



Request for Comments Paper

---

**QR's Draft Undertaking - Costing  
Manual**

---

***March 2000***

---

## SUBMISSIONS

The Queensland Competition Authority (the Authority) considers public involvement to be an important element of its decision-making processes. It therefore invites submissions from interested parties concerning the most desirable approach to cost allocation as part of QR's draft undertaking for third party access to its network.

To facilitate the publication of submissions on the QCA's website, it is preferred if submissions could be made electronically by disk or by e-mail. However, if this is not possible, submissions can be made in writing. Submissions, comments or inquiries regarding this paper should be directed to:

Queensland Competition Authority  
GPO Box 2257  
Brisbane QLD 4001

Attention Euan Morton

Telephone: (07) 3222 0506  
Fax: (07) 3222 0599  
E-mail: rail.submissions@qca.org.au

The **closing date** for submissions is 21 April, 2000.

### Confidentiality

In the interests of transparency and to promote informed discussion, the Authority would prefer submissions to be made publicly available wherever this is reasonable. However, if a person making a submission does not want that submission to be public, that person should claim confidentiality in respect of the document (or any part of the document). Claims for confidentiality should be clearly noted on the front page of the submission and the relevant sections of the submission should be marked as confidential, so that the remainder of the document can be made publicly available.

To facilitate disclosure of the non-confidential portion of submissions, it would be appreciated if a copy of the submission with the confidential information excised could be provided in addition to the full submission. Again, it is preferred if the relevant submissions could be made electronically by disk or by e-mail. However, if this is not possible, the submissions can be made in writing. Where it is unclear why a submission has been marked "confidential", the status of the submission will be discussed with the person making the submission.

While the Authority will endeavour to identify and protect material claimed as confidential as well as exempt documents (within the meaning of the *Freedom of Information (FOI) Act 1989*), it cannot guarantee that submissions will not ultimately be made publicly available. As stated in s187 of the *Queensland Competition Authority Act 1997*, the Authority must take all reasonable steps to ensure the information is not disclosed without the person's consent, provided the Authority is satisfied that the person's belief is justified and that the disclosure of the information would not be in the public interest.

### Public access to submissions

Subject to the above, submissions will normally be made available for public inspection at the Brisbane office of the Authority (see below), or on its website at [www.qca.org.au](http://www.qca.org.au). Information about the role and current activities of the Authority, including copies of reports, papers and submissions can also be found on this website.

Queensland Competition Authority  
Level 19, 12 Creek Street  
GPO Box 2257  
Brisbane QLD 4001

Tel: (07) 3222 0555  
Fax: (07) 3222 0599  
Internet: [www.qca.org.au](http://www.qca.org.au)

## TABLE OF CONTENTS

	PAGE
<b>GLOSSARY OF TERMS</b>	<b>ii</b>
<b>OVERVIEW</b>	<b>v</b>
<b>1. INTRODUCTION</b>	<b>1</b>
1.1 The Role of QR's Undertaking and the Queensland Competition Authority	1
1.2 The role of cost allocation	1
1.3 QR's Draft Undertaking and the QCA Act	2
1.4 Purpose of the Paper	3
<b>2. OVERVIEW OF THE COSTING MANUAL</b>	<b>4</b>
2.1 Purpose of the Costing manual	4
2.2 Scope and administration of the Costing manual	4
2.3 Costing Framework	5
<i>Organisational Structure</i>	5
<i>Costing principles</i>	5
<i>Management Accounts</i>	5
2.4 Identification of Below Rail Cost Base	5
2.5 Hierarchy of Below Rail Costs	6
2.6 Access Pricing Limits	6
<i>Incremental costs</i>	6
<i>Stand Alone Costs</i>	7
<b>3. TRANSPARENCY AND ACCOUNTABILITY OF APPROACH</b>	<b>8</b>
3.1 Transparency of proposed allocations	8
3.2 Accountability arrangements	10
<b>4. STAND ALONE COSTS AND ACCESS CHARGES</b>	<b>11</b>
<b>5. APPROACHES TO COST ALLOCATION</b>	<b>13</b>
<i>General Ledger Approach</i>	13
<i>Internal Trading Arrangements</i>	13
<b>6. FUTURE APPROACH TO COST ALLOCATION</b>	<b>15</b>
<b>ATTACHMENT - QR's Costing Manual</b>	

---

## GLOSSARY OF TERMS

### **Above Rail Costs**

The costs and/or assets (as the context implies) associated with the provision of Above Rail Services.

### **Above Rail Services**

Those activities, other than Below Rail Services, required to provide and operate Train Services including rollingstock provision, rollingstock maintenance, non train control related communications, train crewing, terminal provision and services, freight handling and marketing and administration of those services.

### **Allocation**

Where costs or assets are jointly used for the provision of a function/service and where there is no direct causal relationship between the resources used and the function/service provided, the sharing of such joint costs between those functions/services.

### **Attribution**

Where costs or assets are jointly used for the provision of a function/service and where there is a causal relationship between the resources used and function/service provided, the sharing of costs between those functions/services on a basis of cost causality.

### **Below Rail Costs**

The costs and/or assets (as the context implies) associated with the provision of Below Rail Services.

### **Below Rail Services**

The activities associated with the provision and management of Rail Infrastructure, including the construction, maintenance and renewal of Rail Infrastructure assets, and the network management services required for the safe operation of Train Services on the Rail Infrastructure, including train control and the implementation of safeworking procedures.<sup>1</sup>

### **Corporate Overhead**

Costs are those costs that relate predominantly to the overall management, strategy and governance of the corporation and include, for example, the chief executive's office, internal audit, corporate strategy and planning, corporate finance, information strategy, safety and industrial relations.

### **Corporate Services**

Costs are the costs of services that are provided at the corporation wide level to groups and divisions within QR and include, for example, legal services, computer services, motor vehicle fleet management, administration building services, payroll preparation and employee relations;

---

<sup>1</sup> Below Rail Services correspond to the services that have been declared under the QCA Act.

**Cross Subsidy**

Means where:

- one Train Service or combination of Train Services pays Access Charges which are insufficient to meet the Incremental Cost imposed on the Rail Infrastructure by that Train Service or combination of Train Services; and
- the shortfall is contributed by revenue from another Train Service or combination of Train Services that is paying Access Charges which provide revenue greater than the Stand Alone Cost of that Train Service or combination of Train Services.

**Geographic Region**

Sections of the Track identified in Appendix 2 as a “Region”.

**Geographic System**

Sections of the Track identified in Appendix 2 as a “System” and, for those Geographic Regions that have no “Systems” identified, means that Geographic Region.

**Identification**

Where costs are directly incurred, or assets directly used in the performance of a function/service, the identification of those costs to that function/service

**Incremental Costs**

Those costs of providing Access, including capital (renewal and expansion) costs, that would not be incurred (including the cost of bringing expenditure forward in time) if the particular Train Service or group of Train Services (as appropriate) did not operate and “Incremental” has a similar meaning.

**Infrastructure Payments**

Payments to QR from the Queensland Government to enable QR to provide specified sections of Rail Infrastructure.

**Line Section**

A section of railway route as defined in QR’s chart of accounts from time to time and that is [separately] identified for the purpose of classifying the Rail Infrastructure into line sections with reasonably consistent traffic (in terms of type of traffic and density of traffic) and reasonably consistent Track standards.

**Line Section Specific**

Costs and assets able to be specifically Identified or Attributed to a Line Section.

**Network Access**

The business group established within QR to manage the provision of Below Rail Services with the exception of stations and platforms.

**Network Wide**

Costs and assets associated with the provision of Below Rail Services not able to be Identified or Attributed to a Line Section or a Geographic Region.

**Other Activities**

Activities undertaken by QR that are neither Above Rail Services nor Below Rail Services and include, for example, consulting activities and treasury activities such as cross border leasing, foreign exchange and financing.

**Other Activities Costs**

The costs and/or assets (as the context implies) associated with the provision of Other Activities.

**Rail Infrastructure**

Rail Transport Infrastructure as defined in the Transport Infrastructure Act 1994 (Qld) for which QR is the Railway Manager.

**Railway Operator**

A person who has, or is seeking, Access from QR to operate Train Services on the Rail Infrastructure and who is, or who will become, accredited in respect of those Train Services;

**Region Specific**

Costs and assets associated with the provision of Below Rail Services not able to be Identified or Attributed to a specified Line Section, but able to be Identified or Attributed to a Geographic Region;

**Rollingstock**

Locomotives, carriages, wagons, rail cars, rail motors, light rail vehicles, light inspection vehicles, rail/road vehicles, trolleys and any other vehicle that operates on or uses the Track.

**Stand Alone Costs**

Those costs that QR would reasonably incur if the relevant Train Service or combination of Train Services (as appropriate) was the only Train Service or combination of Train Services (as appropriate) provided Access by QR and "Stand Alone" has a similar meaning.

**Third Party Operator**

A Railway Operator other than QR.

**Train Service**

The operation of a Train between specified origins and destinations on the Rail Infrastructure.

**Train Services**

A train service or a combination of Train Services.

## **OVERVIEW**

1. The attached paper addresses matters relating to a costing manual QR has submitted in conjunction with the draft undertaking it has lodged with the Authority for assessment.
2. As QR is vertically integrated, the appropriate assignment of costs between its competitive above rail business and its monopoly below rail business is very important.
3. An inappropriate assignment of costs could result in competing Above Rail Operators being placed at a competitive disadvantage relative to QR's Above Rail Operations.

## 1. INTRODUCTION

### 1.1 The Role of QR's Undertaking and the Queensland Competition Authority

Queensland Rail (QR) has submitted a draft access undertaking to the QCA covering certain services relating to the use of rail transportation infrastructure owned by QR. Accompanying the draft access undertaking is an explanatory guide which QR has produced to clarify the intent of selected provisions of the undertaking. These documents are available from the QCA (telephone Ms Natasha Bree on (07) 3222 0555) or can be downloaded from the QCA's website at [www.qca.org.au](http://www.qca.org.au).

The draft access undertaking sets out the basis under which QR proposes to provide third party access to certain declared services. Under Part 5 of the *Queensland Competition Authority Act 1997*, the QCA is required to assess the undertaking and decide whether or not to approve it. In determining whether to approve QR's draft undertaking, the Authority is mindful of the role of the approval of an undertaking under the QCA Act, which is to provide certainty to all stakeholders in future arbitrations. If approved, the undertaking will effectively bind the Authority in any future disputes between QR and those seeking to use its network. Accordingly, once the Authority accepts an undertaking, stakeholders may be bound by its terms in future negotiations with QR.

The Authority has adopted a consultative approach to its assessment of the undertaking. As part of this process, there are a number of matters related to QR's Costing Manual (the Manual) upon which the Authority seeks submissions. The Manual is reproduced in Attachment 1 to this paper.<sup>2</sup>

The Authority's *Request for Comments - Draft Undertaking* paper sought stakeholder views on matters associated with cost allocation. Those views are mentioned in the relevant sections of this paper and the QCA will take these comments into account in developing its Draft Decision on QR's Undertaking. The recent documentation submitted to the QCA represents QR's attempt to deal with some of the concerns previously raised by stakeholders. The Authority is particularly interested in the extent to which stakeholder concerns are allayed by the content of this documentation.

**The Authority has produced this paper in an effort to facilitate focused comments on the Manual by interested parties in the context of QR's draft Undertaking. However, the Authority does not wish to inhibit comment and, therefore, the Authority also invites submissions that raise issues other than those outlined in this paper. To facilitate feedback, this paper summarises aspects of the Manual and QR's draft Undertaking as the Authority has interpreted it. However, this summary is intended only as a guide and should not be regarded as a substitute for stakeholders reading the relevant documents.**

### 1.2 The role of cost allocation

The Manual plays an important role in the ongoing regulation of QR's Below Rail business as it:

- sets out the arrangements for allocating costs between Below Rail Services and Above Rail Services. In turn, this process provides a basis for:
  - assigning the benefits of vertical integration between QR (and, in turn, its shareholders) and its customers;

---

<sup>2</sup> The Manual was submitted to the Authority on 23 December, 1999.

- monitoring QR's financial performance in respect of the provision of Below Rail Services, including assessing the appropriateness of Reference Tariffs;
- setting Reference Tariffs in future reviews;
- sets out the appropriate level within the organisation to which Below Rail Costs should be assigned – such as to a Line Section, to a Geographic Region or to the network as a whole; and
- enables costs to be assigned to particular traffics for the setting of Access Charges.

An inappropriate assignment of costs will have several adverse effects. For example, a cost allocation approach that assigns too great a proportion of costs to Below Rail Services (as opposed to Above Rail Services) will result in:

- Third Party Operators being placed at a competitive disadvantage relative to QR's above rail operations; and
- customers paying too much for their rail haulage services (where there is an absence of intermodal transportation alternatives). Assigning a greater than appropriate portion of costs to Below Rail Services will tend to raise Access Charges which could be passed on to customers in the form of higher rates for rail haulage services.

An inappropriate assignment of costs to various levels within the organisation could have similar consequences. Accordingly, the adoption of the Manual by QR plays an important role in providing confidence to customers and above rail operators that QR is not gaining an inappropriate commercial advantage over competitors through its vertical integration. It also should provide confidence that customers are not being required to pay excessive Access Charges (and in doing so cross subsidising other traffics).

### 1.3 QR's Draft Undertaking and the QCA Act

QR has submitted a draft Manual to the QCA so that it could be considered as part of the QCA's assessment of QR's undertaking. QR's undertaking provides that the QCA's acceptance of QR's Manual will fulfill QR's obligations under division 9 of part 5 of the QCA Act (clause 5.5). This division provides that the QCA may request the owner of a declared service (or its agent) to prepare a cost allocation manual. The QCA may impose its own cost allocation manual on the owner of the declared service if:

- the owner (or its agent) does not submit a cost allocation manual within 60 days of the QCA's request; or
- the QCA is not satisfied with the manual submitted by the owner or its agent.

The QCA Act requires that, once a cost allocation manual is in place, the owner (or its authorised agent) must:

- keep the books of account and other records that are necessary to comply with the cost allocation manual; and
- keep the books and records in the way required by the manual.

The QCA Act also provides that the QCA may revise the manual from time to time.

## **1.4 Purpose of the Paper**

The purpose of this Issues Paper is to provide an overview of the Manual and to elicit comment from interested parties on a range of matters pertinent to the Manual including:

- the level of transparency (detail) and accountability that ought to be provided in the Manual;
- the proposed assignment of overhead costs to particular Train Services as it affects Access Charges;
- whether the Manual should provide for the allocation of costs or reflect an internal trading environment where market based prices are charged for services rather than the allocation of actual costs incurred; and
- the most appropriate approach to be taken to the Manual in the context of the Authority's assessment of the undertaking.

## 2. OVERVIEW OF THE COSTING MANUAL

### 2.1 Purpose of the Costing manual

QR has submitted a Costing Manual to the QCA in order to comply with the requirements of the QCA Act. The Manual is intended to provide the basis for QR to keep its accounting records for Below Rail Services separate from its accounting records for its other operations. The Manual is to provide a basis for the preparation of a statement of assets (a partial balance sheet) and a statement of earnings before interest and tax (a partial profit and loss statement). QR does not intend to produce a partial cash flow statement for its Below Rail operations.<sup>3</sup>

Clause 1.3 provides that the principal purpose of the Manual is to provide guidance in the Identification, Attribution and Allocation of costs and assets as Above Rail Costs, Below Rail Cost and Other Activities Costs. The Manual is also intended to provide a methodological basis for identifying the cost components of the pricing limits (ie maximum and minimum prices) for Access Charges to apply to Train Services. Other purposes identified by QR include providing a reference point in access negotiations, to assist in the ringfencing of QR's costs and assets to Below Rail Services and to Geographic Regions.

### 2.2 Scope and administration of the Costing manual

The Costing Manual sets out (clause 2.1):

- the process for identifying the cost base for Below Rail Services, separate from other services provided by QR;
- within the cost base for Below Rail Services, the process for identifying;
  - costs attributable to specified Line Sections;
  - costs not attributable to specified Line Sections but attributable to specified Geographic Regions; and
  - Network Wide Costs, which are those costs not attributable to specified Line Sections or any specified Geographic Region;
- the process for identifying the cost components of the pricing limits (ie maximum and minimum prices) for Access Charges in accordance with the principles set out in the undertaking being:
  - costs (including capital charges) to be included in the Incremental Cost for the provision of Access to Train Services (to determine the price floor);
  - costs (including capital charges) to be included in the Stand Alone Cost for the provision of Access to Train Services (to determine the price ceiling).

QR proposes that the Costing Manual apply for the three year period corresponding to the term of the undertaking. However, QR reserves the right to withdraw the Manual earlier if it does not have an approved undertaking. QR may withdraw or amend the Manual with the QCA's approval (clauses 2.2 and 2.3). Clause 2.4 provides for an annual audit to be undertaken of QR's compliance with the Manual.<sup>4</sup>

---

<sup>3</sup> The respondents to the *Request for Comments – Draft Undertaking* paper gave strong support for the proposition that QR should prepare and publicly release a cash flow statement in respect of its operations relating to declared services each financial year.

<sup>4</sup> QR's proposed audit arrangements are considered in section 3 below.

## 2.3 Costing Framework

### *Organisational Structure*

QR intends that the Manual operate in the context of its proposed organisational structure. Under QR's proposed organisational structure, Network Access is not responsible for the provision of certain declared services, such as the operation of stations and platforms and train scheduling and train control (clause 3.1).<sup>5</sup> The Manual indicates that the functional assignment of costs will be drawn from responsibility based accounts reflecting QR's current organisational structure. Consequently, the costs for these Below Rail Services will be assigned to Above Rail Business Groups and be separately identified as relating to Below Rail Services.

### *Costing principles*

The costing approach detailed in the Manual is based on all costs and assets being (clause 3.2):

- Identified as Below Rail Costs or Assets where costs are directly incurred, or assets directly used, in the performance of Below Rail Services;
- Attributed on a reasonable basis of cost causality where costs are incurred, or assets are used, in common for the provision of Above Rail Services, Below Rail Services and/or Other Activities, and where there is a causal relationship between the resources used and Above Rail Services, Below Rail Services or Other Activities; and
- Allocated in a balanced manner where costs or assets are used jointly for the provision of Above Rail Services, Below Rail Services and/or Other Activities, and where there is no direct causal relationship between the resources used and Above Rail Services, Below Rail Services or Other Activities.

The fundamental principle underlying QR's approach to costing is therefore that costs and assets are, wherever possible, directly Identified or Attributed to a function/service so that the Allocation of costs is minimised. QR proposes to adopt the principle of materiality in the Manual.

### *Management Accounts*

QR proposes to implement the Manual in the production of its annual management accounts. The management accounts associate costs and assets to functional activities and, from this, separate costs and assets into Above Rail Costs, Below Rail Costs and Other Activities Costs. This information will underpin the derivation of the statement of assets and statement of earnings before interest and tax for Below Rail Services provided by Network Access (clause 3.3). The Manual explains the account coding, work order and survey systems that are deployed as part of the management accounts.

## 2.4 Identification of Below Rail Cost Base

The Identification, Attribution and Allocation of costs and assets within QR as Above Rail Costs, Below Rail Costs and Other Activities Costs is based on an identification of the function that they are physically associated with and the purpose for which the function is provided (clause 4.2).

---

<sup>5</sup> QR's Above Rail Groups will provide Train Services associated infrastructure maintenance. The QCA is aware of the views of stakeholders expressed in response to the *Draft Undertaking - Request for Comments* paper. The QCA is still considering the appropriateness of QR's proposed arrangements.

Figures 4.1 and 4.2 of the Manual shows the key functions provided by QR and indicates whether they are associated with Above Rail Services, Below Rail Services, Other Activities or Joint Functions for cost and asset assignment respectively. Tables 1 and 2 contained in Attachment 2 summarise QR's proposed assignment of responsibility for the allocation of Assets and Costs.

## 2.5 Hierarchy of Below Rail Costs

Once costs and assets have been assigned to Above Rail Services, Below Rail Services and Other Activities, the Below Rail costs and assets are Identified or Attributed to Line Sections, Geographic Regions or to the network as a whole for the purpose of developing Access Charges.

Assets and costs are allocated to Line Sections where they can be specifically identified or attributed to the Line Section. Where costs and assets associated with the provision of Below Rail Services cannot be Identified or Attributed to specified line sections they are allocated either to a defined region (of which there are 9) or on a network wide basis. Tables 3 and 4 contained in Attachment 2 detail how the Manual addresses this assignment of Below Rail Costs.

## 2.6 Access Pricing Limits

Section 6 of the Manual sets out rules for developing the stand alone and incremental costs for the purposes of establishing ceilings and floors for Access Charges.

### *Incremental costs*

The Incremental Costs of Train Services are determined by adding the incremental asset related costs and operating costs. In broad terms, QR's proposed approach is summarised as follows.

QR proposes there be no asset related incremental costs for Train Services which represent a small proportion of the traffic on a line and which does not require a higher standard of track than currently exists.

Incremental operating costs are those costs that would be avoided if the Train Services ceased to operate, assuming QR meets all other obligations. This is assumed to be zero where the Train Services constitute less than 1 million gross tonnes per annum and do not require a higher standard of track than currently exists. Where traffic exceeds 1 million gross tonnes per annum but is still only a small proportion of the total traffic, Table 6.1 provides the basis for assessing incremental variable costs.

Where Train Services constitute a significant proportion of traffic or require track of a higher standard, the asset related Incremental Costs are based on the assets that could be removed whilst QR fulfills its other existing obligations. In respect of these assets, the incremental asset related costs include depreciation, rate of return and any cost associated with premature replacement of assets arising from upgrades based on an asset value corresponding to the expected sale price of the assets.<sup>6</sup>

Where Train Services constitute a significant proportion of total traffic or require a higher track standard, incremental operating costs are broadly the long-run avoidable costs associated with the Train Services based on variable maintenance charges, and avoidable Region Specific and Network Wide costs.

---

<sup>6</sup> Clause 6.2.2 refers to the case of a New Train Service in which case the charges for assets that are prematurely replaced would be the depreciation that would otherwise be charged for those assets and a return on the assets that would have been available if they had not been replaced. This is equivalent to the sale price of the prematurely replaced assets forming part of the capital cost of the new assets that are constructed to provide the New Train Service.

The Incremental Costs of New Train Services are the additional costs associated with meeting the requirements of those services ie those costs beyond those incurred in QR meeting its existing obligations (ie both new assets and additional operating costs).

#### *Stand Alone Costs*

QR proposes that stand-alone costs be the sum of stand-alone asset related costs and stand-alone operating costs. In broad terms, QR's proposed approach is summarised as follows.

The stand-alone asset related costs include costs related to all assets necessary for operation of the Train Services. For Train Services that constitute all but a small proportion of existing trains, train kilometres or gross tonne kilometres, QR proposes there be no optimisation (with optimisation on the basis of capacity and the standard of track in other cases). QR does not indicate what constitutes a small proportion for this exercise.

Stand-alone operating costs are all costs based upon QR's forecast of operating costs with an additional allowance for external insurance. To quantify these stand-alone operating costs, QR proposes that the following be added:

- attributed electrical energy;
- where the Train Services constitute all but a small proportion of traffic on the line:
  - all costs relating to operating costs and assets that are able to be specifically Identified or Attributed to a Line Section;
  - Geographic Region costs less any incremental regional costs allocated to other traffics in that region<sup>7</sup>;
  - all Network Wide costs;

A case by case assessment relying upon engineering or operational estimates would be undertaken to estimate these costs.

---

<sup>7</sup> Although in general, only a very limited proportion of these costs would be allocated incrementally to other traffics.

---

### 3. TRANSPARENCY AND ACCOUNTABILITY OF APPROACH

#### 3.1 Transparency of proposed allocations

The Manual points out that many of QR's functions can be clearly identified as relating to Above Rail Services, Below Rail Services or Other Activities. Accordingly, the focus of the Manual is on those assets or costs that cannot be clearly assigned to one of these. In respect of these assets and costs, the Manual sets out guiding principles rather than detailed arrangements pursuant to which assignments will be effected. It appears that QR proposes to rely upon an audit process (discussed below) to provide the required level of transparency and accountability.

The Costing Manual indicates whether assets or costs will be Identified, Attributed or Allocated but does not provide clear indication of the basis of the assignment (with the exception of telecommunications).<sup>8</sup> For example, the Manual refers to the Attribution or Allocation of costs or assets being made on the basis of an analysis of the responsible cost centre and manager or asset type and location but, in general, the Manual does not indicate the basis of Attribution or Allocation. Similarly, whilst QR adopts the principle of materiality, no guidance is provided on what might constitute a materiality threshold.

There is a wide range of possible allocations that could be made consistently with a functional analysis - the Manual provides little if any guidance as to how such allocations may be effected. For example, departmental trains are charged to Below Rail Services on the basis of usage – is this to be net tonne kms, an allocation based on the stand alone cost of provision etc. Worked examples of the approach QR proposes to apply are not contained in the Manual. The effect of this approach is to potentially provide considerable discretion to QR as to how costs and assets may be assigned.

Moreover, to assign cost and asset related information for the Manual, QR will rely heavily on a system of account codes (for transactions), work orders (for rollingstock and infrastructure maintenance) and surveys to provide the necessary information (clauses 3.3(d), (f) and (g)). Clause 3.3(e) argues that the financial account coding and underlying information is collected and arranged such that it is suitable for functional analysis through the management account process. However, QR does not indicate how these processes will provide stakeholders with confidence that the account coding, work order and survey systems operate effectively (for example, there is no commitment to the publication of any of this information). One approach could involve the publication of the work papers that underpin the assignment of costs to the QCA (with only higher level financial information becoming publicly available).

QR proposes to utilise the approach it currently uses in its Financial Statements for the purposes of assessing and reporting on asset values and depreciation/amortisation expenses, rather than the values for these parameters used by the QCA for pricing purposes. Such an approach could result in significant discrepancies between reported figures and those underpinning the QCA's pricing decisions, with a corresponding reduction in transparency. One means of overcoming this concern may be for QR to publish details of asset values and depreciation amounts used for pricing purposes where these amounts depart from those reported in Financial Statements, either as notes to those Financial Statements or as part of a separate disclosure.<sup>9</sup>

One area where there is an absence of clear guidance on how QR intends the cost and asset allocation process to apply in practice is in the assignment of the benefits of vertical integration.<sup>10</sup> One of the key functions of the Manual is to assign benefits of synergies between QR (and, in turn, its shareholders) and customers. QR proposes that where it is not possible to

---

<sup>8</sup> However, even in respect of telecommunications, no basis is provided for QR's proposed allocation.

<sup>9</sup> The QCA is aware of the views expressed by stakeholders in response to the *Draft Undertaking – Request for Comments* paper relating to the level of financial disclosure proposed by QR.

<sup>10</sup> The QCA is aware of the views expressed by stakeholders in response to the *Draft Undertaking – Request for Comments* paper relating to the assignment of benefits from vertical integration.

Identify or Attribute a cost or asset as an Above Rail Cost, a Below Rail Cost or an Other Activities Cost, it be Allocated in a balanced manner. Accordingly, QR proposes that cost savings arising from vertical integration be shared between Above and Below Rail Services (clause 3.2(e)). However, QR gives no indication of how such a balance will be struck or the principles it proposes to apply in assigning those benefits.<sup>11</sup>

Figure 4.1 refers to corporate overhead being a joint function.<sup>12</sup> Clause 3.3(h) indicates that Corporate Services costs recorded in the general ledger in the corporate cost centres are transferred out to the appropriate cost function, in order to leave a residual of the “true” Corporate Overhead costs. However, the Manual does not explain how Corporate Overhead costs are transferred to the cost functions, or in fact identify the relevant cost functions. Accordingly, it is not clear how the process is intended to operate – the Manual provides no indication of the functions to which these costs will be allocated or the identity of the allocators.

**The Authority seeks comment on whether:**

- **the Manual should provide greater detail of the basis upon which costs and assets are Identified, Attributed or Allocated to functions**
- **the process of cost and asset Attribution and Allocation is sufficiently transparent having regard to:**
  - **the account coding**
  - **the system of work orders**
  - **surveys**
  - **the allocation of corporate services costs**
- **the Manual deals appropriately with the level of information on the Identification, Attribution and Allocation of costs and assets to be made available:**
  - **to the QCA**
  - **to other interested parties**
- **the Manual should more precisely identify the parameters that it proposes to underpin the Attribution or Allocation of assets and costs**
- **the Manual should provide for publication of any discrepancies between asset values and depreciation/amortisation amounts used for public reporting and pricing purposes**
- **explicit provision should be made for the assignment of the benefit of vertical integration, and if so, what rules should guide these arrangements**

<sup>11</sup> In the competitive Above Rail market, new entrants will determine the Above Rail haulage component of the total rail freight (with Access Charges, other things being equal, being passed through to customers). In such an environment, it could be argued that assigning the benefits of vertical integration to QR's above rail groups will provide QR with an unjustified competitive advantage since the cost structure of the above rail group will be lowered relative to that of entrants. Any cost advantage QR has will be expected to be represented by the increased profitability of its above rail business and its ability to win new market share. It could therefore be argued that the benefits of vertical integration that are not available to any of QR's competitors should be assigned to the below rail component of the business exclusively so that QR's Above Rail Business Groups and Third Party Operators would compete on an equal footing.

<sup>12</sup> Figures 4.1 and 4.2 refer to joint functions and joint resources respectively, but these terms are not defined elsewhere in the Manual. QR has advised that joint functions are those functions that relate to both Above Rail Services and Below Rail Services.

### 3.2 Accountability arrangements

Clause 2.4 of the Manual provides for the QCA to require QR's performance in complying with the Manual to be audited on an annual basis. QR reserves the right to appoint the auditor, provided that the identity of the auditor is reasonably acceptable to the QCA. There is no mechanism to address a situation where QR considers that the QCA's rejection of its nominated auditor is unreasonable.

The auditor's role under the Manual assumes considerable significance by virtue of the extent of the discretion QR confers upon itself in its cost and asset allocation processes. Accordingly, it would appear that QR is relying upon the audit process alone to provide interested parties with confidence in the integrity of the cost allocation process. However, the Manual does not provide any guidance on the scope of the audit process or on the powers of the auditor.

Moreover, it is unclear whether the audit report will provide interested parties with the confidence they desire. In this regard, the generality of the Manual provides such a wide range of possible parameters which may be used to assign assets and costs that it may be difficult for an auditor to find that an inappropriate Attribution or Allocation has occurred. Accordingly, the Manual could legitimise a wide variety of cost and asset assignment.

Unlike similar documents that apply in other jurisdictions, the Manual:

- does not provide for a process by which QR's directors would sign-off on its accounts as complying with the Manual;
- does not provide a framework within which the audit is to take place (including establishing the auditor's powers to obtain information etc);
- does not indicate the consequences of a qualified audit report.

**The Authority seeks comment on whether:**

- **the QCA or QR should appoint the auditor**
- **the Manual is sufficiently detailed for the proposed audit process to provide the necessary level of confidence**
- **QR's directors should publicly certify that the accounts comply with the Manual**
- **the auditor's role is sufficiently clear**
- **the manual should define an audit process that addresses the auditor's powers and the consequences of a qualified report**

#### 4. STAND ALONE COSTS AND ACCESS CHARGES

One of the purposes of the Manual is to ensure that Access Charges fall within the price limits defined in QR's draft undertaking (ie to ensure that Access Charges for Train Services fall within a band bounded by Incremental Costs and Stand Alone Costs). The Manual goes on to define how these bands are determined for pricing purposes.

However, QR's proposed rules for developing stand-alone costs raise a number of issues that need to be addressed, including:

- the application of the concept of Stand Alone Cost in the context of the coal system;
- the costs imposed by Train Services on other traffics on a system;
- the rules for assessing Stand Alone Costs; and
- self insurance by QR.

Implicit in QR's approach is that a stand-alone system built only to service coal traffic would be identical to QR's existing system. In practice, this may not be the case. Accordingly, it is possible that QR's approach could result in a greater proportion of costs than appropriate being assigned to particular traffics.<sup>13</sup>

This matter could be exacerbated by the fact that regions are widely defined in the Manual. For example, the Central Queensland Coal Region comprises the Newlands, Goonyella, Blackwater and Moura systems. QR argues that this approach is appropriate because any Allocation of Below Rail costs to more detailed geographic regions will be essentially arbitrary and possibly misleading for the calculation of Incremental Costs (clause 3.2(c)).

However, QR's approach will result in costs that cannot be assigned to Line Sections falling within a large Geographic Region. It could allow QR significant discretion in the allocation of costs that cannot be assigned to specific Line Sections across any one of the Reference Tariff geographical zones. This could result in the Stand Alone Cost for Train Services along a particular corridor being overstated.

In addition, QR's approach does not address the issue of whether the costs that Train Services impose upon other traffics on a system should, under certain circumstances, be considered to form part of the Incremental Costs of those Train Services.

An example where this may occur is where a livestock train secures priority over a coal train. Such an outcome would require the coal train to wait at a siding and impose costs on the coal train operator by virtue of it not being able to utilise its rollingstock for that time. There is a question as to whether the additional cost imposed on that coal train operator can be considered to be an additional Incremental Cost of the livestock train in the context of assessing the Stand Alone Cost of providing Access for that coal train.

In addition, there are a number of concepts contained in this part of the Manual that are unclear, such as a "small proportion" or a "significant proportion" of traffic. It is not clear what criteria are to be applied in practice in assessing what Train Services meet these threshold tests.

---

<sup>13</sup> QR also proposes a very limited optimisation for the purposes of assessing Stand Alone Costs. The QCA is aware of the comments received from stakeholders in response to its *Asset Valuation, Depreciation and Rate of Return* paper. The QCA is currently assessing whether there is evidence of excess capacity on QR's coal corridors in conjunction with the consideration of the optimisation of QR's infrastructure for the quantification of Reference Tariffs.

There is also the issue of the treatment of self insurance costs by QR. QR proposes that specific allowance be made for such costs. However, if allowance is made for the costs associated with derailments etc in the cash flow modelling, making further allowance for the costs associated with self insurance could result in recovery of the same costs more than once.

**The Authority seeks comments on whether:**

- **the determination of Incremental Costs for minimum Access Charges should include the opportunity costs those Train Services impose on other users**
- **the geographic regions should be more narrowly defined, especially where there may be concerns with monopoly pricing**
- **greater clarity is desirable in the definition of terms for establishing access pricing limits**
- **QR's proposed treatment for the costs associated with self insurance is appropriate**

## 5. APPROACHES TO COST ALLOCATION

A particular issue in respect of cost allocation arises in the context of internal services provided by QR to Network Access, where those services could be sourced outside of QR. Whilst this situation may not apply to all of the activities that are allocated through the Manual, it is likely that it could apply to the majority of Below Rail Services, including maintenance expenditure and certain corporate service activities such as payroll.

Broadly, there are two approaches that could be adopted:

- an assignment of costs based on QR's current general ledger accounts; or
- an assignment of costs based on internal trading arrangements. Under this approach, charges for internally sourced activities would be based on available market benchmarks rather than the cost allocation process.

### *General Ledger Approach*

The Manual is based on the first alternative (ie the general ledger) as distinct from an internal trading arrangement. Costs are allocated through the management accounts process rather than on the basis of available market benchmarks. This approach has the advantage of compatibility with QR's current general ledger and associated accounting protocols. Minor changes to QR's internal structure can be more easily accommodated under this approach.

However, it suffers the disadvantage of reducing the level of transparency about the costs of services delivered:

- by QR Network Access to Train Operators; and
- to QR Network Access by QR's Above Rail and Infrastructure Services groups.

The lack of transparency arises because of the number of allocation interactions that are necessary in this environment. For example, payroll costs for maintenance employees would go through several allocation interactions before reaching Below Rail Costs. In contrast, the cost of such services would be included in the contract based charge in an internal trading environment (providing a basis for charge to be compared to market rates).

### *Internal Trading Arrangements*

A cost allocation manual based on the second alternative would assign costs consistent with internal trading arrangements. For example, under such an approach, Below Rail Departmental Trains would not exist. Instead, QR Network Access would simply pay a market based rate for the use of Above Rail trains. Under such an approach, the use of trains for Below Rail Services would result in a transfer from the relevant user (Network Access or Infrastructure Services Group) to the relevant Above Rail provider and the assignment of all relevant costs to that Above Rail group.

The outcome of this approach is likely to facilitate transparency for the purposes of cost assignment by allowing the regulator (and, if appropriate other parties) to clearly see the basis of internal contracting arrangements. It is likely to be more transparent since it would promote greater transparency in the attributed cost of internally provided services.

It might be possible to provide sufficient transparency for internally provided services whilst maintaining QR's proposed approach, by publishing internal contract rates for those services provided to Below Rail functions. This would allow comparability with the rates of externally

service providers. Alternatively, if an internal trading approach is considered superior it may be possible to retain the current structure whilst producing financial statements for the various elements of QR's business.

**The Authority seeks comments on whether:**

- **the general ledger or internal trading approach should be adopted as the basis for the Manual (where internal trading is feasible)**
- **if the general ledger approach is adopted, what other information might be provided to make this approach more transparent.**

## 6. FUTURE APPROACH TO COST ALLOCATION

In this paper, the QCA has requested the views of interested parties on the nature of the cost allocation manual that is appropriate for QR having regard to the functions of a document of this type. In particular, the views of stakeholders have been sought in relation to the level of detail that ought to be contained in such a manual.

The Authority is currently involved in a process of assembling information to assist it assess the appropriateness of Reference Tariffs to be submitted by QR. As part of this, the Authority is undertaking a detailed cost assessment aimed at establishing the appropriate costs that should be paid by those seeking access to QR's network for the carriage of coal.

The Authority expects to gain considerable knowledge and insight into various cost allocation arrangements as part of the assessment of QR's Reference Tariffs. With this in mind, it may be more appropriate to consider QR's Costing Manual with the benefit of the experience of assessing QR's Reference Tariffs.

Under such an approach, the QCA's Draft and Final Decisions on QR's draft undertaking could set out the cost allocation arrangements as part of the publication of Reference Tariffs. These cost allocation arrangements could be established in conjunction with QR and interested parties in a forum attended by interested parties. Cost allocation arrangements underpinning the Reference Tariffs could be published as part of the Draft Decision. The QCA could then utilise its powers under the QCA Act and request QR to submit a Costing Manual after the publication of the QCA's final decision on QR's draft undertaking.

Under this approach, the costing manual would not be used for the initial setting of reference tariffs. However, it, would provide relevant information to the monitoring of QR's financial performance, particularly in relation to those services which are the subject of Reference Tariffs. It would also provide a basis for the setting of Reference Tariffs as part of future regulatory reviews.

Alternatively, it would be possible to either accept QR's Manual or accept it subject to amendment as part of the Authority's Draft Decision on QR's draft undertaking. However, if substantially more detail is considered to be appropriate for the Manual, then a significant delay could be expected in the review process. Having regard to the urgency associated with the finalisation of the QCA's assessment of QR's draft undertaking, the views of interested parties are sought in relation to the most appropriate approach to progress this matter.<sup>14</sup>

**The Authority seeks comments on whether:**

- **the Manual should be finalised after the Authority has assessed the other aspects of QR's draft undertaking, with cost allocation required for the Authority's assessment of Reference Tariffs being published as part of the Authority's decision material; or**
- **the Manual should be finalised before the QCA issues a final decision**

---

<sup>14</sup> The QCA is aware of the views expressed by stakeholders in response to the *Draft Undertaking – Request for Comments* paper relating to the desirability of finalising the Costing Manual as part of the QCA's assessment of QR's Draft Undertaking.

**ATTACHMENT 1: ASSIGNMENT OF ASSETS AND COSTS TO ABOVE AND BELOW RAIL GROUPS****TABLE 1: ASSET ASSIGNMENT BETWEEN ABOVE AND BELOW RAIL**

(See Figure 4.2 in the Manual)

<b>Asset Category</b>	<b>Relevant Areas</b>	<b>Asset Allocator</b>
Rollingstock locomotives (4.3.2.1(c))	Above and Below Rail	Above Rail cost, except non-revenue trains. These are Attributed as Above Rail or Below Rail cost according to the extent of their usage for those purposes.
Wagons (4.3.2.1(d))	Above and Below Rail	Above Rail cost, except non-revenue trains. These are Identified to areas within QR through an analysis of cost centre and responsible manager – then Identified, Attributed or Allocated to Above Rail or Below Rail in a manner consistent with how the relevant function is Attributed or Allocated
Trackwork and Civil Works, including corridor land, civil works, track, field signals and traction power distribution equipment (4.3.2.2)	Above and Below Rail	To each line section, unless the line section refers to a yard or to a section of through corridor and a yard whereupon assets are attributed on the basis of track kilometres and track standard designated as Above Rail and Below Rail and the standard of the track. It is assumed that land for Above Rail track is immaterial
Traction Power Supply Equipment (4.3.2.3)	Below Rail	
Facilities and Buildings (4.3.2.4)	Above Rail, Below Rail or other Activity	Identified to functions within QR through an analysis of asset type and location – then Identified, Attributed or Allocated to Above Rail or Below Rail in a manner consistent with how the relevant function is Attributed or Allocated.
Plant and Equipment (4.3.2.5)	Above and Below Rail	All track maintenance equipment is attributed to Below Rail. Other plant and equipment is Identified to functions within QR through an analysis of cost centre and responsible manager – then Identified, Attributed or Allocated to Above Rail or Below Rail in a manner consistent with how the relevant function is Identified Attributed or Allocated.
Control Systems (4.3.2.6)	Above and Below Rail	Identified to functions within QR – then Identified, Attributed or Allocated to Above Rail or Below Rail in a manner consistent with the treatment of the relevant function.
Telecommunications (4.3.2.7)	Above and Below Rail	Allocation between Above Rail and Below Rail of 40 per cent and 60 per cent respectively.
Land (4.3.2.8)	Above Rail, Below Rail and Other Activity	Identified to functions within QR through an analysis of asset type and location – then Identified, Attributed or Allocated to Above Rail, Below Rail or Joint Resource in a manner consistent with how the relevant function is Attributed or Allocated.

**TABLE 1 cont'd: Asset assignment between above and below rail**

(see Figure 4.2 in the Manual)

<b>Asset Category</b>	<b>Relevant Areas</b>	<b>Asset Allocator</b>
Motor Vehicles (4.3.2.9)	Above Rail, Below Rail and Other Activity	Motor vehicles not controlled by central fleet are identified to an area within QR based on an analysis of responsible cost centre and manager. Motor vehicles controlled by central fleet are attributed to areas within QR proportionately to usage. Once identified or attributed to areas motor vehicles become associated with the functions provided by those areas and are then Attributed or Allocated to Above Rail, Below Rail or Other Activities in a manner consistent with how the relevant function is Attributed or Allocated..
Construction in progress (4.3.2.11)	Above Rail, Below Rail and Other Activities	Attributed on the basis of the Identification of each project to Above or Below Rail or Other.
Receivables (4.4.3(a))	Above Rail, Below Rail and Other Activities	Identified to business areas through an analysis of the customer and the nature of the service that is provided to that customer, then Attributed or Allocated in a manner consistent with the way in which that function/business is Attributed or Allocated.
Inventories (4.4.3(b))	Above Rail, Below Rail and Other Activities	Where possible inventories are identified as Above or Below Rail or Other Activities Costs based on the nature of the inventory stock. Where this is not possible, once Identified to a business group, assets are Attributed or Allocated consistent with the proportion of that business group's total working expenses (excluding fuel and traction electricity).
Prepayments (4.4.3(c))	Above Rail, Below Rail and Other Activities	Identified to business areas through an analysis of the service provider and the nature of the service. Once Identified to business areas, these assets are Attributed or Allocated in a manner consistent with the way in which that function is Attributed or Allocated. are Identified as Other Activities
Cash, deferred finance lease expenses and future income tax benefit (4.4.3(d))	Other Activities	Identified as Other Activities Costs

**TABLE 2: COST ALLOCATION BETWEEN ABOVE AND BELOW RAIL**

(See Figure 4.3 in the Manual)

<b>Operating Cost Category</b>	<b>Relevant Areas</b>	<b>Cost Allocator</b>
Train Crew (4.5.1.1(d))	Above and Below Rail	Analysed by depot and costs allocated on work tasks performed. Crew costs are allocated on the basis of crew time. For Non-revenue (Above and Below Rail) trains, crew time will be calculated on the basis of estimated average non-revenue train speeds.
Fuel (4.5.1.1(e))	Above and Below Rail	Attributed on the basis of consumption patterns by locomotive class by locomotive kilometre.
Rollingstock Maintenance (4.5.1.1(f))	Above and Below Rail	Allocated to Above Rail or Below Rail based on an assessment of the usage of the rollingstock for each activity.
Car Provisioning and Cleaning	Above Rail	
On-board Services and Catering	Above Rail	
Contract Road Services	Above Rail	
Traction Electricity (4.5.1.2)	Below Rail	
Shunt Engines and Crew (4.5.2(b))	Above and Below Rail	Attributed to shunting of trains by yard on the basis of surveys of hours of operation of shunt locomotives and the purpose for which they are used.
Shunters and Number Takers	Above and Below Rail	
Freight Terminals	Above Rail	
Passenger Services	Above Rail	
Revenue Protection and Security	Above Rail	
Examination of Rollingstock	Above Rail	
Station Catering	Above Rail	

**TABLE 2 cont'd: Cost Allocation between above and below rail**

(See Figure 4.3 in the Manual)

<b>Operating Cost Category</b>	<b>Relevant Areas</b>	<b>Cost Allocator</b>
General principles relating to items under category 4.5.3.1		<p>Work orders are used to identify both the nature of maintenance activities and the location at which maintenance occurs, by way of Line Section code or station code. Where a Line Section code relates solely to a yard, or to a section of through corridor and a yard, maintenance costs are attributed as Below Rail or Above Rail costs based on the extent to which the yard is designated a common use yard (Below Rail Services) or Railway Operator Specific (Above Rail Services).</p> <p>Where work orders do not identify separately the location of the maintenance activity within the Line Section, the maintenance costs are Attributed as Below Rail Costs or Above Rail Costs based on the extent to which the yard is designated as being required for Below Rail Services or for Above Rail Services.</p>
Track and Bridge Maintenance (4.5.3.1(c)(i))	Above and Below Rail	Based on the proportion of Track kilometres in the Line Section that are designated as being for the purpose of Above Rail Services and Below Rail Services and the standard of Track that is required those parts of the Line Section that are designated as being for the purpose of Above Rail Services and Below Rail Services
Signal Maintenance(4.5.3.1(c)(ii))	Above and Below Rail	Identified fully as a Below Rail Cost except where there is a material portion of field signals in an area of the Line Section designated for Above Rail Services. In these circumstances, signal maintenance is Attributed as Above Rail Costs and Below Rail Costs based on an assessment of the extent and type of signals in the Line Section that are designated as being for the purposes of the Railway Operator specific section of the Line Section (Above Rail Services) or the common user section of the Line Section (Below Rail Services).
Traction Power Distribution Maintenance (4.5.3.1(c)(iii))	Above and Below Rail	Traction distribution maintenance costs are Attributed as Above Rail Costs and Below Rail Costs consistent with the proportion of electrified Track kilometres in the relevant Line Section that are designated as being for the purposes of Above Rail Services and Below Rail Services.
Traction Power Supply Maintenance (4.5.3.2)	Below Rail	
Derailment and Collision Costs (4.5.3.3)	Above and Below Rail	Where the reason for a derailment or collision is able to be identified and linked to the reported costs the cost associated will be allocated on a causation basis ie to Above or Below Rail. Where the reason for a derailment or collision is not identified and/or not linked to the reported costs the cost of infrastructure repair is identified as Below Rail while the cost of repairing Rollingstock is Above Rail.
Train Control and Safeworking (4.5.3.4)	Above and Below Rail	Costs associated with train control are Identified separately from other costs of other activities within train operations areas and are Below Rail costs. All other activities undertaken in train operation centres are Above Rail Costs.
Telecom Maintenance (4.5.3.5)	Above Rail, Below Rail and Other Activity	Allocation between Above and Below Rail of 40 per cent and 60 per cent respectively.

**TABLE 2 cont'd: Cost Allocation between above and below rail**

(See Figure 4.3 in the Manual)

<b>Operating Cost Category</b>	<b>Relevant Areas</b>	<b>Cost Allocator</b>
Facilities Maintenance (4.5.3.6)	Above Rail, Below Rail and Other Activity	The costs associated with maintaining specific facilities are function related. Maintenance of all Stations and platforms are included as Below Rail Costs (although separately identified, as QR has allocated these items to Above rail groups).
Group Administration (4.5.4(b))	Above Rail, Below Rail and Other Activity	Based on the function being performed. For Network Access, the costs are Identified as Below Rail. For those groups whose primary purpose is to operate train services, the costs are Allocated as Above Rail Costs and Below Rail Costs <i>pro rata</i> on the total expenses of that group that are Identified, Attributed or Allocated as Above Rail Costs and Below Rail Costs. For those groups whose purpose is to provide support activities for Network Access and the business groups operating Train Services, the costs are treated as part of the function being performed, and are Attributed or Allocated as Above Rail Costs, Below Rail Costs and Other Activities Costs in a manner consistent with how that function is Attributed or Allocated as an Above Rail Service, Below Rail Service or Other Activities.
Operations Administration (4.5.4(c))	Above Rail, Below Rail and Other Activity	Where possible, the activities performed within operations administration are Identified or Attributed to Above Rail Services and Below Rail Services. The remaining operations costs are allocated on a pro rata basis on the total operations expenses of that group.
Infrastructure Administration (4.5.4(d))	Above Rail, Below Rail and Other Activity	The administration of the cost of specific maintenance categories are attributed to Above Rail and Below Rail Costs based on the expenditure within that group on the maintenance of infrastructure in each of those categories. The remaining costs are allocated on a pro rata basis on the total expenditure on infrastructure maintenance by the relevant business group.
Rollingstock Administration (4.5.4(e))	Above Rail	The administration associated with Below Rail rollingstock is not considered material.
Corporate Overheads (4.5.5)	Above Rail, Below Rail and Other Activity	Attributed on a usage basis to specific functions. Corporate Overheads are allocated on a percentage mark-up on all other costs excluding overhead, interest and depreciation. Other corporate costs are variously allocated eg: surplus staff on the basis of the function of the specific surplus staff, VERs and most other items are Allocated on the same basis as corporate overheads.
Loss on Disposal of Assets (4.5.6)	Above Rail, Below Rail and Other Activity	Any loss on disposal of assets is Identified to an area within QR through an analysis of the cost centre against which the loss is recorded. The loss is then identified, attributed or allocated as an Above Rail or Below Rail costs in a manner consistent with how that function is identified attributed or allocated as Above Rail Services, Below Rail Services or other Activities.

**TABLE 3: ASSIGNMENT OF BELOW RAIL ASSETS TO LINE SECTIONS AND GEOGRAPHIC REGIONS**

(See Figure 5.1 in the Manual)

<b>Asset Category</b>	<b>Line Section/Region/ Network Wide</b>	<b>Basis for Assignment</b>
Corridor Land (5.2.1(a))	Line Section	Assets that are required for the provision of the through railway corridor and common use yards are Line Section Specific and are identified to the Line Section on which they are located.
Rollingstock (5.2.2(a))	Region/Network wide	Generally region-specific except for certain specialised equipment, such as track recording equipment, which is treated as network wide.
Track and Civil Works (5.2.1(a))	Line Section	Assets that are required for the provision of the through railway corridor and common use yards are Line Section Specific and are identified to the Line Section on which they are located.
Facilities (5.2.2(c))	Line Section/ Region/Network Wide	Where facilities are used for the performance of functions that relate to more than a single Line Section, but are not used for the performance of functions that related to the network as a whole, these facilities are region specific. Where these region specific facilities are used for the performance of functions related solely to a particular geographic region, the assets are identified to that region. Where the region specific facilities are used for the performance of functions that relate to more than one region, and the impact is material, the assets are attributed to the relevant geographic regions in accordance with an assessment of usage of that facility for the purpose of provision of Below Rail Services in the relevant geographic regions.  Where facilities are used for the performance of functions that relate to the network as a whole these facilities are Network Wide.
Field Signals (5.2.1(a))	Line Section	Assets that are required for the provision of the through railway corridor and common use yards are Line Section Specific and are identified to the Line Section on which they are located.
Control Systems (5.2.2(e))	Region specific	Identified to a particular Geographic Region based on the location and nature of the control system and the type of traffic that is operated in that Geographic Region. Where a Control System relates to more than one Geographic Region, and the impact is material, the assets are Attributed to the relevant Geographic Regions in accordance with an assessment of usage of those Control Systems for the purpose of provision of Below Rail Services in the relevant Geographic Regions.
Telecommunications (5.2.3(b))	Network Wide	All telecommunications assets that are Allocated as Below Rail Costs are treated as Network Wide.
Traction Power Distribution Equipment (5.2.1(a))	Line Section	Assets that are required for the provision of the through railway corridor and common use yards are Line Section Specific and are identified to the Line Section on which they are located.
Traction Power Supply Equipment (5.2.2(b))	Region Specific	Identified to the geographic region in which they are located.

**TABLE 3 cont'd: ASSIGNMENT OF BELOW RAIL ASSETS TO LINE SECTIONS AND GEOGRAPHIC REGIONS**

(See Figure 5.1 in the Manual)

<b>Asset Category</b>	<b>Line Section/Region/ Network Wide</b>	<b>Basis for Assignment</b>
Plant and Equipment (5.2.2(h), 5.2.3(a))	Region Specific/Network Wide	Where plant and equipment is used for the performance of functions that relate to the provision of Below Rail Services in an area of the network, rather than for the network as a whole, these assets are region specific and are identified to the geographic region in which they are located. Where items of Track maintenance equipment are major items used throughout the entire network these assets are treated as Network Wide.
Motor Vehicles (5.2.2(f), 5.2.3(e))	Region Specific/Network Wide	Where motor vehicles are used for the performance of functions that relate to the provision of Below Rail Services in a geographic region, these motor vehicles are Region Specific and are identified to the geographic region in which that function is performed. If they relate to the network as a whole these motor vehicles are Network Wide.
Computers and Miscellaneous (5.2.2(g), 5.2.3(f))	Region Specific/Network Wide	Where computers and miscellaneous office equipment is used for the performance of functions that relate to the provision of Below Rail Services in a geographic region, these assets are region specific and are identified to the geographic region in which that function is performed.  Where computers and miscellaneous office equipment is used for the performance of functions that relate to the network as a whole, these assets are network wide.
Construction in Process (5.2.2(j), 5.2.3(g))	Line Section/Region Specific	Construction (of assets) in progress would be treated in the same manner as the relevant assets.
Receivables (5.2.3(h))	Network Wide	
Inventories (5.2.2(i))	Region Specific/Network Wide	Inventory held in local infrastructure depots is treated as region specific and is Identified to the region in which the depot is located.
Prepayments (5.2.3(h))	Network Wide	

**TABLE 4: ASSIGNMENT OF BELOW RAIL OPERATING COSTS TO LINE SECTIONS AND GEOGRAPHIC REGIONS**

(See Figure 5.2 in the Manual.)

<b>Cost Category</b>	<b>Line Section/Region/ Network Wide</b>	<b>Basis for Assignment</b>
Costs Associated with non-revenue Below Rail Trains (5.4.1(c))	Line Section	Where possible, work orders will identify the location of the maintenance activity for which specific Trains are operated, and the relevant non revenue below rail train running expenses will be Identified to that Line Section. Where work orders do not specifically identify the location of the relevant maintenance, non revenue below rail train running expenses will be Attributed to the Line Sections within the relevant Geographic Region based on the expenditure on Track maintenance for the various Line Sections in that Geographic Region.
Train Control (5.4.2(c))	Region Specific	Where train operations cross regional boundaries, train control costs are Identified or Attributed to the geographic regions covered by the relevant train control centre.
Safeworking (5.4.2(d))	Region Specific	Safeworking costs are treated as Region Specific Costs. Where material, safeworking costs associated with stations that manage the movement of Trains across a number of geographic regions are attributed to the relevant geographic regions on the basis of the train kilometres operated in each of those geographic regions.
Track and Bridge, Signals, Traction Power Distribution Maintenance (5.4.1(a))	Line Section	Operating expenses relating to the maintenance of Track and associated assets that are required for the provision of the through railway corridor are Line Section Specific.
Traction Power Supply Maintenance (5.4.2(a))	Region Specific	Maintenance costs associated with traction power supply assets are Region Specific and are Identified to the Geographic Region in which they are incurred.
Telecommunications Maintenance (5.4.3(a))	Network Wide	All telecommunications costs that are allocated as Below Rail Costs are treated as Network Wide.
Facilities Maintenance (5.4.1(b), 5.4.2(b))	Line Section/ Region/Network Wide	<p>Operating expenses relating to the maintenance of facilities that are required for the provision of Rail Infrastructure in the immediately surrounding location are Line Section Specific and are Identified to the Line Section on which they are incurred.</p> <p>Maintenance costs associated with facilities that are used for the performance of functions that relate to more than a single Line Section, but not to the network as a whole, are Region Specific. Where the region specific facilities are used for the performance of functions that relate to more than one region, and the impact is material, the assets are attributed to the relevant geographic regions in accordance with an assessment of usage of that facility for the purpose of provision of Below Rail Services in the relevant geographic regions.</p>

**TABLE 4 cont'd: Assignment of below rail operating costs to line sections and geographic regions**

(See Figure 5.2 in the Manual.)

<b>Cost Category</b>	<b>Line Section/Region/ Network Wide</b>	<b>Basis for Assignment</b>
Derailment and Collision Costs (5.4.2(e))	Region Specific	Considered to be a reflection of the standard of the Rail Infrastructure in that area and the nature of the Train Services operating on that Rail Infrastructure. In this regard the costs are considered to be region specific.
Group Administration (5.4.3(e))	Network Wide	
Operations Administration (5.4.2(f), 5.4.3(c))	Region Specific/ Network Wide	Regional operations administration is identified as all operations administration related to cost centres where the responsible manager's sphere of control relates to a single geographic region or to a small number of geographic regions. Where the sphere of control relates to a number of regions the costs are attributed to the relevant geographic region based on the operations administration expenditure able to be Identified to each of those geographic regions.
Infrastructure Administration (5.4.2(g), 5.4.3(d))	Region Specific/ Network Wide	Infrastructure administration is identified as all administration related to cost centres where the responsible manager's sphere of control relates to a single geographic region or to a small number of geographic regions. Where the sphere of control relates to a number of regions the costs are attributed to the relevant geographic region based on the relevant category of infrastructure maintenance expenditure able to be Identified to each of those geographic regions.
Corporate Overhead (5.4.3(f))	Network Wide	
Loss on Disposal of Assets (5.4.2(h), 5.4.2(g))	Line section/Region/ Network Wide	Allocated on the basis the assets had been allocated.

ATTACHMENT

# **COSTING MANUAL**



## TABLE OF CONTENTS

<b>1. PURPOSE OF COSTING MANUAL</b>	<b>1</b>
1.1 Background	1
1.2 Legislative Context	1
1.3 Purpose	1
<b>2. SCOPE AND ADMINISTRATION OF COSTING MANUAL</b>	<b>4</b>
2.1 Scope of Costing Manual	4
2.2 Duration of Costing Manual	4
2.3 Review of Costing Manual	5
2.4 Audit of Compliance with Costing Manual	5
<b>3. COSTING FRAMEWORK</b>	<b>7</b>
3.1 Organisational Structure	7
3.2 Costing Principles	8
3.3 Management Accounts	9
<b>4. IDENTIFICATION OF BELOW RAIL COST BASE</b>	<b>13</b>
4.1 Introduction	13
4.2 Identification of Below Rail Functions	13
4.3 Treatment of Assets	14
4.3.1 <i>Classification of Assets</i>	14
4.3.2 <i>Fixed Assets</i>	15
4.3.3 <i>Other Assets</i>	20
4.4 Assessment of Below Rail Depreciation/Amortisation	21
4.5 Treatment of Operating Costs	21
4.5.1 <i>Train Running Costs</i>	22
4.5.2 <i>Direct Station and Terminal Costs</i>	23
4.5.3 <i>Corridor Costs</i>	24
4.5.4 <i>Business Administration Costs</i>	26
4.5.5 <i>Corporate Overheads</i>	29
4.5.6 <i>Loss on Disposal of Assets</i>	30
<b>5. HEIRARCHY OF BELOW RAIL COSTS</b>	<b>32</b>
5.1 Introduction	32
5.2 Treatment of Assets	32
5.2.1 <i>Line Section Specific</i>	33
5.2.2 <i>Region Specific</i>	33
5.2.3 <i>Network Wide</i>	35
5.3 Assessment of Below Rail Depreciation/Amortisation	35
5.4 Treatment of Operating Expenses	36

---

5.4.1	<i>Line Section Specific</i>	36
5.4.2	<i>Region Specific</i>	37
5.4.3	<i>Network Wide</i>	39
5.5	Traction Electricity	39
<b>6.</b>	<b>ACCESS PRICING LIMITS</b>	<b>42</b>
6.1	Approach to Access Pricing	42
6.2	Incremental Cost of Providing Access	42
6.2.1	<i>Assessment of Incremental Cost</i>	42
6.2.2	<i>Incremental Assets</i>	43
6.2.3	<i>Incremental Operating Costs</i>	45
6.2.4	<i>Incremental Capital Charges</i>	49
6.3	Stand Alone Cost of Providing Access	51
6.3.1	<i>Assessment of Stand Alone Cost</i>	51
6.3.2	<i>Stand Alone Assets</i>	51
6.3.3	<i>Stand Alone Operating Cost</i>	53
6.3.4	<i>Stand Alone Capital Charges</i>	55
<b>7.</b>	<b>DEFINITIONS</b>	<b>58</b>
<b>8.</b>	<b>GEOGRAPHIC REGIONS AND SYSTEMS</b>	<b>63</b>

---

## 7. 1. PURPOSE OF COSTING MANUAL

### 1.1 Background

- (a) QR has developed an Undertaking that provides the framework for negotiations with Third Party Operators for Access to Rail Infrastructure for the purpose of operating Train Services.
- (b) The intent of the Undertaking is *inter alia* to ensure that Access negotiations are conducted expeditiously on a commercial basis, and in a competitively neutral environment. The Undertaking seeks to ensure that there will be no Cross Subsidy between individual Train Services or between combinations of Train Services. It also outlines pricing principles to be employed in determining applicable Access Charges.
- (c) QR is an integrated railway provider, in that it provides both Below Rail Services as a Railway Manager and Above Rail Services as a Railway Operator. QR is obligated, under the Act, to keep accounting records for Below Rail Services separate from its accounting records for its other operations. Consistent with this obligation, the Undertaking contains a requirement for the production of separate financial accounts for Below Rail Services provided by Network Access. These financial accounts will take the form of a statement of assets (a partial balance sheet) and a statement of earnings before interest and tax (a partial profit and loss statement). Given that Network Access is not responsible for providing all Below Rail Services, in order to ensure that it complies with the provisions of the Act, QR will also separately identify the costs and assets associated with Below Rail services provided by business groups within QR other than Network Access.
- (d) In order to assist in its compliance with the Act and the Undertaking, QR has developed this Costing Manual (referred to as the “Manual”).

### 7.1 1.2 Legislative Context

The Undertaking is a voluntary undertaking as provided for in the Act. This Manual has been prepared in accordance with the requirements of the Undertaking.

### 7.2 1.3 Purpose

- (a) The principal purpose of the Manual is to provide guidance in the Identification, Attribution and Allocation of costs and assets as Above Rail Costs, Below Rail Costs and Other Activities Costs and a methodological basis for identifying the cost components of the pricing limits for Access Charges to apply to a Train Service or combination of Train Services (as appropriate).
- (b) The Manual is to provide a point of reference in negotiating Access Charges for Railway Operators, and if necessary, for an expert or the

QCA in investigating QR's application of the pricing principles set out in the Undertaking.

- (c) The Manual is designed to assist in the ringfencing of QR's costs and assets to Below Rail Services and, where applicable, to geographic locations.
- (d) The Manual establishes a methodology for the Identification, Attribution and Allocation of costs based on the accounting information available and methodologies applicable at the time of its development. Where, in the future, costs or assets are identified for which the Identification, Attribution or Allocation methodology has not been explicitly defined within this Manual, QR will, as far as reasonably possible, Identify, Attribute or Allocate these costs and assets in a manner consistent with the methodology and principles defined within the Manual.



**8. 2. SCOPE AND ADMINISTRATION OF COSTING MANUAL**

**8.1 2.1 Scope of Costing Manual**

The Manual sets out:

- (e) The process for identifying the cost base for Below Rail Services provided by QR separate from other services provided by QR.
- (f) Within the cost base for Below Rail Services, the process for identifying:
  - (i) costs and assets attributable to specified Line Sections;
  - (ii) costs and assets not attributable to specified Line Sections but attributable to specified Geographic Regions; and
  - (iii) costs and assets not attributable to specified Line Sections or any specified Geographic Region;
- (g) The process for identifying the cost components of the pricing limits for Access Charges, in accordance with the principles set out in the Undertaking, and in particular:
  - (i) costs (including capital charges) to be included in the Incremental Cost for the provision of Access to a Train Service or combination of Train Services (which is then used in determining the price floor);
  - (ii) costs (including capital charges) to be included in the Stand Alone Cost for the provision of Access to a Train Service or combination of Train Services (which is then used in determining the price ceiling); and
- (h) The Geographic Systems referred to in the Undertaking.

**8.2 2.2 Duration of Costing Manual**

- (i) The Manual will take effect on the date that it is approved by the QCA in accordance with the provisions of the Undertaking (herein referred to as the “Commencing Date”) and any Identification, Attribution or Allocation of costs made after the Commencing Date must be in accordance with this Manual.
- (j) The Manual will apply for a period of three (3) years from the Commencing Date.
- (k) If, at any time during the term of the Manual, QR does not have an approved Undertaking, QR may withdraw the Manual.

- (l) Apart from in the circumstances identified in Paragraph (c), QR may withdraw the Manual at any time, provided it has received the written agreement to such withdrawal by the QCA.

**8.3 2.3 Review of Costing Manual**

- (m) If it is necessary to change the Manual in order to ensure that it remains consistent with the Undertaking, QR will submit amendments to the Manual to the QCA within one (1) month of the QCA's approval of the relevant changes to the Undertaking.
- (n) If, at any time during the term of the Manual, QR is of the view that changes to the Manual are desirable, QR may submit amendments to Manual to the QCA.
- (o) Where amendments to the Manual are submitted to the QCA, the QCA must consider the amendments to the Manual, and approve, or not approve the amendments to the Manual. If the QCA does not approve the amendments to the Manual, the previously approved Manual will continue to apply. If the QCA does approve the amendments to the Manual, the amended Manual will apply from the date of the QCA's approval of the amendments.

**2.4 Audit of Compliance with Costing Manual**

- (p) The QCA may require QR's performance in complying with the Costing Manual to be audited on an annual basis.
- (q) Any audit undertaken in accordance with Paragraph (a) will be separate to the audit of QR's Financial Statements.
- (r) In the event that the QCA requires an audit as provided for in Paragraph (a), the audit will be undertaken by a person who has sufficient expertise and experience in the area of costing of railway activities. The auditor will be appointed by QR, provided that the identity of the auditor is reasonably acceptable to the QCA.



**9. 3. COSTING FRAMEWORK**

**9.1 3.1 Organisational Structure**

- (s) QR has established its organisational structure to facilitate a level of separation of the management of Rail Infrastructure from the operation of Train Services, while recognising the need to share some resources.
- (t) Network Access has been established as a business group of QR, separate from those business groups within QR that operate Train Services. Apart from as set out in Paragraph (c) below, Network Access is responsible for the provision of Below Rail Services. In addition, there are service groups whose purpose is to provide support activities for both Network Access and the business groups operating Train Services.
- (u) The business groups that operate Train Services are responsible for the provision of certain Below Rail Services, being the management of stations and platforms and the provision or procurement of appropriate levels of maintenance and investment in those stations and platforms.
- (v) In addition, the business groups that operate Train Services perform certain Below Rail Services on behalf of Network Access, either directly or indirectly through QR's service groups, as follows:
  - (i) provision and management of train scheduling, train control and associated safeworking and incident management services in accordance with the Scheduling and Train Control Protocols specified by Network Access; and
  - (ii) operation and management of Train Services (including shunting) required for maintenance and enhancement of Rail Infrastructure.
- (w) The principles of cost Identification, Attribution and Allocation recognise that QR's organisational structure may change over time. Therefore, the Identification, Attribution and Allocation of costs and assets are based on functions regardless of the area within QR that provides them. The principles in the Manual have been developed on this basis, however at any point in time costing information will be drawn from responsibility-based accounts reflecting QR's current organisational structure.

**9.2 3.2 Costing Principles**

- (x) The fundamental principle underlying QR's approach to costing is that, wherever possible, costs and assets are directly Identified or Attributed to a function, and functions are directly Identified or Attributed as a Below Rail Service, Above Rail Service or Other Activities. Costs and assets are only Allocated to a function/service where it is not possible or practical to disaggregate those costs and assets in a manner that allows for them to be directly Identified or Attributed to a function/service. This principle precludes the application of general rules of allocation that apply in all circumstances. Rather, it requires a detailed process to be put in place to analyse the assets owned, and the costs incurred, by QR.
- (y) The costing mechanisms described in the Manual are based on the following methodology:
  - (i) Where costs are directly incurred, or assets directly used, in the performance of Below Rail Services, those costs and assets are directly Identified as Below Rail Costs;
  - (ii) Where costs are incurred, or assets are used, in common for the provision of Above Rail Services, Below Rail Services and/or Other Activities, and where there is a causal relationship between the resources used and Above Rail Services, Below Rail Services or Other Activities, these costs are Attributed on a reasonable basis of cost causality; and
  - (iii) Where costs or assets are used jointly for the provision of above Rail Services, Below Rail Services and/or Other Activities, and where there is no direct causal relationship between the resources used and Above Rail Services, Below Rail Services or Other Activities, these costs are Allocated on a reasonable basis.
- (z) In order to achieve the requirements under the Act whilst operating within the fundamental principle identified in Paragraph (a), QR applies this costing methodology so that:
  - (i) All costs and assets must be Identified, Attributed or Allocated as Above Rail Costs, Below Rail Costs or Other Activities Costs;
  - (ii) Within each of these overarching categories, Allocation of costs and assets is minimised. Rather, costs and assets are Identified or Attributed to the functions and, hence, the type of activity, for which they are incurred. For example, costs that are incurred in providing train control services are Identified as relating to the region across which those train control services are provided – they are not Allocated to the provision of the individual line

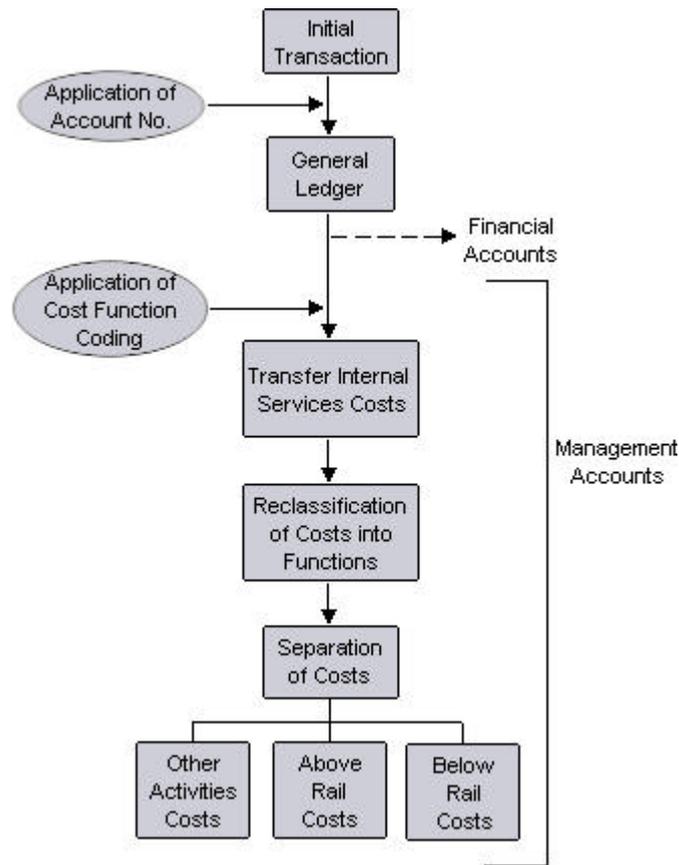
sections within that region. Any Allocation of Below Rail Costs to a more detailed geographical level than at which they are incurred is essentially arbitrary in nature and could be misleading in the context of assessing the Incremental Cost for a Train Service or combination of Train Services in accordance with Clause 6.2.

- (aa) In assessing how costs and assets are to be Identified, Attributed and Allocated as Above Rail Costs, Below Rail Costs and Other Activities Costs, QR will only Attribute or Allocate costs and assets if, in aggregate, the impact of such Attribution or Allocation will be material to the assessment of Above Rail Costs, Below Rail Costs and Other Activities Costs.
- (bb) Where it is not possible to Identify or Attribute a cost or asset as an Above Rail Cost, a Below Rail Cost or an Other Activities Cost, QR Allocates that cost or asset to Above Rail Costs, Below Rail Costs and Other Activities Costs on the principle that the costs should be Allocated in a balanced manner. As a result, any cost savings achieved by QR due to its nature as an integrated railway are shared between Above Rail Services and Below Rail Services.
- (cc) The Identification, Attribution and Allocation of costs and assets in accordance with the Manual shall be performed by an area within QR with sufficient expertise and which is not directly involved in the provision of either Above Rail Services or Below Rail Services.

### **9.3 3.3 Management Accounts**

- (a) QR produces internal management accounts on an annual basis. They interpret QR's financial accounts to provide detailed information on the costs of various functions carried out and reconcile to QR's audited financial statements.
- (b) The management accounts associate costs and assets to functional activities, and from this, separate costs and assets into Above Rail Costs, Below Rail Costs and Other Activities Costs. The resulting information forms the basis for the statement of assets and the statement of earnings before interest and tax for Below Rail Services provided by Network Access.
- (c) The process of generating the management accounts is outlined in Figure 3.1.

**Figure 3.1: Process for Production of Management Accounts and Cost Separation**



- (d) For financial accounting purposes all transactions are booked to an appropriate account code. The account code is constructed to allow identification of:
- (i) the nature of the activity requiring the transaction;
  - (ii) the element of activity (eg labour, materials); and
  - (iii) the responsible cost centre and manager.
- (e) This financial account coding is designed primarily around the requirements for construction of QR's general ledger based on the objectives of responsibility management. The network nature of a railway operation, where assets and activities serve more than one business or geographic sector, prevents responsibility-based accounting from providing direct Identification of all costs and assets to functions and, hence, to Above Rail Costs, Below Rail Costs and Other Activities Costs. However, the financial account coding and underlying information is collected and arranged such that it is suitable for functional cost analysis through the management accounts process.
- (f) For maintenance of Rollingstock and Rail Infrastructure, a standard costing system using work orders underlies and balances to the general ledger. The work order system allows for the identification of costing

information at an activity level, which then permits a functional analysis of such costs. Work orders typically incorporate the following information:

- (i) in relation to maintenance of Rail Infrastructure, a description of the nature of the activity undertaken and the location, eg Line Section code, station code, etc; and
  - (ii) in relation to maintenance of Rollingstock, a description of the nature of the activity undertaken and the class of Rollingstock, eg type of ballast wagon, type of coal wagon, etc.
- (g) For activities other than maintenance of Rollingstock and Rail Infrastructure, information is drawn from the account code (primarily the responsible cost centre and manager) and supporting information, such as supporting transaction explanations, traffic statistics and staff pay locations, in order to undertake a functional analysis of these costs. Where supporting information does not provide sufficiently detailed information regarding the functions undertaken at a particular location, QR may undertake surveys in order to gain such detailed information.
- (h) The functional cost analysis process re-presents the financial accounts to reflect the functional activities that give rise to the costs and assets, using physical resource and empirical measures to Attribute and Allocate those costs and assets that cannot be directly Identified to a function. As part of this process, Corporate Services costs recorded in the general ledger in corporate cost centres are transferred out to the appropriate cost function, in order to leave a residual of true Corporate Overhead costs.
- (i) The management accounts involve some minor reclassification of certain administrative and corporate costs and assets in order to ensure that functional costs are accurately identified.
- (j) The costs and assets associated with each function are then separated into Above Rail Costs, Below Rail Costs and Other Activities Costs in accordance with the process set out in Section 4 of the Manual.



## **10. 4. IDENTIFICATION OF BELOW RAIL COST BASE**

### **10.1 4.1 Introduction**

This section outlines the process for identifying the cost base for Below Rail Services separate from other services provided by QR. In particular the section outlines:

- (k) The general principles for separation of functional costs into Below Rail Costs separate from Above Rail Costs and Other Activities Costs;
- (l) The specific treatment of assets and corresponding depreciation/amortisation charges in accordance with these general principles; and
- (m) The specific treatment of operating expenses in accordance with these general principles.

### **10.2 4.2 Identification of Below Rail Functions**

- (n) Costs and assets are identified as Above Rail Costs, Below Rail Costs or Other Activities Costs based on an identification of the function that they are physically associated with and the purpose for which that function is provided. Many of the functions provided by QR can be clearly Identified as relating to Above Rail Services, Below Rail Services or Other Activities. Where such separation is not entirely clear from the function, the organisational separation of QR further facilitates separation of costs and assets into Above Rail Costs, Below Rail Costs and Other Activities Costs. However, there remain some costs and assets associated with functions and activities not clearly identified as Above Rail Services, Below Rail Services or Other Activities.
- (o) The key functions provided by QR, and identification of whether they are associated with Above Rail Services, Below Rail Services or Other Activities is shown in Figure 4.1. Figure 4.1 also indicates those functions that are either jointly used in the provision of Above Rail Services, Below Rail Services and Other Activities.
- (p) Items to note in relation to particular key functions include:
  - (i) Train running, station services and terminal costs and assets almost entirely relate to the provision of Above Rail Services, whereas a large part of the corridor elements relate to the provision of Below Rail Services. Thus for a large part of the cost structure the creation of separate financial accounts directly Identifies the costs and assets appropriately at this level.
  - (ii) Stations and platforms are managed by business groups that operate Train Services (rather than by Network Access). These

facilities are included in the definition of Rail Infrastructure and are declared available for Access under the Act. Costs and assets associated with the provision and maintenance of these facilities (i.e. the costs that a “landlord” owner of the facilities would incur) are treated as Below Rail Costs, but are identified separately from other Below Rail Costs, because, unlike other Below Rail Costs, they are not the responsibility of Network Access.

- (iii) Costs related to yards are Attributed as Above Rail Costs and Below Rail Costs based on the extent to which the yard is designated a common use yard (Below Rail Services) or Railway Operator specific (Above Rail Services).

**Figure 4.1 Key Function Categories**

Key Function	Above Rail Function	Below Rail Function	Other Activity	Joint Function
<b>Train Running</b>				
Revenue trains	***			
Non revenue above rail trains (driver training etc)	***			
Non revenue below rail trains (infrastructure maintenance etc)		***		
<b>Station and Terminal Costs</b>				
Yard shunt for QR below rail trains		***		
Yard shunt for all other trains	***			
Provision of terminal facilities/terminal services	***			
Provision of station facilities		***		
Station services	***			
<b>Corridor Costs</b>				
Train control and safeworking		***		
Mainline and common user yards		***		
Railway Operator specific yards and terminals	***			
Private sidings	***			
<b>Business Management</b>	***	***	***	***
<b>Corporate Overhead</b>				***

**10.3 4.3 Treatment of Assets**

*4.3.1 Classification of Assets*

- (q) Assets are classified as Above Rail Costs, Below Rail Costs or Other Activities Costs by determining the function for which the assets are required. In some instances, Attribution or Allocation of assets may be required in order to align with the identified functions. QR’s major asset categories are shown in Figure 4.2.
- (r) Figure 4.2 identifies the asset categories required for the purpose of Above Rail Services, Below Rail Services and Other Activities. In addition, Figure 4.2 identifies assets that are used jointly to provide Above Rail Services, Below Rail Services and Other Activities. This

Manual sets out how assets that are not exclusively used for Above Rail Services, Below Rail Services or Other Activities (i.e. those assets that are marked in Figure 4.2 either as both Above Rail Resource and Below Rail Resource or as Joint Resource) are Attributed or Allocated to Above Rail Costs, Below Rail Costs or Other Activities Costs.

**Figure 4.2 Asset Categories**

Asset Category	Above Rail Resource	Below Rail Resource	Other Activity Resource	Joint Resource
<b>Fixed Assets</b>				
Corridor land sublease		***		
Rollingstock	***(P)	***		***
Trackwork & civil works	***	***(P)		
Facilities	***	***		***
Control systems	***	***		***
Field signals	***	***(P)		
Telecommunications				***
Traction power distribution equipment	***	***(P)		
Traction power supply equipment		***		
Plant and equipment	***	***		***
Land	***	***		***
Motor vehicles	***	***	***	***
Computers & miscellaneous office equipment	***	***	***	***
Construction in progress	***	***	***	
<b>Other Assets</b>				
Receivables	***	***	***	
Inventories	***	***		
Prepayments	***	***	***	
Treasury assets (cash, future income tax benefit, deferred leases)			***	

(P): identifies the predominant use of the asset

#### 4.3.2 Fixed Assets

##### 4.3.2.1 Rollingstock

- (s) All locomotives, with the exception of those classes of locomotives that may be used for the purpose of non revenue below rail Trains, are Identified as Above Rail Costs. The remaining locomotive assets are Attributed as Above Rail Costs or Below Rail Costs in accordance with the extent of their usage for Above Rail Services compared to the extent of their usage for Below Rail Services (primarily the transportation of QR's infrastructure maintenance supplies).
- (t) All wagons, with the exception of those classes of wagons that may be used for the purpose of non revenue below rail Trains (i.e. service wagons), are Identified as Above Rail Costs. Service wagon assets are Identified to areas within QR through analysis of the cost centre and responsible manager for each service wagon. Once service wagons are Identified to areas within QR, these assets become associated with the

functions provided by those areas within QR. The service wagons are then Identified, Attributed or Allocated as Above Rail Costs or Below Rail Costs in a manner consistent with how that function is Identified, Attributed or Allocated to Above Rail Services or Below Rail Services.

4.3.2.2 *Assets Associated with the Provision of Track*

- (u) Assets directly associated with the provision of Track are Identified to individual Line Sections and include:
  - (i) Corridor land, being QR's sublease from Queensland Transport in relation to the corridor land, which will be treated as a leased asset;
  - (ii) Civil Works, including bridges, culverts and pipes (major), cuttings, embankments, fences, overbridges, retaining walls, subways, tunnels, minor drainage and access roads;
  - (iii) Track, including ballast, sleepers, rails, fasteners, turnouts and diamond crossings;
  - (iv) Field signals, including electrical signal interlocking, train order/DTC (field componentry), level crossing protection and tramway crossings;
  - (v) Traction power distribution equipment, including contact wire and the overhead support structure.
- (v) The rail infrastructure is identified according to Line Section codes. Major yards are generally assigned a separate Line Section code. Therefore, all assets that can be Identified to a Line Section that solely forms part of the mainline are Identified as Below Rail Costs.
- (w) Where a Line Section code relates solely to a yard, or to a section of mainline and a yard, assets are Attributed as Below Rail Costs or Above Rail Costs based on the extent to which the Line Section is designated as mainline, common user yard (both part of Below Rail Services) or Railway Operator specific (Above Rail Services). In particular, assets are Attributed as follows:
  - (i) All corridor land is Identified as a Below Rail Cost, as the element that is involved in the provision of Above Rail Services is immaterial.
  - (ii) Civil works and Track are grouped together and Attributed as Above Rail Costs and Below Rail Costs based on an assessment of:

- the proportion of Track kilometres in the Line Section that are designated as being for the purpose of Above Rail Services and Below Rail Services; and
  - the standard of Track that is required in those parts of the Line Section that are designated as being for the purpose of Above Rail Services and Below Rail Services.
- (iii) In most cases, the extent of field signal assets in the area of yards designated for Above Rail Services will be immaterial, as the signal assets will be concentrated in those areas with the highest traffic. In these cases, all field signal assets in the relevant Line Section are Identified as Below Rail Costs. However, where material, field signal assets are Attributed as Above Rail Costs and Below Rail Costs based on an assessment of the extent and type of signals in the Line Section that are designated as being for the purpose of Above Rail Services and Below Rail Services.
- (iv) Traction power distribution assets are Attributed as Above Rail Costs and Below Rail Costs based on an assessment of the electrified Track kilometres in the relevant Line Section that are designated as being for the purpose of Above Rail Services and Below Rail Services.

#### 4.3.2.3 *Traction Power Supply Equipment*

- (x) Traction power supply equipment is used to supply electric energy for traction over the overhead traction power distribution system. Traction power supply equipment includes traction substation switchboards and transformers, power distribution assets and earthing and bonding equipment. Traction power supply equipment is Identified separately to any power supply assets that are used to provide electricity to facilities and buildings.
- (y) Given that energy is taken from QR's electric overhead system by all electric trains in common, all traction power supply equipment is Identified as Below Rail Costs.

#### 4.3.2.4 *Facilities and Buildings*

- (z) Each facility/building is described in QR's asset register according to the type of facility/building and its location. Based on an analysis of this information, an assessment is made of the function/s associated with each facility/building. To the extent that more than one function is associated with a facility/building, that facility/building is Attributed between those functions.
- (aa) Facilities/buildings, or portions thereof, are then Attributed or Allocated to Above Rail Costs, Below Rail Costs or Other Activities

Costs in a manner consistent with how the relevant function is Attributed or Allocated to Above Rail Services, Below Rail Services or Other Activities.

#### 4.3.2.5 *Plant and Equipment*

- (bb) Track maintenance equipment is used for the purpose of maintaining the Track assets. Track maintenance equipment includes, for example, tamping machines, ballast cleaners, rail grinders and Track recording vehicles.
- (cc) QR separately identifies Track maintenance equipment from other plant and equipment. As a result, all Track maintenance equipment is Identified as Below Rail Costs.
- (dd) Plant and equipment assets (excluding Track maintenance equipment) are Identified to areas within QR through analysis of the responsible cost centre and manager for each piece of equipment. Once plant and equipment assets are Identified to areas within QR, these assets become associated with the functions provided by those areas within QR. The plant and equipment assets are then Identified, Attributed or Allocated as Above Rail Costs or Below Rail Costs in a manner consistent with how that function is Identified, Attributed or Allocated to Above Rail Services or Below Rail Services.

#### 4.3.2.6 *Control Systems*

- (ee) Control systems include real time information systems, signal control systems, traction power control systems and Train/Track monitoring systems.
- (ff) Control systems are assessed according to the function of the individual systems. The control systems are then Identified, Attributed or Allocated as Above Rail Costs or Below Rail Costs consistent with how that function is Identified, Attributed or Allocated as Above Rail Services or Below Rail Services. For example, where that function relates to the provision of Below Rail Services, eg signal control systems and traction power control systems, these assets are Identified as Below Rail Costs.

#### 4.3.2.7 *Telecommunications*

- (gg) Telecommunications assets can be identified as those required for the “backbone” telecommunication systems and those required for customer premises. In addition, both backbone and customer premises assets can be categorised by type of asset, eg cable, hand held radios, microwave.
- (hh) Whilst the primary purpose for QR owning a backbone telecommunications system is for the purposes of providing train

control services as part of Below Rail Services, the system is also used for other telecommunications and data requirements of QR's overall business. It is considered that the nature of telecommunications assets and the variety of uses for those assets means that it is not possible to usefully categorise the assets as being required for the provision of Above Rail Services or Below Rail Services. Therefore, QR will Allocate telecommunications assets on the basis of 60% being Below Rail Costs and 40% being Above Rail Costs. The impact of Other Activities on telecommunication assets is considered to be immaterial.

#### 4.3.2.8 Land

- (ii) Land assets include any parcels of land owned by QR. Land assets exclude corridor land, as QR subleases the corridor land from Queensland Transport and, hence, QR does not own the corridor land.
- (jj) Land assets are Identified to areas within QR through analysis of the cost centre and responsible manager for each parcel of land.
- (kk) Once land assets are Identified to areas within QR, these assets become associated with the functions provided by those areas within QR. The land is then Attributed or Allocated as Above Rail Costs, Below Rail Costs or Other Activities Costs in a manner consistent with how that function is Attributed or Allocated to Above Rail Services, Below Rail Services or Other Activities.

#### 4.3.2.9 Motor Vehicles

- (ll) The majority of QR's motor vehicle assets are controlled within a central fleet. Motor vehicles that are not controlled within the central fleet are Identified to an area within QR based on an analysis of responsible cost centre and manager for those assets. Motor vehicles that are managed within the central fleet are Attributed to areas within QR in proportion to the manner that motor vehicle expenses are charged to areas within QR. This is assessed through an analysis of responsible cost centre and manager for motor vehicle expenses.
- (mm) Once motor vehicles are Identified or Attributed to areas within QR, these assets become associated with the functions provided by those areas within QR. The motor vehicles are then Attributed or Allocated as Above Rail Costs, Below Rail Costs or Other Activities Costs in a manner consistent with how that function is Attributed or Allocated to Above Rail Services, Below Rail Services or Other Activities.

#### 4.3.2.10 Computers and Miscellaneous Office Equipment

- (nn) Computers and miscellaneous office equipment assets are Identified to areas within QR through analysis of the cost centre and responsible manager for each piece of equipment.

- (oo) Once computers and miscellaneous office equipment are Attributed to areas within QR, these assets become associated with the functions provided by those areas within QR. The equipment is then Attributed or Allocated as Above Rail Costs, Below Rail Costs or Other Activities Costs in a manner consistent with how that function is Attributed or Allocated to Above Rail Services, Below Rail Services or Other Activities.

*4.3.2.11 Construction in Progress*

- (pp) Prior to commencement, projects are assessed in terms of whether, and to what extent, the project is being undertaken for the purpose of providing Above Rail Services, Below Rail Services or Other Activities.
- (qq) Construction in progress is Attributed as Above Rail Costs, Below Rail Costs or Other Activities Costs based on an identification of each project that is currently underway and the extent to which the individual projects are related to Above Rail Services, Below Rail Services or Other Activities.

*4.3.3 Other Assets*

- (rr) Receivables are assessed and Identified to business areas through an analysis of the customer and the nature of the service that is provided to that customer. Once Identified to business areas, these assets are Attributed or Allocated as Above Rail Costs, Below Rail Costs and Other Activities Costs in a manner consistent with the way in which that function is Attributed or Allocated to Above Rail Services, Below Rail Services or Other Activities.
- (ss) Inventories are Identified in terms of the nature of the inventory stock and the business group that holds them. Where possible, inventories are Identified as Above Rail Costs, Below Rail Costs or Other Activities Costs based on the nature of the inventory stock. Where this is not possible, once Identified to business groups, these assets are Attributed or Allocated as Above Rail Costs, Below Rail Costs and Other Activities Costs consistent with the proportion of that business group's total working expenses (excluding fuel and traction electricity) that have been Identified, Attributed or Allocated as Above Rail Costs, Below Rail Costs and Other Activities Costs.
- (tt) Prepayments are assessed and Identified to business areas through an analysis of the service provider and the nature of the service that is received from that service provider. Once Identified to business areas, these assets are Attributed or Allocated as Above Rail Costs, Below Rail Costs and Other Activities Costs in a manner consistent with the way in which that function is Attributed or Allocated to Above Rail Services, Below Rail Services or Other Activities.

- (uu) Cash, deferred finance lease expenses and future income tax benefit are all treated as being required for treasury activities and, as a result, are Identified as Other Activities Costs.

#### **10.4 4.4 Assessment of Below Rail Depreciation/Amortisation**

- (vv) In assessing the depreciation and amortisation for assets that have been Identified, Attributed or Allocated as Below Rail Costs for reporting purposes, QR will utilise the appropriate asset value, economic asset life and method of depreciation/amortisation for each of the assets Identified, Attributed or Allocated as Below Rail Costs in a manner consistent with the method used in QR's Financial Statements.
- (ww) To the extent that the asset value, economic asset life or method of depreciation used in QR's Financial Statements is not the same as the asset value, economic asset life or method of depreciation permitted by the QCA for pricing purposes, the depreciation and amortisation identified in accordance with this approach may not be identical to the depreciation and amortisation utilised by QR in developing its Access Charges.

#### **10.5 4.5 Treatment of Operating Costs**

- (xx) Operating costs are classified as Above Rail Costs, Below Rail Costs or Other Activities Costs by determining the function for which the costs are incurred. In some instances, Attribution or Allocation of operating costs may be required in order to align with the identified functions. QR's major operating cost categories are shown in Figure 4.3.
- (yy) Figure 4.3 identifies the operating cost categories directly incurred in the provision of Above Rail Services, Below Rail Services and Other Activities. In addition, Figure 4.3 identifies operating cost categories that are incurred jointly to provide Above Rail Services, Below Rail Services and Other Activities. This Manual sets out how operating costs that are not exclusively incurred for Above Rail Services, Below Rail Services or Other Activities (i.e. those operating costs that are marked in Figure 4.3 either as both Above Rail Cost and Below Rail Cost or as Joint Cost) are Attributed or Allocated to Above Rail Costs, Below Rail Costs or Other Activities Costs.

**Figure 4.3: Operating Cost Categories**

Category/Activity	Above Rail Cost	Below Rail Cost	Other Activities Cost	Joint Cost
<b>Train Running*</b>				
Train crew	***(P)	***		
Locomotive repairs and maintenance (includes fuelling and sanding)	***(P)	***		
Wagon repairs and maintenance	***(P)	***		
Car provisioning and cleaning	***			
On-board services and catering	***			
Contract road services, including passenger alternative travel	***			
Fuel	***(P)	***		
Traction Electricity		***		
<b>Direct Station and Terminal Costs</b>				
Shunt engines and crew	***(P)	***		
Shunters and number takers	***(P)	***		
Freight terminals	***			
Passenger services	***			
Revenue protection and security	***			
Examination of rolling stock	***			
Station catering	***			
<b>Corridor Costs</b>				
Train control and safeworking		***		
Track and bridge maintenance	***	***(P)		
Signal maintenance	***	***(P)		
Traction power distribution maintenance	***	***(P)		
Traction power supply maintenance		***		
Telecommunications maintenance				***
Facilities (including station) maintenance	***	***		***
Derailment and collision costs	***	***		
Private siding maintenance	***			
<b>Business Administration</b>				
Group administration	***	***	***	***
Operations administration				***
Infrastructure administration		***		***
Rollingstock administration	***			
<b>Corporate Costs</b>				***
<b>Loss on Disposal of Assets</b>	***	***	***	

(P): identifies the predominant reason for the expense

4.5.1 Train Running Costs

4.5.1.1 Infrastructure Trains

(zz) Train crew, motive power energy (either diesel or electricity) and Rollingstock maintenance is provided for:

- (i) revenue Trains;
- (ii) non revenue above rail Trains (eg inspection, driver training);
- (iii) non revenue below rail Trains (eg ballast and other infrastructure maintenance trains); and
- (iv) shunting of all of the above Trains within yards.

- (aaa) The costs associated with shunting of Trains within yards is treated as a station/terminal cost and, therefore, is addressed in Subsection 4.5.2.
- (bbb) Only the costs of non revenue below rail Trains are Attributed as Below Rail Costs. All other Train running costs are Identified or Attributed as Above Rail Costs. The components of Train running costs Attributed as Below Rail Costs include train crew, fuel (non revenue Trains do not currently use electric locomotives) and Rollingstock repairs and maintenance.
- (ccc) Train crew costs are analysed by depot and the costs allocated based on work undertaken at each depot. Standard costing practice is for crew costs to be allocated on the basis of crew time. The nature of non revenue Train operations requires that crew time be calculated on the basis of estimated average train speeds for non revenue Trains from recorded Train kilometre statistics.
- (ddd) Fuel costs are Attributed to non revenue below rail Trains on the basis of consumption patterns by locomotive class by locomotive kilometre.
- (eee) Rollingstock maintenance costs are collected on a state wide basis and are analysed by class of Rollingstock. Rollingstock maintenance and servicing expenditure is Attributed to revenue Trains, non revenue above rail Trains, non revenue below rail Trains and shunting within yards based on an assessment of their usage for each of these activities.

#### 4.5.1.2 Traction Electricity

Electricity for traction is treated as a Below Rail Cost because the electricity is taken from QR's electric overhead system by all (electric) Trains in common. Separate invoicing by the electricity distributor to an individual Railway Operator is not currently possible, therefore, it is necessary that the Railway Operator purchase electricity for traction from QR.

#### 4.5.2 Direct Station and Terminal Costs

- (fff) Station and terminal costs (with the exception of maintenance which is treated as a form of facilities maintenance as discussed below) are incurred for the purpose of providing Above Rail Services, with the exception of shunting and handling of service wagons for non revenue below rail Trains.
- (ggg) The costs associated with shunting and handling of service wagons for non revenue below Rail Trains are Attributed based on similar principles as set out in Subsection 4.5.1.1, with the exception that utilisation of yard shunt locomotives and crews is Attributed to Above Rail Services and Below Rail Services on the basis of surveys of hours of operation of shunt locomotives and the purpose for which they are used.

4.5.3 Corridor Costs

4.5.3.1 Maintenance Identified to Line Sections

(hhh) Work orders are used to identify both the nature of maintenance activities and the location at which maintenance occurs by way of a Line Section code or a station code. Maintenance activities specified to individual Line Sections include:

- (i) Track maintenance
- (ii) Bridge maintenance
- (iii) Signal maintenance
- (iv) Traction power distribution maintenance

(iii) The corridor is broken up into identified Line Sections. Major yards are generally assigned a separate Line Section code. Therefore, all maintenance activities of the type nominated in Paragraph (a) that can be Identified to a Line Section that solely forms part of the mainline are Identified as Below Rail Costs.

(jjj) Where a Line Section code relates solely to a yard, or to a section of mainline and a yard, elements of that Line Section have been identified and designated as mainline, common user yard (both part of Below Rail Services) or Railway Operator specific (Above Rail Services). Where possible work orders will identify the location of the maintenance activity by reference to whether it is part of Below Rail Services or Above Rail Services. Where work orders do not separately identify the location of the maintenance activity within the Line Section, the maintenance costs of the type nominated in Paragraph (a) are Attributed as Below Rail Costs or Above Rail Costs based on the extent to which the yard is designated as being required for Below Rail Services or for Above Rail Services. In particular, these maintenance costs are Attributed as follows:

- (i) Track and bridge maintenance are grouped together and Attributed as Above Rail Costs and Below Rail Costs based on an assessment of:
  - the proportion of Track kilometres in the Line Section that are designated as being for the purpose of Above Rail Services and Below Rail Services; and
  - the standard of Track that is required those parts of the Line Section that are designated as being for the purpose of Above Rail Services and Below Rail Services.
- (ii) Signal maintenance is Identified fully as a Below Rail Cost except where there is a material portion of field signals in an area of the Line Section designated for Above Rail Services. In

these circumstances, signal maintenance is Attributed as Above Rail Costs and Below Rail Costs based on an assessment of the extent and type of signals in the Line Section that are designated as being for the purposes of the Railway Operator specific section of the Line Section (Above Rail Services) or the common user section of the Line Section (Below Rail Services).

- (iii) Traction distribution maintenance costs are Attributed as Above Rail Costs and Below Rail Costs consistent with the proportion of electrified Track kilometres in the relevant Line Section that are designated as being for the purposes of Above Rail Services and Below Rail Services.
- (kkk) Private siding maintenance is often undertaken by QR as part of a rail haulage service. As such, it is treated as an Above Rail Cost and charged to the end customer.

#### 4.5.3.2 *Traction Power Supply Maintenance*

All maintenance of the traction power supply equipment is Identified as a Below Rail Cost.

#### 4.5.3.3 *Derailments and Collisions*

- (a) Unless otherwise specified in the relevant Access agreement, where the reason for a derailment or collision is able to be identified and linked to the reported costs, the cost associated with damage (whether to the Rail Infrastructure or to Rollingstock or to other property) resulting from the negligence of the Railway Manager is Identified as a Below Rail Cost. The cost associated with any damage resulting from the negligence of the Railway Operator will be Identified as an Above Rail Cost. If otherwise specified in the relevant Access agreement, the costs will be Identified as Above Rail Costs or Below Rail Costs in accordance with the provisions of that Access agreement.
- (b) Where the reason for a derailment or collision is not identified and/or not linked to the reported costs, the element of derailment and collision costs identified as a Below Rail Cost will be the cost of repairing damage to the Rail Infrastructure. In such cases, the cost of repairing Rollingstock is Identified as an Above Rail Cost.

#### 4.5.3.4 *Train Control and Safeworking*

- (c) Within QR's Train operations areas, a number of activities are performed. These include Train scheduling, Train crew rostering, Train crew management, locomotive management, wagon management, controlling Train and Track machine movements (i.e. Train control), safeworking, incident management, customer advice (eg in relation to estimated time of arrival), performance reporting, security monitoring and revenue protection and collection.

- (d) The costs associated with Train control (i.e. the salaries of those people who control Train and Track machine movements) are separately Identified from the costs of other activities undertaken within the Train operations areas. These costs are Identified as a Below Rail Cost as the control of Train and Track machine movements is necessarily a common user function, and are therefore provided as a Below Rail Service. In some locations, a small proportion of a train controller's time is directed to the provision of Above Rail Services (eg train crew management), however this is not considered to be material.
- (e) Other costs associated with the Train operations area are dealt with as operations administration costs in Section 4.5.4.

#### 4.5.3.5 Telecommunications Maintenance

- (f) Consistent with the Subclause 4.3.2.7, the nature of telecommunications maintenance costs and the variety of uses for the related assets means that it is not possible to usefully categorise the costs as being incurred for the provision of Above Rail Services or Below Rail Services.
- (g) Therefore, QR will Allocate telecommunications costs on the basis that 60% are Below Rail Costs and 40% are Above Rail Costs. The impact of Other Activities on telecommunication costs is considered to be immaterial.

#### 4.5.3.6 Facilities Maintenance

- (h) The costs associated with maintaining specific facilities that are Identified, Attributed or Allocated as required for the provision of Below Rail Services are Identified, Attributed or Allocated as a Below Rail Cost. Similarly, the costs associated with maintaining specific facilities that are Identified, Attributed or Allocated as relating to the provision of Above Rail Services are Identified, Attributed or Allocated as an Above Rail Cost.
- (i) In performing this analysis, it should be noted that stations and platforms are facilities/buildings that are defined as Rail Infrastructure and are declared available for Access under the Act. Therefore, maintenance of stations and platforms is treated as a Below Rail Cost, however, given that the assets are owned by business groups that operate Train Services rather than by Network Access, such maintenance costs are identified separately from other Below Rail Costs.

#### 4.5.4 Business Administration Costs

- (j) Business administration costs can be separated into the following categories:

- (i) Group administration, which is then further categorised as follows:
- group management and administration, which includes all administration related to group general manager, immediate administration support and finance management, including costs associated with insurance and damages claims;
  - marketing expenses;
  - business unit administration; and
  - capital works expensed;
- (ii) Operations administration, which includes Train Scheduling, Train crew rostering, Train crew management, locomotive management, wagon management, safeworking, incident management, customer advice, performance reporting, security monitoring, revenue protection and collection and all administration and management related to these activities;
- (iii) Infrastructure administration, which includes the administration of permanent way maintenance, facilities maintenance and trackside systems (eg signals and telecommunications, traction power equipment, etc) maintenance as well as all administration and management related to these maintenance activities; and
- (iv) Rollingstock administration, which includes management and administration related to rollingstock maintenance and overhaul.
- (k) The group administration costs are Identified, Attributed or Allocated based on the function being performed:
- (i) Group administration and management costs are treated as follows:
- For Network Access, the costs are Identified as Below Rail;
  - For those groups whose primary purpose is to operate train services, the costs are Allocated as Above Rail Costs and Below Rail Costs *pro rata* on the total expenses of that group that are Identified, Attributed or Allocated as Above Rail Costs and Below Rail Costs;
  - For those groups whose purpose is to provide support activities for Network Access and the business groups operating Train Services, the costs are treated as part of the

- function being performed, and are Attributed or Allocated as Above Rail Costs, Below Rail Costs and Other Activities Costs in a manner consistent with how that function is Attributed or Allocated as an Above Rail Service, Below Rail Service or Other Activities;
- (ii) Marketing costs are Identified as Above Rail Costs, Below Rail Costs and Other Activities based on the purpose of the marketing. For example if Network Access incurs marketing costs, these are Identified as Below Rail Costs. Similarly all of the marketing costs for groups whose primary purpose is to operate train services are Identified as Above Rail Costs.
  - (iii) Business unit administration (excluding marketing) relates to the management of sections of a group's activities that relate to the maintenance and development of relationships between that group and its customers (eg coal, industrial products, Citytrain) and is Identified fully as an Above Rail Cost, with the exception of the costs associated with the business development division of Network Access, which is Identified as a Below Rail Cost.
  - (iv) Capital works expensed is Identified as an Above Rail Cost or Below Rail Cost based on the nature of the project undertaken.
- (l) Operations administration includes elements that form part of both Above Rail Services and Below Rail Services. Where possible, the activities performed within operations administration are Identified or Attributed as Above Rail Services or Below Rail Services, and the costs Identified and Attributed accordingly. For example, incident management and safeworking are Identified or Attributed as Below Rail Services and train crew rostering, train crew management and locomotive and wagon management are Identified as Above Rail Services. The remaining operations administration costs that are incurred by each group are Allocated as Above Rail Costs and Below Rail Costs *pro rata* based on the total operations expenses of that group that is Identified, Attributed and Allocated as Above Rail Costs and Below Rail Costs.
- (m) Infrastructure administration is incurred in the provision of both Above Rail Services and Below Rail Services. For each group that incurs costs associated with infrastructure administration, the administration of the cost of specific maintenance categories (eg permanent way, facilities, signals and telecommunications, etc) are Attributed to Above Rail Costs and Below Rail Costs based on the extent of expenditure by that group on each of those maintenance categories that has been Identified, Attributed or Allocated as Above Rail Costs or Below Rail Costs. The remaining infrastructure

administration costs for each of those groups are Allocated as Above Rail Costs and Below Rail Costs *pro rata* based on the total expenditure on infrastructure maintenance by that group that has been Identified, Attributed or Allocated as Above Rail Costs or Below Rail Costs.

- (n) Rollingstock administration is Identified as an Above Rail Cost. Although a small proportion of Rollingstock assets and Rollingstock maintenance is Attributed as Below Rail Costs, the impact of attributing a consistent proportion of Rollingstock administration as a Below Rail Cost is not material.

#### 4.5.5 Corporate Overheads

- (o) Corporate costs include both Corporate Services and Corporate Overhead.
- (p) Corporate Services costs are Attributed on a usage basis to specific functions and are Attributed or Allocated as Above Rail Costs, Below Rail Costs and Other Activities Costs in a manner consistent with how that function is Attributed or Allocated to Above Rail Services, Below Rail Services or Other Activities.
- (q) Corporate Overheads are common to the provision of Above Rail Services, Below Rail Services and Other Activities, and across all regions and traffics. These costs are allocated as Above Rail Costs, Below Rail Costs and Other Activities Costs on a percentage mark-up on all other expenses excluding corporate overhead, interest and depreciation.
- (r) Other corporate costs are Identified, Attributed or Allocated as follows:
  - (i) Surplus staff costs are Identified as Above Rail Costs or Below Rail Costs according to the function and location of the surplus staff.
  - (ii) The cost of early retirement payments (VERS) is recorded as a corporate cost as the staff concerned could have worked in different areas within QR during their career. VERS expense is then Allocated as an Above Rail Cost, Below Rail Cost and Other Activities in the same ratio as the corporate overhead allocation.
  - (iii) Bank charges are Identified to Other Activities (i.e. treasury activities).
  - (iv) Miscellaneous year end and audit adjustments are Allocated as Above Rail Costs, Below Rail Costs and Other Activities in the same ratio as the corporate overhead allocation.

- (v) Other general items such as year 2000 costs are Allocated as Above Rail Costs, Below Rail Costs and Other Activities Costs in the same ratio as the corporate overhead allocation.
- (vi) QR's share of the net costs related to the Sydney-Brisbane passenger services is Identified as an Above Rail Cost.

*4.5.6 Loss on Disposal of Assets*

Any loss on disposal of assets is Identified to an area within QR through an analysis of the cost centre against which the loss is recorded. The loss is then Identified, Attributed or Allocated as an Above Rail Cost, Below Rail Cost or Other Activities Cost in a manner consistent with how that function is Identified, Attributed or Allocated as Above Rail Services, Below Rail Services or Other Activities.



**11. 5. HEIRARCHY OF BELOW RAIL COSTS**

**11.1 5.1 Introduction**

(a) Where consistent with the costing principles upon which this Manual is based, costs and assets are Identified or Attributed to Line Sections and Geographic Regions for the purpose of developing Access Charges that reflect geographic differences in Rail Infrastructure standards, utilisation and costs. Separate financial accounts are not produced on the basis of Line Sections or Geographic Regions.

(b) Below Rail Costs fall into the following categories:

- (i) Line Section Specific;
- (ii) Region Specific;
- (iii) Network Wide;
- (iv) Electric Traction Energy; and
- (v) Stations and Platforms.

**11.2 5.2 Treatment of Assets**

The identification of assets as Line Section Specific, Region Specific or Network Wide is shown in Figure 5.1

**Figure 5.1 Asset Categories**

Asset Category	Line Section Specific	Region Specific	Network Wide
<b>Non Current Physical Assets</b>			
Corridor land	***		
Rollingstock		***	
Track & civil works	***		
Facilities	***	***	***
Control systems		***	
Field signals	***		
Telecommunications			***
Traction power distribution equipment	***		
Traction power supply equipment		***	
Plant and equipment		***	***
Land	***	***	***
Motor vehicles		***	***
Computers & miscellaneous office equipment		***	***
Construction in progress	***	***	
<b>Other Assets</b>			
Receivables			***
Inventories		***	***
Prepayments			***

*5.2.1 Line Section Specific*

- (a) Track and associated assets that are required for the provision of the mainline and common user yards are Line Section Specific and Identified to the Line Section on which they are located. These assets include:
  - (i) Corridor land sublease;
  - (ii) Civil Works;
  - (iii) Track;
  - (iv) Field signals; and
  - (v) Traction power distribution equipment.
- (b) Facilities that are required for the provision of Rail Infrastructure in the immediately surrounding location (eg minor infrastructure depots) are Line Section Specific and are Identified to the Line Section on which they are located.
- (c) Any land assets (i.e. not part of the corridor land) upon which facilities that are Identified as Line Section Specific are located are also Line Section Specific and Identified to the Line Section on which they are located.
- (d) Construction in progress that relates to the construction of assets that would, in accordance with Paragraphs (a) or (b), be Identified as Line Section Specific, is also Identified as a Line Section Specific asset and is Identified to the Line Section where the construction occurring.

*5.2.2 Region Specific*

- (e) Where assets Identified or Attributed as Below Rail Costs and which are used for the purpose of maintaining the Rail Infrastructure (i.e. Track maintenance equipment (a component of plant and equipment) and Rollingstock required for non revenue below rail Trains) are typically used in a particular geographic area (as opposed to a single piece of Track maintenance equipment that is transported throughout the state as required), they are considered to be Region Specific.
- (f) Traction power supply assets are used for the provision of electric traction energy over a geographic area. As a result, these assets are Region Specific. Traction power supply assets are Identified to the Geographic Region in which they are located.
- (g) Where facilities are used for the performance of functions that relate to more than a single Line Section, but are not used for the performance of functions that relate to the network as a whole (eg major infrastructure depots, regional infrastructure and operations administration buildings, train control facilities), these facilities are Region Specific. Where these Region Specific facilities are used for the

performance of functions related solely to a particular Geographic Region, these assets are Identified to that Geographic Region. Where Region Specific facilities are used for the performance of functions that relate to more than one Geographic Region, and the impact is material, the assets are Attributed to the relevant Geographic Regions in accordance with an assessment of usage of that facility for the purpose of provision of Below Rail Services in the relevant Geographic Regions.

- (h) Any land assets (i.e. not part of the corridor land) upon which facilities that are Identified as Region Specific are located are also Region Specific and Identified to the Region in which they are located.
- (i) Control system assets Identified or Attributed as Below Rail Costs are Region Specific assets as they generally relate to the provision of Below Rail Services within a geographic area, rather than over the network as a whole. Control Systems can be Identified to a particular Geographic Regions based on the location and nature of the control system and the type of traffic that is operated in that Geographic Region. Where a Control System relates to more than one Geographic Region, and the impact is material, the assets are Attributed to the relevant Geographic Regions in accordance with an assessment of usage of those Control Systems for the purpose of provision of Below Rail Services in the relevant Geographic Regions.
- (j) Where motor vehicles are used for the performance of functions that relate to the provision of Below Rail Services in a Geographic Region, these motor vehicles are Region Specific and are Identified to the Geographic Region in which that function is performed.
- (k) Where computers and miscellaneous office equipment is used for the performance of functions that relate to the provision of Below Rail Services in a Geographic Region, these assets are Region Specific and are Identified to the Geographic Region in which that function is performed.
- (l) Where plant and equipment (excluding Track maintenance equipment) is used for the performance of functions that relate to the provision of Below Rail Services in an area of the network, rather than for the network as a whole, these assets are Region Specific and are Identified to the Geographic Region in which they are located.
- (m) Inventory assets Identified as Below Rail Costs include inventory held in local infrastructure depots, as well as inventory held corporately for use throughout QR's network. That inventory held in local infrastructure depots is treated as Region Specific and is Identified to the Geographic Region in which the infrastructure depot is located.

- (n) Construction in progress that relates to the construction of assets that would, in accordance with Paragraphs (a) to (h), be Identified as Region Specific, is also Identified as a Region Specific asset and is Identified to the Region where the construction occurring.

*5.2.3 Network Wide*

- (o) Where items of Track maintenance equipment are major items used throughout the entire network, (eg Track recording car) these assets are treated as Network Wide.
- (p) Due to the difficulty in accurately Identifying or Attributing telecommunications assets to specific functions, all telecommunications assets that are Allocated as Below Rail Costs are treated as Network Wide.
- (q) Where facilities are used for the performance of functions that relate to the network as a whole (i.e. have not been Identified as Line Section Specific or Region Specific), these facilities are Network Wide (eg group and network wide infrastructure and operations administration buildings).
- (r) Any land assets (i.e. not part of the corridor land) upon which facilities that are Identified as Network Wide are located are also Network Wide.
- (s) Where motor vehicles are used for the performance of functions that relate to the network as a whole, these motor vehicles are Network Wide.
- (t) Where computers and miscellaneous office equipment is used for the performance of functions that relate to the network as a whole, these assets are Network Wide.
- (u) Construction in progress that relates to the construction of assets that would, in accordance with Paragraphs (a) to (e), be Identified as Network Wide, is also Identified as Network Wide.
- (v) All other assets (i.e. receivables, inventory assets not Identified as Region Specific and prepayments) are treated as Network Wide.

**11.3 5.3 Assessment of Below Rail Depreciation/Amortisation**

- (w) In assessing the depreciation and amortisation of assets that have been Identified, Attributed or Allocated to each level of the hierarchy of Below Rail Costs, for reporting purposes QR will utilise the appropriate asset value, economic asset life and method of depreciation for each of the assets Identified, Attributed or Allocated as Below Rail Costs in a manner consistent with the method used in QR's Financial Statements.

- (x) To the extent that the asset value, economic asset life or method of depreciation used in QR's Financial Statements is not the same as the asset value, economic asset life or method of depreciation permitted by the QCA for pricing purposes, the depreciation and amortisation identified for each level of the hierarchy of Below Rail Costs in accordance with this approach may not be identical to the depreciation and amortisation utilised by QR in developing its Access Charges.

**11.4 5.4 Treatment of Operating Expenses**

The identification of operating expenses as Line Section Specific, Region Specific or Network Wide is shown in Figure 5.2.

**Figure 5.2: Operating Cost Categories**

Category/Activity	Line Section Specific	Region Specific	Network Wide
<b>Train Running/Direct Station and Terminal Costs</b>			
Costs associated with non revenue below rail trains	***		
<b>Corridor Costs</b>			
Train control and safeworking		***	
Track and bridge maintenance	***		
Signal maintenance	***		
Traction power distribution maintenance	***		
Traction power supply maintenance		***	
Telecommunications maintenance			***
Facilities (including station) maintenance	***	***	***
Derailment and collision costs		***	
<b>Business Administration</b>			
Group administration			***
Operations administration		***	***
Infrastructure administration		***	***
<b>Corporate Overhead</b>			***
<b>Loss on Disposal of Assets</b>	***	***	***

*5.4.1 Line Section Specific*

- (a) Operating expenses relating to the maintenance of Track and associated assets that are required for the provision of the mainline and common user yards are Line Section Specific and Identified to the Line Section on which they are incurred. Line Section Specific maintenance expenses include:
- (i) Track maintenance
  - (ii) Bridge maintenance
  - (iii) Signal maintenance
  - (iv) Traction power distribution equipment maintenance
- (b) Operating expenses relating to the maintenance of facilities that are Identified as Line Section Specific are Line Section Specific operating costs and are Identified to the Line Section on which they are incurred.

- (c) Non revenue below rail train running expenses are considered to be Line Section Specific as they are incurred in the direct maintenance of the Rail Infrastructure. Where possible, work orders will identify the location of the maintenance activity for which specific Trains are operated, and the relevant non revenue below rail train running expenses will be Identified to that Line Section. Where work orders do not specifically identify the location of the relevant maintenance, non revenue below rail train running expenses will be Attributed to the Line Sections within the relevant Geographic Region based on the expenditure on Track maintenance for the various Line Sections in that Geographic Region.
- (d) Loss on disposal of assets is treated as a Line Section Specific cost where the assets being sold are Line Section Specific assets.

#### 5.4.2 Region Specific

- (e) Maintenance costs associated with traction power supply assets are Region Specific and are Identified to the Geographic Region in which they are incurred.
- (f) Maintenance costs associated with Region Specific facilities are Region Specific operating costs. Maintenance costs for Region Specific facilities that are used for the performance of functions related solely to a particular Geographic Region are Identified to that Geographic Region. Where material, maintenance costs for Region Specific facilities that are used for the performance of functions that relate to more than one Geographic Region are Attributed to the relevant Geographic Regions in accordance with an assessment of usage of that facility for the purpose of provision of Below Rail Services in the relevant Geographic regions.
- (g) Train control costs are incurred in a small number of locations across Queensland. Although the boundaries for the individual train control centres do not necessarily directly align with the Geographic Regions, train control costs are Identified or Attributed to the Geographic Regions covered by the relevant train control centre, as the function of train control is not considered to be network wide in nature. The costs associated with the provision of train control for those centres that relate to a specific Geographic Region are Identified to that Geographic Region. The costs associated with the provision of train control for those centres that manage the movement of Trains across a number of Geographic Regions are Attributed to the relevant Geographic Regions on the basis of the Train kilometres operated in each of those Geographic Regions.
- (h) Safeworking costs at stations relate primarily to the provision of safe Train movements across the network. Therefore, although the costs

associated with the provision of station facilities can be identified to a specific location, safeworking costs are treated as being Region Specific Costs. The safeworking costs associated with stations that relate to a specific Geographic Region are Identified to that Geographic Region. Where material, the safeworking costs associated with stations that manage the movement of Trains across a number of Geographic Regions are Attributed to the relevant Geographic Regions on the basis of the Train kilometres operated in each of those Geographic Regions.

- (i) The costs associated with derailments and collisions are considered to be a reflection of the risks associated with the Rail Infrastructure in that area and the nature of the Train Services operating on that Rail Infrastructure. These risks tend to be reasonably consistent throughout a Geographic Region. Therefore, although it is possible to identify the Line Section on which a particular derailment or collision occurred, the costs associated with derailments and collisions are more appropriately considered to be Region Specific.
- (j) The element of operations administration Attributed as a Below Rail Cost can be further separated into regional operations administration and network wide operations administration. Regional operations administration is identified as all operations administration related to cost centres where the responsible manager's sphere of control relates to a single Geographic Region or to a small number of Geographic Regions. Where the sphere of control relates to a single Geographic Region, the operations administration cost is Identified to that Geographic Region. Where the sphere of control relates to a small number of Geographic Regions, the operations administration cost is Attributed to the relevant Geographic Region based on the operations administration expenditure able to be Identified to each of those Geographic Regions.
- (k) The element of infrastructure administration Attributed as a Below Rail Cost can be further separated into regional infrastructure administration and network wide infrastructure administration. Regional infrastructure administration is identified as all infrastructure administration related to cost centres where the responsible manager's sphere of control relates to a single Geographic Region or to a small number of Geographic Regions. Where the sphere of control relates to a single Geographic Region, the infrastructure administration cost is Identified to that Geographic Region. Where the sphere of control relates to a small number of Geographic Regions, the infrastructure administration cost is Attributed to the relevant Geographic Regions based on the relevant category of infrastructure maintenance expenditure able to be Identified to each of those Geographic Regions.

- (l) Loss on disposal of assets is treated as a Region Specific cost where the assets being sold are Region Specific assets.

*5.4.3 Network Wide*

- (m) Due to the difficulty in accurately Identifying or Attributing telecommunications costs to specific functions, all telecommunications costs that are Allocated as Below Rail Costs are treated as Network Wide.
- (n) Maintenance costs associated with Network Wide facilities are Network Wide operating costs. .
- (o) The element of operations administration that cannot be Identified as Region Specific is a Network Wide cost.
- (p) The element of infrastructure administration that cannot be Identified as Region Specific is a Network Wide cost.
- (q) Group administration and management costs are Network Wide costs.
- (r) Corporate overheads allocated as Below Rail Costs are Network Wide costs.
- (s) Loss on disposal of assets is treated as a Network Wide cost where the assets being sold are Network Wide assets.

**5.5 Traction Electricity**

- (t) Separate invoicing by the electricity distributor to an individual Railway Operator is not currently possible. Therefore, traction electricity costs are Allocated to individual Train Services on the basis of empirical data.
- (u) Traction electricity costs incorporate both an energy component and a demand component.
- (v) The energy component is Attributed to Train Services on the basis of kilowatt hours. Kilowatt hours are estimated on the basis of a gross tonne kilometre measure that is weighted by Train type according to estimates of the average consumption by each Train type.
- (w) The demand component is Attributed to Train Services based on the number of Train Services operating over the relevant section of Rail Infrastructure, again weighted according to the type of Train.
- (x) This assessment described in Paragraphs (c) and (d) is facilitated by QR's ability to Identify traction electricity consumption costs (including energy and demand) and electrically powered Train activity into four electrification stages:

- (i) Brisbane suburban area – south of Caboolture;
- (ii) North coast line – Caboolture to Gladstone (Parana);
- (iii) Blackwater system – Gladstone (Parana) to Emerald (including branch lines) and Burngrove to German Creek (including branch lines);
- (iv) Goonyella system – German Creek to Hay Point (including branch lines).



## **12. 6. ACCESS PRICING LIMITS**

### **12.1 6.1 Approach to Access Pricing**

- (a) QR's Undertaking provides that, in the determination of Access Charges, price limits will be applied such that there is no Cross Subsidy between individual Train Services or between combinations of Train Services.
- (b) Price limits will apply in respect to Access Charges to be established for each individual Train Service (referred to as "Individual Train Service") such that, over the Evaluation Period, the relevant Access Charge for the Individual Train Service:
  - (i) will not fall below the level that will recover the expected Incremental Cost of providing Access for the Individual Train Service; and
  - (ii) will not exceed the level that will recover the expected Stand Alone Cost of providing Access for the Individual Train Service.
- (c) In addition, price limits will apply in respect of Access Charges to be established for Individual Train Services such that, over the Evaluation Period, the expected Access revenue for any combination of Train Services incorporating the Individual Train Service:
  - (i) will not fall below the level that will recover the expected Incremental Cost of providing Access for that combination of Train Services after giving consideration to the level of contribution provided by Infrastructure Payments towards the relevant Rail Infrastructure; and
  - (ii) will not exceed the level that will recover the expected Stand Alone Cost of providing Access for that combination of Train Services.
- (d) The Undertaking identifies how to assess whether Access Charges are consistent with these limits, however, does not specifically identify how Incremental Cost and Stand Alone Cost are assessed. The purpose of this section is to assist in identifying what costs are incorporated in an assessment of these price limits.

### **12.2 6.2 Incremental Cost of Providing Access**

#### *6.2.1 Assessment of Incremental Cost*

- (e) The Incremental Costs for a Train Service or combination of Train Services that are not currently operating on the Rail Infrastructure (referred to as "New Train Service(s)") are those additional costs, including capital costs, that would be incurred (including the cost of

bringing expenditure forward in time) if that Train Service or combination of Train Services (as appropriate) commenced operation and QR continued to meet all existing obligations to all other parties.

- (f) The Incremental Costs for a Train Service or a combination of Train Services that are currently operating on the Rail Infrastructure (referred to as “Existing Train Service(s)”) are those costs that would not be incurred if that Train Service or combination of Train Services (as appropriate) ceased operation, but where QR continues to meet its existing obligations to all other parties. For example, where an Existing Train Service is the sole user of a Line Section, its Incremental Cost will include all Line Section Specific Below Rail Costs associated with that Line Section, unless QR has an obligation to another party (eg Queensland Transport) to continue to make that Line Section available for the operation of Train Services. In the circumstances where QR has such an obligation, the Incremental Cost of the Existing Train Service would include (but not necessarily be limited to) those additional Line Section Specific Below Rail Costs that QR incurs as a direct result of the operation of that Existing Train Service, compared to the costs of the provision of that Line Section to the required standard in the absence of that Existing Train Service.
- (g) The Incremental Cost for a combination of Train Services that includes both Existing Train Services and New Train Services will be the sum of the Incremental Cost for the Existing Train Service or combination of Existing Train Services (as appropriate) and the Incremental Cost of the New Train Service or combination of New Train Services (as appropriate).
- (h) The Incremental Cost for a Train Service or combination of Train Services (as appropriate) will be the sum of the Incremental operating costs determined in accordance with Subclause 6.2.3 and the Incremental capital charges determined in accordance with Subclause 6.2.4.

#### 6.2.2 Incremental Assets

- (i) For a New Train Service or a combination of New Train Services, the Incremental assets will be any new assets that are required to facilitate the operation of that Train Service or combination of Train Services (as appropriate) while providing for QR to continue to meet all of its existing obligations to all other parties.
- (j) For an Existing Train Service or a combination of Existing Train Services, the Incremental assets will be those existing assets that would no longer be required and which could be removed if that Train Service or combination of Train Services (as appropriate) ceased to

operate but where QR continued to meet all existing obligations to all other parties.

(k) For the purposes of Paragraph (b), the Incremental assets for an Existing Train Service or combination of Existing Train Services (as appropriate) will be assessed by adding together Incremental Line Section Specific assets (if any), the Incremental Region Specific assets (if any) and the Incremental Network Wide assets (if any), determined in accordance with Paragraphs (d) to (f).

(l) For the purpose of assessing Incremental Line Section Specific assets:

(i) Where the Train Service or combination of Train Services (as appropriate):

- reflects a small proportion of the train kilometres or gross tonne kilometres that travel over a Line Section; and
- requires the same or a lower Track standard as other Train Services that travel over a Line Section;

unless there is better information to the contrary, it will be assumed that there are no Incremental Line Section Specific assets related to that Train Service or combination of Train Services (as appropriate).

(ii) Where the Train Service or combination of Train Services (as appropriate):

- reflects a significant proportion of the train kilometres or gross tonne kilometres that travel over a Line Section; or
- requires a higher Track standard than other Train Services that travel over a Line Section;

the Incremental assets for that Train Service or combination of Train Services (as appropriate) include Line Section Specific assets Identified to that Line Section that would not be required and which could be removed if that Train Service or combination of Train Services (as appropriate) ceased to operate. These assets will be assessed on a case by case basis using engineering and operational estimates of the impact of that Train Service or combination of Train Services (as appropriate).

(m) For the purpose of assessing Incremental Region Specific assets:

- (i) Where the Train Service or combination of Train Services (as appropriate) reflects a small proportion of the train kilometres or gross tonne kilometres that travel within a Geographic Region, unless there is better information to the contrary, it will be assumed that there are no Incremental Region Specific assets related to that Train Service or combination of Train Services (as appropriate).
  - (ii) Where the Train Service or combination of Train Services (as appropriate) reflects a significant proportion of the train kilometres or gross tonne kilometres that travel within a Geographic Region, the Incremental assets for that Train Service or combination of Train Services (as appropriate) include Region Specific assets Identified to that Geographic Region that would not be required and which could be removed if that Train Service or combination of Train Services (as appropriate) ceased to operate. These assets will be assessed on a case by case basis using engineering and operational estimates of the impact of that Train Service or combination of Train Services (as appropriate).
- (n) For the purpose of assessing Incremental Network Wide assets:
- (i) Where the Train Service or combination of Train Services (as appropriate) reflects a small proportion of the train kilometres or gross tonne kilometres that travel over the Rail Infrastructure, unless there is better information to the contrary, it will be assumed that there are no Incremental Network Wide assets related to that Train Service or combination of Train Services (as appropriate).
  - (ii) Where the Train Service or combination of Train Services (as appropriate) reflects a significant proportion of the train kilometres or gross tonne kilometres that travel over the Rail Infrastructure, the Incremental assets for that Train Service or combination of Train Services (as appropriate) include Network Wide assets that would not be required and which could be removed if that Train Service or combination of Train Services (as appropriate) ceased to operate. These assets will be assessed on a case by case basis using engineering and operational estimates of the impact of that Train Service or combination of Train Services (as appropriate).

*6.2.3 Incremental Operating Costs*

- (o) For a New Train Service or a combination of New Train Services, the Incremental operating cost will be any operating costs, in excess of those currently expected to be incurred in order to meet all of QR's

existing obligations to other parties, which are required to facilitate the operation of that Train Service or combination of Train Services (as appropriate) including, but not limited to, the costs of operating and maintaining any Incremental assets for that Train Service or combination of Train Services (as appropriate).

- (p) For an Existing Train Service or a combination of Existing Train Services, the Incremental operating costs will be those operating costs that would not be incurred if that Train Service or combination of Train Services (as appropriate) ceased to operate but assuming that QR continued to meet all other existing obligations to other parties.
- (q) For the purposes of Paragraphs (a) and (b), Incremental operating costs will be assessed based on QR's forecast operating costs developed on the following assumptions:
  - (i) the forecasts costs will reflect QR's actual expectations of the costs that it will incur in the provision of below rail services; and
  - (ii) QR will not include in its forecast a specific forecast of the costs associated with repairing damage caused by unplanned events such as floods, derailments and collisions, or a forecast of external insurance costs. Rather, QR will include in the estimate of forecast costs an estimated cost of risk associated with the forecast operation of Train Services on the Rail Infrastructure. The forecast cost of risk will incorporate the cost of external insurance and the cost of self insurance for those non diversifiable risks that are not, or cannot, be covered by external insurance (including, where external insurance is in place, the likely expenditure on deductibles).
- (r) For the purposes of Paragraph (b), the Incremental operating cost for an Existing Train Service or combination of Existing Train Services (as appropriate) will be assessed by adding together the cost of electric traction energy (if any), the Incremental Line Section Specific operating costs, the Incremental Region Specific operating costs (if any) and the Incremental Network Wide operating costs (if any), determined in accordance with Paragraphs (e) to (i).
- (s) Electric energy required for traction power that is Attributed to a Train Service or a combination of Train Services (as appropriate) will form part of the Incremental Cost of that Train Service or combination of Train Services (as appropriate).
- (t) Where the Train Service or combination of Train Services (as appropriate):

- reflects a small proportion of the train kilometres or gross tonne kilometres that travel over a Line Section; and
- requires the same or lower Track standard as other Train Services that travel over a Line Section;

the operating costs that form part of the Incremental operating cost of that Train Service or combination of Train Services (as appropriate) will include:

- Line Section Specific costs Identified to that Line Section being the variable component of Line Section Specific costs, all measured on a long run avoidable basis. In absence of better information to the contrary, the ratios in Table 6.1 will be used to estimate these costs for all areas of the network with the exception of those Line Sections where, on average, less than 1,000,000 gross tonnes per annum is carried over the Line Section and where QR is obliged to continue to provide that Line Section in accordance with an arrangement with Queensland Transport. In such circumstances, in the absence of information to the contrary, the variable component of the relevant Line Section Specific costs will be assumed to be zero.
- Region Specific costs identified to that Geographic Region being the estimated cost associated with the additional risk to QR associated with the operation of that Train Service or group of Train Services (as appropriate).

**Table 6.1 Ratios of Variable to Total Cost**

Line Section Specific Cost	Ratio of Variable to Total Costs	Usage Factor
Track Maintenance	40%	Gross tonne km
Traction Power Distribution Maintenance	5%	Pantograph km
Signal Maintenance	5%	Train km
Bridge Maintenance	0%	n/a
Facilities Maintenance	0%	n/a

- Where the Train Service or combination of Train Services (as appropriate):
  - reflects a significant proportion of the train kilometres or gross tonne kilometres that travel over a Line Section; or
  - requires a higher Track standard than all other Train Services that travel over a Line Section;

the Incremental Costs for that Train Service or combination of Train Services (as appropriate) include:

- (i) Line Section Specific costs Identified to that Line Section as follows:
  - Where the Train Service or combination of Train Services (as appropriate) reflects a significant proportion of the train kilometres or gross tonne kilometres that travel over the Line Section, the variable component of Track maintenance, bridge maintenance, signal maintenance and traction power distribution maintenance, all measured on a long run avoidable basis;
  - Where the Train Service or combination of Train Services (as appropriate) requires a higher Track standard than required by other Train Services on the Line Section, the cost of the additional Track maintenance, bridge maintenance and traction power distribution maintenance resulting from differing standard of Rail Infrastructure to suit the requirements of the subject Train Service or combination of Train Services (as appropriate) as compared to the Train Services that would otherwise be operating on the Line Section; and
  - The variable component of Line Section Specific facilities maintenance costs, measured on a long run avoidable basis.

These costs will be assessed on a case by case basis, using engineering estimates of the impact on those cost items; and

- (ii) Region Specific costs identified to that Geographic Region being the estimated cost associated with the additional risk to QR associated with the operation of that Train Service or group of Train Services (as appropriate).
- (v) For the purpose of assessing Incremental Region Specific operating costs in addition to those identified in accordance with Subparagraph (g)(ii) above:
  - (i) Where the Train Service or combination of Train Services (as appropriate) reflects a small proportion of the train kilometres or gross tonne kilometres that travel over that Geographic Region, unless there is better information to the contrary, it will be assumed that there are no additional Incremental Region Specific operating costs.

- (ii) Where the Train Service or combination of Train Services (as appropriate) reflects a significant proportion of the train kilometres or gross tonne kilometres that travel over that Geographic Region, the Incremental operating cost will include Region Specific costs identified to that Geographic Region being the variable component of all Region Specific costs (with the exception of the estimated cost of risk), measured on a long run avoidable basis. These costs will be assessed on a case by case basis, using engineering and operational estimates of the impact on those cost items.
- (w) For the purpose of assessing Incremental Network Wide costs:
- (i) Where the Train Service or combination of Train Services (as appropriate) reflects a small proportion of the train kilometres or gross tonne kilometres that travel over the Rail Infrastructure, unless there is better information to the contrary, it will be assumed that there are no Incremental Network Wide operating costs.
  - (ii) Where the Train Service or combination of Train Services (as appropriate) reflects a significant proportion of the train kilometres or gross tonne kilometres that travel over the Rail Infrastructure, the Incremental operating costs will include the variable component of Network Wide costs, measured on a long run avoidable basis. These costs will be assessed on a case by case basis.

#### 6.2.4 Incremental Capital Charges

- (x) Incremental capital charges for a Train Service or combination of Train Services (as appropriate) are the sum of:
- (i) depreciation (if any) on Incremental assets for that Train Service or combination of Train Services (as appropriate) determined in accordance with Paragraph (b);
  - (ii) depreciation (if any) on other Rail Infrastructure assets determined in accordance with Paragraph (d);
  - (iii) a commercial return on Incremental assets for that Train Service or combination of Train Services (as appropriate) determined in accordance with Paragraph (e); and
  - (iv) a commercial return (if any) on other Rail Infrastructure assets determined in accordance with Paragraph (f);
- (y) Depreciation charges will be assessed on Incremental assets on the basis of the asset valuation determined in accordance with Paragraph

- (c) and the economic life and depreciation methodology permitted by the QCA for pricing purposes rather than on the basis of the depreciation recorded in QR's Financial Statements.
- (z) Incremental assets for a Train Service or combination of Train Services (as appropriate) will be valued as follows:
- (i) For a New Train Service or a combination of New Train Services (as appropriate) the Incremental assets will be valued at QR's estimated cost of constructing those assets.
  - (ii) For an Existing Train Service or a combination of Existing Train Services (as appropriate) the Incremental assets will be valued at the net amount that QR would expect to receive from the sale of those assets.
- (aa) Depreciation charges will be assessed on other Rail Infrastructure assets as follows:
- (i) Where the life of assets utilised by the Train Service or combination of Train Services (as appropriate) is limited based on the usage of those assets and it is expected that those assets will be replaced at the end of that life, depreciation on those assets will be assessed based on their Incremental usage. For example, in the above circumstances, the Incremental capital charge may include depreciation of Track assets based on gross tonne kilometres, and depreciation of electric distribution assets based on pantograph kilometres; and
  - (ii) Where the construction of Incremental assets for a New Train Service or combination of New Train Services (as appropriate), directly results in the premature replacement of existing Rail Infrastructure assets, the Incremental capital charge will include depreciation on the value of those prematurely replaced assets, where that depreciation is that which would have been determined for those assets if they were not prematurely replaced, based on the asset valuation and depreciation methodology permitted by the QCA for pricing purposes.
- (bb) The return on Incremental assets will be determined by applying the rate of return permitted by the QCA for use in the determination of QR's Access Charges to the value of assets that are Incremental assets for that Train Service or combination of Train Services, where the value of those assets is determined in accordance with Paragraph (c).
- (cc) A return on other Rail Infrastructure assets will be determined in the circumstances described in Paragraph (d)(ii), by applying the rate of return permitted by the QCA for use in the determination of QR's

Access Charges to the value of any prematurely replaced assets, where the value is that which would have been determined for those assets if they were not prematurely replaced, based on the asset valuation and depreciation methodology permitted by the QCA for pricing purposes.

### 12.3 6.3 Stand Alone Cost of Providing Access

#### 6.3.1 Assessment of Stand Alone Cost

The Stand Alone Cost for a Train Service or combination of Train Services (as appropriate) will be the sum of the Stand Alone operating costs determined in accordance with Subclause 6.3.3 and the Stand Alone capital charges determined in accordance with Subclause 6.3.4.

#### 6.3.2 Stand Alone Assets

- (dd) The Stand Alone assets required for the purpose of a Train Service or combination of Train Services will be all of those assets Identified, Attributed or Allocated as Below Rail Costs that would be required to provide the Below Rail Services necessary for the operation of that Train Service or combination of Train Services (as appropriate) if they were the only services provided by QR.
- (ee) For the purposes of Paragraph (a), the Stand Alone assets for a Train Service or combination of Train Services (as appropriate) will be assessed by adding together the Stand Alone Line Section Specific assets, the Stand Alone Region Specific assets and the Stand Alone Network Wide assets, determined, for each group of assets (i.e. Line Section Specific, Region Specific and Network Wide), in accordance with the process identified in Paragraph (c).
- (ff) The Stand Alone assets, for the relevant group of assets, required for the purposes of a Train Service or combination of Train Services (as appropriate) will be assessed as follows:
- (i) The Stand Alone assets will include QR's existing assets reviewed for the purpose of identifying and, where necessary excluding, any assets that would not be required (i.e. QR's existing assets will be optimised) to meet the requirements of that Train Service or combination of Train Services (as appropriate). The elements to be addressed in such optimisation are:
    - Rail Infrastructure capacity; and
    - Rail Infrastructure standard.
  - (ii) If such optimisation indicates that QR's existing assets are insufficient to meet the requirements of that Train Service or combination of Train Services (as appropriate), for example

because it reflects additional Train Services compared to what is currently operating, the Stand Alone assets will include QR's existing assets, plus those additional assets necessary to meet the requirements of the Train Service or combination of Train Services (as appropriate).

(iii) If such optimisation indicates that QR's existing assets are sufficient (or excessive) to meet the requirements of that Train Service or combination of Train Services (as appropriate) with respect to only one element of the optimisation framework, for example because the Train Service combination requires less Rail Infrastructure capacity but a higher Rail Infrastructure standard, the Stand Alone assets will be assessed by:

- optimising QR's existing assets in relation to the element of the optimisation framework where QR's existing assets are sufficient (or excessive) to meet the requirements of that Train Service or combination of Train Services (as appropriate); and then
- adding those additional assets necessary to meet the requirements of the Train Service or combination of Train Services (as appropriate) in respect of the other element of the optimisation framework.

(gg) For the purpose of performing an optimisation of QR's existing assets for the purpose of Paragraph (c), where:

(i) the Train Service or combination of Train Services (as appropriate):

- reflects all, or all but a small proportion, of the existing train kilometres and gross tonne kilometres that travel on a Line Section; and
- requires a standard of Rail Infrastructure which is the same as that currently provided on the Line Section;

unless there is better information to the contrary, it will be assumed that there is no need to exclude any of QR's existing Line Section Specific assets and, therefore, the Stand Alone Line Section Specific assets will be all existing Line Section Specific assets for that Line Section;

(ii) the Train Service or combination of Train Services reflects all, or all but a small proportion, of the existing train kilometres and gross tonne kilometres that travels in a Geographic Region, unless there is better information to the contrary, it will be

assumed that there is no need to exclude any of QR's existing Region Specific assets and, therefore, the Stand Alone Region Specific assets will be all existing Region Specific assets for that Geographic Region;

- (iii) the Train Service or combination of Train Services reflects all, or all but a small proportion, of the existing train kilometres and gross tonne kilometres that travels on the Rail Infrastructure, unless there is better information to the contrary, it will be assumed that there is no need to exclude any of QR's existing Network Wide assets and, therefore, the Stand Alone Network Wide assets will be all existing Network Wide assets.

In all circumstances other than those identified in Subparagraphs (i) to (iii), assessments made for the purpose of Paragraph (c) relating to optimising existing assets or assessing additional assets necessary to meet the requirements of the Train Service or combination of Train Services (as appropriate) will be made on a case by case basis using engineering and operational estimates of the assets that would be required to meet the requirements of that Train Service or combination of Train Services (as appropriate).

#### 6.3.3 Stand Alone Operating Cost

- (hh) The Stand Alone operating costs required for the purposes of a Train Service or combination of Train Services (as appropriate) will include all operating costs Identified, Attributed or Allocated as Below Rail Costs that would be incurred in the provision of Below Rail Services necessary for the operation of that Train Service or combination of Train Services (as appropriate) if they were the only services provided by QR.
- (ii) For the purpose of Paragraph (a), Stand Alone operating costs will be assessed based on QR's forecast operating costs developed on the following assumptions:
  - (i) the forecast costs will reflect those costs that QR would reasonably be expected to incur in the provision of the necessary Below Rail Services, taking into account the reasonably expected improvements in efficiency that QR should achieve over the Evaluation Period; and
  - (ii) QR will not include a forecast of the costs associated with repairing damage caused by unplanned events such as floods, derailments and collisions, or a forecast of external insurance costs. Rather, QR will include in its forecast costs an estimated cost of risk associated with the forecast operation of Train Services on the Rail Infrastructure. The forecast cost of risk will

incorporate the cost of external insurance and the cost of self insurance for those non diversifiable risks that are not, or cannot, be covered by external insurance (including, where external insurance is in place, the likely expenditure on deductibles).

- (jj) For the purpose of Paragraph (a), the Stand Alone operating cost for a Train Service or combination of Train Services (as appropriate), will be assessed by adding together the cost of electric traction energy (if any) identified in accordance with Paragraph (d), the Stand Alone Line Section Specific operating cost, the Stand Alone Region Specific operating cost and the Stand Alone Network Wide operating costs, determined for each group of costs (i.e. Line Section Specific, Region Specific and Network Wide) in accordance with Paragraph (e).
- (kk) Electric energy required for traction power that is Attributed to a Train Service or a combination of Train Services (as appropriate) will form part of the Stand Alone Cost of that Train Service or combination of Train Services (as appropriate).
- (ll) For the purpose of estimating the Stand Alone operating costs, where:
- (i) the Train Service or combination of Train Services (as appropriate):
- reflects all, or all but a small proportion, of the existing train kilometres and gross tonne kilometres operated on a Line Section; and
  - requires a standard of Rail Infrastructure which is the same as that currently provided on the Line Section;

unless there is better information to the contrary, it will be assumed that the Stand Alone Line Section Specific operating costs will be all of the currently forecast Line Section Specific operating costs for that Line Section, less the Incremental Line Section Specific operating costs of the remaining combination of Train Services (assessed in accordance with principles identified in Subclause 6.2.3, but based on a forecast of operating costs determined in accordance with Paragraph (b));

- (ii) the Train Service or combination of Train Services reflects all, or all but a small proportion, of the existing train kilometres and gross tonne kilometres operated in a Geographic Region, unless there is better information to the contrary, it will be assumed that the Stand Alone Region Specific operating costs will be all currently expected Region Specific operating costs for that Geographic Region, less the Incremental Region Specific

operating costs of the remaining combination of Train Services (assessed in accordance with principles identified in Subclause 6.2.3, but based on a forecast of operating costs determined in accordance with Paragraph (b));

- (iii) the Train Service or combination of Train Services (as appropriate) reflects all, or all but a small proportion, of the existing train kilometres and gross tonne kilometres operated on the Rail Infrastructure, unless there is better information to the contrary, it will be assumed that the Stand Alone Network Wide operating cost will be all existing Network Wide operating costs.

In all circumstances other than those identified in Subparagraphs (i) to (iii), assessments made for the purpose of Paragraph (e) relating to the Stand Alone operating costs for a Train Service or combination of Train Services (as appropriate) will be made on a case by case basis using engineering and operational estimates of the costs that will be incurred in managing, to the required standard, the Stand Alone assets required to meet the requirements of that Train Service or combination of Train Services (as appropriate).

#### 6.3.4 Stand Alone Capital Charges

- (mm) Stand Alone capital charges for a Train Service or combination of Train Services (as appropriate) are the sum of:
  - (i) depreciation on the Stand Alone assets for that Train Service or combination of Train Services (as appropriate) determined in accordance with Paragraph (b); and
  - (ii) a commercial return on the Stand Alone assets for that Train Service or combination of Train Services (as appropriate) determined in accordance with Paragraph (d).
- (nn) Depreciation charges will be the depreciation on all Stand Alone assets for a Train Service or combination of Train Services (as appropriate) assessed on the basis of valuation of the Stand Alone assets identified in Paragraph (c) and the methodology for depreciation permitted by the QCA for pricing purposes rather than the depreciation recorded in QR's Financial Statements.
- (oo) Stand Alone assets for a Train Service or combination of Train Services (as appropriate) will be valued on the basis of the methodology for asset valuation permitted by the QCA for use in the determination of QR's Access Charges rather than the values recorded in QR's Financial Statements.
- (pp) The commercial return on Stand Alone assets will be assessed by applying the rate of return permitted by the QCA for use in the

determination of QR's Access Charges to the value of assets that are Stand Alone assets for that Train Service or combination of Train Services (as appropriate), where the value of those assets is determined in accordance with Paragraph (c).



### 13. 7. DEFINITIONS

In this Manual, unless inconsistent with the Manual or context, the following words and expressions shall have the meanings identified in this Part 7. Other parts of speech or grammatical forms of a word or phrase defined in this Manual have a corresponding meaning.

**“Above Rail Costs”** means the costs and/or assets (as the context implies) associated with the provision of Above Rail Services;

**“Above Rail Services”** means those activities, other than Below Rail Services, required to provide and operate Train Services including rollingstock provision, rollingstock maintenance, non train control related communications, train crewing, terminal provision and services, freight handling and marketing and administration of those services;

**“Access”** means the non-exclusive utilisation of a specified section of Rail Infrastructure for the purposes of operating Train Services;

**“Access Charge”** means the price paid by a Railway Operator for Access under an Access agreement;

**“Act”** means the Queensland Competition Authority Act 1997 (Qld);

**“Allocation”** means, where costs or assets are jointly used for the provision of a function/service and where there is no direct causal relationship between the resources used and the function/service provided, the sharing of such joint costs between those functions/services;

**“Attribution”** means, where costs or assets are jointly used for the provision of a function/service and where there is a causal relationship between the resources used and function/service provided, the sharing of costs between those functions/services on a basis of cost causality;

**“Below Rail Costs”** means the costs and/or assets (as the context implies) associated with the provision of Below Rail Services;

**“Below Rail Services”** means the activities associated with the provision and management of Rail Infrastructure, including the construction, maintenance and renewal of Rail Infrastructure assets, and the network management services required for the safe operation of Train Services on the Rail Infrastructure, including train control and the implementation of safeworking procedures;

**“Capacity”** means the capability of a specified section of Rail Infrastructure to accommodate Train Services within a specified time period after providing for QR’s reasonable requirements for the exclusive utilisation of that specified section of Rail Infrastructure for the purposes of performing activities associated with the repair or enhancement of the Rail Infrastructure, including the operation of work trains;

**“Corporations Law”** has the meaning given to that term in the Corporations (Queensland) Act 1990;

**“Corporate Overhead”** costs are those costs that relate predominantly to the overall management, strategy and governance of the corporation and include, for example, the chief executive's office, internal audit, corporate strategy and planning, corporate finance, information strategy, safety and industrial relations;

**“Corporate Services”** costs are the costs of services that are provided at the corporation wide level to groups and divisions within QR and include, for example, legal services, computer services, motor vehicle fleet management, administration building services, payroll preparation and employee relations;

**“Costing Manual”** of **“Manual”** means the document prepared by QR that identifies those matters required of the cost allocation manual, as identified in the Undertaking;

**“Cross Subsidy”** means where:

- one Train Service or combination of Train Services pays Access Charges which are insufficient to meet the Incremental Cost imposed on the Rail Infrastructure by that Train Service or combination of Train Services; and
- the shortfall is contributed by revenue from another Train Service or combination of Train Services that is paying Access Charges which provide revenue greater than the Stand Alone Cost of that Train Service or combination of Train Services;

**“Evaluation Period”** means, when in reference to an Individual Train Service, the period which is equal to the length of the expected duration of the existing or proposed Access agreement in respect of the relevant Train Service or, when in reference to a group of Train Services, the period which is equal to the length of the expected duration of the longest existing or proposed Access agreement in respect of any of the Train Services comprising the combination of Train Services, provided that such period does not exceed ten (10) years;

**“Financial Statements”** means the annual accounts prepared in accordance the requirements of the *Financial Administration and Audit Act (1997)* and audited by the Queensland Auditor-General;

**“Geographic Region”** means sections of the Track identified in Appendix 2 as a “Region”;

**“Geographic System”** means sections of the Track identified in Appendix 2 as a “System” and, for those Geographic Regions that have no “Systems” identified, means that Geographic Region;

**“Identification”** means, where costs are directly incurred, or assets directly used in the performance of a function/service, the identification of those costs to that function/service;

**“Incremental Costs”** means those costs of providing Access, including capital (renewal and expansion) costs, that would not be incurred (including the cost of bringing expenditure forward in time) if the particular Train Service or group of Train Services (as appropriate) did not operate and “Incremental” has a similar meaning;

**“Infrastructure Payments”** means payments to QR from the Queensland Government to enable QR to provide specified sections of Rail Infrastructure;

**“Line Section”** means a section of railway route as defined in QR’s chart of accounts from time to time and that is identified for the purpose of classifying the Rail Infrastructure into line sections with reasonably consistent traffic (in terms of type of traffic and density of traffic) and reasonably consistent Track standards;

**“Line Section Specific”** means costs and assets able to be specifically Identified or Attributed to a Line Section;

**“Network Access”** means the business group established within QR to manage the provision of Below Rail Services with the exception of stations and platforms;

**“Network Wide”** means costs and assets associated with the provision of Below Rail Services not able to be Identified or Attributed to a Line Section or a Geographic Region;

**“Other Activities”** are activities undertaken by QR that are neither Above Rail Services nor Below Rail Services and include, for example, consulting activities, treasury activities such as cross border leasing, foreign exchange and financing;

**“Other Activities Costs”** means the costs and/or assets (as the context implies) associated with the provision of Other Activities;

**“QCA”** means the Queensland Competition Authority as established by the Act;

**“Queensland Transport”** means the Department of Transport for the State of Queensland;

**“Rail Infrastructure”** means Rail Transport Infrastructure as defined in the Transport Infrastructure Act 1994 (Qld) for which QR is the Railway Manager;

**“Railway Manager”** has the meaning given to that term in the Transport Infrastructure Act 1994 (Qld);

**“Railway Operator”** means a person who has, or is seeking, Access from QR to operate Train Services on the Rail Infrastructure and who is, or who will become, Accredited in respect of those Train Services;

**“Region Specific”** means costs and assets associated with the provision of Below Rail Services not able to be Identified or Attributed to a specified Line Section, but able to be Identified or Attributed to a Geographic Region;

**“Rollingstock”** means locomotives, carriages, wagons, rail cars, rail motors, light rail vehicles, light inspection vehicles, rail/road vehicles, trolleys and any other vehicle that operates on or uses the Track;

**“Stand Alone Costs”** means those costs that QR would reasonably incur if the relevant Train Service or combination of Train Services (as appropriate) was the only Train Service or combination of Train Services (as appropriate) provided Access by QR and “Stand Alone” has a similar meaning;

**“Third Party Operator”** means a Railway Operator other than QR;

**“Track”** means that part of the Rail Infrastructure comprising the rail, ballast, sleepers and associated fittings upon which Trains operate;

**“Train”** means any configuration of Rollingstock operating as a unit on the Track;

**“Train Service”** means the operation of a Train between specified origins and destinations on the Rail Infrastructure;

**“Undertaking”** refers to QR’s undertaking developed and approved in accordance with the Act.



## 14. 8. GEOGRAPHIC REGIONS AND SYSTEMS

### **METROPOLITAN REGION**

Roma Street - Rosewood  
Bundamba - Box Flat  
Ipswich - Workshops  
Ipswich - Churchill  
Yarrowlea - Ebenezer  
Roma Street - Robina  
Yeerongpilly - Corinda  
Salisbury Jct - Acacia Ridge  
Bethania - Beaudesert  
Park Road - Cleveland  
Lytton Jct - Fisherman Islands  
Roma Street - Nambour  
Roma St - Exhibition - Mayne  
Bowen Hills - Ferny Grove  
Eagle Jct - Pinkenba  
Northgate - Shorncliffe  
Caboolture - Wamuran

### **STANDARD GAUGE REGION**

Acacia Ridge - NSW Border  
Salisbury Junction - Acacia Ridge

### **SOUTH WEST REGION**

#### **Mainline System**

Rosewood - Toowoomba

#### **South West System**

Toowoomba - Dirranbandi  
Wyreema - Millmerran  
Hendon - Allora  
Warwick - Wallangarra

#### **Western System**

Toowoomba - Quilpie  
Oakey - Cecil Plains  
Dalby - Bell  
Tycanba - Jandowae  
Dalby - Glenmorgan  
Miles - Wandoan  
Westgate - Cunnamulla

### **NORTH COAST LINE REGION**

Nambour - Gladstone Station  
Rocklands - Durroburra  
Mackay - Marian  
Erakala - Mackay Harbour  
Kaili - Cairns  
Townsville Jetty Branch  
Cobarra Balloon  
Gympie Nth - Gympie  
(Gladstone to Rocklands included in Blackwater System)  
(Durroburra to Kaili included in Newlands System)

**OTHER BRANCHES REGION**

Theebine - Kingaroy/ Byee  
Mungar - Monto  
Graham - Monto  
Maryborough West - Maryborough (Incl M'boro Yard)  
Colton - Takura  
Dakenba - Biloela  
Earlsfield - Kooemba  
Moura Mine Jct - Goolara  
Bajool - Wheat Board Siding  
Glenmore Jct - Yeppoon  
Bowen Jct - Bowen

**CENTRAL WEST REGION**

Burngrove - Longreach - Hughenden  
Nogoa - Springsure  
Emerald - Blair Athol Mine Jct  
Jericho - Yaraka

**MOUNT ISA LINE REGION**

Stuart - Mt Isa  
Yurbi Jct - Yurbi (Cannington Mine)  
Flynn - Phosphate Hill

## **NORTHERN TABLELANDS REGION**

Cairns - Forsayth  
Mareeba - Atherton  
Arriga Jct - Arriga  
Almaden - Mungana  
Normanton - Croydon

## **CENTRAL QUEENSLAND COAL REGION**

### **Newlands System**

Newlands - Abbot Point  
Pring - Merinda  
Collinsville - McNaughton

### **Goonyella System**

Hay Pont/ Dal Bay - Coppabella  
Coppabella - North Goonyella  
Wotonga - Blair Athol Jct  
Coppabella - Oaky Creek Jct  
Mine Spurs

### **Blackwater System**

Gladstone Station - Burngrove  
Callemondah Yard & Golding  
Fish landing Jct - Fish Landing  
East End Jct - East End  
Burngrove - Oaky Creek Junction  
Mine Spurs

### **Moura System**

Gladstone (Parana) - Callemondah via short line  
Callemondah - Moura Mine  
Annandale - Boundary Hill  
Earlsfield - Callide Coalfields