

The Pilbara Infrastructure Pty Ltd (TPI)

Draft Determination on TPI's
Costing Principles

24 November 2009

Economic Regulation Authority



WESTERN AUSTRALIA

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For further information, contact:

Jeremy Threlfall
Assistant Director Rail
Economic Regulation Authority
Perth, Western Australia
Phone: (08) 9213 1900

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DRAFT DETERMINATION

1. The Pilbara Infrastructure Pty Ltd (**TPI**), a wholly owned subsidiary of Fortescue Metals Group (**FMG**) is the owner of a recently constructed railway (**TPI Railway**) connecting FMG's Cloud Break iron ore mine in the Pilbara to TPI's port facilities at Port Hedland.
2. On 1 July 2008, the TPI Railway was included in the State's rail access regime (consisting of the *Railways (Access) Act 1998* (**Act**) and the *Railways (Access) Code 2000* (**Code**)) through proclamation of Part 3 of the *Railway and Port (The Pilbara Infrastructure Pty Ltd) Agreement Act 2004* (**Agreement Act**).
3. On 15 August 2008, TPI submitted its proposed Costing Principles to the Economic Regulation Authority (**Authority**) for approval, in accordance with Part 5, section 46(1) of the Code. The Agreement Act required TPI to submit its proposed Costing Principles to the Authority no later than seven days after the TPI Railway became subject to the State's rail access regime.
4. The Authority has considered TPI's proposed Costing Principles in conjunction with comments made in submissions to the Authority by interested parties, including a supplementary submission received from TPI addressing issues raised in interested parties submissions.
5. The draft determination of the Authority is to approve TPI's proposed Costing Principle subject to 17 amendments. These amendments are listed below.

LIST OF AMENDMENTS

Required Amendment 1

Section 1 of TPI's proposed Costing Principles (headed 'Introduction') should be amended as follows:

- Additional paragraphs should be added similar to the following elements of sections 1.2 and 1.3 of the WNR CP:
 - first sentence under the first paragraph of section 1.2
 - second and third paragraphs of section 1.3
- Additional dot points should be added to the list at the end of this section to include Section 7 and the appendices (A to C). The appendices should also be added to the List of Contents on page 2.

Required Amendment 2

Section 2 of TPI's proposed Costing Principles (headed 'Timing and route sections') should be amended as follows:

- The first paragraph should be amended to include a statement to the effect that TPI will provide the Authority with its proposed floor and ceiling costs submission, incorporating its costing model (in excel format), within two months of the Authority issuing its final determination on TPI's Costing Principles.
- A statement should be included to the effect that TPI will design its costing model to accommodate the addition of multiple route sections in the future.

- A statement should be added to the effect that, whenever rail lines connecting to TPI's railway network are constructed, TPI will submit within three months of the completion of such works, proposed amendments to its Costing Principles for the purpose of inclusion of those new route sections.

Required Amendment 3

Section 3.1 of TPI's proposed Costing Principles (headed 'Infrastructure included') should be amended as follows:

- In the first paragraph on page 4, delete the words "covered by the WA Rail Access regime or is otherwise required to provide access under the TPI Railway and Port Agreement (covered infrastructure), including:" and replace with the words "defined as 'railway infrastructure' under Part 1 of the Code, including:".
- In the second paragraph on page 5, delete the second and third sentences in this paragraph and replace with wording which accurately reflects the provisions of sections 2(2) and 2(2a) of Schedule 4 of the Code.

Required Amendment 4

Section 3.1.1 of TPI's proposed Costing Principles (headed 'Gross replacement values') should be amended as follows:

Item 1: Capacity of infrastructure

- Add the words "for all users taken together" immediately following the words "reasonably projected demand".
- Delete the second sentence.

Item 2: Route optimisation

- Delete the words "as a greenfields development" and "infrastructure configuration".

Item 4: Greenfields

- Amend this section to be consistent with the wording in the equivalent part of section 2.3 of the WNR CP.

Item 5: Modern equivalent assets

- Add the words "if appropriate" immediately following the words "MEA value".
- Delete the second sentence.
- Provide details of the process to determine the MEA and to calculate the GRV on the basis of the MEA, consistent with the wording for these processes in the equivalent part of section 2.3 of the WNR CP.

Item 6: Unit rates

- Amend this section to be consistent with the wording in the equivalent part of section 2.3 of the WNR CP.

Item 7: Design, construction and project management fees

- Amend this section to be consistent with the wording in the equivalent part of section 2.3 of the WNR CP.

Item 8: Financing charge during construction

- Delete the third sentence.

- Amend the heading to read “Financing charge during railway infrastructure construction”.
- Add wording consistent with the wording in the equivalent part of section 2.3 of the WNR CP.

Item 9: Equity raising costs

- Add the word “Authority’s” immediately preceding the word “weighted” in the third line.

Item 10: Costs index

- Delete the wording in the last paragraph on page 6 and replace with the words “Where it is necessary for TPI to escalate its actual costs the escalators used will be in accordance with the nature of the costs involved”.

Item 11: Extensions and expansions

- Delete the entire first paragraph on page 7.

Required Amendment 5

Appendix A on page 13 of TPI’s proposed Costing Principles (headed ‘Economic life of assets’) should be amended as follows:

- Item 1 – Delete the figure ‘50’ under the heading ‘Life Expectancy (Years)’ and replace this figure with ‘100’.
- Item 2(a) – Delete the figure ‘50’ under the heading ‘Life Expectancy (Years)’ and replace this figure with ‘100’.
- Item 5(a)[Curve > 800m & tangent] – Delete the figure ‘20’ under the heading ‘Life Expectancy (Years)’ and replace this figure with ‘60’.
- Items 11, 12 and 13 – Delete these items.

Required Amendment 6

Section 3.1.3 of TPI’s proposed Costing Principles (headed ‘Rate of return’) should be amended by deleting the second, third and fourth sentences under this section.

Required Amendment 7

Section 3.1.4 of TPI’s proposed Costing Principles (headed ‘Annuity’) should be amended as follows:

- Delete the second sentence.
- Add a detailed outline of the annuity calculation methodology, consistent with the principles under sections 2(3) and 2(4) of Schedule 4 of the Code and along similar lines to the methodology set out under section 2.6 of the WNR CP.

Required Amendment 8

Section 4.1 of TPI’s proposed Costing Principles (headed ‘Definition of operating costs’) should be amended as follows:

- The second sentence should include the words “managing the railway network in a manner consistent with the efficient costs definition under section 4 of Schedule 4 of the Code”, immediately following the words “efficient stand alone operator”.
- Add the first paragraph under section 3.3 of the WNR CP as the second paragraph.

- Add the words “TPI has defined the terms routine and cyclical maintenance to detail what activities have been included in operating costs” as the third paragraph.
- Delete the first three dot points and the last two dot points on page 8.
- Delete the words “and major planned maintenance” from the fourth and fifth dot points on page 8.
- Add the following four headings and provide a detailed description of the appropriate definitions, principles and processes under each of these headings, consistent with those set out under section 3.3 of the WNR CP:
 - Routine and cyclical maintenance for track.
 - Routine and cyclical maintenance for signalling and communications.
 - Network management costs.
 - Working capital.
- Add details of TPI’s track maintenance model in a manner similar to the description of WestNet’s track maintenance model set out under section 3.3 of the WNR CP.
- Incorporate TPI’s track maintenance model into its costing model.

Required Amendment 9

Section 4.2 of TPI’s proposed Costing Principles (headed ‘Efficient cost tests’) should be amended as follows:

- Delete the first paragraph and replace with wording similar to that in the first paragraph of section 3.2 of the WNR CP.
- Delete the words “having regard to the market conditions that are presently being experienced in the Pilbara region” in the first dot point.
- Delete the word “will” in the second dot point and replace with the word “may”.
- Add the words “or unit costs, as appropriate,” immediately following the word “actual” under the third dot point.
- Delete the second sentence in the last paragraph and replace with wording similar to the sentence under section 3.1 of the WNR CP.

Required Amendment 10

Section 4.3 of TPI’s proposed Costing Principles (headed ‘Allocation of operating costs’) and Appendix B on page 14 should be amended as follows:

- Amend section 4.3 by:
 - Deleting the words “specific operating costs, including track and signalling maintenance costs, centralised train control cost and” from the first sentence.
 - Inserting the first two sentences from section 3.4 of the WNR CP as the first paragraph.
 - Deleting the last sentence.
 - Inserting the last sentence under section 3.4 of the WNR CP as the last sentence in this section, excluding the words “will be determined by the ERA” and replacing these words with “will be reviewed by the ERA”.
- Amend the Operating Costs part of Appendix B by:

- Deleting all references to costs related to land (corridor and non-corridor land).
- Deleting references to operating costs which are directly attributable and listing indirect operating costs under the headings ‘railway infrastructure management costs’ and ‘network management costs’.
- Inserting GTKs as the cost allocator for railway infrastructure management costs.
- Inserting train numbers as the cost allocator for network management costs.

Required Amendment 11

Section 5.1 of TPI’s proposed Costing Principles (headed ‘Definition of overhead costs’) and Appendix B on page 14 should be amended as follows:

- Amend section 5.1 by:
 - Deleting the wording in the third paragraph. Replace with similar wording to that in the third sentence of the third paragraph of section 4.1 in the WNR CP.
- Amend the Overhead Costs part of Appendix B by:
 - Classifying overheads under the heading ‘Cost Component’ into two categories, being: ‘TPI’s overheads’ and ‘Corporate overheads (services provided by FMG and allocated to TPI)’.
 - Providing a similar level of detail in relation to the specific type of overhead costs being allocated under the heading ‘Description’, as is provided under Annexure 7.2 of the WNR CP under the heading ‘Inclusions’.

Required Amendment 12

Section 5.2 of TPI’s proposed Costing Principles (headed ‘Allocation of overhead costs’) and Appendix B on page 14 should be amended as follows:

- Amend section 5.2 by:
 - Deleting the number “2” and replacing it with the letter “B”.
 - Adding the first sentence under section 4.2 of the WNR CP as the first paragraph, excluding the words “will be determined by the ERA” and replacing these words with “will be reviewed by the ERA”.
- Amend the Overhead Costs part of Appendix B by:
 - Inserting the words “Combination of GTKs and Train Numbers” under the heading ‘Cost allocator’.
 - Adding a note at the end of this appendix, similar to the note under section 7.2.1 of Annexure 7.2 of the WNR CP, which relates to the use of the two cost allocators (GTKs and Train Numbers) for overhead costs.
 - Adding a further sentence to the end of the above note, as follows; “The use of these two cost allocators for overhead cost allocation is to be reviewed by the ERA during its floor and ceiling costs determinations”.

Required Amendment 13

Section 6.1 of TPI’s proposed Costing Principles (headed ‘Indexation of floor and ceiling’) should be amended as follows:

- Delete the third paragraph.
- Replace the above paragraph with the first four sentences from section 5.1 of the WNR CP.

Required Amendment 14

Section 7 of TPI's proposed Costing Principles (headed 'Review and consultation') should be amended as follows:

- Amend the heading to read "Compliance and review".
- Delete the wording under this section and replace with wording consistent with section 6 of the WNR CP, with the exception of the following:
 - First paragraph of section 6 of the WNR CP: Delete this paragraph and replace with "TPI agrees to a review of the Costing Principles by the ERA, through a public consultation process, two years after the date when all the regulatory instruments required under the Act and the Code for TPI's railway have been approved by the ERA. It is expected that the review will commence on 1 October 2012 and that TPI will provide the ERA with its proposed revised Costing Principles on this date".
 - Fourth paragraph of section 6 of the WNR CP: (1) Replace "WestNet" with "TPI", (2) Replace "The ERA will monitor TPI's compliance" with "TPI agrees to the monitoring by the ERA of its compliance", (3) Add the following sentence to the end of this paragraph; "It is expected that the first audit will commence at the end of the 2011-12 financial year".

Required Amendment 15

Section 6 of TPI's proposed Costing Principles (headed 'Other Matters') should be amended to include a new sub-section (sub-section 6.3) headed "Asymmetric Risk".

Required Amendment 16

Section 6 of TPI's proposed Costing Principles (headed 'Other matters') should be amended to include a new sub-section (sub-section 6.4) headed "Service quality commitment", which should contain wording similar to the wording under section 1.5 of the WNR CP.

Required Amendment 17

TPI's proposed Costing Principles should be amended to include a new section (Section 8) headed "Definitions", which should include a complete list of all the terms used in the Costing Principles which might reasonably be expected to require a definition. In addition, all definitions should be:

- Consistent with the definitions in the Act and the Code.
- If not defined in the Act or the Code, consistent with the definitions under section 8 of the WNR CP.
- Consistent with definitions used previously by TPI in its proposed segregation arrangements or proposed Part 5 Instruments, subject to the above requirements.

REASONS FOR THE DRAFT DETERMINATION

BACKGROUND

6. The TPI Railway was commissioned in May 2008. This railway is about 260 kilometres in length and runs from FMG's Cloud Break iron ore mine in the Chichester Ranges (East Pilbara) to TPI's port facilities at Anderson Point in Port Hedland.
7. On 1 July 2008, the TPI Railway became subject to the Act and the Code through the proclamation of Part 3 of the Agreement Act. TPI was required, from this date, to comply with the legislative obligations set out for railway owners under the Act and the Code.
8. The TPI Railway is owned and operated by TPI. TPI will perform both access-related rail functions and functions associated with the operation of train services.
9. The Costing Principles is one of the four Part 5 Instruments set out in Section 40(3) of the Code. Section 40(2) of the Code notes that the Part 5 Instruments are binding on the railway owner.

LEGISLATIVE REQUIREMENTS

10. The key areas of the Code and the Act that have relevance to the formulation and application of the Costing Principles are as follows:

Code Requirements

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.
 - (2) The Regulator may —
 - (a) approve the statement submitted by the railway owner either with or without amendments; or
 - (b) if he or she is not willing to do so, determine what are to constitute the costing principles.
 - (3) The costing principles may be amended or replaced by the railway owner with the approval of the Regulator.
 - (4) The Regulator may, by written notice, direct the railway owner —
 - (a) to amend the costing principles; or
 - (b) to replace them with other costing principles determined by the Regulator, and the railway owner must comply with such a notice.

(5) The costing principles 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.

Act Requirements

20(4) Functions of the Regulator

In performing functions under the Act or Code, the Regulator is to take into account —

- (a) the railway owner's legitimate business interests and investment in the railway infrastructure;
- (b) the railway owner's costs of providing access, including any costs of extending or expanding the railway infrastructure, but not including costs associated with losses arising from increased competition in upstream or downstream markets;
- (c) the economic value to the railway owner of any additional investment that a person seeking access or the railway owner has agreed to undertake;
- (d) the interests of all persons holding contracts for the use of the railway infrastructure;
- (e) firm and binding contractual obligations of the railway owner and any other person already using the railway infrastructure;
- (f) the operational and technical requirements necessary for the safe and reliable use of the railway infrastructure;
- (g) the economically efficient use of the railway infrastructure; and
- (h) the benefits to the public from having competitive markets.

11. In exercising its decision-making power pursuant to section 46 of the Code, the Authority is required to take into account the factors listed in section 20(4) of the Act. However, the Authority may allocate such weight to each of the factors listed in section 20(4) as it considers appropriate, in order to ensure a balancing of interests in relation to the railway owner, rail operators, access seekers and the public.

PUBLIC CONSULTATION

12. The Code does not require the Authority to undertake public consultation prior to approving the Costing Principles prepared by a railway owner pursuant to Section 46 of the Code. However, the Authority has noted in previous determinations relating to Part 5 Instruments that it has decided to apply the same public consultation process to all these instruments in order to provide consistency in its approach.
13. On 20 August 2008, the Authority issued a notice on its web site calling for submissions from interested parties on TPI's proposed Costing Principles by 1 October 2008. Four public submissions were received, from:
 - The Australian Rail Track Corporation Ltd.
 - Hancock Prospecting Pty Ltd.
 - North West Iron Ore Alliance
 - United Minerals Corporation NL.
14. On 21 October 2008 TPI requested the Authority's agreement to make a supplementary submission addressing some issues raised in the public submissions. This agreement was provided and TPI's supplementary submission was received by the Authority on 14 November 2008.

15. The four submissions from interested parties and TPI's supplementary submission are available on the Authority's website (www.era.wa.gov.au).
16. In the discussion below, the names of the parties who made public submissions have been abbreviated. The North West Iron Ore Alliance is the **NWIOA**. United Minerals Corporation is **UMC**. The Australian Rail Track Corporation is the **ARTC**. Hancock Prospecting submitted a consultant's report prepared on its behalf by ACIL Tasman. This report is referred to as **Hancock(ACIL)**.

CONSULTANTS USED BY THE AUTHORITY

17. To assist the Authority in the preparation of its draft determination, the Authority engaged a consultant, PricewaterhouseCoopers (**PwC**) to review TPI's proposed Costing Principles and the public submissions and provide advice to the Authority. The PwC draft report is available on the Authority's website (www.era.wa.gov.au).

SCOPE OF MATTERS COVERED UNDER THE DRAFT DETERMINATION

18. The draft determination deals with the matters to be included in TPI's Costing Principles as set out under Part 5, section 46 of the Code.
19. Some comments made in the public submissions are outside the scope of matters dealt with under the above section of the Code and, consequently, have not been included in the discussion of relevant issues set out in this draft determination.

DISCUSSION OF ISSUES

20. TPI has set out its proposed Costing Principles in seven sections. These are:
 - Introduction (Section 1)
 - Timing and route sections (Section 2)
 - Determination of capital costs (Section 3)
 - Determination of operating costs (Section 4)
 - Overhead costs (Section 5)
 - Other matters (Section 6)
 - Review and consultation (Section 7)

Each of the above sections are discussed below. The TPI proposal also has three appendices, which are:

- Economic Life of Assets (Appendix A)
- Allocation of operating costs and overheads (Appendix B)
- Route Sections (Appendix C)

The appendices are addressed in conjunction with discussion on the sections which refer to the respective appendices.

21. The discussion of each section is undertaken in the following order:

- a) A summary of TPI proposals relating to that item.
 - b) An outline of comments received in the public consultation process which relate to that item, including any comments provided by TPI in its supplementary submission.
 - c) PwC's advice in relation to the TPI proposal, the public submissions and TPI's supplementary submission.
 - d) The Authority's assessment.
 - e) Any amendments required by the Authority.
22. It should be noted that reference has been made in the discussion below to WestNet Rail's (**WNR**) Costing Principles, as approved by the Authority in April 2009. WNR's 2009 Costing Principles document is available on the Authority's web site (www.era.wa.gov.au). This document is referred to as **WNR CP** in this draft determination.

Introduction (Section 1)

TPI's Proposal

23. TPI has acknowledged that it is required, in accordance with Section 46 of the Code, to prepare and submit Costing principles to the ERA for approval. Section 1 of TPI's proposal describes the aims of the Costing Principles, the relationship with Overpayment Rules and outlines the structure of the document.

Public Submissions

24. The NWIOA (page 15), UMC (page 4) and Hancock(ACIL) (page 2) have each commented that a definitions clause similar to that in section 8 of the WNR CP should be added to TPI's proposed Costing Principles.
25. Hancock(ACIL) (page 2) noted that it would be useful for TPI to support its Costing Principles with databases and models. Hancock(ACIL) also commented that TPI should make reference to the Code provisions relating to the requirement for TPI to negotiate prices for access between a floor price and a ceiling price and the Code provisions, under Clause 13 of Schedule 4, which provide the principles on which negotiated access prices are to be based.

PricewaterhouseCoopers' (PwC) Advice

26. PwC noted that section 1 of TPI's proposal is generally consistent with sections 1.1 and 1.6 of the WNR CP.
27. PwC also noted that TPI has not provided a definitions section but that TPI had proposed that the terms defined in the Act and the Code be adopted for the purpose of the Costing Principles. PwC commented that the following terms are used by TPI which are not defined in the Act and the Code, and for which a definition is required in order to clearly set out how the Costing Principles will apply:
- Major Periodic Maintenance
 - Cyclical Maintenance
 - Routine Maintenance

- Working Capital
 - Greenfields
28. In relation to the contents list at the end of Section 1, PwC advised that this list omitted reference to Section 7, Review and consultation.
29. PwC also commented that section 1 of the TPI proposal does not contain the provisions found at sections 1.2 and 1.3 of the WNR CP.
30. PwC recommended that:
- A definitions section should be added to TPI's Costing Principles similar to the definitions section under section 8 of the WNR CP. Definitions should also be included for the list of terms noted in paragraph 1 (page 2) of the Hancock (ACIL) submission.
 - The contents list at the end of section 1 of TPI's Costing Principles should include reference to TPI's Section 7 (Review and Consultation).
 - TPI's Costing Principles should include the provisions under sections 1.2 and 1.3 of the WNR CP.

Authority's Assessment

31. The Authority agrees with the advice of PwC and the views expressed in submissions to the effect that TPI's Costing Principles should include a definitions section similar to section 8 of the WNR CP. The Authority also notes that all definitions should be consistent with the Act and the Code. This issue is dealt with later in this determination under Required Amendment 17.
32. The Authority also agrees with PwC that section 1 of TPI's Costing Principles should also include, at the end of this section, an additional dot point stating "Section 7 – Review and Consultation". The Authority notes that TPI has also not included references to appendices (A, B and C) in section 1. The appendices have also not been included in TPI's List of Contents on page 2 of the Costing Principles.
33. In relation to the inclusion of additional information under section 1 of TPI's Costing Principles, along the lines suggested by Hancock(ACIL), the Authority considers that it would be beneficial for TPI's Costing Principles to provide additional information on relevant Code provisions. The Authority notes that PwC has advised that the information under sections 1.2 and 1.3 of the WNR CP should be added to section 1 of TPI's Costing Principles.
34. The Authority's view is that it would be beneficial to have some of the information under sections 1.2 and 1.3 of the WNR CP included in TPI's Costing Principles but does not consider that it is necessary to include all this information. The information which should be included is the first sentence under paragraph 1 of section 1.2 and paragraphs 2 and 3 of section 1.3, of the WNR CP.

Draft Determination**Required Amendment 1**

Section 1 of TPI's proposed Costing Principles (headed 'Introduction') should be amended as follows:

- Additional paragraphs should be added similar to the following elements of sections 1.2 and 1.3 of the WNR CP:
 - first sentence under the first paragraph of section 1.2
 - second and third paragraphs of section 1.3
- Additional dot points should be added to the list at the end of this section to include Section 7 and the appendices (A to C). The appendices should also be added to the List of Contents on page 2.

Timing and Route Sections (Section 2)**TPI's Proposal**

35. TPI has proposed to provide its costing model to the Authority within 18 months of the approval of the Costing Principles, with its costing model being prepared in accordance with the approved Costing Principles. TPI noted that this would allow the costing model to be developed with the benefit of at least 18 months actual experience in the level of costs which will be incurred in the provision of access services.
36. TPI has proposed to calculate floor and ceiling costs at the route section level, with route sections for its railway network as set out under Appendix C.
37. Appendix C defines one route section for its entire railway network, being the route from the load-out at FMG's Cloudbreak mine to the dump station servicing TPI's port facilities at Anderson Point in Port Hedland.

Public Submissions

38. The submissions dealt primarily with two issues. These issues are the time proposed by TPI to submit its costing model and the route sections set out by TPI.

Costing Model

39. The NWIOA commented (page 14) that in view of the planning timeframe and the certainty required for access pricing, the timeframe for TPI to submit its costing model should be shorter. The NWIOA suggested that 6 months was appropriate.
40. UMC suggested (page 4) that TPI's proposed timing for provision of its costing model could be reduced significantly.
41. Hancock(ACIL) submitted (page 5) that TPI should commit to providing the Costing Model within about a month after approval of the Costing Principles.

42. In its supplementary submission (page 5), TPI did not accept the views expressed by the NWIOA, UMC and Hancock(ACIL), to the effect that its proposed 18 month period to submit its costing model should be significantly reduced.

Route Sections

43. The NWIOA (page 10) commented that TPI's proposed single route section approach 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 on existing mining and exploration tenements, between Cloudbreak and Port Hedland.
44. The NWIOA also suggested that wording similar to that under section 1.4 of the WNR CP be added to this section of TPI's Costing Principles.
45. UMC (page 8) expressed a view similar to the NWIOA on this matter.
46. Hancock(ACIL) commented (page 5) that to meet the needs of access seekers requiring access to only part of TPI's network, disaggregation of the network into constituent route sections would be required. Hancock(ACIL) suggests, however, that this may not need to be done at the outset, but that:
- 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 need to define the process whereby Route Sections would be redefined and associated ceiling and floor costs recalculated.
47. TPI responded to the comments by the NWIOA, UMC and Hancock(ACIL) in its supplementary submission (page 3) noting that it would prefer to define route sections on the basis of existing rail usage and that any separation of the current railway into alternative route sections would be arbitrary given the uncertainty connected to future access points by potential operators. TPI commented that there would be future opportunities for route sections to be redefined.

PricewaterhouseCoopers' (PwC) Advice

Costing Model

48. PwC considered that a costing model constituted a key element of the Costing Principles as it sets out the detailed application of these principles. In PwC's view, the absence of such a model from TPI's proposed Costing Principles means that this document does not provide sufficient information on the principles, rules and practices to be followed by TPI in determining floor and ceiling prices.
49. PwC also agreed with the NWIOA, UMC and Hancock(ACIL) in relation to TPI's intended timeframe of 18 months to develop its costing model as being too long. PwC considered that TPI should be able to develop its costing model in a significantly shorter period of time and suggested that the model should be provided within six months.
50. PwC recommended that at least the framework for TPI's costing model should be outlined in its Costing Principles. This outline should explain how the cost elements in TPI's Costing Principles are to be incorporated into its costing model.

Route Sections

51. PwC advised that paragraph 2 of this section of TPI's Costing Principles was broadly similar to paragraphs 2 and 3 of section 1.4 of the WNR CP.
52. PwC also noted that Appendix C shows the single route section proposed by TPI (Cloudbreak mine to port rail dumper). However, PwC commented that elements of TPI's Costing Principles reflected the presumption that there could be more than one route section.
53. PwC noted the comments by the NWIOA, UMC and Hancock(ACIL), to the effect that TPI's railway network needed to be able to be divided into multiple route sections to ensure appropriate transparency and cost allocation for different users.
54. The view of PwC was that the ability to negotiate prices for access only in relation to that part of the network required was consistent with the interests of users. PwC also considered that the pricing of such access on the basis of costs associated only with those parts of the network used (rather than the overall network) was consistent with economic efficiency principles and with the requirements 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").
55. PwC also advised that the additional text under section 1.4 of the WNR CP which the NWIOA suggested should be added to this section of TPI's Costing Principles, would not add materially to the information provided by TPI in this section of its Costing Principles.
56. PwC recommended that TPI's Costing Principles should specify multiple route sections similar to the WNR CP. These route sections should be the discrete sections of track between sidings, passing loops and terminals.

Authority's Assessment

Costing Model

57. The Authority has considered the views expressed in submissions and the advice of PwC in relation to the issue of TPI's costing model.
58. The Authority's view is that TPI's costing model is required to be submitted as part of TPI's proposed floor and ceiling costs submission but that TPI's Costing Principles can be set out without needing to submit its proposed costing model. These principles form the basis of the costing model and need to be approved by the Authority before TPI can finalise its costing model and submit this model as part of its floor and ceiling costs proposal.
59. The Authority considers that TPI's proposed approach involving the provision of its costing model 18 months after approval of its Costing Principles by the Authority is not appropriate. The Authority sees no reason why TPI could not provide its costing model in a much shorter period. TPI has noted that it requires 18 months of operation to gain sufficient knowledge of the operating costs for its railway. The Authority notes that this railway has been in operation since July 2008, a period of 16 months to date. In addition, TPI has had in excess of 12 months since submission of its proposed Costing Principles to develop a draft costing model. Further, TPI has also had the benefit of being able to review the WNR costing

model (submitted by WNR as part of its proposed floor and ceiling costs in late 2008) which is available on the Authority's web site.

60. Given the above, the Authority's view is that TPI should be required to provide its proposed floor and ceiling costs submission, incorporating its completed costing model (in excel format) to the Authority two months after the Authority issues its final determination on TPI's proposed Costing Principles.
61. In relation to PwC's suggestion that at least the framework for TPI's costing model should be outlined in its Costing Principles, the Authority has required amendments in this draft determination which cover those elements of TPI's Costing Principles considered to be inadequate, with reference to the comments in public submissions and by comparison with the WNR CP. Under this approach, the Authority requires additional information relating to TPI's costing model framework to be provided, as necessary, subject to the particulars set out in TPI's proposed Costing Principles.

Route Sections

62. The Authority agrees with the comments in public submissions and by PwC to the effect that TPI needs to allow for the disaggregation of its railway network into multiple route sections, to ensure that prices charged for access to this network reflect only those costs attributable to the sections of the network required by users.
63. The Authority notes that TPI has, under Appendix C, defined only one route section for the entire length of its railway (from the loadout at the Cloudbreak mine to the rail dumper at its port).
64. The Authority also notes that in its supplementary submission, TPI has commented that any separation of the current railway into alternative route sections would be arbitrary given the uncertainty connected to future access points by potential operators. TPI also commented that there would be future opportunities for route sections to be redefined.
65. As there are currently no lines running off TPI's railway line from the Cloudbreak mine to its port, the Authority agrees with TPI that a single route section best reflects the current situation for TPI's railway network. The Authority considers that it would not be appropriate to define additional route sections until connecting lines have been constructed, so that the precise location of the route section ends can be determined.
66. When other rail lines have been constructed which connect to TPI's railway network or when TPI builds extensions to its network, the Authority will require TPI to submit amendments to its Costing Principles to provide for additional route sections. In preparing its costing model, TPI should therefore design this model to be able to accommodate multiple route sections in the future.
67. The Authority agrees with PwC that the additional text under section 1.4 of the WNR CP, which the NWIOA suggested should be added to this section of TPI's Costing Principles, would not add materially to the information provided by TPI.

Draft Determination**Required Amendment 2**

Section 2 of TPI's proposed Costing Principles (headed 'Timing and route sections') should be amended as follows:

- The first paragraph should be amended to include a statement to the effect that TPI will provide the Authority with its proposed floor and ceiling costs submission, incorporating its costing model (in excel format), within two months of the Authority issuing its final determination on TPI's Costing Principles.
- A statement should be included to the effect that TPI will design its costing model to accommodate the addition of multiple route sections in the future.
- A statement should be added to the effect that, whenever rail lines connecting to TPI's railway network are constructed, TPI will submit within three months of the completion of such works, proposed amendments to its Costing Principles for the purpose of inclusion of those new route sections.

Determination of Capital Costs (Section 3)**Section 3.1 - Infrastructure Included****TPI's Proposal**

68. TPI has set out a list of its railway infrastructure which it proposes to include in its Costing Principles.
69. TPI also notes the Code requirement that railway infrastructure does not include the land on which the infrastructure is located.
70. TPI has proposed that assets which support operating functions will be included in the operating cost or overhead cost calculations as appropriate, and has nominated a list of assets which fall into this category.

Public Submissions

71. There were no comments in the public submissions on this section of TPI's Costing Principles.

PricewaterhouseCoopers' (PwC) Advice

72. PwC advised that the introduction to section 3 'Determination of Capital Costs' is generally consistent with provisions in the WNR CP (at paragraphs 1 to 3 of section 2.1).
73. PwC also advised that paragraph 1 of section 3.1 is generally consistent with the equivalent paragraph in the WNR CP, describing railway infrastructure assets

included as capital costs, except that WNR also includes stations and platforms, buildings and workshops.

74. PwC commented that paragraph 2 of section 3.1 does not accurately portray the provision (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 value of such does not include the value of the land of which the cutting or embankment forms part.
75. PwC commented that paragraph 3 of section 3.1 is consistent with paragraph 3 of section 2.2 of the WNR CP.
76. PwC recommended that:
- The wording under the second half of the first paragraph under section 3.1 should be deleted as it is not required.
 - Sentences 2 and 3 should be deleted from the second paragraph of section 3.1 and be replaced with the wording from clause 2(2a) of Schedule 4 of the Code.

Authority's Assessment

77. The Authority accepts PwC's advice in relation to the first paragraph under this section, as the words "or is otherwise required to provide access under the TPI Railway and Port Agreement (covered infrastructure)" are unnecessary and potentially misleading. The Code sets out the definition of railway infrastructure relevant to TPI's Costing Principles and reference to additional railway infrastructure under the *Railway and Port (The Pilbara Infrastructure) Agreement Act 2004* is not relevant.
78. The Authority also agrees that TPI has not correctly represented the provisions of the Code under Schedule 4, including section 2(2a), under the second and third sentences of the second paragraph under this section. These sentences should reflect the relevant Code provisions (sections 2(2) and 2(2a) of Schedule 4) accurately.

Section 3.1.1 – Gross Replacement Values

TPI's Proposal

79. Under this section TPI has set out details of the assumptions it proposes to make in calculating the Gross Replacement Value (**GRV**) for its railway.
80. TPI has provided details of its intended approach to the GRV calculation in relation to a number of matters including capacity, route optimisation, contributed assets, greenfields nature of its railway, Modern Equivalent Asset (**MEA**), unit rates, design and financing cost and equity raising costs.

Discussion of TPI's Proposal Under Section 3.1.1

81. As a result of the large number of items listed under section 3.1.1 of TPI's proposed Costing Principles, each of these items has been discussed under separate headings below.

Item 1: Capacity of Infrastructure**Public Submissions**

82. Both the NWIOA (page 14) and UMC (page 4) commented that the words “for all users taken together” should be added to the first sentence, in order to make this sentence comparable with the equivalent part of the WNR CP.
83. Hancock(ACIL) (page 7) also commented in a similar manner, noting that ‘reasonably projected demand’ should include demand from access seekers not associated with TPI.
84. The ARTC (page 4) considered that it was not necessarily the case that TPI’s network should be optimal as a result of the railway being a greenfields development, as stated by TPI. The ARTC noted that, for example, TPI could have chosen a particular standard of track to suit its own above-rail operations which may not be a ‘standard’ track in relation to other rail users.

PricewaterhouseCoopers’ (PwC) Advice

85. As a general comment, PwC advised that the equivalent part of the WNR CP clearly sets out the assumptions made by WNR in determining gross replacement values, whereas TPI only identifies those matters on which assumptions will need to be made. PwC describes the TPI proposal in this context as being framed in terms of options to consider in developing its principles, rather than the specific principles to be applied.
86. PwC noted that the wording used by TPI under its ‘capacity of infrastructure’ section is consistent with the similar provision in section 2.3 of the WNR CP, except for the claim to exclusion from optimisation requirements on the grounds of the railway being a ‘greenfields development’.
87. PwC agreed with the ARTC that it was not appropriate for TPI to make an assumption that because of the greenfields nature of its railway, no optimisation should occur on its network. PwC noted that this was a matter for Authority to consider during assessment of TPI’s proposed floor and ceiling costs.
88. PwC recommended that the sentence referring to ‘greenfields development’ in this section of TPI’s Costing Principles should be removed.
89. PwC agreed with the UMC and NWIOA submissions that a statement equivalent to that in paragraph 3 of section 2.3 of the WNR CP should be included in this section of TPI’s Costing Principles in order to clarify the extent to which the capacity of the railway infrastructure can meet the demand of all users taken together.

Authority’s Assessment

90. The Authority notes PwC’s general observation on section 3.1.1 of TPI’s Costing Principles, in relation to the lack of specific information on TPI’s intended approach compared to the information provided in the equivalent part of WNR CP.
91. In relation to the section headed ‘capacity of infrastructure’ the Authority agrees with the view expressed in submissions, and by PwC, that the first sentence should be amended to reflect similar words to those in the WNR CP. The additional words ‘for all users taken together’ clearly removes any doubt that the

words 'reasonably projected demand' under section 2(4)(c)(i) of Schedule 4 of the Code refers to demand from both TPI's above-rail operations and third party access seekers.

92. The Authority accepts the PwC view that it is not appropriate for TPI to be incorporating assumptions in its Costing Principles regarding its railway network being optimised on the basis that the railway is a greenfields development. The Authority considers that this statement should be deleted from TPI's Costing Principles.

Item 2: Route Optimisation

Public Submissions

93. No comments were made on this issue in the public submissions.

PricewaterhouseCoopers' (PwC) Advice

94. PwC noted that the wording under this section was generally similar to the equivalent part of the WNR CP.
95. However, PwC commented that the words 'as a greenfields development' at the start of this section were not appropriate as this implied that the route optimisation was a direct result of TPI's network being a greenfields development.

Authority's Assessment

96. The Authority agrees with PwC that the implication of TPI's reference to 'greenfields development' at the commencement of this section is not appropriate and this reference should be deleted.
97. The Authority also considers that the meaning of the words 'infrastructure configuration' in this section is unclear. These words do not appear to be necessary and should be deleted as the issue of TPI's route alignment being assumed to be optimal and efficient, similar to the wording in the equivalent part of the WNR CP, is already set out in this section.

Item 3: Contributed Assets

Public Submissions

98. Hancock(ACIL) commented (page 10) that the wording set out by TPI was consistent with the equivalent part of the WNR CP. Hancock(ACIL) also noted that TPI's proposed Over-payment Rules contained provisions allocating any payments resulting from contributed assets to the party who made the contribution.

PricewaterhouseCoopers' (PwC) Advice

99. PwC noted that TPI's section on contributed assets was consistent with the equivalent section of the WNR CP.

Authority's Assessment

100. The Authority considers this section of TPI's Costing Principles to be appropriate.

101. In relation to the issue raised by Hancock(ACIL) relating to TPI's Over-payment rules, the Authority will consider this matter under its assessment of TPI's proposed Over-Payment rules.

Item 4: Greenfields

Public Submissions

102. Hancock(ACIL) (page 8) commented that TPI's proposed approach involving the inclusion of infrastructure relocation costs reflected more a 'brownfields' rather than 'greenfields' approach. Hancock(ACIL) considered that TPI should amend this section to include an appropriate definition of 'greenfields'.
103. The NWIOA (page 16) commented that TPI should use the same wording as in the equivalent section of the WNR CP (section 2.3), which excludes infrastructure relocation costs.

PricewaterhouseCoopers' (PwC) Advice

104. PwC agreed with the comments by Hancock(ACIL) and the NWIOA to the effect that TPI's 'greenfields' approach was not consistent with the greenfields principle implicit in the Code. This principle is that, for GRV purposes, the railway would be considered to be built in a 'greenfields' corridor, which means that there would be no cost allowance required for the relocation of infrastructure within that corridor during the construction of the railway.
105. PwC recommended that TPI adopt wording consistent with the wording under the equivalent part (section 2.3) of the WNR CP.

Authority's Assessment

106. The Authority concurs with PwC and the comments in the public submissions, to the effect that TPI's approach does not reflect a 'greenfields' approach as set out under the WNR CP (section 2.3).
107. The Authority also notes PwC's advice, that TPI's wording does not reflect the 'greenfields' principle in relation to the GRV methodology. The Authority considers that TPI should amend this wording to be consistent with the equivalent wording in the WNR CP.

Item 5: Modern Equivalent Assets (MEA)

Public Submissions

108. The NWIOA (page 16) suggested that TPI should adopt wording similar to that in the equivalent section of the WNR CP. Further, the NWIOA commented that the TPI railway was neither an MEA or efficient in terms of cost, as the railway had been built quickly resulting in several diseconomies (such as inefficient purchasing, higher project management costs and higher labour costs).
109. Hancock(ACIL) (page 12) noted that TPI should apply MEA valuations to calculate GRV only when appropriate.

PricewaterhouseCoopers' (PwC) Advice

110. PwC advised that TPI's position that MEA values should reflect current market-tested values for materials is appropriate and consistent with the WNR CP.
111. PwC also noted that it was unclear as to TPI's intended meaning in the second sentence of this section, which stated "as a greenfields development this will reflect indexed actual costs".
112. PwC advised that TPI needed to ensure that its MEA assumptions are consistent with the requirements under section 2(4)(c) of Schedule 4 of the Code.
113. In relation to TPI's lack of detail under this section compared with the equivalent section in the WNR CP, PwC recommended that in order to more fully explain the principles and rules for applying the MEA concept, TPI should provide wording similar to that provided under section 2.3 of the WNR CP.

Authority's Assessment

114. The Authority generally agrees with PwC's advice. However, the Authority considers that both sentences in this section of TPI's Costing Principles have inappropriate elements in relation to the Code requirements.
115. In regard to the first sentence, the Authority notes that section 2(4)(c)(ii) of Schedule 4 of the Code requires use of an MEA, if appropriate, for replacement values rather than as a mandatory requirement as implied under TPI's wording ('replacement values must reflect the MEA value'). The words 'if appropriate' need to be added to the first sentence immediately following the words 'MEA value'.
116. In relation to the second sentence, the Authority does not consider this sentence to be consistent with the requirements under section 2(4)(c) of Schedule 4 of the Code. It cannot be assumed, that because a railway is a 'greenfields' development that the lowest current cost to replace existing assets with (if appropriate) the MEA is represented by an indexation of the actual costs of constructing the greenfields railway.
117. In the case of TPI's railway the Authority has noted comments made by the NWIOA relating to potential cost inefficiencies resulting from the rapid construction of this railway. While the Authority will not be forming a view on this matter until it undertakes its assessment of TPI's proposed floor and ceiling costs, the requirements of Schedule 4 of the Code require the Authority to ensure that an appropriate level of market testing of key unit rates is undertaken at the time TPI submits its proposed floor and ceiling costs, to ensure that the GRV has been calculated in accordance with the requirements of section 2(4)(c)(ii) of Schedule 4 of the Code.
118. Based on the above, the Authority's view is that TPI's second sentence under this section is inappropriate and should be deleted.
119. The Authority also notes the suggestion by PwC that this section of TPI's Costing Principles provides inadequate detail in comparison to the equivalent section in the WNR CP. The Authority agrees with PwC's view and considers that TPI should provide details of the process it will use to determine the MEA for its railway network and in the calculation of a GRV on the basis of the MEA. These detailed

processes should be similar to the processes set out under section 2.3 of the WNR CP.

Item 6: Unit Rates

Public Submissions

120. The ARTC commented (page 3) that although TPI's approach to determining GRV seemed reasonable, TPI had not proposed that the valuation be independently assessed. The ARTC considered that an independently determined or assessed valuation is important to establish market confidence in the limits around access pricing.
121. The NWIOA (page 17) set out alternative provisions for this section, which are similar to those under section 2.3 of the WNR CP.

PricewaterhouseCoopers' (PwC) Advice

122. PwC noted that TPI did not set out how its unit rates relate to the MEA. PwC commented that the WNR CP noted that the GRV would generally be calculated using current market tested unit rates for materials and construction, based on the MEA.
123. PwC recommended that TPI set out details of how it would derive a GRV, to a similar level of detail as under section 2.3 of the WNR CP.

Authority's Assessment

124. The Authority notes that TPI proposes to index its actual unit rate construction costs to derive current unit costs, using the Perth Building Index, adjusted for Pilbara values, from the Rawlinson's Australian Construction handbook.
125. In relation to the requirements under the Code for deriving the lowest current cost for the GRV calculation, the Authority's view is that the requirements of Schedule 4 of the Code require the Authority to ensure that an appropriate level of market testing of key unit rates is undertaken at the time TPI submits its proposed floor and ceiling costs, to ensure that the GRV has been calculated in accordance with the requirements of Section 2(4)(c)(ii) of Schedule 4 of the Code.
126. The Authority therefore considers TPI's proposed approach involving an assumption that indexed actual unit costs (with no market testing) will provide the lowest current unit costs, to be inappropriate.
127. The Authority also notes that the equivalent section of the WNR CP states that WNR has used an independent engineering consultant to derive the unit costs it has used in its costing model for the GRV calculation. The use of an independent consultant to derive a railway owner's unit cost values is considered by the Authority to be important as it provides transparency and improves confidence in the costs submitted by the railway owner under its floor and ceiling proposal. The comments by the ARTC, to the effect that an independently determined or assessed valuation is important to establish market confidence in the limits around access pricing, support the Authority's position.
128. Similar to the suggestion by PwC, the Authority's view is that the wording under this section should be similar to the wording under the equivalent section of the WNR CP.

Item 7: Design, Construction and Project Management Fees**Public Submissions**

129. Hancock(ACIL) (page 10) commented that TPI's proposal under this section appeared to be reasonable.
130. The NWIOA (page 17) set out alternative provisions for this section similar to those under the equivalent section of the WNR CP.

PricewaterhouseCoopers' (PwC) Advice

131. PwC noted that TPI has proposed to use actual design, construction and project management costs indexed to current values, whereas WNR uses a standard loading of 20% applied to the primary unit rates for these costs.
132. PwC recommended that TPI use wording for this section similar to that under the equivalent part of section 2.3 of the WNR CP.

Authority's Assessment

133. The Authority has outlined, earlier in this draft determination, concerns in relation to the assumption by TPI that indexed actual costs represent the lowest current cost for an MEA. While it is recognised that fees associated with the design, construction and project management of infrastructure generally vary according to the complexity of the project, in the case of railways under the Code the application of a uniform figure of 20% to unit infrastructure costs for these fees provides a clear and well defined approach to calculating the GRV consistent with the requirements of the Code.
134. The Authority agrees with PwC to the effect that TPI should use wording in this section similar to the wording used in the equivalent part of section 2.3 of the WNR CP.

Item 8: Financing Charge During Construction**Public Submissions**

135. Hancock(ACIL) (page 10) commented that TPI's proposal under this section seemed reasonable.
136. The NWIOA (page 13) suggested that for access pricing purposes, the Authority should consider TPI's railway to be a stand-alone entity using a regulatory building block approach.
137. UMC (page 4) provided similar comments to those expressed by the NWIOA above.
138. The NWIOA (page 18) also commented that the wording under the equivalent part of the WNR CP (section 2.3) should be used by TPI under this section.

PricewaterhouseCoopers' (PwC) Advice

139. PwC advised that sentences 1 and 2 of this section are consistent with the equivalent section in the WNR CP. However, PwC noted that sentence 3 appeared to be inconsistent with Schedule 4 of the Code, which requires the application of the WACC to the GRV.

140. PwC also noted that the provisions in the WNR CP contained more detail, in particular with respect to:
- The basis of the construction rate.
 - The allocation of construction costs to route sections.
 - That the Authority may adjust the construction rate assumed.
 - The interest calculation ceases on completion of construction.
141. A further point made by PwC was that the financing charges should only relate to the financing of the railway infrastructure covered under the Code. This matter was raised by the NWIOA in its submission.
142. PwC recommended that the third sentence of this section of TPI's Costing Principles be deleted and that TPI amend this section to incorporate similar wording to that contained in the equivalent part (section 2.3) of the WNR CP. PwC also suggested that the heading to this section should include the words 'railway infrastructure' immediately preceding the word 'construction'.

Authority's Assessment

143. The Authority agrees with PwC that the third sentence in this section is not appropriate. The use of actual historical cash flows is inconsistent with the requirements of section 2 of Schedule 4 of the Code relating to the calculation of capital costs by application of the WACC to the GRV. This sentence should therefore be deleted.
144. The Authority also notes PwC's observation that TPI does not make it clear that the financing charges should only relate to the construction of railway infrastructure covered under the Code. The equivalent part of the WNR CP (section 2.3) makes this clear, both in its section heading and in the text.
145. The Authority agrees with PwC that this section lacks detail in key areas covered in the WNR CP. The Authority requires that this section of TPI's Costing Principles should incorporate similar wording to that in the equivalent part of the WNR CP (Section 2.3), including the heading used in the WNR CP.

Item 9: Equity Raising Costs

Public Submissions

146. Hancock(ACIL) (page 11) commented that TPI's proposal was reasonable as the Authority had noted in its recent WACC report on TPI's railway, that equity raising costs should be recognised in the valuation of the regulatory asset base and in new capital expenditure rather than in the WACC itself.
147. The NWIOA (page 14) suggested that TPI's equity raising costs should be benchmarked by the Authority at the time TPI's proposed floor and ceiling costs are assessed.
148. The UMC (page 4) provided comments similar to the NWIOA.

PricewaterhouseCoopers' (PwC) Advice

149. PwC noted that in the Final Determination for the 2008 Weighted Average Cost of Capital for the freight and urban railway networks, the Authority had expressed the view that, where appropriate, equity raising costs should be recognised in valuation of the regulatory asset base and in new capital expenditure and not in the WACC.
150. Based on the above approach, PwC considered this section of TPI's Costing Principles to be appropriate.
151. PwC also noted that it assumed that the Authority would benchmark equity raising costs as part of its assessment of TPI's proposed floor and ceiling costs.

Authority's Assessment

152. The Authority determined, on page 33 of its Final Determination on the 2009 WACC for TPI's Railway Network (issued in June 2009) that:
- An allowance for equity raising costs, if appropriate, should be included as a capitalised cost in the regulatory asset value and not as a component of the WACC.
153. Accordingly, the Authority considers TPI's approach under this section to be appropriate.
154. The Authority notes that for the sake of clarity, the word 'Authority's' should be inserted immediately preceding the word 'weighted' in the third line of this section.
155. In relation to benchmarking, the Authority has noted, in its recent WACC determination, that regulators typically use benchmarking for assessing a reasonable level of equity raising costs. The Authority expects to follow a similar approach when assessing TPI's proposed equity raising costs as part of TPI's floor and ceiling costs submission.
156. As an observation, the Authority notes that the WNR CP does not contain any provisions dealing with equity raising costs.

Item 10: Costs Index**Public Submissions**

157. No comments were made in the public submissions on TPI's proposed cost index, which was as outlined in the last paragraph on page 6 of TPI's Costing Principles.

PricewaterhouseCoopers' (PwC) Advice

158. PwC suggested that before TPI's proposed costs escalator is accepted, the Authority should require TPI to demonstrate that the results of its escalator applied to actual costs do not exceed the value derived from current market tested unit rates for materials, based on the MEA.

Authority's Assessment

159. The Authority has clearly noted above that it considers that the requirements of Schedule 4 of the Code require the Authority to ensure that an appropriate level of market testing of key unit rates is undertaken at the time TPI submits its proposed

floor and ceiling costs to ensure that the GRV has been calculated in accordance with the requirements of section 2(4)(c)(ii) of Schedule 4 of the Code.

160. The Authority notes that cost indexation may be appropriate where market testing or benchmarking cannot reasonably be undertaken. In such cases, the Authority would assess the validity of the index chosen to escalate those particular costs on the basis of whether that escalator was appropriate to the nature of those costs.
161. Based on the above, the Authority does not consider the index set out in the last paragraph on page 6 of TPI's Costing Principles to necessarily be appropriate. This paragraph should be deleted and replaced with wording indicating that where it is necessary for TPI to escalate actual costs, the escalators used will be in accordance with the nature of the costs involved.

Item 11: Extensions and Expansions

Public Submissions

162. The ARTC (page 4) noted that the first sentence in the first paragraph on page 7 was 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.

PricewaterhouseCoopers' (PwC) Advice

163. PwC advised that this section was not consistent with the amortisation of capital costs over the economic life of the assets through the annuity calculation, as provided under section 2 of Schedule 4 of the Code.

Authority's Assessment

164. The Authority notes PwC's advice and considers that this section, comprising the first paragraph on page 7, is inconsistent with the principles set out in Schedule 4 of the Code in several areas.
165. Firstly, the Code does not take into account extensions or expansions to a railway network until this infrastructure has been built. When a GRV is then undertaken pursuant to the provisions of Schedule 4 of the Code, the GRV is calculated on the basis of the network as it exists at that time. Hence, any extension or expansion is dealt with as part of the total network for the purpose of the GRV, not separately as suggested by TPI.
166. Secondly, TPI suggests that the depreciation of assets is not taken into account under the floor and ceiling prices. As pointed out by PwC, the costing methodology outlined under Schedule 4 of the Code takes account of both the depreciation and return on the GRV of assets, based on their economic lives, through the calculation of an annuity (Sections 2(3) and 2(4) of Schedule 4) which forms part of the ceiling cost calculation.
167. Based on the above, the Authority does not consider the wording in this section of TPI's Costing Principles to be appropriate. Further, the Authority does not consider that specific provisions dealing with extensions and expansions are necessary in TPI's Costing Principles under the GRV calculation requirements set out in the Code, as outlined above. The Authority also notes that the WNR CP does not

contain specific provisions dealing with extensions and expansions. The Authority's view is that this section should be deleted.

Draft Determination

Required Amendment 3

Section 3.1 of TPI's proposed Costing Principles (headed 'Infrastructure included') should be amended as follows:

- In the first paragraph on page 4, delete the words "covered by the WA Rail Access regime or is otherwise required to provide access under the TPI Railway and Port Agreement (covered infrastructure), including:" and replace with the words "defined as 'railway infrastructure' under Part 1 of the Code, including:".
- In the second paragraph on page 5, delete the second and third sentences in this paragraph and replace with wording which accurately reflects the provisions of sections 2(2) and 2(2a) of Schedule 4 of the Code.

Required Amendment 4

Section 3.1.1 of TPI's proposed Costing Principles (headed 'Gross replacement values') should be amended as follows:

Item 1: Capacity of infrastructure

- Add the words "for all users taken together" immediately following the words "reasonably projected demand".
- Delete the second sentence.

Item 2: Route optimisation

- Delete the words "as a greenfields development" and "infrastructure configuration".

Item 4: Greenfields

- Amend this section to be consistent with the wording in the equivalent part of section 2.3 of the WNR CP.

Item 5: Modern equivalent assets

- Add the words "if appropriate" immediately following the words "MEA value".
- Delete the second sentence.
- Provide details of the process to determine the MEA and to calculate the GRV on the basis of the MEA, consistent with the wording for these processes in the equivalent part of section 2.3 of the WNR CP.

Item 6: Unit rates

- Amend this section to be consistent with the wording in the equivalent part of section 2.3 of the WNR CP.

Item 7: Design, construction and project management fees

- Amend this section to be consistent with the wording in the equivalent part of section 2.3 of the WNR CP.

Item 8: Financing charge during construction

- Delete the third sentence.
- Amend the heading to read “Financing charge during railway infrastructure construction”.
- Add wording consistent with the wording in the equivalent part of section 2.3 of the WNR CP.

Item 9: Equity raising costs

- Add the word “Authority’s” immediately preceding the word “weighted” in the third line.

Item 10: Costs index

- Delete the wording in the last paragraph on page 6 and replace with the words “Where it is necessary for TPI to escalate its actual costs the escalators used will be in accordance with the nature of the costs involved”.

Item 11: Extensions and expansions

- Delete the entire first paragraph on page 7.

Section 3.1.2 – Economic Life**TPI’s Proposal**

168. TPI has outlined the basis for its assumptions on the economic lives of its railway infrastructure assets. A list of the economic lives assumed for these assets is set out in Appendix A.
169. TPI notes that the economic lives shown in Appendix A will apply unless a shorter life is adopted due to the assets servicing a limited time project.

Public Submissions

170. UMC commented (page 3) 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.
171. The NWIOA noted (page 11) that contractor’s margin and overheads, engineering and contract management and interest on construction, which have been included in Appendix A, are irrelevant to the economic life of assets and are not assets in the sense that the Authority is considering. The NWIOA suggests that these terms should be removed from Appendix A and the appropriate provisions amended as set out under its Annexure B.
172. Hancock(ACIL) commented (page 11) that most of the economic lives listed by TPI are similar to those in the WNR CP, apart from rail (on curves), bridges and

earthworks. Hancock(ACIL) noted that while the reduced life for rail based on the heavy axle loads was reasonable, justification was required in the case of earthworks and bridges.

173. TPI in its response to the public submissions (page 3) stated that the inclusion of the items noted by the NWIOA has not been contentious in regulatory processes and that TPI's approach is consistent with that adopted by WNR.

PricewaterhouseCooper's (PwC) Advice

174. PwC noted that this section was broadly consistent with section 2.4 of the WNR CP.
175. PwC advised that the economic lives listed under Appendix A were the same as those under Annexure 7.1 with the exception of the following:
- Earthworks for tracks – TPI uses 50 years, WNR uses 100 years.
 - Bridges – TPI uses 50 years, WNR uses 100 years.
 - Rail Curve > 800m & tangent – TPI uses 20 years, WNR uses 60 years.
176. PwC noted that the effect of the shorter asset lives for the three asset types outlined above would be higher depreciation costs (resulting in higher annuity costs) than if the WNR asset lives applied.
177. PwC recommended that before the Authority accepts the shorter economic lives for these assets, TPI should be required to provide justification for the shorter lives.
178. PwC also advised that it agrees with the approach suggested by the NWIOA for dealing with the economic life of the fees and charges associated with construction of the railway infrastructure. PwC recommended that these items (11 to 13) be deleted from Appendix A and wording similar to that in the WNR CP be adopted under the relevant provisions of section 3.1.1 of the TPI's Costing Principles.

Authority's Assessment

179. The Authority notes that this section and the associated Appendix A are similar to section 2.4 and the associated Annexure 7.1 in the WNR CP.
180. The key difference between this section and the equivalent section in the WNR CP, is the shorter economic lives attributed by TPI to the following assets:
- Earthworks for tracks – TPI uses 50 years, WNR uses 100 years.
 - Bridges – TPI uses 50 years, WNR uses 100 years.
 - Rail Curve > 800m & tangent – TPI uses 20 years, WNR uses 60 years.
181. The Authority notes that TPI has not provided any justification for the reduced economic lives assumed for these three asset classes.
182. The Authority agrees with PwC that TPI should provide appropriate justification supporting the shorter economic lives proposed for these three asset classes. The Authority considers, that in the absence of such justification, the economic lives for these three asset classes for the purpose of the draft determination should be the same as for the similar asset classes set out under the WNR CP (Annexure 7.1).

Before making its final determination on this matter, the Authority will consider any submissions on this issue from TPI or other parties, in response to the draft determination.

183. The Authority agrees with PwC that items 11 to 13 of Appendix A should be deleted on the basis that these items are fees and charges associated with the construction of railway infrastructure, not assets.
184. The Authority notes that items 11 to 13 of Appendix A are set out under Section 3.1.1 under the headings 'Design, construction and project management fees' and 'Financing charge during construction'. The Authority has required amendments to these two items under section 3.1.1 in this draft determination to reflect wording similar to that used in the relevant sections of the WNR CP. This wording states, for each of these items, that an economic life of 50 years has been assumed for the purpose of the annuity calculation.

Draft Determination

Required Amendment 5

Appendix A on page 13 of TPI's proposed Costing Principles (headed 'Economic life of assets') should be amended as follows:

- Item 1 – Delete the figure '50' under the heading 'Life Expectancy (Years)' and replace this figure with '100'.
- Item 2(a) – Delete the figure '50' under the heading 'Life Expectancy (Years)' and replace this figure with '100'.
- Item 5(a)[Curve > 800m & tangent] – Delete the figure '20' under the heading 'Life Expectancy (Years)' and replace this figure with '60'.
- Items 11, 12 and 13 – Delete these items.

Section 3.1.3 – Rate of Return

TPI's Proposal

185. TPI has noted the process under the Code for the Authority to determine the WACC applicable to TPI's railway network as at 30 June each year.
186. TPI also raises the issue of asymmetric risk, which it proposes will be accounted for either in the WACC or through an allowance in the operating costs.

Public Submissions

187. The ARTC suggested (page 4) that where asymmetric risks are real they should be accounted for in the rate of return but on a transparent and independently assessed basis. Alternatively, the value of the risk should be quantified and be an allowable inclusion in operating costs.

188. Hancock(ACIL) commented (page 13) that TPI needs to provide a strong justification for any premium on costs (such as self insurance premium) or any premium on the WACC to allow for asymmetric risk and that such an allowance should not be given 'blanket' approval within the Costing Principles.
189. The NWIOA commented (page 8) on asymmetric risk with respect to the stranding risk for TPI's railway. The NWIOA was of the view that the stranding risk was minor and provided a number of supporting reasons, including that FMG's tonnage and markets mitigated this risk and that proper planning for network expansions to accommodate third party access should also mitigate any stranding risks.
190. UMC supported (page 6) the view put forward by the NWIOA in relation to the stranding risk issue.

PricewaterhouseCoopers' (PwC) Advice

191. PwC advised that the first sentence in this section, which outlined the Authority's annual WACC determination process under the Code, was appropriate.
192. In relation to the second sentence in this section, PwC considered that assumptions to the effect that the WACC will include certain costs were not appropriate for inclusion in TPI's Costing Principles. PwC noted that these issues were a matter for consideration by the Authority as part of its annual WACC determination process for TPI's railway. On this basis, PwC recommended the deletion of the second sentence.
193. PwC advised that in relation to TPI's comments on asymmetric risk under this section, this matter would be dealt with under the Authority's annual WACC determination process. PwC noted, that in relation to TPI's view that allowance for asymmetric risk could be made in the operating costs, this approach would be inconsistent with the definition of operating costs under section 1 of Schedule 4 of the Code. PwC recommended that the sentences dealing with asymmetric risk be deleted.

Authority's Assessment

194. The Authority notes that the first sentence under this section is consistent with the Code.
195. The Authority also notes that the equivalent section under the WNR CP (Section 2.5) only provides this level of information.
196. In relation to the second sentence under this section of TPI's Costing Principles, the Authority agrees with PwC's advice, that assumptions on matters which would be dealt with in the Authority's annual WACC determination process should not be included in TPI's Costing Principles. The Authority therefore considers that this sentence should be deleted.
197. With regard to the comments included under this section dealing with TPI's asymmetric risk, the Authority notes that this matter (in particular stranding risk) was considered and discussed in its Final Determination on the 2009 WACC for TPI's railway (pages 48 to 54), issued in June 2009.
198. The Authority's above determination was that stranding risk should not be accounted for in the WACC but will be considered under its future floor and ceiling costs determination for TPI's railway.

199. Based on the above, the Authority's view is that the sentences referring to asymmetric risk under this section of TPI's Costing Principles should be deleted. These matters will be considered by the Authority in its assessment of TPI's proposed floor and ceiling costs, in accordance with its above determination.

Required Amendment 6

Section 3.1.3 of TPI's proposed Costing Principles (headed 'Rate of return') should be amended by deleting the second, third and fourth sentences under this section.

Section 3.1.4 – Annuity

TPI's Proposal

200. This section essentially consists of a statement that TPI will adopt an annuity calculation methodology that is acceptable to the Authority.

Public Submissions

201. ARTC commented (page 4) that there needs to be transparency around the approach for the annuity calculation and any methodology should be clearly outlined.
202. Hancock(ACIL) noted (page 13) that TPI provided no detail on the method of calculation of the annuity, whereas WestNet had defined the annuity calculation formula and terms and explained the justification for a working capital adjustment within operating costs. Hancock(ACIL) considered that TPI should define the annuity calculation in terms similar to the outline provided by WestNet.

PricewaterhouseCoopers' (PwC) Advice

203. PwC noted that TPI had not provided any detail on the annuity calculation whereas, in comparison, the equivalent section in the WNR CP (section 2.6) provided details on how the annuity was to be calculated.
204. PwC advised that TPI should specify the precise form of annuity calculation it proposes to adopt and that this form should be the "annuity due" method, in which cashflows are assumed to occur at the start of each annual period. This would be consistent with the approach set out under the WNR CP and would also be consistent with TPI recovering working capital as a component of its operating costs.

Authority's Assessment

205. The Authority notes that TPI has not provided details of the annuity calculation under this section whereas the WNR CP contains a detailed outline of its annuity calculation.
206. The Authority also notes that sections 2(3) and 2(4) of Schedule 4 of the Code provide the principles to be applied in calculating an annuity.

207. The Authority agrees with PwC that TPI should provide details of its annuity calculation methodology, along similar lines to that provided under section 2.4 of the WNR CP and consistent with the principles under sections 2(3) and 2(4) of Schedule 4 of the Code.

Draft Determination

Required Amendment 7

Section 3.1.4 of TPI's proposed Costing Principles (headed 'Annuity') should be amended as follows:

- Delete the second sentence.
- Add a detailed outline of the annuity calculation methodology, consistent with the principles under sections 2(3) and 2(4) of Schedule 4 of the Code and along similar lines to the methodology set out under section 2.6 of the WNR CP.

Determination of Operating Costs (Section 4)

4.1 Definition of Operating Costs

TPI's Proposal

208. TPI has acknowledged the definition of operating costs contained in the Code. TPI has assumed this to mean "the operating costs that would be incurred by an efficient stand alone operator in providing access to TPI's railway infrastructure".
209. TPI also sets out a list of the costs it considers constitute operating costs, including the following:
- Routine, cyclical and Major Periodic Maintenance (**MPM**) for track, signalling and communications where MPM is necessary to achieve the economic life of the asset.
 - Network management costs.
 - Working capital.
 - Rental payments or other costs associated with the corridor for the railway infrastructure.
 - An allowance for the fair value of the impact of asymmetric risk (where a corresponding increment is not provided in the WACC).

Public Submissions

210. The NWIOA commented (page 5) that the industry standard definition of MPM is maintenance undertaken to renew an asset, not undertaken for repair and maintenance purposes. NWIOA suggested that, as the TPI railway was built as a rapid development project resulting in several diseconomies, MPM should be accepted by the Authority for inclusion as an operating cost, in lieu of depreciation.

211. In relation to the inclusion of land leases in TPI's list of operating cost components, NWIOA noted (page 14) that TPI did not provide details on these leases or explain why they should be included in its operating costs.
212. UMC (page 4) provided a similar view to the NWIOA in relation to the MPM issue.
213. Hancock(ACIL) (page 15) commented 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.
214. In relation to the issue of land leasing costs, Hancock(ACIL) considered (page 15) that TPI should identify what "other costs" it proposes to include alongside corridor lease payments.
215. With regard to the inclusion of working capital on the list of operating cost components, Hancock(ACIL) noted (page 15) that TPI should define its working capital charge.
216. Hancock(ACIL) (page 15) also commented that TPI should provide a commitment to the provision of a track maintenance model within its costing model specifying the assumptions made when estimating maintenance costs over time and the method of averaging.
217. In its response to the public submissions, TPI commented (page 4) that MPM is appropriate for inclusion in operating costs if targeted at achieving asset life rather than asset renewal. TPI noted that it views MPM as a maintenance activity rather than an improvement to the network.
218. TPI's response also noted, in relation to land corridor leasing costs, 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.

PricewaterhouseCoopers' (PwC) Advice

219. PwC advised that the concept of cost efficiency as expressed by TPI in the first paragraph, is generally consistent with that in section 4 of Schedule 4 of the Code. However, PwC recommended that TPI also makes specific reference to this section of the Code in its definition.
220. PwC also noted that TPI has listed categories of operating costs which are generally consistent with those outlined in section 3.3 of the WNR CP, with the exception of MPM, corridor land costs and asymmetric risk.
221. In relation to MPM, PwC did not agree with TPI's suggestion that the Authority allow MPM in lieu of depreciation. PwC advised that MPM is not defined in the TPI proposal, and to the extent that it does not represent renewal of assets (as would be provided by a depreciation charge), the annuity calculation based on TPI's proposal would not return the initial capital value to TPI, consistent with basic capital amortisation principles.
222. PwC noted that TPI's understanding of MPM was different to that in the WNR CP and the understandings outlined by the NWIOA and UMC, which were that MPM extends the economic life of an asset. TPI's view is that MPM should be included

in operating costs “where it is necessary to be incurred to achieve the economic life of the assets”.

223. PwC advised that the WNR CP acknowledges that there are activities which are included in both MPM or cyclical maintenance in a GRV regime and are not exclusive to either and that, accordingly, the WNR CP defines the terms ‘routine maintenance’ and ‘cyclical maintenance’ in order to detail the activities that are included in operating costs.
224. PwC recommended that TPI provides a definition of MPM that clarifies the activities that are included in MPM to the same level of detail as provided in the WNR 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.
225. In relation to land corridor leasing and other associated costs for its railway infrastructure, PwC advised that the only costs associated with the land corridor which should be included in TPI’s operating costs were those which were consistent with sections 2(2) and 2(2a) of Schedule 4 of the Code.
226. On the issue of asymmetric risk, PwC reiterated its earlier advice, that the definition of operating costs under section 1 of Schedule 4 of the Code precluded the inclusion of costs due to asymmetric risk and that this item should therefore be deleted from TPI’s operating costs.
227. PwC noted that section 3.3 of the WNR CP states that WNR has developed a track maintenance model which calculates the cost of maintaining its track infrastructure in accordance with its defined assumptions. PwC recommended the incorporation of a similar track maintenance model into TPI’s costing model, in order to provide a clear statement of the principles and rules for determining operating costs.
228. PwC also recommended that working capital costs should be defined by TPI on the same basis as in WNR’s CP, which is that the annual charge for working capital be calculated by multiplying half the WACC by the annuity.

Authority’s Assessment

229. The Authority accepts PwC’s advice that TPI’s description of its concept of cost efficiency in the first paragraph of this section should be consistent with, and include specific reference to, section 4 of Schedule 4 of the Code.
230. The Authority generally agrees with PwC’s view on MPM. However, the Authority considers that it is important for TPI to have a similar definition of MPM as that contained in section 3.3 of the WNR CP. This means that MPM would be assumed to extend the life of the assets and, in accordance with the treatment in the WNR CP and the requirements of Schedule 4 of the Code, MPM would be excluded from the operating costs.
231. The Authority agrees with PwC that the terms ‘routine maintenance’ and ‘cyclical maintenance’ should be defined in the TPI CP. In the Authority’s view TPI should adopt similar definitions, and provide a similar level of detail, as contained under section 3.3 of the WNR CP, under the headings ‘Routine and Cyclical

Maintenance for track' and 'Routine and Cyclical Maintenance for signalling and communications'.

232. The Authority also agrees with PwC's view that working capital costs should be defined by TPI on the same basis as in section 3.3 of WNR's CP. The Authority considers that TPI should also include a similar definition for network management costs, as contained under section 3.3 of the WNR CP.
233. In relation to land corridor leasing and other associated costs for the railway infrastructure, the Authority agrees with PwC that only costs consistent with the Code should be included as operating costs. The Authority notes that, the relevant sections of the Code which refer to the land on which the railway infrastructure is located, are sections 2(2) and 2(2a) of Schedule 4. The Authority's view is that these sections make it clear that no costs associated with the value of the land on which the railway infrastructure is located (such as rental or lease costs) can be taken into account. Under section 2(2a) of Schedule 4 of the Code, railway embankments or railway cuttings constructed on the land are considered to be railway infrastructure and are included under the GRV calculation.
234. With regard to asymmetric risk, the Authority has noted earlier in this draft determination that it intends to consider the issue of asymmetric risk, including stranding risk, under its assessment of TPI's proposed floor and ceiling costs.
235. The Authority also noted in its Final Determination on the 2009 WACC for TPI's Railway Network, under paragraph 347 on page 53, that "a range of options are available to account for stranding risk (should the Authority find that there is a material stranding risk for TPI's railway) including a reduction in relevant asset lives".
236. On the above basis, the Authority does not consider it to be appropriate for TPI to assume in its Costing Principles that asymmetric risks, if material, would necessarily be incorporated as an allowance into the operating costs. The Authority will assess any asymmetric risks which TPI may choose to include in its proposed floor and ceiling costs, at the time the Authority undertakes its assessment of TPI's floor and ceiling costs. Dependent on the nature of such asymmetric risks, and subject to the Authority's assessment of materiality, the Authority would determine the most appropriate option for accommodating the costs associated with such risks, as noted in its above determination.
237. The Authority therefore considers that asymmetric risk should be deleted from TPI's operating costs under this section of TPI's Costing Principles. TPI should include asymmetric risk as a separate item under section 6 (Other Matters), given that TPI has made allowance for such costs to be included in floor and ceiling cost proposals.
238. In relation to a track maintenance model, the Authority agrees with PwC that a track maintenance model similar to that described under section 3.3 of the WNR CP should be set out in TPI's Costing Principles, in order to provide a clear statement of the principles and rules for determining maintenance costs. This track maintenance model should be incorporated into TPI's costing model.

Draft Determination**Required Amendment 8**

Section 4.1 of TPI's proposed Costing Principles (headed 'Definition of operating costs') should be amended as follows:

- The second sentence should include the words "managing the railway network in a manner consistent with the efficient costs definition under section 4 of Schedule 4 of the Code", immediately following the words "efficient stand alone operator".
- Add the first paragraph under section 3.3 of the WNR CP as the second paragraph.
- Add the words "TPI has defined the terms routine and cyclical maintenance to detail what activities have been included in operating costs" as the third paragraph.
- Delete the first three dot points and the last two dot points on page 8.
- Delete the words "and major planned maintenance" from the fourth and fifth dot points on page 8.
- Add the following four headings and provide a detailed description of the appropriate definitions, principles and processes under each of these headings, consistent with those set out under section 3.3 of the WNR CP:
 - Routine and cyclical maintenance for track.
 - Routine and cyclical maintenance for signalling and communications.
 - Network management costs.
 - Working capital.
- Add details of TPI's track maintenance model in a manner similar to the description of WestNet's track maintenance model set out under section 3.3 of the WNR CP.
- Incorporate TPI's track maintenance model into its costing model.

4.2 Efficient Cost Tests

TPI's Proposal

239. TPI has undertaken to demonstrate to the ERA that its actual costs and cost forecasts reasonably reflect efficient costs and therefore provide an appropriate basis for determining floor and ceiling costs. TPI has nominated methods such as benchmarking, industry standard maintenance programming and competitive tendering, as means of achieving this.
240. TPI notes that it will develop its efficient cost estimates on the basis that its network is constructed to a standard that is equivalent to an MEA.

Public Submissions

241. ARTC commented (page 5) that in line with transparency, the tendering process cited by TPI should be clearly outlined.
242. Hancock(ACIL) (page 5) noted that the efficient cost tests proposed by TPI are similar to those proposed by WestNet and that given the TPI network is new, TPI's reliance on competitively tendered costs would seem appropriate.

PricewaterhouseCoopers' (PwC) Advice

243. PwC advised that the principles set out by TPI in this section are generally consistent with those set out in section 3.2 of the WNR CP. PwC notes a distinction between WNR's commitment to testing whether costs used in determining floor and ceiling costs are efficient, whereas TPI states that it will seek to demonstrate to the Authority that its actual costs and cost forecasts reasonably reflect efficient costs.
244. PwC recommended that TPI adopts the direct commitment to subjecting operating costs to efficient cost tests, as set out in section 3.2 of the WNR CP.
245. PwC also recommended that the words "having regard to the market conditions that are presently being experienced in the Pilbara region" be deleted from the first dot point.

Authority's Assessment

246. The Authority accepts PwC's advice that the efficient cost tests set out by TPI under this section are similar to those set out in the equivalent part (section 3.2) of the WNR CP.
247. The Authority also agrees with PwC's view that although the wording in this section is similar to the wording under the WNR CP (section 3.2), it does not clearly state that the purpose of the efficiency cost testing is to ensure that the operating costs, proposed for inclusion in TPI's floor and ceiling costs, are efficient costs.
248. Therefore, the Authority considers that this section of TPI's Costing Principles should be amended to remove any uncertainty in relation to the purpose of TPI's cost efficiency testing, by adopting similar wording to that included under section 3.1 and the first paragraph of section 3.2 of the WNR CP.

249. The Authority notes that the wording in the last part of the first dot point under this section, “having regard to the market conditions that are presently being experienced in the Pilbara region”, is unclear and unnecessary. The Authority agrees with PwC that this wording should be deleted.

Draft Determination

Required Amendment 9

Section 4.2 of TPI’s proposed Costing Principles (headed ‘Efficient cost tests’) should be amended as follows:

- Delete the first paragraph and replace with wording similar to that in the first paragraph of section 3.2 of the WNR CP.
- Delete the words “having regard to the market conditions that are presently being experienced in the Pilbara region” in the first dot point.
- Delete the word “will” in the second dot point and replace with the word “may”.
- Add the words “or unit costs, as appropriate,” immediately following the word “actual” under the third dot point.
- Delete the second sentence in the last paragraph and replace with wording similar to the sentence under section 3.1 of the WNR CP.

4.3 Allocation of Operating Costs

TPI’s Proposal

250. TPI has noted that the allocation of specific operating costs (including track and signal maintenance costs, centralised train control costs and non-sector specific operating costs) to route sections will be in accordance with Appendix B of its Costing Principles.

Public Submissions

251. The NWIOA commented (page 5):

Section 4.3 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 that these be replaced with a proposed suggestion based on allocation rules using gross tonne kilometres (GTK) or train movements.”

252. Hancock(ACIL) (page 15) expressed similar comments to those of the NWIOA as outlined above.
253. The NWIOA (page 12) also suggested that TPI should adopt similar provisions to those under the WNR CP (sections 3.4 and Annexure 7.2).

254. The ARTC (page 5) commented that it was of the view, consistent with previous submissions, that any cost allocation should be independently assessed. The ARTC noted that it is the Authority's position to be satisfied that operating costs are efficient and allocated appropriately.
255. In response to the public submissions, TPI commented (page 4) that it prefers train kilometres as an allocator of costs, 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".

Pricewaterhouse Cooper's (PwC) Advice

256. PwC advised that this section is broadly consistent with section 4.3 of the WNR CP.
257. PwC also advised that the allocators shown in Appendix B are similar to the allocation bases in section 3.4 and Annexure 7.2 of the WNR CP. However, PwC noted that Appendix B contained costs categories that are not clearly identified in its Costing Principles, includes allocators in relation to land and does not nominate GTK as an allocator for any class of cost.
258. In PwC's view, GTK provides a better measure of demands placed on the railway infrastructure than the simple measure of train kilometres as proposed by TPI. PwC also considered that train numbers or train movements provide a better allocator of network management costs than GTK or train kilometres.
259. PwC recommended that TPI adopt in Appendix B, a GTK allocator for railway infrastructure indirect costs and a train movements allocator for network management indirect costs (replacing, in both cases, TPI's train kms allocator).
260. In relation to land, PwC recommended that land associated costs which did not meet the criteria under sections 2(2) and 2(2a) of Schedule 4 of the Code should be excluded from Appendix B.
261. With regard to the issue of identifiable cost categories, PwC recommended that the cost categories in Appendix B should be aligned with categories identified in TPI's Costing Principles and with the definitions in the Code.
262. PwC also suggested that this section of TPI's Costing Principles should state that the Authority may require an independent review of the allocation bases used by TPI.

Authority's Assessment

263. The Authority notes that this section and Appendix B are broadly similar to section 3.4 and Annexure 7.2 of the WNR CP.
264. Nonetheless, the Authority agrees with PwC that there are differences between the TPI and equivalent WNR sections which need to be addressed.
265. The first issue relates to the cost component categories listed under Appendix B for operating costs. These cost categories are not well described and in a number of instances it is not clear as to the nature of the operating cost being allocated (for example "buildings – Train Km". In addition it is also unclear as to whether the

infrastructure listed under Appendix B is restricted to the assets which fall within the 'railway infrastructure' definition under Part 1 of the Code.

266. The Authority considers that Appendix B needs to be amended to clearly set out costs under an 'operating costs' heading and costs under an 'overhead costs' heading. The overhead costs are dealt with later in this draft determination. In relation to the operating costs, these should be divided under Appendix B into two broad categories being 'railway infrastructure management costs' and 'network management costs' (consistent with an amended section 4.1 of TPI's Costing Principles, as required by this draft determination). Similar to the WNR CP (Annexure 7.2), Appendix B should only list the indirect operating costs which cannot be directly attributed to route sections, based on the nature and population of the infrastructure.
267. The Authority considers that section 4.3 of TPI's Costing Principles should include, as its first paragraph, the first two sentences under section 3.4 in the WNR CP. These sentences deal specifically with the manner in which track and signalling maintenance costs able to be directly attributed will be allocated and the manner in which the centralised train control costs will be allocated. This will ensure consistency with the allocation methodology previously approved by the Authority under the WNR CP. The existing paragraph under section 4.3 of TPI's Costing Principles, which will then form the second paragraph in this section, should be amended by deleting the words "specific operating costs, including track and signalling maintenance costs, centralised train control cost and" to reflect the Authority's position as outlined above. The Authority also considers that TPI should include the last sentence under section 3.4 of the WNR CP, as the last sentence in this section.
268. The second issue of concern to the Authority, in relation to Appendix B, relates to the allocators proposed by TPI under Appendix B. The Authority agrees with PwC that GTK provides a better measure of demands placed on the railway infrastructure than the simple measure of train kilometres as proposed by TPI. Therefore, the Authority considers that the indirect railway infrastructure management costs should be allocated based on GTKs. This is consistent with Annexure 7.2 of the WNR CP.
269. In relation to network management costs, the Authority also agrees with PwC that train numbers is a better allocator for the indirect network management costs than train kms due to the nature of the network operations, such as train scheduling and access management. This is consistent with Annexure 7.2 of the WNR CP.
270. The third issue which with respect to Appendix B, is the matter of the costs that TPI has included under Appendix B for land associated with the railway infrastructure. As noted earlier in this draft determination, the Authority's view is that the Code makes it clear that no costs associated with the value of the land on which the railway infrastructure is located (such as rental or lease costs) can be taken into account. Therefore, all costs associated with the land corridor within which the railway infrastructure is located should be deleted from Appendix B.

Draft Determination**Required Amendment 10**

Section 4.3 of TPI's proposed Costing Principles (headed 'Allocation of operating costs') and Appendix B on page 14 should be amended as follows:

- Amend section 4.3 by:
 - Deleting the words "specific operating costs, including track and signalling maintenance costs, centralised train control cost and" from the first sentence.
 - Inserting the first two sentences from section 3.4 of the WNR CP as the first paragraph.
 - Deleting the last sentence.
 - Inserting the last sentence under section 3.4 of the WNR CP as the last sentence in this section, excluding the words "will be determined by the ERA" and replacing these words with "will be reviewed by the ERA".
- Amend the Operating Costs part of Appendix B by:
 - Deleting all references to costs related to land (corridor and non-corridor land).
 - Deleting references to operating costs which are directly attributable and listing indirect operating costs under the headings 'railway infrastructure management costs' and 'network management costs'.
 - Inserting GTKs as the cost allocator for railway infrastructure management costs.
 - Inserting train numbers as the cost allocator for network management costs.

Overhead Costs (Section 5)**5.1 Definition of Overhead Costs****TPI's Proposal**

271. TPI has proposed that Overhead Costs will be those costs attributable to the performance of TPI's access-related functions by TPI or FMG. TPI has stated that TPI is a separate legal entity and has overheads which relate to its business of access provision and that TPI sources corporate and related functions from FMG.
272. TPI has also proposed that the cost of any activity which would be incurred by an efficient railway owner in providing access to TPI's infrastructure, but which is not

considered by the Authority to be classed as an operating cost will be included as an overhead cost.

Public Submissions

273. Hancock(ACIL) commented (page 16) that TPI does not provide any indication of how it will allocate overheads between its rail infrastructure and haulage business units and does not indicate how the allocated amount of FMG corporate services costs will be determined. Hancock(ACIL) noted that the Authority has previously assessed that an allocation methodology based on a combination of train movements and GTK are standard rail industry allocators for distributing common costs. Hancock(ACIL) suggested that TPI's proposed allocation method (by train kilometres) will disadvantage access seekers with smaller freight loads.
274. The NWIOA suggested (page 13) that a combination of GTKs and train movements be employed by TPI as allocators of common costs. The NWIOA suggested replacement wording for section 5.2 and a table clearly defining TPI and corporate overheads.
275. The ARTC commented (page 5) that TPI should specify that overhead costs are defined in the Code and that TPI's overhead costs should be specified. The ARTC noted that TPI should outline that only those overhead costs attributed to activities related to the Code's definition of railway infrastructure will be included in the floor and ceiling price tests. Hancock(ACIL) also noted that the Authority should have TPI's cost allocations independently assessed, to ensure that they are efficient, allocated in accordance with normally accepted practices for railways, and benchmarked against other rail access providers.
276. In its response to the public submissions, TPI commented (page 4) that WNR's approved costing principles do not specify the basis upon which owner's corporate overheads are allocated to WNR. TPI also noted that the cost allocators will be included in the costing model, with the model being assessed by the Authority.

PricewaterhouseCoopers' (PwC) Advice

277. PwC advised that this section of TPI's Costing Principles is broadly consistent with section 4.1 of the WNR CP and that the definition of overhead costs under this section reflects the wording in the Code associated with the use of the term 'overheads' and is consistent with the wording in the WNR CP.
278. PwC also noted that the WNR CP provides greater information on the composition of overheads costs, in Annexure 7.2.
279. PwC considered that the third paragraph expressed the concept of cost efficiency on different terms to that in section 4 of Schedule 4 of the Code.
280. PwC recommended that TPI's use of the term of efficient costs under the third paragraph should be consistent with, and include reference to, section 4 of Schedule 4 of the Code. PwC also recommended that TPI should provide further information on the composition of its overhead costs, in the manner set out in Annexure 7.2 of the WNR CP.

Authority's Assessment

281. In relation to the definition of overhead costs under the first paragraph, the Authority agrees with PwC that this definition is consistent with the definition of overhead costs under the Code (section 1 of Schedule 4).
282. The Authority notes the comments in public submissions and by PwC, to the effect that TPI has not provided the same level of detail in relation to the allocation of its overhead costs under Appendix B, compared to Annexure 7.2 in the WNR CP. The Authority agrees with this view.
283. Accordingly, the Authority considers that Appendix B should contain a similar level of detail, in relation to the specific type of overhead costs being allocated under the heading 'Description', as is provided under Annexure 7.2 of the WNR CP. In addition, the Authority considers that TPI's overheads in Appendix B should be classified under the heading 'Cost Component' into two categories: 'TPI's overheads' and 'Corporate overheads (services provided by FMG and allocated to TPI)', consistent with Annexure 7.2 of the WNR CP.
284. In relation to the third paragraph, the Authority considers that this paragraph should be deleted and replaced with wording similar to the third sentence of the third paragraph under section 4.1 of the WNR CP.
285. The Authority notes that matters dealing with overhead cost allocators are dealt with in the following section.

Draft Determination

Required Amendment 11

Section 5.1 of TPI's proposed Costing Principles (headed 'Definition of overhead costs') and Appendix B on page 14 should be amended as follows:

- Amend section 5.1 by:
 - Deleting the wording in the third paragraph. Replace with similar wording to that in the third sentence of the third paragraph of section 4.1 in the WNR CP.
- Amend the Overhead Costs part of Appendix B by:
 - Classifying overheads under the heading 'Cost Component' into two categories, being: 'TPI's overheads' and 'Corporate overheads (services provided by FMG and allocated to TPI)'.
 - Providing a similar level of detail in relation to the specific type of overhead costs being allocated under the heading 'Description', as is provided under Annexure 7.2 of the WNR CP under the heading 'Inclusions'.

5.2 Allocation of Overhead Costs

TPI's Proposal

286. TPI notes that the basis for its allocation of overhead costs is set out in Attachment 2.

Public Submissions

287. The comments in public submissions relating to cost allocators for TPI's overhead costs have been outlined in conjunction with section 5.1 above.

PricewaterhouseCoopers' (PwC) Advice

288. PwC advised that this section should refer to Appendix B rather than Attachment 2.
289. PwC noted that its comments in relation to section 4.3 of TPI's Costing Principles (Allocation of Operating Costs) were also relevant to this section. These comments were to the effect that Appendix B should be amended to use cost allocators consistent with those in Annexure 7.2 of the WNR CP. On this basis, TPI's overhead costs should be allocated based on GTKs and train numbers.

Authority's Assessment

290. The Authority notes that Attachment 2 should be Appendix B in the TPI CP.
291. The Authority agrees with the views of PwC, Hancock(ACIL) and the NWIOA that the use of train kilometres as the cost allocator for overheads (proposed by TPI in Appendix B) does not provide the best proxy for allocation purposes (given the nature of the overhead costs) and could result in a disproportionate amount of the overheads being attributed to smaller operators.
292. The Authority's view, consistent with its position in relation to section 4.3 of TPI's Costing Principles (Allocation of Operating Costs) and PwC's advice, is that TPI's overhead costs should be allocated based on a combination of GTKs and train numbers. This approach is consistent with the approach under Annexure 7.2 of the WNR CP. The basis for deciding which of these two allocators to use for the allocation of particular overhead costs should be as outlined under section 7.2.1 of Annexure 7.2 of the WNR CP, which notes that GTKs are used to allocate overhead costs which vary more in quantum due to volumes moved and train numbers are used to allocate overhead costs which vary more in quantum due to the number of train movements.
293. The Authority also notes the comment by the ARTC, to the effect that the Authority should subject overhead cost allocations to an independent assessment as part of its floor and ceiling cost determinations, to ensure that they are efficient, allocated in accordance with normally accepted practices for railways and benchmarked against other rail access providers. The Authority notes that, as part of its floor and ceiling costs assessments, it commissions independent advice from financial and engineering consultants to ensure that these matters are properly considered.

Draft Determination

Required Amendment 12

Section 5.2 of TPI's proposed Costing Principles (headed 'Allocation of overhead costs') and Appendix B on page 14 should be amended as follows:

- Amend section 5.2 by:
 - Deleting the number "2" and replacing it with the letter "B".
 - Adding the first sentence under section 4.2 of the WNR CP as the first paragraph, excluding the words "will be determined by the ERA" and replacing these words with "will be reviewed by the ERA".
- Amend the Overhead Costs part of Appendix B by:
 - Inserting the words "Combination of GTKs and Train Numbers" under the heading 'Cost allocator'.
 - Adding a note at the end of this appendix, similar to the note under section 7.2.1 of Annexure 7.2 of the WNR CP, which relates to the use of the two cost allocators (GTKs and Train Numbers) for overhead costs.
 - Adding a further sentence to the end of the above note, as follows; "The use of these two cost allocators for overhead cost allocation is to be reviewed by the ERA during its floor and ceiling costs determinations".

Other Matters (Section 6)

6.1 Indexation of Floor and Ceiling

TPI's Proposal

294. In relation to the annual indexation of Floor and Ceiling Costs, TPI has proposed to index the capital cost component of Floor and Ceiling costs based on the Australian Bureau of Statistics Weighted Average of Eight Capital Cities All Groups CPI index. The annual change in this CPI measure is proposed to be calculated as a percentage change in the average of the four quarters to March of each year from the average of the previous four quarters.
295. TPI has also proposed to index the operating cost components of floor and ceiling prices by a separate index based on regional cost drivers and proposed that this index will be developed at some point in the future, following which, TPI will consult with the Authority before submitting the index to the Authority for approval.
296. TPI has proposed to submit the annual indexed floor and ceiling costs to the Authority for review and approval.

Public Submissions

297. Hancock(ACIL) commented (page 17) that TPI's floor and ceiling costs should be indexed by CPI-X, with the Authority setting an appropriate X factor in the light of its consideration of future cost movements in operating TPI's rail infrastructure.
298. In relation to the proposal by TPI to apply a separate index to operating costs, ARTC commented (page 5) that "this is a reasonable approach however the process for ERA's approval should be conducted through a public consultation process".
299. In its response to public submissions, TPI argued (page 5) that there should be no adjustment for productivity in the absence of evidence that TPI is inefficient. This argument was 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.

PricewaterhouseCoopers' (PwC) Advice

300. PwC advised that the approach proposed by TPI is equivalent to the WNR approach (at section 5.1 of the WNR CP) except that the WestNet CPI escalator includes the effect of an "X" efficiency factor and also applies to operating costs.
301. PwC considered it reasonable that no X efficiency factor is applied to costs for the initial application of Costing Principles to the TPI network. Nonetheless, PwC suggested that, at the next review of the Costing Principles, the Authority consider whether TPI has capacity to make efficiency gains and accordingly, whether an X efficiency factor should apply to the TPI indexation approach.
302. PwC's view on the indexation issue was that, for the purpose of the current approval process, the approach used for the capital cost component should also apply to operating costs, in a manner consistent with the approach under section 5.1 of the WNR CP.

Authority's Assessment

303. In relation to the efficiency factor issue, the Authority notes that section 5.1 of the WNR CP sets out an 'X' factor, being an efficiency factor, of one quarter of the CPI for the second and third annual adjustment following a floor and ceiling determination.
304. PwC agreed with TPI's proposed approach, whereby no efficiency factor should be applied to TPI's costs following its floor and ceiling costs determination. The Authority does not agree with this approach, on the grounds that an efficiency factor applies to WNR's railway and that in the interests of consistency, the same efficiency factor should apply to TPI's railway.
305. The Authority recognises that the X factor has been in place for some time under the WNR CP and that this efficiency factor should be reviewed in the near future. Accordingly, the Authority will undertake a review, involving public consultation, on whether the current methodology and magnitude of the efficiency factor for railways under the Code is still appropriate, following completion of TPI's floor and ceiling costs determination. TPI and other interested parties will have the opportunity to make submissions to the Authority as part of this review process.

306. With regard to TPI's view that its operating costs should be subject to an index other than CPI, the Authority agrees with PwC that for the purpose of TPI's initial Costing Principles, it is appropriate for the Authority to adopt an approach consistent with that applied to WNR. Under this approach, the same CPI indexation approach would apply to both capital cost components and operating costs, consistent with the requirements set out under section 5.1 of the WNR CP.
307. At the time TPI's Costing Principles are reviewed in 2012 (discussed in Section 7 below), TPI and other interested parties will have the opportunity to make submissions to the Authority on this matter.

Draft Determination

Required Amendment 13

Section 6.1 of TPI's proposed Costing Principles (headed 'Indexation of floor and ceiling') should be amended as follows:

- Delete the third paragraph.
- Replace the above paragraph with the first four sentences from section 5.1 of the WNR CP.

6.2 Calculation of Floor and Ceiling

TPI's Proposal

308. TPI has set out, in this section, the process for calculation of its Floor and Ceiling costs.

Public Submissions

309. Hancock(ACIL) commented (page 17) that the processes set out by TPI for calculation of its floor and ceiling appear to be reasonable.

PricewaterhouseCoopers' (PwC) Advice

310. PwC advised that TPI's processes for calculation of its floor and ceiling costs set out in this section are consistent with the processes set out in sections 5.2 (calculation of the ceiling) and 5.3 (calculation of the floor) of the WNR CP.

Authority's Assessment

311. The Authority agrees with PwC's advice to the effect that this section is consistent with the equivalent sections (5.2 and 5.3) of the WNR CP.

Draft Determination

Section 6.2 of TPI's Costing principles is appropriate.

Review and Consultation (Section 7)

TPI's Proposal

312. TPI proposed that its compliance with its approved Costing Principles will be subject to an annual independent external audit and that the Authority may select and manage the auditor and will approve the scope of the audit, with TPI paying costs.
313. TPI has also proposed that it will review the Costing Principles two years after the Authority's approval of these Costing Principles.

Public Submissions

314. Hancock(ACIL) commented (page 17) that TPI should state explicitly that access seekers and operators can at any time request the Authority to consider amendments to the Costing Principles.

PricewaterhouseCoopers' (PwC) Advice

315. PwC advised that this section was generally consistent with section 6 of the WNR CP.
316. PwC agreed with Hancock(ACIL) that TPI should state that access seekers and operators can, at any time, request the Authority to consider amendments to the Costing Principles, in accordance with provisions of section 6 of the WNR CP.
317. PwC noted that this section contained an appropriate commitment to a future review of TPI's Costing Principles.

Authority's Assessment

318. The Authority has set out consistent processes for compliance and review in its recent final determinations on TPI's Train Path Policy and Train Management Guidelines.
319. The Authority intends that all TPI's Part 5 Instruments should have consistent provisions for compliance and review. Accordingly, the Authority requires this section to be amended to comply with the wording set out under the relevant sections of its final determinations noted above.
320. Key elements of the Authority's required compliance and review arrangements involve an independent audit every two years (commencing in 2011-12), with a review of the Costing Principles by the Authority due two years following approval of TPI's regulatory instruments.
321. The Authority notes that it has recently written to TPI outlining the Authority's compliance requirements for the two yearly independent audit, encompassing the Segregation Arrangements, Part 5 Instruments and relevant provisions of the Code.

Draft Determination

Required Amendment 14

Section 7 of TPI's proposed Costing Principles (headed 'Review and consultation') should be amended as follows:

- Amend the heading to read "Compliance and review".
- Delete the wording under this section and replace with wording consistent with section 6 of the WNR CP, with the exception of the following:
 - First paragraph of section 6 of the WNR CP: Delete this paragraph and replace with "TPI agrees to a review of the Costing Principles by the ERA, through a public consultation process, two years after the date when all the regulatory instruments required under the Act and the Code for TPI's railway have been approved by the ERA. It is expected that the review will commence on 1 October 2012 and that TPI will provide the ERA with its proposed revised Costing Principles on this date".
 - Fourth paragraph of section 6 of the WNR CP: (1) Replace "WestNet" with "TPI", (2) Replace "The ERA will monitor TPI's compliance" with "TPI agrees to the monitoring by the ERA of its compliance", (3) Add the following sentence to the end of this paragraph; "It is expected that the first audit will commence at the end of the 2011-12 financial year".

New Sections Required

Asymmetric Risk

Authority's Assessment

322. The Authority has discussed the issue of asymmetric risk in this draft determination under section 4.1 (Definition of operating costs).
323. The Authority noted earlier that it intends to consider the issue of asymmetric risk, including stranding risk, under its assessment of TPI's proposed floor and ceiling costs.
324. In terms of TPI's Costing Principles, the Authority also noted that it is not appropriate for TPI to assume that asymmetric risks, if material, would be necessarily be incorporated as an allowance into the operating costs. The Authority's view, as set out earlier, was that asymmetric risk should be included as a separate item under section 6 (Other Matters).
325. Therefore, the Authority considers that should TPI wish to include costs relating to asymmetric risks in its Costing Principles, such costs should be set out under a

new sub-section (sub-section 6.3) and will be assessed, as noted above, under the Authority's assessment of TPI's proposed floor and ceiling costs.

Draft Determination

Required Amendment 15

Section 6 of TPI's proposed Costing Principles (headed 'Other Matters') should be amended to include a new sub-section (sub-section 6.3) headed "Asymmetric Risk".

Service Quality Commitment

Authority's Assessment

326. The Authority considers that TPI should include, in its Costing Principles, a service quality commitment, similar to that outlined under section 1.5 of the WNR CP.
327. This service quality commitment is a statement setting out the railway owner's intention to adopt economically and technically efficient practices, to provide a network which maintains service quality at specified operational levels.
328. The Authority requires TPI to include a new sub-section in its Costing Principles (sub-section 6.4), under the heading "Service quality commitment", similar to section 1.5 of the WNR CP.

Draft Determination

Required Amendment 16

Section 6 of TPI's proposed Costing Principles (headed 'Other matters') should be amended to include a new sub-section (sub-section 6.4) headed "Service quality commitment", which should contain wording similar to the wording under section 1.5 of the WNR CP.

Definitions

Public Submissions

329. As noted in this draft determination, the NWIOA (page 15), UMC (page 4) and Hancock(ACIL) (page 2) each commented that a definitions clause similar to that in section 8 of the WNR CP should be added to TPI's proposed Costing Principles.

PricewaterhouseCoopers' (PwC) Advice

330. As noted earlier, PwC recommended that a definitions section should be added to TPI's Costing Principles, similar to the definitions section under section 8 of the WNR CP. Definitions should also be included for the list of terms noted in paragraph 1 (page 2) of the Hancock(ACIL) submission.

Authority's Assessment

331. In the earlier discussion, the Authority agreed with PwC that a definitions section should be added to TPI's Costing Principles.
332. The Authority requires TPI to include a new section in its Costing Principles (section 8), under the heading "Definitions", similar to section 8 of the WNR CP. The Authority also notes that the definitions should be consistent with the Act and the Code.

Draft Determination**Required Amendment 17**

TPI's proposed Costing Principles should be amended to include a new section (Section 8) headed "Definitions", which should include a complete list of all the terms used in the Costing Principles which might reasonably be expected to require a definition. In addition, all definitions should be:

- Consistent with the definitions in the Act and the Code.
- If not defined in the Act or the Code, consistent with the definitions under section 8 of the WNR CP.
- Consistent with definitions used previously by TPI in its proposed segregation arrangements or proposed Part 5 Instruments, subject to the above requirements.