1, dot point 3, paragraph 1 - contributed assets. This provision is consistent with the process in the WestNet CP for contributed assets.

Section 3.1.1, dot point 4, paragraph 1 - greenfields. This provision provides that "the valuation will reflect any costs associated with re-locating infrastructure that were actually incurred by TPI in constructing the covered infrastructure, indexed to current values."

The equivalent WestNet provision is that "…replacement cost calculations are to assume a greenfields site and hence costs related to constructing around rail traffic, surface restoration and other surface diversions are excluded from the GRV."

The North West Alliance, at page 16 of its submission, in effect, suggests that the above wording from the WestNet CP should be used in place of dot point 4, paragraph 1 – greenfields. In addition, ACIL for Hancock Prospecting, at page 12 of its submission states that "TPI should be explicit that it will apply a Greenfields approach to any future capacity expansions, with an appropriate definition of Greenfields included in the Costing Principles."

CP Recommendation 12
We suggest that TPI CP defines greenfields costs consistently with the greenfields principle as reflected in section 2.3 the WestNet CP, in that costs incurred in working around the existing infrastructure are not included in any greenfields costs.

At this dot point, and in some following dot points in this paragraph 1, TPI states that the relevant costs will be "indexed to current values". Such an approach may be appropriate where efficient cost data can only be obtained in relation to a past period and hence it is necessary to escalate the costs to current values. However, we note that a greenfields cost build-up could also be performed based on current data: in that case, the resulting GRV could be calculated simply as the lowest cost to replace existing assets (in accordance with clause 2(4)(c) of Schedule 4 of the Code).

Section 3.1.1, dot point 5, paragraph 1 – Modern Equivalent Assets (MEA). TPI's position that MEA values should reflect current market-tested values for materials is appropriate (and consistent with the WestNet document). TPI also states in this dot point that "as a greenfields development, this will reflect indexed actual costs". This statement requires clarification.

CP Recommendation 13

PRICEWATERHOUSECOOPERS

TPI's statement in relation to MEA implies that it considers greenfields costs to equate to its actual costs. If that is TPI's position, we suggest that TPI demonstrates to the ERA that the assets created comply with clause 2(4)(c) of Schedule 4 of the Code, and in respect of the particular inputs to creating those assets, that it verifies the escalation in input cost since the assets were created. As per CP Recommendation 12, as greenfields costs, such costs should exclude the costs associated with working around existing infrastructure.

The North West Alliance, at page 16 of its submission, suggests that TPI adopts alternative MEA provisions to those at dot point 5, paragraph 1 of section 3.1.1 and that the alternative provisions should, in effect, be those as set out in section 2.3 of the WestNet CP under the heading, Modern Equivalent Assets (the text suggested by the NWIOA omits some WestNet-specific material). The key elements of the WestNet provisions as reflected in the NWIOA's suggested text are that:

- "Where the Ceiling costs calculated for a specific route using MEA is significantly higher than the existing infrastructure calculation, the Regulator may determine that it is not appropriate to apply MEA."

- "The Regulator, when determining the Floor and Ceiling on the various routes as part of the Clause 9, Schedule 4 of the Code review, will decide the MEA applicable to the route sections."

- Where there is a likelihood that the Ceiling cost calculation for a route section has the potential to breach the Ceiling, the Regulator may require an independent review of these costs.

CP Recommendation 14
We suggest that in order to more fully explain the principles and rules for applying the MEA concept in the CP, TPI should adopt the MEA principles and rules from section 2.3 of the WestNet CP.

<u>Section 3.1.1, dot point 6, paragraph 1 - Unit Rates</u>. TPI provides that unit rates will be based on TPI's experience and will be indexed to current costs. TPI does not set out how such unit rates relate to the MEA and greenfields values. In this regard, we note that WestNet calculates the GRV using current market tested unit rates for materials and construction based on the MEA, or using the existing infrastructure, based on the procedures set out in its CP.

The North West Alliance, at page 17 of its submission, sets out alternative provisions on unit rates which it suggests should apply in place of those at dot point 6, paragraph 1 of section 3.1.1. The provisions suggested by the North West Alliance reflect those set out in section 2.3 of the WestNet CP under the heading, Unit Rates. We consider the WestNet provisions to more fully set out the principles and rules in relation to the determination of unit rates. As such, we consider that adopting similar principles and rules in the TPI CP would provide a clearer statement of the application of unit rates within the CP.

In its response to public comments, TPI commented that previous WestNet costing reviews were marked by debate over asset valuation approaches. It commented that while there is merit in arguing the reasonableness of applying GRV to the mature assets operated by WestNet, “there can be no such debate in TPI’s case as it operates a greenfields railway.”

While we have no issue with TPI adopting a GRV approach, the specific procedures to be applied by TPI in arriving at a GRV are not clearly set out in the CP.

CP Recommendation 15
We suggest that TPI sets out details of the process by which it will apply greenfields values, MEA values and market tested rates to arrive at a GRV to a similar level of detail as provided in the WestNet CP.

Section 3.1.1, dot point 7, paragraph 1 - Design, construction and project management fees. TPI sets out that it will use its actual costs, indexed to current values. WestNet, on the other hand, uses standard percentage loadings applied to primary unit rates.

The North West Alliance, at page 17 of its submission, suggests that TPI adopts alternative provisions in relation to this dot point. The provisions suggested by the NWIOA reflect those set out in section 2.3 of the WestNet CP under the heading, Design, construction and project management fees. The WestNet provisions more fully set out the principles and rules in relation to the determination of such fees (including a prescribed percentage limit of such costs in relation to the total cost of infrastructure, and states that such charges will be reduced where they are already included in unit rates). Adoption of similar principles and rules in the TPI CP would, in our view, result on the CP providing a clearer statement of TPI’s approach in relation to design, construction and project management fees.

CP Recommendation 16
We suggest that TPI sets out details of the process principles and rules for applying design, construction and project management fees on a similar basis to the equivalent provisions in the WestNet CP.

Section 3.1.1, dot point 8, paragraph 1 - Financing charge during construction. Sentences 1 and 2 of this dot point are consistent with, although less specific than, the equivalent provision in the WestNet CP. At sentence 3, TPI states that "Reliance may be able to be placed on the actual historical cashflows experienced as part of the construction process." The statement at sentence 3 appears to be inconsistent with the calculation of capital costs in terms of clause 2 of Schedule 4 of the Code (which is to involve the application of WACC to GRV).

CP Recommendation 17
We suggest that sentence 3 of this dot point is deleted, given that actual historical cashflows are inconsistent with the required calculation in the Code, which is to involve the application of WACC to GRV.

The North West Alliance, at page 17 of its submission, suggests alternative provisions in place of dot point 8, paragraph 1 of section 3.1.1 that reflect the provisions of section 2.3 of the WestNet CP under the heading, Financing charge during railway infrastructure construction. The WestNet provisions more fully set out the principles and rules in relation to the determination of such costs. Key matters clarified in the WestNet provisions are:

- the basis to the construction rate;
- the allocation of construction costs to route sections;
- that the ERA may adjust the construction rate applied; and
- that upon completion of construction, the interest calculation ceases.

Incorporating such provisions into the TPI CP would provide a clearer statement of the application of the CP in terms of financing charges during construction.

CP Recommendation 18
We suggest that TPI amends the provisions in section 3.1.1 in relation to financing charges during construction by adopting the measures as contained in section 2.3 of the WestNet CP under the heading, Financing charge during railway infrastructure construction. We also suggest that TPI amends the description of this cost element by adopting the same description as in the WestNet CP.

In addition, the North West Alliance, at page 13 of its submission (and similarly, UMC, at page 4 of its submission) provides the following comments on this dot point:

> "The proposal reads that TPI "will include in the capital cost an allowance for its cost of capital and related financing charges during the construction period" and "reliance may be able to placed on actual historical cash flows during the construction period". The Alliance would request the Authority that the TPI railway be considered for access pricing purposes as a stand-alone entity using a Regulatory building block approach."

It is important that financing charges should relate only to the financing of railway infrastructure covered by the Code. Section 3.1 of the CP makes clear that the CP relate only the infrastructure covered by the Code and section 4.1 in terms of operating costs provides that the operating costs will be those that would be incurred by an efficient stand alone operator.

<u>Section 3.1.1, dot point 9, paragraph 1 - Equity raising costs</u>. TPI proposes to calculate such costs as an increment to GRV based on the notional level of equity in the WACC.

The North West Alliance, at page 14 (a similar request is made by UMC, at page 4) of its submission, states as follows:

> "The TPI proposal states the estimate will include the direct costs of raising equity finance and all other costs not covered by the underwriter's commission and the Alliance would request that these types of cost be benchmarked."

We note that in its Final Determination, 2008 Weighted Average Cost of Capital for the Freight (WestNet Rail) and Urban (Public Transport Authority) Railway Networks, 23 June 2008 (2008 WACC Determination), the ERA expressed the view that, where appropriate, equity raising costs should be recognised in the valuation of the regulatory asset base and in new capital expenditures and not in the WACC.

Based on this approach, where equity raising costs would not be included in the WACC, we consider the broad principle in sentence 3 to be appropriate. We also consider that such costs would be benchmarked as a matter of course by the ERA in making any determination in relation to equity raising costs.

At paragraph 2 of section 3.1.1 of the CP, TPI proposes to convert the costs that it actually incurred by the Perth Building Index adjusted for the average of the Port Hedland and Tom Price regional indices published in the Rawlinson Australian Construction Handbook.

CP Recommendation 19
We suggest that before such escalation is accepted by the ERA, TPI demonstrates that the results of its escalator applied to actual costs do not exceed the MEA value derived from "current market tested unit rates for materials" as per dot point 5 above (see also CP Recommendation 36 below).

Paragraph 3 of section 3.1.1 of the CP provides that when TPI undertakes an expansion or extension to the railway infrastructure, the GRV will comprise the sum of the undepreciated GRVs of the existing infrastructure and of the extension or expansion.

n our view, the rule in paragraph 3 of section 3.1.1 is not consistent with the amortisation of capital costs over economic life by an annuity (as provided for in clause 2 of Schedule 4 of the Code).

The annuity calculation returns the initial capital value of an asset over the life of the asset. In broad principle, at a point of time within the economic life of an asset, the asset value will be the initial capital value, less accumulated depreciation. TPI's proposed principle that, at a future time when an expansion or extension is added to the railway infrastructure, the asset value will comprise the sum of the undepreciated GRVs for the existing infrastructure and for the expansion or extension, is inconsistent with this principle (although it is appropriate that railway infrastructure assets are valued at GRV when they first enter the capital cost calculation at clause 2(4) of Schedule 4 of the Code).

CP Recommendation 20
We suggest that the principle in this paragraph 3 is amended to state that when TPI undertakes an expansion or extension to the railway infrastructure, the asset created by the expansion or extension will be valued at GRV at the time it first enters the capital cost calculation.

ARTC, at page 4 of its submission, states in relation to the above paragraph 3 of section 3.1.1:

> “ARTC finds this reasonable as long as any additional infrastructure built is necessary given reasonably anticipated expectations of

> future volumes on the network and not simply for TPI's purposes. Also, any investment needs to be considered prudent by the ERA."

We consider that the issue of the prudency of investment would be assessed as a matter of course by the ERA in making any determination in relation to the TPI asset base.

In relation to the GRV methodology as generally set out in section 3.1.1, ARTC states, on page 3 of its submission that:

> "TPI's approach to determining GRV seems reasonable, however, ARTC is concerned that the valuation is not proposed to be independently assessed. An independently determined or assessed valuation is important to establish market confidence in the limits around access pricing."

Our recommendations above seek the inclusion of provisions into the CP in order to clarify that the ERA may require independent assessments of costs determined under the CP, and that such assessments would cover matters such as network optimisation, cost methodologies and asset values.

ACIL for Hancock Prospecting, at page 12 of its submission, recommends that:

> "TPI should indicate that GRV is to be up-dated every three years, at which point floor and ceiling costs would be re-determined by ERA. It would aid clarity if TPI were to also state here that in between the three yearly up-dates, floor and ceiling prices are to be escalated by an approved index."

The updating of GRV values would be a necessary element of the three yearly review process (see section 7 below) and is consistent with adopting three yearly reviews of GRV in the WestNet CP (section 2.4 of the WestNet document).

CP Recommendation 21
Section 3.1.1 should specify that the GRV will be reviewed by the ERA every third year. (see also CP Recommendation 37).

3.1.2 Economic life

This section on economic life is broadly consistent with the economic life principles set out in section 2.4 of the WestNet CP.

Paragraph 2 states that the economic life assumptions underpinning the annuity payment calculation for capital costs will be based on the economic life of assets listed in Attachment A, "unless a shorter life is adopted due to the assets servicing a time limited project."

Attachment A, which sets out economic lives by asset class reflects information in the spreadsheet, Annexure 7.1, of the WestNet CP. The asset classes and the associated economic lives for those assets in Attachment A are the same as those Annexure 7.1 of the WestNet CP, except that:

- Earthworks for track Bridges, tunnels and culverts - TPI uses 50 years, whereas WestNet uses 100 years;
- a Bridges (not footbridges) - TPI uses 50 years, WestNet uses 100 years; and
- a Rail Live Curve > 800m & tangent - TPI uses 20 years, WestNet uses 60 years.

We note that the shorter asset lives proposed by TPI, all other things being equal, would result in higher depreciation charges than if the WestNet asset lives applied.

CP Recommendation 22
We suggest that before TPI's economic lives used for earthworks, bridges (non footbridges) and the item, Rail Live Curve > 800m & tangent, are accepted by the ERA, TPI demonstrates the basis to the lives used for these items. If this cannot be demonstrated to the ERA's satisfaction, the asset lives in the WestNet CP should apply.

The use of shorter asset lives above are noted by the North West Alliance and UMC. UMC comments at page 4 of its submission that:

> **"**The economic life determines the rate of capital renewal and where this is at variance to industry accepted rates for heavy haul railways there should be a list of consideration factors in order to justify this variance including consideration of any actual leases related to below rail infrastructure involved."

The North West Alliance, at page 11 of its submission, also makes the following comments in relation to the asset classes in Attachment A:

> "TPI have included Contractors margin and overheads, engineering and contract management and interest on construction in the economic life of assets. These are irrelevant to the economic life of assets, they are not assets in the sense the Authority is considering, and should be removed. The Alliance is suggesting alternative references to these in our proposed wording in Annexure B under the headings Design, construction and project management fees and Financing charge during railway infrastructure construction."

In its response to public comments, TPI states that inclusion of the items noted by the North West Alliance has not been contentious in regulatory processes and that TPI's approach is consistent with that adopted by WestNet.

We are aware that the items referred to in the comments above by the North West Alliance are contained in the WestNet CP. However, we do not consider the items referred to by the North West Alliance (which are items 11 to 13 in both the TPI and WestNet asset tables) to constitute assets, although we accept that a railway owner should be able to recover such costs as reasonably incurred. To this effect, we agree with the approach suggested by the North West Alliance for dealing with such costs and recommend that TPI adopts the wording as suggested.

CP Recommendation 23
It is recommended that TPI delete items 11 to 13 from Attachment A. The provisions on Design, construction and project management fees and Financing charge during railway infrastructure construction (as amended by CP Recommendations 16 and 18) would apply in place of those items.

The broader process set out in paragraph 2 of section 3.1.2 – to the effect that the economic lives of assets should be those as listed, "unless a shorter life is adopted due to the assets servicing a time limited project" – is consistent with the process set out in section 2.4 of the WestNet CP. Similar to the WestNet provisions, the TPI CP requires the railway owner to advise the ERA of the reasons for shorter life assumptions that may be applied to time limited projects.

As noted in relation to section 2 above on the requirement for multiple route sections to be specified for the TPI network, the North West Alliance, at page 11 of its submission, comments that adoption of shorter lives for time limited projects would be feasible only where there are multiple sections created on the network (such as in the case of a rail spur catering for a time-limited project). Accordingly, the process set out in paragraph 2 of section 3.1.2 – that asset lives should be as prescribed, unless a shorter life applies due to the assets servicing a time limited project – is considered reasonable, provided that TPI specifies route sections in terms of discrete sections of track between sidings, passing loops and terminals (CP Recommendation 5 above).

3.1.3 Rate of return

This section provides appropriate recognition that the WACC to be applied by TPI in the capital cost calculation will be determined by the ERA at 30 June in each year.

Sentence 2 of this section sets out costs to be allowed for in the cost of debt component in the WACC formula.

CP Recommendation 24
We do not consider it to be appropriate that WACC component approaches and values should be prescribed in the CP, given that the WACC (including the approach, formulas, inputs and output WACC values) is established by a separate ERA determination process. We suggest that sentence 2 is deleted from section 3.1.3.

Sentence 3 of this section states in effect that, if an allowance for asymmetric risk is not included in the WACC, TPI would include the cost of such risks in operating costs.

ARTC states, at page 4 of its submission:

> "If this is to be acceptable to the ERA, ARTC suggests that the method for estimating the allowance for asymmetric risk be transparent and independently assessed. ARTC notes that the method used by IPART in NSW is to select a rate of return towards the upper end to what might be a reasonable rate."

Also, ACIL for Hancock Prospecting makes the following comments at page 15 of its submission:

> "TPI needs to provide a strong justification for any premium on costs (such as a self insurance premium) or any premium on the WACC to allow for asymmetric risk. Such allowance should not given "blanket" approval within the Costing Principles."

CP Recommendation 25
Asymmetric risk issues that would be covered by a WACC calculation are not appropriate matters to include in the CP given that the WACC is established by separate ERA determination.

Further, we consider that the definition of "operating costs" in clause 1 of Schedule 4 of the Code would not encompass the asymmetric risk allowance proposed by TPI. We suggest that sentence 3 is deleted.

3.1.4 Annuity

This section sets out the basic objective of an annuity calculation and states that the annuity methodology to be applied will be one that is acceptable to the ERA.

ARTC states, at page 4 of its submission, that, in its view, "there needs to be transparency around the approach for the annuity calculation and any methodology should be clearly outlined."

Also in relation to this issue, ACIL for Hancock Prospecting, at pages 12 and 13 of its submission, states as follows:

> "TPI provides no detail on the method of calculation of the annuity. By contrast, WestNet defines the annuity calculation formula and terms, and explains the justification for a working capital adjustment within operating costs."
>
> "TPI should define the annuity calculation in terms of the formula and terms within it. This should include the justification for including a working capital adjustment within operating costs."

We note that the basic annuity options are:

- ordinary annuity (cashflows assumed to occur at the end of each period); or
- annuity due (cashflows assumed to occur at the start of each period).

The WestNet CP adopt the annuity due methodology, and on the basis of the effect of that methodology (given that clause 2(4) of Schedule 4 of the Code assumes one year periods in the annuity calculation), WestNet has been permitted by the ERA to obtain a return on working capital.

CP Recommendation 26
Because TPI proposes to include working capital costs (section 4.1 discussed below), in order that capital costs are not over recovered, and to treat TPI on a consistent basis with WestNet, the TPI annuity calculation should be on an annuity due basis.

4.1 Definition of operating costs

In paragraph 1 of this section TPI sets out that operating costs will comprise all of the operating costs that would be incurred by an "efficient stand alone operator" in providing access to the TPI railway infrastructure.

The concept of cost efficiency as expressed by TPI in paragraph 1 is considered to be generally consistent with that in clause 4 of Schedule 4 of the Code.

CP Recommendation 27
We suggest that the reference to efficient operating costs in paragraph 1 is amended to also reflect the concept of efficient costs as set out in clause 4 of Schedule 4 of the Code (which is consistent with the definition of efficient costs in the WestNet CP).

The list of operating costs included by TPI is consistent with those included by WestNet, with the exceptions noted below.

TPI includes Major Periodic Maintenance (MPM), where it is necessary to achieve the economic life of the assets. WestNet does not include MPM in the context of its MEA assumption, where MPM would extend the economic life of the assets. WestNet notes in its CP that there can be different definitions of MPM. We note that, unlike WestNet, TPI has not provided a full definition of MPM.

The North West Alliance provides the following comments at page 5 of its submission (UMC makes similar points on page 4 of its submission) in relation to the issue of MPM:

> “When considering railway infrastructure assets and in particular heavy haul infrastructure there is an industry custom and practice of Major Periodic Maintenance (MPM) which renews the asset. MPM is not repairs and maintenance it is renewal of the asset.”
>
> “The Alliance members are prepared to share the fair and reasonable cost of ensuring the railway can perform the task. Also as stated in Section 6 that the TPI railway construction under taking was a rapid development project which resulted in several diseconomies and given the difficulties of estimating the capital base (aside from stranding risk) the Alliance would suggest that the Authority consider the use of MPM in lieu of depreciation. Such an approach would ensure that the railway was at a standard (to be nominated) to meet the task, TPI have incentive to undertake MPM and the Alliance members have incentive to fund the investment. Another benefit of this approach is that it would reduce the estimation errors in estimating WACC and provide openness as to the capital works program to meet the operational standard.”

We do not agree with the suggestion that the ERA should apply MPM in lieu of depreciation given that MPM is not defined in the TPI CP and, to the extent that it does not represent renewal of assets (as would be provided by the depreciation charge), the annuity calculation would not return the initial capital value to TPI (consistent with basic capital amortisation principles).

Based on the interpretation of MPM above by the North West Alliance and UMC, where MPM would extend the life of assets, it should not be included in operating costs given that asset renewal/replacement is provided by the depreciation charge. However, TPI presents that MPM will be included in operating costs where it "is necessary to be incurred to achieve the economic life of the assets". TPI's interpretation of MPM is thus different from the interpretation of the North West Alliance and UMC, and with the effective definition of MPM given in the WestNet CP. In this regard, paragraphs 1 and 2 of section 3.3 of the WestNet CP state as follows:

> "In determining what maintenance activities are required to maintain MEA infrastructure in a GRV based regime, major periodical maintenance activities ("MPM") have not been included. For the purpose of the Costing Principles, this is because MPM is assumed to extend the economic life of the assets.
>
> However, it is noted that the use and definition of MPM has a wide variety of application and interpretation in the rail industry."

In determining the activities covered by MPM, WestNet also notes that there are activities that are included in both MPM or in cyclical maintenance in a GRV based regime and are not exclusive to either and accordingly WestNet defines the terms "routine maintenance" and "cyclical maintenance" to in order detail the activities that are included in operating costs.

ACIL for Hancock Prospecting, at page 15 of its submission, makes a similar suggestion on the issue of MPM as per CP Recommendation 18 above. The ACIL suggestion is that "TPI should define routine, cyclical and MPM maintenance, and indicate how expenditure aimed at renewing assets will be identified (and excluded from the Costing Model)."

In its response to public comments, TPI states that MPM is appropriate for inclusion in operating costs if targeted at achieving asset life rather than asset renewal. We do not consider this position of TPI to be inconsistent with our CP Recommendation 28 which, in effect, suggests that the TPI CP should contain same level of clarity on this issue as in the WestNet CP.

CP Recommendation 28
We suggest that TPI provides a definition of MPM that clarifies the activities that included in MPM, to the same level of detail as provided in the WestNet CP and accordingly, also defines the terms "routine maintenance" and "cyclical maintenance" in this context. MPM that would provide for renewal of assets or otherwise extend the life of assets should be excluded from operating costs.

TPI proposes to include the rental or "other costs" associated with the corridor of land upon which the infrastructure is constructed or is otherwise used in providing access.

In relation to this issue, the North West Alliance observes at page 14 of its submission that "Land leases are included in the ceiling price but TPI do not say what these leases are for or if they should be in TPI's operating cost (generally Regulators exclude land)."

In addition, ACIL, at page 15 of is submission, states that TPI should identify what "other costs" it proposes to include alongside corridor rental payments.

TPI in its response to public comments, states as follows:

> "Consistent with the Westnet precedent, TPI considers that the initial capital value should include the value of all earthworks, including cuttings and embankments, but should exclude the value of the land of which they form part. We believe that the costs associated with assembling land for a corridor and associated costs should be recoverable. Leasing costs for corridor land should also be recoverable as an operating cost. It is incorrect to state that regulators generally exclude land costs – rather, Australian rail regulatory precedent is uneven."[2]

As the costs of renting or leasing land would be equivalent to including the asset value of land in the cost calculations (where asset values are converted into "capital costs" in terms of clause 2 of Schedule 4 of the Code by way of an annuity, which is equivalent to a leasing charge), we consider that lease costs should only relate to railway infrastructure as referred to in clauses 2(2) and 2(2a) of Schedule 4 of the Code.

CP Recommendation 29
The land costs included in the incremental and total cost calculations (whether directly by way of a rental or lease charge or some other cost; or indirectly buy amortising a capital cost as an annuity) should only be those costs that relate to railway infrastructure referred to in clauses 2(2) and 2(2a) of Schedule 4 of the Code.

TPI proposes to include working capital in its cost calculations. In relation to this issue, see our comments in relation to section 3.1.4 above. The ERA allowed WestNet to obtain a return on working capital in consideration of WestNet applying an annuity due methodology. We recommend that TPI's working capital allowance is accepted (and is calculated on the same basis as working capital in the WestNet CP) given that we also recommend that TPI adopts the annuity due methodology (CP Recommendation 26). ACIL for Hancock Prospecting, at page 15 of its submission, recommends that TPI define its working capital charge. We concur with that recommendation and consider that the charges should be defined on a similar basis as in the WestNet CP.

CP Recommendation 30
We recommend that TPI's working capital charge is defined, and that the definition is consistent with the effective definition of this charge in the WestNet CP, which is that annual charge should be calculated by multiplying ½ of the WACC by the annuity.

TPI proposes to include an asymmetric risk factor in operating costs, if such a risk factor is not allowed for in the WACC. In relation to this issue, see our comments in relation to section 3.1.3 above and CP Recommendation 25.

ACIL for Hancock Prospecting, at page 15 of its submission, makes the following suggestion:

[2] Sentences 1-3 of this response are also quoted in our discussion of section 3.1 of the CP above).

> "The Costing Principles should provide some commitment to the provision of a track maintenance model within the Costing Model. Such a model should specify the detailed assumptions made when estimating maintenance cost level over time and the method of averaging."

We note that section 3.3 of the WestNet CP under the heading, Routine and Cyclical Maintenance for track, states that WestNet has developed a track maintenance model which calculates the cost of maintaining the track infrastructure in accordance with the defined assumptions documented in the CP. We consider that the incorporation of such into the costing model would present a clear statement of the principles and rules for determining operating costs (see CP Recommendation 4).

4.2 Efficient cost tests

The principles set out by TPI in this section are generally consistent with those set out in section 3.2 of the WestNet CP, also entitled Efficient Cost Tests.

WestNet emphasises that it will test whether operating costs used in determining the floor and ceiling are efficient, whereas TPI states that it will seek to demonstrate to the ERA that its actual costs and cost forecasts reasonably reflect efficient costs.

CP Recommendation 31
We suggest that TPI adopts the direct commitment to subjecting operating costs to efficient cost tests as set out in section 3.2 of the WestNet CP. To this effect, we suggest that:

- the introduction to paragraph 1 of this section is replaced by the following text adapted from the WestNet CP: "TPI will test whether the operating costs used for determining the floor and ceiling are efficient as follows";
- the following text is deleted from dot point 1 of paragraph 1: "having regard to the market conditions that are presently being experienced in the Pilbara region"; and
- an equivalent provision to paragraph 3 of section 3.2 of the WestNet CP is added, to the effect that TPI will report against agreed efficiency KPI's to the ERA.

The views of ARTC in relation to this issue, as set out on page 5 of its submission, are:

> "Where actual costs are used, TPI states that a "…robust tendering process will provide the regulator with some comfort that the resulting price reflects an efficient market price." In line with transparency, such a process should be clearly outlined and agreed with the ERA.
>
> It is ARTC's view that TPI should be required to report against agreed efficiency KPI's to the ERA."

In relation to this latter point by ARTC, ACIL for Hancock Prospecting, at page 5 of its submission also states that:

> "TPI should commit to adopting economically and technically efficient practices to provide a network which maintains service quality at specified operational levels. TPI should agree appropriate KPIs with ERA and report on these annually."

We note in this regard that the WestNet CP includes the statement that "WestNet will report against agreed efficiency KPI's to the ERA". We consider such reporting to be appropriate for a regulated network (see CP Recommendation 31 above). Also, in relation to ATRC's point about TPI's tendering process being clearly outlined and agreed with the ERA, in the absence of information to suggest that TPI's tendering process is not efficient, we do not consider it necessary for the ERA require agreement or approval of such processes at this time.

4.3 Allocation of operating costs

This section is broadly consistent with section 3.4 of the WestNet CP. The allocation bases used by TPI are provided in Attachment B.

The allocators in Attachment B are similar to the allocation bases in section 3.4 and Annexure 7.2 of the WestNet CP - being largely direct attribution, or allocation by train km (WestNet uses direct attribution, or GTK and/or train numbers) according to the particular cost classes.

The WestNet table in Annexure 7.2 covers only operating costs and overheads, and the cost categories are shown as per the categories provided for elsewhere in its CP.

The TPI table in Attachment B, however, contains cost categories that are not clearly identified in the body of the CP and includes asset allocators that include allocators in relation to land.

The North West Alliance, at page 5 of its submission, makes the following comments in relation to this section 4.2, and section 5.2 below (Allocation of Overhead costs), and to the depiction of allocation bases for both operating and overhead costs in Attachment B:

> "Sections 4.3 Allocation of Operating costs and Section 5.2 Allocation of Overhead cost does not provide sufficient transparency to the allocation of costs and potentially may lead to the unfair allocation of costs as the route section definition in the document covers the entire railway not just that part used by the access seeker. Consequently the Alliance request these be replaced with a proposed suggestion based on allocation rules using gross tonne kilometres (GTK) or train movements."

Similar comments to the above are made by ACIL for Hancock Prospecting at page 15 of its submission in relation to allocation of operating costs and at page 16 in relation to overhead costs.

In relation to point by the North West Alliance regarding a potentially unfair allocation of costs arising from only one route section being defined in the CP, this issue is to be addressed by CP Recommendation 5, which requires a number of route sections to be defined on the TPI network. We note that the means of assigning costs to route sections in the TPI CP is either by direct attribution, or by allocation by train km (versus WestNet's use of direct attribution, or GTK and/or train numbers). We consider the WestNet CP to more clearly set out an allocation process. We also view GTKs as providing a better measure of the demands placed on the railway infrastructure (thus a better measure of cost causation) than the simple measure of train km as proposed by TPI.

Similarly, train numbers or train movements may represent a better allocator of network management costs which could be expected vary in quantum due to the number of train movements, rather than GTK or train km.

In its response to public comments, TPI states that it prefers train km as it simplifies the allocation methodology and that GTK "very poorly addresses the complex cost relationships that are influenced by factors such as traffic levels, speed, axle load and a fixed component of expenditure unrelated to traffic."

We accept that the GTK measure alone will not reflect all of the factors that can affect the incidence of railway infrastructure costs. However, we consider GTKs to have a stronger causal relationship to the incidence of such costs than train kms and accordingly, that it represents a more relevant cost allocator. Similarly, we consider train movements to better reflect the incidence of network management indirect costs than train kms. Both GTKs and train movements (similar to train kms) represent simple, verifiable allocation bases.

CP Recommendation 32
We suggest that TPI adopt a GTK allocator for railway infrastructure indirect costs and train movements as an allocator of network management indirect costs (in both cases replacing train kms).

At page 12 of its submission, the North West Alliance suggests alternative provisions to the TPI cost allocation provisions in sections 4.3 and 5.2. The NWIOA provisions are essentially an adapted version of section 3.4, Allocation of Overhead Costs, and section 7.2, Operating and Overhead allocation table, from the WestNet CP.

While the WestNet CP provisions contain some more detail in relation to allocation procedures than the equivalent TPI provisions, we do not consider the differences between the two CP to be material. Further, the allocators of indirect costs used in the WestNet CP, which we consider reflect appropriate cost causation (ie GTK and train movements), would be adopted in the TPI CP under CP Recommendation 32. Accordingly, we do not consider it necessary for the details of the allocation process as suggested by the North West Alliance need to be incorporated in to the TPI CP.

ARTC, page 5, in respect of operating cost allocations states:

> "ARTC is of the view, consistent with previous submissions, that any cost allocation should be independently assessed. ARTC recognises that it is the ERA's position to be satisfied that operating costs are efficient and allocated appropriately."

ARTC, page 5, in respect of overhead cost allocations states:

> "It is ARTC's view that the ERA would need to confirm reasonableness of TPI's position in terms of allocation of overheads

> and that any cost allocation should be independently assessed. ARTC recognises that it is the ERA's position to be satisfied that overhead costs are efficient and allocated appropriately, and the basis of sharing costs should be in accordance with normally accepted practices for railways, and benchmarked against other rail access providers around the country."

We do not consider it necessary for the CP to specify that the allocation bases must be independently assessed, but we note that in performing its functions in relation to the CP (eg in approving the CP, or approving revisions to the CP, and during floor and ceiling cost determinations), the ERA may wish to obtain an independent review of the allocation bases used by TPI. Accordingly, we consider that the CP should make clear that the ERA may subject the allocation bases to independent review.

CP Recommendation 33
We suggest that the cost categories in this attachment are aligned with the categories identified in the body of the CP and with the definitions in the Code. If assets are to be allocated in accordance with this table, this should be shown in the heading. Land assets that do not meet the criteria in clauses 2(2) and 2(2a) of Schedule 4 of the Code should be excluded from this table. Section 4.3 and 5.2 of the CP should state that the ERA may require an independent review of the allocation bases used by TPI.

5.1 Definition of Overhead costs

This section is broadly consistent with section 4.1 of the WestNet CP, also entitled Definition of Overhead Costs.

The TPI section 5.1 definition of "overhead costs" reflects the wording in the Code associated with the use of the term "overheads" and is consistent with the wording in the WestNet CP in this regard. The WestNet CP, however, provides additional information on the composition of overhead costs, by way of the definitions of WestNet overheads and Corporate overheads (the definitions are effectively given in section 7.2 of the WestNet document).

Paragraph 3 of this section expresses the concept of cost efficiency on different terms to that in clause 4 of Schedule 4 of the Code (see also our comments in relation to paragraph 1 of section 4.1).

CP Recommendation 34
We suggest that the concept of overhead costs as "incurred by an efficient stand alone operator" should also reflect the concept of efficient costs as set out in clause 4 of Schedule 4 of the Code, and that TPI provides further information in relation to the composition of overhead costs, in the manner of the additional information provided in the WestNet CP.

5.2 Allocation of overhead costs

The allocation bases used by TPI in respect of operating and overhead costs are set out in Attachment B. In its response to public comments, TPI comments that WestNet's approved CP do not specify the basis upon which the owner's corporate overheads are allocated to WestNet. We note that the allocator of corporate overheads in the WestNet CP is listed as "GTK & Train numbers - Proportion to be agreed by the ERA during floor and ceiling cost determinations" whereas the TPI CP lists train km as the allocator of

"Corporate Overheads and other" costs. In relation to this issue, see our comments on these allocation bases in the discussion above of section 4.3 of the TPI CP.

CP Recommendation 35
Reference to "Attachment 2" should be amended to "Attachment B".

6.1 Indexation of floor and ceiling

Indexation of the capital cost component of floor and ceiling costs according to the rise in the March to March Eight State Capitals CPI is consistent with the indexation approach in section 5.1 of the WestNet CP, except that the WestNet CPI escalator includes the effect of an "X" efficiency factor and also applies to operating costs.

In relation to this issue, ACIL for Hancock Prospecting, at page 17 of its submission, comments as follows:

> "TPI's floor and ceiling costs should be indexed by CPI-X, with ERA setting an appropriate X factor in the light of its consideration of future cost movements in operating TPI's rail infrastructure."

In relation to this issue, TPI's response to public comments states as follows:

> "TPI would argue that there should be no adjustment for productivity in the absence of evidence that TPI is inefficient. This is on the grounds that for new infrastructure, it is likely to be very difficult to accurately estimate achievable productivity gains over the initial price setting period."

We consider it reasonable for the initial application of costing principles to the TPI network that no X efficiency factor is applied to costs. At the next review of the CP, however, we suggest that the ERA considers whether TPI has capacity to make efficiency gains and accordingly, whether an X efficiency factor should apply to the TPI indexation approach.

TPI proposes to apply a separate index to operating costs, which is to be based on regional cost drivers and will be submitted to the ERA for approval, after TPI gains an understanding of operating cost changes over time.

ARTC, at page 5 of its submission, comments that "this is a reasonable approach however the process for ERA's approval should be conducted through a public consultation process."

We note that public consultation is not required before the CP are approved, but that the ERA has subjected the current CP along with TPI's other Part 5 instruments to public consultation. In that context, we consider the ARTC recommendation to be consistent with the approach adopted by the ERA to approving the CP. However, for the purposes of the current approval process, we suggest that the indexation approach used for the capital cost component of floor and ceiling costs should also apply to operating costs, consistent with the approach in the WestNet CP. At the next review of the CP, we suggest that the ERA considers whether an alternative indexation approach should apply. The ERA's consideration of this issue should be on the basis of a public submission to be lodged by TPI. As part of the review, we suggest that the ERA also considers whether TPI's costs reflect efficient costs and accordingly, whether TPI has capacity to make efficiency gains and thus whether an X efficiency factor should apply to TPI.

CP Recommendation 36
We suggest that, in order for such an escalation to be accepted by the ERA at its next review, TPI should provide the ERA with a public submission demonstrating the relevance of general local cost increases to its future estimates of efficient costs of operating and maintaining the MEA infrastructure.

6.2 Calculation of floor and ceiling

The calculation of floor and ceiling costs in this section is consistent with the processes set in sections 5.2 (Calculation of the Ceiling) and 5.3 (Calculation of the Floor) in the WestNet CP.

7 Review and consultation

This section is generally consistent with section 6 of the WestNet CP which has the same title. The WestNet principles provide for a review every three years as required by the Code after the ERA's approval of the CP, whereas TPI commits to a review within two years after the ERA's approval of these CP.

Although it is recognised that the railway owner, with the approval of the ERA, can amend or replace the CP at any time, and that the ERA can direct the railway owner to amend or replace the principles, we consider that a commitment to periodic reviews provides a general benefit of certainty of regulatory process and ensures that the interests of railway owners and users will be balanced on a regular basis and that the principles continue to operate in accordance with the objectives. We consider that three yearly reviews, as provided in the WestNet CP, to be sufficient for these purposes.

In relation to this section 7, ACIL for Hancock Prospecting, at page 17 of its submission, recommends as follows:

> "TPI should state explicitly that access seekers and operators can at any time request the ERA to consider amendments to the Costing Principles."

A similar provision is contained in section 6 of the WestNet CP and should be included in the TPI CP to provide similar rights to users.

CP Recommendation 37
We suggest that section 7 of the CP, entitled Review and Consultation, includes a regular review commitment, as per the WestNet principles.

We also suggest that the reviews should be conducted every three years commencing from the date of the ERA's approval of these CP.

In addition, we suggest that section 7 incorporates the following text, which reflects a similar provision in 6 of the WestNet CP:

- "Access seekers and operators can at any time request the ERA to consider amendments to the Costing Principles."

A Economic life of assets

This attachment is discussed in relation to section 3.1.2 above.

B Allocation of operating costs and overheads

This attachment is discussed in relation to section 4.3 above.

C Route sections

This attachment is discussed in relation to section 2 above.

Appendix: List of Recommendations

CP Recommendation 1 We recommend that TPI adds a definitions section, similar to that in section 8 of the WestNet CP, to provide a complete list of the definitions used in the principles. The definitions should be consistent those in the Act and the Code. Terms used that are not defined in the Act and Code and that have a key bearing on the application of the principles should also be defined. The terms should cover at least the list of terms as noted in paragraph 1 of page 2 of the submission from ACIL for Hancock Prospecting.

CP Recommendation 2 The document contents list at the end of section 1 omits reference to section 7, Review and consultation. Reference to this section should be added.

CP Recommendation 3 We recommend that the TPI CP incorporates the same provisions as in sections 1.2 and 1.3 of the WestNet CP in order for the CP to provide further information on TPI's obligations and on the regulatory framework in which the CP apply.

CP Recommendation 4 We consider that at least the framework for the costing model should explained in the CP in order for the model to be assessed as being part of the principles, rules and practices to be applied by TPI (in accordance with section 46(1) of the Code). Such explanation should cover how the cost elements in the CP are incorporated into the model. We also suggest that the model should be developed within a significantly shorter period of time than proposed by TPI, (we suggest within 6 months) given the importance of modelling results to determining floor and ceiling costs, to preparing financial records and to the review to be conducted within three years (see section 7 below). The costing model should incorporate a track maintenance model as discussed in relation to section 4.1. TPI should also indicate that floor and ceiling costs may be re-determined in the light of improved data from the costing model.

CP Recommendation 5 We suggest that, similar to the WestNet CP, the TPI CP specifies multiple route sections on its network. The TPI route sections should be the discrete sections of track between sidings, passing loops and terminals. This recommendation also applies to the TPI OPR.

CP Recommendation 6 Because the CP are to apply under the WA Rail Access Regime, and that all of the tracks that are part of the railway constructed pursuant to the TPI Railway and Port Agreement are covered by the Regime, the wording "or is otherwise required to provide access under the TPI Railway and Port Agreement" is not required and should be deleted.

CP Recommendation 7
We suggest that sentences 2 and 3 are deleted from paragraph 2 and are replaced by wording from clause 2(2a) of Schedule 4 of the Code.

CP Recommendation 8
It is recommended that principles, rules and practices explained in the CP are presented as measures that are to be applied by TPI. This general recommendation relates to a number of areas of the document. Requirements for greater specificity in relation to particular principles and processes are also addressed by specific recommendations in this paper.

CP Recommendation 9
We suggest that the words “for all users taken together” are appended to sentence 1 of dot point 1, paragraph 1 of section 3.1.1.

CP Recommendation 10
We suggest that the assertion in relation to greenfields developments is removed.

CP Recommendation 11
We suggest that dot point 2, paragraph 1 of section 3.1.1 is amended to:

- set out that the ERA may obtain an independent review of whether the TPI network represents an efficient, optimised network; and

- clarify the meaning of "the existing corridor of the land" in this context of this dot point (where this wording is from the WestNet CP, but would have a different context in relation to the WestNet network).

CP Recommendation 12
We suggest that TPI CP defines greenfields costs consistently with the greenfields principle as reflected in section 2.3 the WestNet CP, in that costs incurred in working around the existing infrastructure are not included in any greenfields costs.

CP Recommendation 13
TPI’s statement in relation to MEA implies that it considers greenfields costs to equate to its actual costs. If that is TPI’s position, we suggest that TPI demonstrates to the ERA that the assets created comply with clause 2(4)(c) of Schedule 4 of the Code, and in respect of the particular inputs to creating those assets, that it verifies the escalation in input cost since the assets were created. As per CP Recommendation 12, as greenfields costs, such costs should exclude the costs associated with working around existing infrastructure.

CP Recommendation 14
We suggest that in order to more fully explain the principles and rules for applying the MEA concept in the CP, TPI should adopt the MEA principles and rules from section 2.3 of the WestNet CP.

CP Recommendation 15
We suggest that TPI sets out details of the process by which it will apply greenfields values, MEA values and market tested rates to arrive at a GRV to a similar level of detail as provided in the WestNet CP.

CP Recommendation 16
We suggest that TPI sets out details of the process principles and rules for applying design, construction and project management fees on a similar basis to the equivalent provisions in the WestNet CP.

CP Recommendation 17
We suggest that sentence 3 of this dot point is deleted, given that actual historical cashflows are inconsistent with the required calculation in the Code, which is to involve the application of WACC to GRV.

CP Recommendation 18
We suggest that TPI amends the provisions in section 3.1.1 in relation to financing charges during construction by adopting the measures as contained in section 2.3 of the WestNet CP under the heading, Financing charge during railway infrastructure construction. We also suggest that TPI amends the description of this cost element by adopting the same description as in the WestNet CP.

CP Recommendation 19
We suggest that before such escalation is accepted by the ERA, TPI demonstrates that the results of its escalator applied to actual costs do not exceed the MEA value derived from "current market tested unit rates for materials" as per dot point 5 above (see also CP Recommendation 36 below).

CP Recommendation 20
We suggest that the principle in this paragraph 3 is amended to state that when TPI undertakes an expansion or extension to the railway infrastructure, the asset created by the expansion or extension will be valued at GRV at the time it first enters the capital cost calculation.

CP Recommendation 21
Section 3.1.1 should specify that the GRV will be reviewed by the ERA every third year. (see also CP Recommendation 37).

CP Recommendation 22
We suggest that before TPI's economic lives used for earthworks, bridges (non footbridges) and the item, Rail Live Curve > 800m & tangent, are accepted by the ERA, TPI demonstrates the basis to the lives used for these items. If this cannot be demonstrated to the ERA's satisfaction, the asset lives in the WestNet CP should apply.

CP Recommendation 23
It is recommended that TPI delete items 11 to 13 from Attachment A. The provisions on Design, construction and project management fees and Financing charge during railway infrastructure construction (as amended by CP Recommendations 16 and 18) would apply in place of those items.

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CP Recommendation 24
We do not consider it to be appropriate that WACC component approaches and values should be prescribed in the CP, given that the WACC (including the approach, formulas, inputs and output WACC values) is established by a separate ERA determination process. We suggest that sentence 2 is deleted from section 3.1.3.

CP Recommendation 25
Asymmetric risk issues that would be covered by a WACC calculation are not appropriate matters to include in the CP given that the WACC is established by separate ERA determination.

Further, we consider that the definition of "operating costs" in clause 1 of Schedule 4 of the Code would not encompass the asymmetric risk allowance proposed by TPI. We suggest that sentence 3 is deleted.

CP Recommendation 26
Because TPI proposes to include working capital costs (section 4.1 discussed below), in order that capital costs are not over recovered, and to treat TPI on a consistent basis with WestNet, the TPI annuity calculation should be on an annuity due basis.

CP Recommendation 27
We suggest that the reference to efficient operating costs in paragraph 1 is amended to also reflect the concept of efficient costs as set out in clause 4 of Schedule 4 of the Code (which is consistent with the definition of efficient costs in the WestNet CP).

CP Recommendation 28
We suggest that TPI provides a definition of MPM that clarifies the activities that included in MPM, to the same level of detail as provided in the WestNet CP and accordingly, also defines the terms “routine maintenance” and “cyclical maintenance” in this context. MPM that would provide for renewal of assets or otherwise extend the life of assets should be excluded from operating costs.

CP Recommendation 29
The land costs included in the incremental and total cost calculations (whether directly by way of a rental or lease charge or some other cost; or indirectly buy amortising a capital cost as an annuity) should only be those costs that relate to railway infrastructure referred to in clauses 2(2) and 2(2a) of Schedule 4 of the Code.

CP Recommendation 30
We recommend that TPI’s working capital charge is defined, and that the definition is consistent with the effective definition of this charge in the WestNet CP, which is that annual charge should be calculated by multiplying ½ of the WACC by the annuity.

CP Recommendation 31
We suggest that TPI adopts the direct commitment to subjecting operating costs to efficient cost tests as set out in section 3.2 of the WestNet CP. To this effect, we suggest that:

- the introduction to paragraph 1 of this section is replaced by the following text adapted from the WestNet CP: “TPI will test whether the operating costs used for determining the floor and ceiling are efficient as follows”;
- the following text is deleted from dot point 1 of paragraph 1: “having regard to the market conditions that are presently being experienced in the Pilbara region”; and
- an equivalent provision to paragraph 3 of section 3.2 of the WestNet CP is added, to the effect that TPI will report against agreed efficiency KPI’s to the ERA.

CP Recommendation 32
We suggest that TPI adopt a GTK allocator for railway infrastructure indirect costs and train movements as an allocator of network management indirect costs (in both cases replacing train kms).

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We suggest that the cost categories in this attachment are aligned with the categories identified in the body of the CP and with the definitions in the Code. If assets are to be allocated in accordance with this table, this should be shown in the heading. Land assets that do not meet the criteria in clauses 2(2) and 2(2a) of Schedule 4 of the Code should be excluded from this table. Section 4.3 and 5.2 of the CP should state that the ERA may require an independent review of the allocation bases used by TPI.

CP Recommendation 34
We suggest that the concept of overhead costs as “incurred by an efficient stand alone operator” should also reflect the concept of efficient costs as set out in clause 4 of Schedule 4 of the Code, and that TPI provides further information in relation to the composition of overhead costs, in the manner of the additional information provided in the WestNet CP.

CP Recommendation 35
Reference to "Attachment 2" should be amended to "Attachment B".

CP Recommendation 36
We suggest that, in order for such an escalation to be accepted by the ERA at its next review, TPI should provide the ERA with a public submission demonstrating the relevance of general local cost increases to its future estimates of efficient costs of operating and maintaining the MEA infrastructure.

CP Recommendation 37
We suggest that section 7 of the CP, entitled Review and Consultation, includes a regular review commitment, as per the WestNet principles.

We also suggest that the reviews should be conducted every three years commencing from the date of the ERA's approval of these CP.

In addition, we suggest that section 7 incorporates the following text, which reflects a similar provision in 6 of the WestNet CP:

- “Access seekers and operators can at any time request the ERA to consider amendments to the Costing Principles.”