- 3 JUL 2009



DATE RECEIVED

Mr John Hall Chief Executive Officer Queensland Competition Authority GPO Box 2257 BRISBANE QLD 4001

Dear John

#### QR Network's Draft Amending Undertaking Lake Vermont Reference Tariff

Please find attached a Draft Amending Access Undertaking for a new Reference Tariff for coal carrying Train Services from the Lake Vermont mine.

Train Services commenced from the Lake Vermont mine to the Port of Gladstone in January 2009. A new Reference Tariff has been developed in accordance with Schedule F, Part B, paragraph 4 of the 2008 Undertaking and will be established as a Lake Vermont via Blackwater Cluster for the Blackwater System.

This submission comprises an explanatory document, together with clean and marked up versions against the 2008 Undertaking.

Please contact on should you have any further queries regarding the preliminary submission.

Yours faithfully

Mike Carter Executive General Manager QR Network Pty Ltd

3 July 2009





Submission to the Queensland Competition Authority

Draft Amending Access Undertaking

Proposed Reference Tariff for the Vermont via Blackwater Cluster

Date: 03 / 07 / 2009



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#### 1. Preamble

This submission has been prepared by QR Network in accordance with its obligations to develop Reference Tariffs under Section 6.4 of the QR Network 2008 Access Undertaking (QR Network's Undertaking). The submission sets out QR Network's proposal for a Reference Tariff for a new Vermont cluster to apply to coal carrying train services from the Lake Vermont mine to the Port of Gladstone.

QR Network aims at all times to deliver a safe, reliable, environmentally sustainable and commercially viable network. As part of this drive, QR Network has a commitment to provide reference tariffs for the major coal regions to further foster transparency and certainty in pricing for QR Network customers. This commitment is embedded in Clause 6.4.2(b) which requires that where a new coal mine is developed and Train Services servicing that mine will utilise Rail Infrastructure in the Central Queensland Coal Region, the Train Services will be incorporated in a new or existing Reference Tariff in a manner consistent with Schedule F.

The intention of the drafting of Clause 6.4.2(b) was to provide a mechanism for QR Network to submit a new Reference Tariff to the Queensland Competition Authority for approval without the need for a formal Draft Amending Access Undertaking (DAAU) process. However, as the proposed Reference Tariff requires amendment to the relevant System Allowable Revenues and adjustment to the Capital Indicator as discussed within this submission, the proposed Reference Tariff to apply to coal carrying Train Service from Lake Vermont within the term of the 2008 Access Undertaking is submitted as a DAAU.

Coal Carrying Train Services commenced operating from the Lake Vermont mine in late January 2009. Consistent with the approach to the development of the Reference Tariffs for the Central Queensland Coal Region (CQCR) the Vermont Cluster Reference Tariff is developed on the basis of it operating as part of a stand-alone coal network.

This submission details the relevant principles, methodology and underlying assumptions relied upon for the development of the Vermont Reference Tariff.

The submission and the development of the Reference Tariff are structured in a manner consistent with calculating a Maximum Annual Revenue Requirement using the building blocks methodology. Specifically, the submission:

- Identifies the capital values for the calculation of the return of and on capital;
- Evaluates the relevant incremental costs and necessary contribution to common costs;
- Develops a Reference Tariff consistent with the Schedule F tariff structures;
   and
- Details QR Network's proposed position in relation to incorporating the Vermont cluster into the CQCR.

In assessing the Vermont Train Service against the requirements of QR Network's Undertaking, QR Network has relied only on the forecast costs and volumes up to 30 June 2009. On 21 May 2009 the QCA approved a Draft Amending Access Undertaking extending the termination date of the 2008 Undertaking to 31 December 2009 (the transition period). As the consideration of the Draft 2009 Undertaking will establish Reference Tariffs with regards to Train Services operating from 1 July 2009, QR Network is proposing to maintain a consistent approach to the existing CQCR Train Services in that:

- the endorsed Reference Tariff applying up to 30 June 2008 will be escalated in accordance with the relevant escalation provisions in the Access Agreement over the transition period (the escalated tariff);and
- the 2009 Undertaking will include a framework, to be agreed with stakeholders and the QCA, for recovery of the difference between the escalated tariff and the approved reference tariff had they applied from 1 July 2009.

As coal carrying train services operating from the Vermont mine up to 30 June 2009 are expected to operate as diesel services the Reference Tariff has not been developed with regard to the incremental overheard related costs of the spur. However it is expected that electric train services will operate between the 30 June 2009 and the termination date of the 2008 Undertaking.

Therefore, the Reference Tariff includes an  $AT_5$  rate commensurate the prevailing Goonyella and Blackwater  $AT_5$  rates and the use of the respective systems. The effect of the incremental electric volume forecasts and the incremental overhead costs on the  $AT_5$  rate applicable to the Vermont spur will be finalised in the approval the 2009 Undertaking.

#### In this submission:

- References to the 2001 Undertaking and 2005 Undertaking are to QR's Access
  Undertakings effective 1 July 2001 and 1 July 2005, and to 2008 Undertaking
  and 2009 Undertaking are to QR Network's Access Undertaking effective 1
  August 2008 and to QR Network's Access Undertaking which is due to
  commence on 1 Janaury 2010, respectively;
- References to QR Network's Undertaking are to the 2008 Undertaking;
- References to 'mines' are to coal mine owners as end customers pursuant to a haulage agreement with an Access Holder;
- Unless expressly stated otherwise, all references to Clauses, Subclauses and Paragraphs refer to clauses, subclauses and paragraphs in Schedule F, Part B of QR Network's Undertaking; and
- Terms used that are defined in QR Network's Undertaking have the meaning given in QR Network's Undertaking.

#### 2. Background

The Lake Vermont Coal Project is the development of an open-cut mine located approximately 18 km north east of Dysart. The Lake Vermont spur was partially commissioned to allow restricted Train Operations on 21 January 2009. When fully operational the Vermont mine will have a production capacity of 4 million tonnes per annum of coking and PCI coal with an expected mine life of at least 15 years.

The Lake Vermont Project is supported by the construction a 16.6 km spur and balloon loop for the transportation of coal for export by rail. As the Lake Vermont mine is strategically located within the catchment zone of the coal loading terminals in the Hay Point area the balloon loop and spur has been built to provide Lake Vermont with the ability to move coal north through the Dalrymple Bay Coal Terminal (DBCT) and south via the Port of Gladstone.

For the purposes of deriving a tariff for UT2, Lake Vermont will only be travelling south. The spur and balloon loop connects to the existing South Goonyella mainline (labelled as Norwich Park rail line) as shown in Figure 1.



Figure 1. Lake Vermont Spur and Balloon Loop

Lake Vermont will be operating diesel services to the Port of Gladstone from the date of partial commissioning and will have the ability to run electrics approximately as of July 2009 following the removal of isolations required for additional capital works. As discussed in Section 1, while the AT<sub>1</sub> to AT<sub>4</sub> have been developed to satisfy the incremental costs and contribution to common costs associated with non-electrical infrastructure, the Reference Tariff includes an AT<sub>5</sub> and EC component to allowing billing of Train Services that may operate from 1 July 2009.

#### QR Network Undertaking

Schedule F of QR Network's Undertaking contains the Reference Tariffs applicable to nominated coal carrying Reference Train Services. These Reference Tariffs have been developed in accordance with the principles contained in Part 6 of this Undertaking and have been endorsed by the QCA for application in accordance with the terms and conditions set out in Section 1 of Schedule F.

Specifically, Clause 6.4.2(b) of QR Network's Undertaking requires that where a new coal mine is developed and Train Services servicing that mine will utilise Rail Infrastructure in the Central Queensland Coal Region, the Train Services will be incorporated in a new or existing Reference Tariff in a manner consistent with Schedule F.

The intent of 6.4.2 is that QR Network would submit, or the QCA could require QR Network to submit, a proposed Reference Tariff which would then be assessed in accordance with the provisions of this paragraph. This avoided the need to submit a DAAU. However, 6.4.2 only provides for the development of a new Reference Tariff – it does not allow for variation to other aspects of QR Network's Undertaking such as the value of System Allowable Revenue or the Capital Indicator.

In the case of the Vermont via Blackwater Reference Tariff, the new Train Services are associated with significant incremental costs that are not currently reflected in the System Allowable Revenue as included in QR Network's Undertaking. Therefore, there is a need to adjust System Allowable Revenue to ensure that additional revenue is able to be retained by QR Network to cover these incremental costs, rather than being passed back to users via the revenue cap mechanism.

Following discussions with the QCA, it is evident that 6.4.2 does not provide for consequential amendments to the Undertaking associated with the development of the proposed Reference Tariff. Therefore, the proposed Reference Tariff has been given to the QCA as a DAAU to QR Network's Undertaking. QR Network proposes to address this issue through the draft 2009 Access Undertaking to ensure the intent of 6.4.2 can be given effect.

Clause 4 of Part B to Schedule F of the Undertaking provides for the establishment of Reference Tariffs for new coal carrying Train Services. Specifically, subclause 4.1.2 specifies that the Reference Tariff for a new coal carrying Train Service will be the higher of (on a \$/net tonne basis):

- a) the Reference Tariff for the most relevant existing Reference Train Service: or
- b) the sum of the new coal carrying Train's Service's Incremental Costs and required minimum Common Cost Contribution determined in accordance subclause 4.1.1.

In determining the relevant Reference Tariff for the Lake Vermont mine, it is first necessary to calculate the new coal carrying train service's incremental costs. As coal carrying train services for the Lake Vermont mine are utilising newly created rail infrastructure not currently included in the Central Queensland Coal Region the incremental costs include the capital and operating costs associated with the Rail Infrastructure from the Lake Vermont balloon loop to the mainline line.

# 4. Incremental Costs for Lake Vermont Coal Carrying Train Services

Incremental costs for Lake Vermont coal carrying train services include:

- the total capital cost for the spur;
- the incremental operational expenditure required to service the new spur for the 2008 Undertaking period;
- the relevant maintenance costs for the spur and balloon loop; and
- incremental mainline maintenance costs

## 4.1 Capital Related Charges for the Lake Vermont Rail Infrastructure

The project plan for the construction of the Lake Vermont Rail Infrastructure includes an estimated capital cost of \$60 million, including electrification. However, as the construction of the spur and ancillary infrastructure, including signalling, is not complete at the time of preparing this submission the proposed Reference Tariff has been developed using the capital costs expected to be incurred up to 30 June 2009. This is estimated to be approximately \$47.3 million.

As electric trains are not forecast to operate prior to 30 June 2009, incremental capital costs related to the overhead distribution and supply system have not been included in the proposed Reference Tariff.

Where a new mine joins an existing system and does not require the development of a new Reference Tariff in accordance with Schedule F (i.e. pays the most relevant existing Reference Tariff) the capital costs associated with facilitating those train services is factored in the Capital Indicator in Schedule F and reflected in existing access charges. However, where a new Reference Tariff is developed the capital costs can be recognised as either:

- an increase in the value of the Regulatory Asset Base; or
- an increase in the value of the Capital Indicator.

As the final capital expenditure value is not known at this time QR Network proposes to reflect the incremental capital costs as an increase in the Capital Indicator. In following this process the actual capital expenditure will be submitted by QR Network and reviewed by the QCA in accordance with the capital expenditure review procedures in Schedule FB. Where the approved Capital Expenditure differs from the Capital Indicator amount the relevant adjustment calculated in accordance with clause 3.2 of Schedule FB will be specifically identified to the Vermont Spur.

Therefore, QR Network proposes the following consequential amendment to clause 3.1 of Schedule FB:

(c) For the purpose of determining the Reference Tariff for the Vermont via Blackwater Cluster, an additional amount of \$47.3 million has been added to the Capital Indicator in paragraph 3.1 for the year 2008-09. This amount has been allocated to the Goonyella system and is assumed to have an average life of 25 years.

The reason for an assumed average life of 25 years is discussed in section 4.1.2.

#### 4.1.1. Return on Capital

QR Network's systematic risk profile for the Lake Vermont spur Rail Infrastructure, on a stand-alone coal basis, is similar to that other Rail Infrastructure in the Central Queensland Coal Region, particularly that of export coal Customers in the Blackwater system. Therefore QR will apply the weighted average cost of capital determined by the QCA for the CQCR in for the 2005/2008 Undertaking in calculating the appropriate return on capital.

#### 4.1.2 Return of Capital

QR Network has applied straight line depreciation over a maximum economic life of 25 years. While the Vermont mine has a forecast mine life of at least 15 years, QR Network considers 25 years provides a more conservative approach to estimating the economic life of the spur as the marketable reserves of the mine is consistent with this estimate.

While there remains the possibility of the spur being utilised following the development of deposits in the immediate geographical area, the current holders of these development licences could potentially load at alternate loading facilities within that same area. Accordingly, in the absence of any interest in utilising the Vermont spur being expressed by these parties to QR Network, the economic life has been constrained to that of the Lake Vermont mine.

This economic life assumption is consistent with the economic life applied to other new spurs in the CQCR.

## 4.2 Total Maintenance of the Relevant Rail Infrastructure

As the Rail Infrastructure for the Lake Vermont spur and balloon loop are still under construction the asset was not fully commissioned prior to the commencement of rail services. While QR Network has undertaken a number of inspections since the commencement of rail services, the costs associated with those inspections are relatively immaterial. Any work undertaken prior to full commissioning are expected to be reflected in the final project costs. Therefore, for the purpose of determining the 2008 Access Undertaking Reference Tariff for Lake Vermont, QR Network has assumed no incremental maintenance costs. The incremental maintenance costs associated with the Lake Vermont spur and balloon loop following commissioning of the relevant Rail Infrastructure will be considered as part of approval of the 2009 Access Undertaking.

#### 4.3 Incremental Railway Maintenance Costs

The access charge should also include an amount to cover the long-run incremental maintenance costs associated with the proposed Train Services on the mainline. This is generally reflected in the existing AT<sub>1</sub> Reference Tariff applicable to the Blackwater and Goonyella systems. As the characteristics of coal carrying train services from the Vermont mine are comparable to existing Blackwater services, QR Network proposes to apply the use the existing AT<sub>1</sub> rates for Goonyella and Blackwater to reflect incremental mainline maintenance costs.

#### 4.4 Incremental Railway Management Costs

While the approved system wide and regional cost allowances approved in the 2005/2008 Undertaking for the Central Queensland Coal Region have not been sufficient to compensate QR Network for the actual operating costs over the period of 2005-06 to 2008-09, QR Network does acknowledge that the approved allowances were based on volume forecasts in excess of actual train movements. As the additional train movements can be managed within the resources associated with the approved volume forecasts, QR Network will not be seeking incremental costs associated with Train Control on the mainline.

However, as train operations have commenced from the Lake Vermont mine prior to the expected commissioning of the signalling system in July 2009, QR Network has incurred incremental costs associated with manual safe-working and train control on the spur.

The manual procedure requires staff from Mackay Yards to manually operate the points each time a train is given access to the spur and balloon. In times of wet weather when access is difficult it has been necessary at times to use the local Asset Services high rail vehicle and driver to provide access. When trains are delayed beyond scheduled shifts for the Mackay Yards, it has also been necessary on occasions to get QR Services to assist. QR Network estimates the incremental costs associated with these activities will equate to \$80,000 up to 30 June 2009 at which time the spur and balloon signalling infrastructure should be operational.

QR Network has determined the risk premium for the Lake Vermont spur with reference to the average of the approved 2005/2008 Undertaking risk premium allocation for the Goonyella System per net tonne kilometre. The escalated risk premium applicable to the Vermont spur and balloon loop is \$0.125 per net tonne kilometre.

# Minimum Contribution to Common Costs

When a new Reference Tariff is developed for a Train Service, its minimum contribution to QR Network's Common Cost, for non-electrification assets, will be developed in accordance with subclause 4.1.1 of Schedule F, Part B. Common Costs is defined in the Undertaking as meaning:

'those costs associated with provision of Rail Infrastructure that are not Incremental Costs for any particular Train Service using that Rail Infrastructure.'

While the Lake Vermont mine is geographically located in the Goonyella system, this reference tariff is for train services to Gladstone and operates primarily in the Blackwater system. Therefore, for the purposes of assessing the minimum contribution to common costs, QR Network considers it appropriate to use the Blackwater system formula.

For a Train Service in the Blackwater system the minimum contribution for common costs (in cents/'000 gtk) shall equal:

$$350 - 0.3M - S$$

where: M = is the relevant mine's mainline length in kilometres; and

S = the relevant mine's spur length in kilometres (16.8 km)

Under this approach the minimum contribution to common costs for the Lake Vermont mine is:

$$350 - (0.3 \times 458.4) - 16.6 = $1.96/'000 \text{ gtk}^1$$

When escalated to the commencement date of 1 January 2009 the minimum contribution to common costs equates to \$2.24 /'000 gtk.

#### 6. Volumes

The long term volume scenario for the Lake Vermont mine is for 4 mtpa to be exported via any combination of coal terminals including the Dalrymple Bay Coal Terminal and RG Tanna or potentially via the proposed Wiggins Island Terminal or through Abbot Point via Newlands.

As the mine commenced commercial railings in January 2009 and the Reference Tariff is effectively applicable only to 30 June 2009, QR Network has determined the volume forecasts relevant to establishing the Reference Tariff with regard to actual railings to end of April 2009 and the forecast railings to end of June 2009. This is summarised in Table 1.

Table 1. Net Tonne forecasts from the Vermont mine to 30 June 2009

January (a)	February (a)	March (a)	April (a)	May (f)	June (f)
48,582	127,367	178,992	184,155	251,080	259,204

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<sup>1</sup> As of June 2005

#### 7. Cluster Test

As discussed in Section 3, subclause 4.1.2 of Schedule F specifies that the Reference Tariff for a new coal carrying train service will be the higher of (on a \$/net tonne basis):

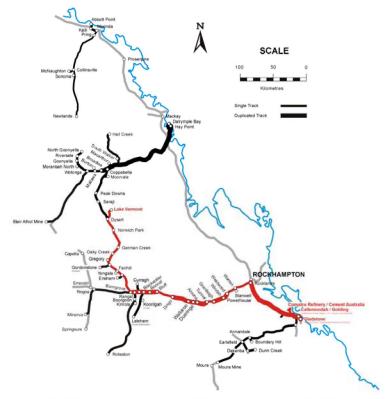
- a) the Reference Tariff for the most relevant existing Reference Train Service: or
- b) the sum of the new coal carrying Train's Service's Incremental Costs and required minimum Common Cost Contribution determined in accordance subclause 4.1.1.

A comparison of the sum of the Lake Vermont mine coal carrying train service's incremental costs as determined within Section 4 and the minimum contribution to common costs calculated in Section 5 and the applicable access charge, expressed in net tonnes, for the most relevant existing reference train services as of 1 January 2009 is shown in Table 2.

**Table 2 Vermont Access Charge Comparisons** 

	North Blackwater	Incremental + minimum CCC
Access Charge \$ per net tonne	\$3.20	\$4.15

Therefore, QR proposes to develop a new Vermont via Blackwater Reference Tariff for coal carrying Train Services from Lake Vermont to Gladstone.



**VERMONT via BLACKWATER CLUSTER** 

# 8. Vermont via Blackwater Reference Tariff

On 29 June 2007, the QCA approved QR Network's proposal to amend its approved access undertaking to implement a hybrid revenue cap for coal-carrying services in the central Queensland coal region.

As a consequence of the form of regulation review a new provision has been added to Schedule F which requires Access Charges for the Central Queensland Coal Region to have the same structure. Specifically, subparagraph 3.5.1 requires that:

'Unless prior written approval from the QCA is received, QR must calculate all Access Charges used for coal-carrying Train Services in the Central Queensland Coal Region by reference to the same components as Reference Train Services (AT<sub>1</sub>, AT<sub>2</sub>, AT<sub>3</sub>, AT<sub>4</sub>, AT<sub>5</sub> and EC if appropriate), even if the Train Service does not constitute a Reference Train Service.'

As the Vermont via Blackwater Reference Tariff coal carrying Train Services are provided by diesel locomotives, there is no requirement for the Reference Tariff to include the AT<sub>5</sub> or EC components.

QR Network's 2009 Draft Access Undertaking includes a proposal for determining the access charge relevant to cross-system traffics and the proposed removal of clusters to be replaced by the application of a premium to the AT<sub>3</sub> component of the relevant System Price. In developing the proposed Reference Tariff, QR Network has had regard to these principles in order to minimise any significant variation between the UT2 Reference Tariff and the probable structure of the UT3 Reference Tariff for the Vermont to Gladstone Train Service.

According, the Reference Tariff has been structured to meet the following objectives:

- AT<sub>1</sub> is the weighted average of North Blackwater and South Goonyella AT<sub>1</sub> by distance at 1 January 2009;
- AT<sub>2</sub> is a summation of the North Blackwater and South Goonyella AT<sub>2</sub> charges at 1 January 2009;
- AT<sub>3</sub> is the North Blackwater AT<sub>3</sub> rate adjusted to ensure Total Revenue is equivalent to the incremental costs and minimum contribution to common costs; and
- AT<sub>4</sub> is the North Blackwater AT<sub>4</sub> at 1 January 2009.
- AT<sub>5</sub> is the weighted average of the Blackwater and Goonyella AT<sub>5</sub> rates by distance at 1 January 2009.
- The EC rate is applicable as the train configuration is consistent with the standard Blackwater train configuration and is therefore likely to have similar load characteristics.

The proposed Reference Tariff to apply from 1 January 2009 is summarised in Table 2.

Table 2. Proposed Reference Tariff for Vermont via Blackwater Cluster

Tariff Component	Rate
AT <sub>1</sub>	0.73
AT <sub>2</sub>	2,688.82
AT <sub>3</sub>	1.23
AT <sub>4</sub>	2.15
AT <sub>5</sub>	2.05
EC	0.66
QCA Levy	0.006

#### 8.1 Commencement Date

Subparagraph 6.4.2.(i) specifies the commencement date for new Reference Tariff services. Specifically:

If the QCA approves a proposed Reference Tariff for a new Reference Train Service submitted under Paragraph 6.4.2(a), or resubmitted under Subparagraph 6.4.2(k)(ii):

- (i) the proposed Reference Tariff will apply from the earlier of:
  - (A) the date of the QCA decision;
  - (B) where Paragraph 6.4.2(b) applies, the date of the first Train Service servicing the new coal mine; and
  - (C) where Paragraph 6.4.2(c) applies, the date when the relevant notice is given by the QCA,

except where the QCA specifies a later date in its decision, in which case the proposed Reference Tariff will apply from that date.

As the first Train Service servicing the Lake Vermont mine occurred on 20 January 2009, the proposed Reference Tariff will apply from 1 January 2009.

#### 8.2 System Allowable Revenues

As the Lake Vermont spur and balloon loop is geographically located in the Goonyella System the capital value of the spur will be included in the Regulatory Asset Base of that system. This is approach is consistent with the expectation that in the absence of capacity constraints in the supply chain the mine owner would rationally elect a port export location which minimised its total transport costs (subject to offsetting any strategic advantages).

As the Reference Tariff represents the incremental costs of the spur and balloon loop and the minimum contribution to common costs, the System Allowable Revenues (SAR) should be adjusted according to an allocation consistent with the allocation of the spur and balloon costs. In this regard, as all the incremental costs relevant to the calculation of the System Allowable Revenue (i.e. excluding AT<sub>1</sub>) are identifiable to the Goonyella System, the Goonyella SAR has been increased by the amount of the incremental costs, and no change is proposed to the Blackwater SAR.

The variations to the SAR for the Goonyella and Blackwater System for 2008-09 are detailed in Table 3.

Table 3. Consequential Variations to UT2 System Allowable Revenue

	Goonyella	Blackwater
Variation to 2008-09	\$ 2,047,184	Nil
System Allowable Revenue	Ψ 2,047,104	IVII

## 8.3 Consequential Amendments to 2008 Access Undertaking

QR Network has identified the following consequential amendments to the 2008 Undertaking to reflect the Vermont via Blackwater Reference Tariff Draft Amending Undertaking:

- A new section 5.10 to Schedule F Part B;
- A revision of the Goonyella SAR;
- the inclusion of a revised Capital Indicator estimate in Schedule FB for the Lake Vermont capital costs.

Upon lodgement of this DAU the QCA will be considering two separate DAUs for the 2008 Undertaking. The second relating to the West Blackwater Reference Tariff. In submitting the amended Undertaking QR Network has not included the Minerva Reference Tariff and associated amendments to the Blackwater SAR but has included the relevant cluster heading at section 5.9. A mark-up of the 2008 Access Undertaking to reflect the Vermont via Blackwater Reference Tariff DAU is included at Attachment 1 of this submission. A clean version is included at Attachment B.

### Attachment A – QR Network 2008 Undertaking – marked-up

### Attachment B – QR Network 2008 Undertaking – clean