Section 1

INTRODUCTION

1. Introduction

1.1 Surat Basin Rail Project

This Environmental Impact Statement (EIS) addresses the proposed development of a new section of railway that will connect the Western Railway System (near Wandoan, 230 km west of Toowoomba) with the Moura Railway System (near Banana, located 130 km west of Gladstone). The proposed Surat Basin Rail (SBR) covers a distance of approximately 210 km (see Map 1 – Locality in the Map Folio) and is sometimes referred to as the 'Southern Missing Link'. The proposed rail is referred to in this EIS as the Project.

The Project is described as commencing (at its southern end) at a point on the Western Railway System near Wandoan, travelling north, passing to the west of Cracow, and continuing to join the Moura Railway System near Banana. The preferred alignment will be generally within or parallel to a number of existing roads; most notably, Nathan Road, Eidsvold-Theodore Road and the Leichhardt Highway. Elsewhere the rail needs to deviate from the existing road reserves to accommodate the more stringent vertical and horizontal alignments required for rail.

The proposed rail will initially consist of a single track with up to eight passing loops and has been designed to accommodate trains of up to 2.5 km in length. Although initially the railway will run diesel hauled trains, provision has been made for future electrification of the railway, should it become economically viable, without requiring the footprint of the development to increase.

A more detailed description of the Project is provided in Section 2. Maps that detail the Project are contained in the Map Folio.

It is important to note that the detail (as described in this EIS) may change as a result of further design progress and as a result of community and agency submissions to this EIS.

1.2 Surat Basin Rail Project Team

1.2.1 Proponent

The Proponent for the Project is Surat Basin Rail Pty Ltd, as an agent for and on behalf of the Surat Basin Rail Joint Venture. The joint venture partners and their interests in the Project are set out in Table 1-1.

Table 1-1: Joint Venture Partners

Joint Venture Partner	Interest in the Project
ATEC Dawson Valley Railway Pty Ltd	Established in 1996 to promote the concept of an inland rail between Melbourne and Darwin, ATEC has emerged as a key player in the rail infrastructure industry. ATEC is developing regional rail freight networks and associated terminal infrastructure. At present it has three core business interests: A freight terminal trust, the Surat Basin Railway in Queensland and the Border Railway linking Moree (NSW) to Toowoomba (QLD).
Anglo Coal Australia Pty Ltd	Anglo Coal is a leading coal producer with extensive coal mining interests and prospects in Queensland, New South Wales and Victoria. The group's coal mining interests in Queensland include a 100% interest in the Callide Mine, a 51% interest in the Dawson and Dawson South mines and a 70% interest in the Capcoal Mining Project. Anglo Coal also controls major mine deposits along the preferred alignment.

Joint Venture Partner	Interest in the Project
Xstrata Coal Surat Basin Rail Pty Ltd	Xstrata Coal is the world's largest producer of export thermal coal and the fifth largest producer of hard coking coal. Xstrata Coal has interests in over 30 operating coal mines throughout Australia, South Africa and Columbia. Xstrata is actively pursuing the development of the Wandoan Mine project in the Surat Basin.
QR Surat Basin Pty Ltd	QR Ltd is the dominant rail transport entity operating in Queensland and is one of the largest transport companies in Australia. Providing rail access and freight haulage services to the Queensland coal industry is a major element of QR's business. QR Surat Basin Rail Pty Ltd has been established to facilitate the Surat Basin Rail Project.

Surat Basin Rail Pty Ltd was established in December 2006, with the intent that the joint venture partners would work together to develop, to financial close, an open access multi-user freight railway between the Western and Moura Railway Systems.

Also in December 2006, the Queensland Government awarded Surat Basin Rail Pty Ltd a Novated Conditional Exclusive Mandate, providing the Proponent with sufficient security to enable the development of the Project. In July 2007 the initial conditions of the mandate were satisfied and the Queensland Government made the mandate unconditional.

Further information on the Proponent can be obtained by contacting:

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Proponent Environmental Record

The Proponent members' environmental records are described in terms of environmental incidents occurring as a result of their managed operational activities (Table 1-2). Where the Proponent members are subsidiary companies, formed for the purpose of the Surat Basin Rail Project and do not have an environmental track record, the environmental record of the parent company has been used.

This information was drawn from individual annual or sustainability reports. Environmental incidents are ranked into five categories defined as follows:

- Category 1 (negligible) – An incident that has caused negligible, reversible environmental impact, requiring very minor or no remediation;
- Category 2 (minor) – An incident that has caused minor, reversible environmental impact, requiring minor remediation;
- Category 3 (significant) – An incident that has caused moderate, reversible environmental impact with short-term effect, requiring moderate remediation;
- Category 4 (major) – An incident that has caused serious environmental impact, with medium-term effect, requiring significant remediation; or

- Category 5 (disastrous) – An incident that has caused disastrous environmental impact, with long-term effect, requiring major remediation.

Table 1-2: Environmental Records

Joint Venture Partner	Environmental Records
ATEC Dawson Valley Railway Pty Ltd	No public information available
Anglo Coal Australia Pty Ltd	Anglo Coal's environmental policy commits them to conserve natural resources, prevent and minimise the adverse impacts arising from their operations and demonstrate active stewardship of land and biodiversity. In terms of environmental incidents, Anglo Coal's target is to have no category 3, 4 or 5 incidents occurring; a target that has been achieved between 2005 and 2007.
Xstrata Plc	Xstrata's Sustainable Development Policy sets out their commitment to identify, analyse, evaluate and eliminate or otherwise treat all significant potential and actual impacts of their activities and operations on the environment, biodiversity and landscape functions. Emphasis is also laid on staff education and awareness about the environment. Xstrata's target is to have no category 3, 4 or 5 incidents occurring. In 2007, no incidents of category 4 or 5 were reported; and 11 category 3 incidents occurred, indicating a decreasing trend over the last few years. Every incident is investigated and reported to the Executive Committee, Board and all HSEC and environmental managers across the Group, to facilitate learning.
QR Ltd	Continual and increased environmental awareness among staff is an ongoing commitment of QR Ltd. The latest annual report 2006/2007 reveals that 4 category 3 incidents and 86 category 2 incidents occurred during this period. These figures are consistent with the average number of incidents occurring in the last few years. QR ensures that all reported incidents are investigated to minimise the impact of operation on the environment, and is constantly looking for ways to improve its environmental performance.

1.2.2 EIS Study Team

Connell Hatch, Parsons Brinckerhoff and Maunsell AECOM (CPM) formed a consortium to provide technical, independent expertise to the Proponent. This expertise covers the engineering, environmental and community engagement aspects of the Project.

An important task for CPM is the preparation of this EIS. To do this the consortium has brought together a team of in-house specialists and external consultants to provide technical advice on all matters that need to be addressed in this EIS. The names and relevant qualifications of all consultants and sub-consultants that worked on this EIS are contained in Appendix A.

1.3 Need for the Project

1.3.1 Surat Basin Coal Reserves and Export Coal Markets

Coal remains Queensland's most important export commodity, and the State continues to receive strong benefits through financial returns, increasing employment opportunities and regional development from this sector of the economy. The Surat Basin and surrounding provinces have substantial coal reserves at relatively shallow depths. The Surat Basin coal deposit contains

approximately four billion tonnes of coal, with the Clarence-Moreton Basin to the south-east providing approximately another two billion tonnes (Figure 1-1).

Figure 1-1: Central Queensland Coal Basins

Mining within these basins, to date, has been restricted to feeding local power stations (Tarong, Millmerran and Kogan Creek). Export has been hampered by a lack of suitable port infrastructure and lack of an efficient rail link to port as well as the historic market/price for steaming/thermal coal.

Recent coal demand forecasts indicate that there is substantial global demand for thermal coal and according to international coal forecasts, demand is expected to continue for the foreseeable future, particularly from China and India. The significant improvements in the commercial feasibility of Surat and Clarence-Moreton deposits in response to world demand for coal are a key driver for this and related projects that look to augment the rail and port infrastructure to facilitate this trade.

1.3.2 Queensland Coal Transport Infrastructure

The existing Queensland coal rail network, shown in Figure 1-2, comprises the following five coal rail systems: Newlands, Goonyella, Blackwater, Moura and the Western Railway Systems. As described in Section 1.1, the Project will provide a new connection between the Moura and Western Railway Systems. The Moura Railway System currently transports coal from the southern tip of the Bowen Basin coal province and the Callide Basin to several coal export terminals located at Gladstone. The Western Railway System services the southern Surat Basin, Clarence-Moreton Basin and Ipswich Basin coal provinces, providing an export link through the Fisherman Island Coal Terminal at the Port of Brisbane.

Establishment of the Project will significantly enhance the existing rail network by facilitating a new north-south link between the Surat and Clarence-Moreton Basin coal provinces and the export terminals at Gladstone via the Moura Railway System as an alternative to the Port of Brisbane, which is capacity constrained.

This Project is just one of several major developments planned to enhance the existing network and port infrastructure. A summary of related projects is provided in Section 1.4.

1.3.3 Queensland Freight Rail Transport Infrastructure

As well as its role in facilitating the export of coal through Gladstone, the Project's connection to the Port of Gladstone also makes it a suitable link for non-coal freight haulage that requires or benefits from port access. Regional freight services currently rely on the Western Rail Line. This is generally of low standard but provides export opportunities for grain and livestock through the Port of Brisbane. Establishment of the Project may provide a new freight rail line and associated export opportunity through the Port of Gladstone avoiding the capacity constrained urban network of Brisbane.

On a national scale, the Project can also form part of the proposed Australian Inland Rail Expressway which may, ultimately, link Melbourne and Darwin via New South Wales and Queensland.

Specific design features are necessary to enable the Project to cater for uses other than coal haulage. The cumulative benefits of improved coal and freight access to export terminals at Gladstone justify the development of this open access multi-user railway and its design (catering for non-coal freight) will maximise the long-term viability of the Project.

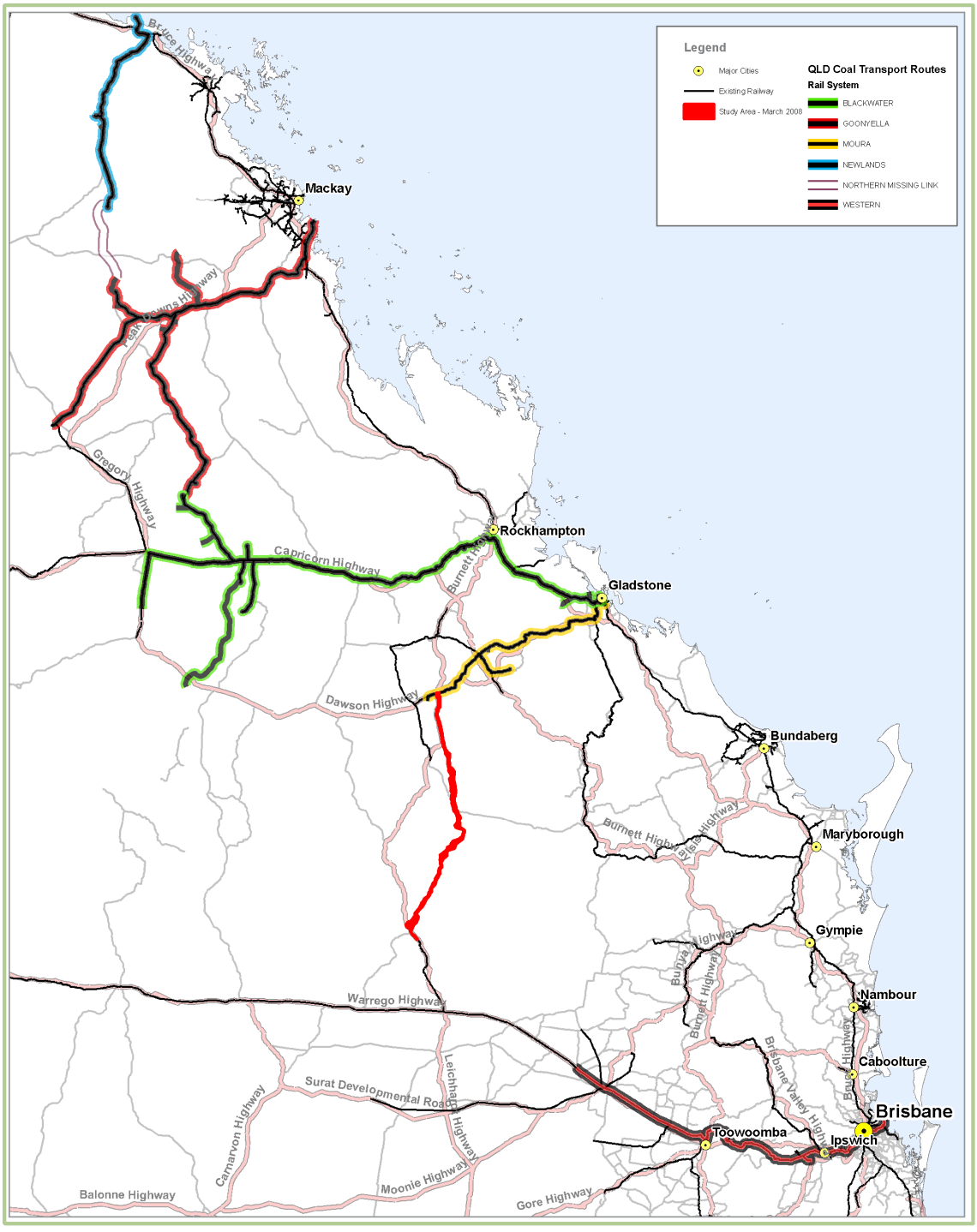

Figure 1-2: Central Queensland Coal Transport Infrastructure

1.4 Relationship to other Projects

While construction of this Project is independent of any other projects, the completion of other related projects will facilitate its commercial success. The four key projects, in varying stages of planning, and most closely related to this Project are:

1. The proposed Wandoan Coal Project;
2. The proposed Moura Link-Aldoga Rail Project;
3. The Moura Line Upgrade;
4. The proposed Wiggins Island Coal Terminal.

1.4.1 Wandoan Coal Project

The Wandoan Coal Mine is being developed by Xstrata Coal and could potentially be the first coal project to be developed in the Surat Basin. The Wandoan Coal Project was declared a 'Significant Project' by the Coordinator-General (CG) on 21 December 2007 and is likely to be one of the largest customers of coal transportation on the operational railway. The Wandoan Coal Project will comprise a number of open-cut coal mines to the west of the township of Wandoan. The mine life is estimated to be in excess of 30 years with an anticipated initial rate of extraction of 7 million tonnes per annum (Mtpa) ramping up to around 30 Mtpa Run of Mine (ROM) (expected to be roughly equivalent to approximately 20 Mtpa on rail). The Wandoan Coal Project may also include water and energy supply arrangements for the mines and coal wash plant. While water supply investigations for the mine are still underway it is possible that infrastructure may run parallel to the preferred alignment of the Surat Basin Rail Project for some distance depending on where the Wandoan Coal Project sources operational water. The EIS is available for comment until 2 February 2009.

1.4.2 Moura Link-Aldoga Railway Project

The proposed Moura Link-Aldoga Railway infrastructure will be developed in parallel with the Wiggins Island Coal Terminal. The rail upgrade will increase coal transport capacity through the construction of new rail lines (the Moura Link) and an expansion of the North Coast Line. The Moura Link - Aldoga Railway Project was declared a 'Significant Project' in September 2007. The public display period for the EIS closed on 25 August 2008.

1.4.3 Moura Railway System Upgrade

The Moura Line will link the SBR Project from Banana to the Port of Gladstone. Currently the Moura system is running close to capacity and it is recognised that upgrades will be required prior to the Project connecting to the Port of Gladstone via the Moura System. The Exclusive Mandate signed between the JV and the State requires that the Proponent and QR Ltd are to enter into, or facilitate the entry into of, commercial arrangements with regard to the potential upgrade of the Moura Railway System to handle the proposed future rail volumes. QR Ltd have written to the current and potential users of the Moura Railway System and requested that they assist with funding arrangements to allow further planning works.

Initial train modelling work shows that these systems can integrate and manage the predicted increase in volume (subject to the above mentioned upgrades being completed ahead of the Project's operation). QR's Coal Rail Infrastructure Master Plan: Second Edition – Industry Consultation Draft issued in December 2007 outlines infrastructure works to upgrade and maintain the Moura System.

Strategic meetings between senior management of QR Network Pty Ltd, SBR and Gladstone Ports Corporation to discuss whole of coal chain issues should ensure upgrades are completed in a co-ordinated manner.

1.4.4 Wiggins Island Coal Terminal Project

The Gladstone Ports Corporation is proposing to construct a Greenfield coal terminal to supplement the current coal export capacity of the Port of Gladstone. The terminal, named the Wiggins Island Coal Terminal, will be located west of the existing RG Tanna Coal Terminal across the Calliope River. The first stage of the three stage project, to be completed by 2012, will have an initial capacity of 25 tonnes per annum (Mtpa). The completed project is predicted to have a nominal export capacity of 70 Mtpa. Depending on material handling efficiencies, the actual capacity of the Terminal could increase by 20% to 84 Mtpa. Construction of the Wiggins Island Coal Terminal is scheduled to commence in 2009. Once fully operational, the Terminal is expected to significantly boost Gladstone's coal exports.

In addition to these key projects, the development of Surat Basin Rail will increase the likelihood that other coal reserves in the Surat and Clarence-Moreton Basins are developed in the medium to longer term by providing a competitive means of delivering coal for export to the Port of Gladstone. Development of these coal mines is independent of this Project. Each development will be subject to appropriate environmental assessment and regulatory approvals.

1.5 Cost and Benefits of the Project

The total cost of the Project is expected to be in the vicinity of $1 billion, depending on the ultimate design parameters and construction timeframes. Operational running and maintenance costs are anticipated to be between $3 to $4 million annually and will also be dependent on design parameters and commercial arrangements between the rail manager and customers.

A number of potential costs and benefits results from the Project, including:

- Economic – the completion of the Project will support and enhance the development of coal reserves in the Surat and Clarence-Moreton Basins with significant positive economic flow-on effects to regional communities as well as the state of Queensland;
- System-wide – the construction of the Project will enable deferral of expensive infrastructure augmentations elsewhere (such as duplication of components of the Toowoomba–Brisbane railway line) and alleviate the capacity and environmentally constrained urban network through Brisbane;
- Regional communities – the development of the Project will provide opportunities for job growth and community development within the South West and Central regions, concurrently the workforce population may place pressure on existing infrastructure and community, although this will be limited due to the accommodation of workers in proposed construction camps;
- Local community - members may experience amenity impacts during construction such as potential noise, dust, odour as construction progresses along the alignment. Temporary traffic changes are also likely to affect the local community;
- Directly affected land owners - are likely to be most affected by the Project. Impacts could include loss of Good Quality Agricultural Land, changes to property access and farming operations, noise, dust and visual impacts;

- Ecology - the Project will impact on a number of Regional Ecosystems, including Endangered (10.4 ha), Of Concern (14.4 ha) and Not of Concern (115.5 ha);
- Water resources - the construction process has been estimated to require between 6,250 and 9,600 ML of water, which is likely to be from a number of different sources and could include groundwater, coal seam gas, public water supply and surface water;
- Maximising the potential of mining in the region – the Project is a key strategic development which will have significant implications for transport infrastructure and port linkages;
- Market access to the rail system – provided by the open access multi user framework that has been adopted by the Project;
- Reducing road infrastructure damage, road maintenance requirements and improving safety – ensuring there is an efficient alternative to road freight transport will reduce the increasing pressure on western highway systems, reduce the need for maintenance of roads due to damage by heavy road freight, and increase safety by decreasing heavy vehicle road traffic volumes. The freight for Queensland is currently expected to more than double within ten years, with growth at a much faster rate than population growth; and
- Strategic port development – increasing the product demand for increased port capacity will support further infrastructure and product handling improvements at Gladstone Port.

1.6 Alternatives to the Project

1.6.1 "Do Nothing" Option

The "Do-Nothing" case for this assessment (i.e. not proceeding with the Project) will have a number of possible implications.

The proposed Project will facilitate the development of the considerable coal reserves located within the Surat and Clarence-Moreton Basins, satisfying demand from export markets. Without the Project, development of in excess of six billion tonnes of coal within these basins is unlikely to be economically viable in comparison to other transport options. Significant socioeconomic gains for local communities and the broader region would not be realised if the Project does not proceed.

Under the "Do Nothing" scenario, freight and coal export from South Queensland deposits will continue to rely on Brisbane's capacity constrained urban network for access to port. The lack of connectivity between Wandoan and Banana will lead to continued reliance on the road network by truck transport in the region.

1.6.2 Alternative Route Options

Previous Studies and Historic Alignments

Several rail alignments linking the Western Line and the Moura-Blackwater system have been investigated over the past 30 years and planned to varying levels of detail to meet the environmental, social and economic aspects required by the legislation of the time including:

- An alignment prepared by GHD in 1981 for the Brigalow Joint Venture, prior to the declaration of the Precipice National Park, connecting Wandoan via the Theodore to Moura network;
- Another prepared by QR Ltd in 1996 that proposed a route from Wandoan via Theodore to the existing Moura mine with the route located close to the Taroom coal deposits; and

- A more recent high level study prepared by Maunsell for ATEC on a more eastern route that passed close to Cracow and joined the existing Moura System near Banana.

Commercial conditions at the time of analysis warranted further investigation and the Project proceeded to the pre-feasibility stage. Results from these previous studies are summarised below whilst the locations of the routes identified in these studies are shown on Figure 1-3.

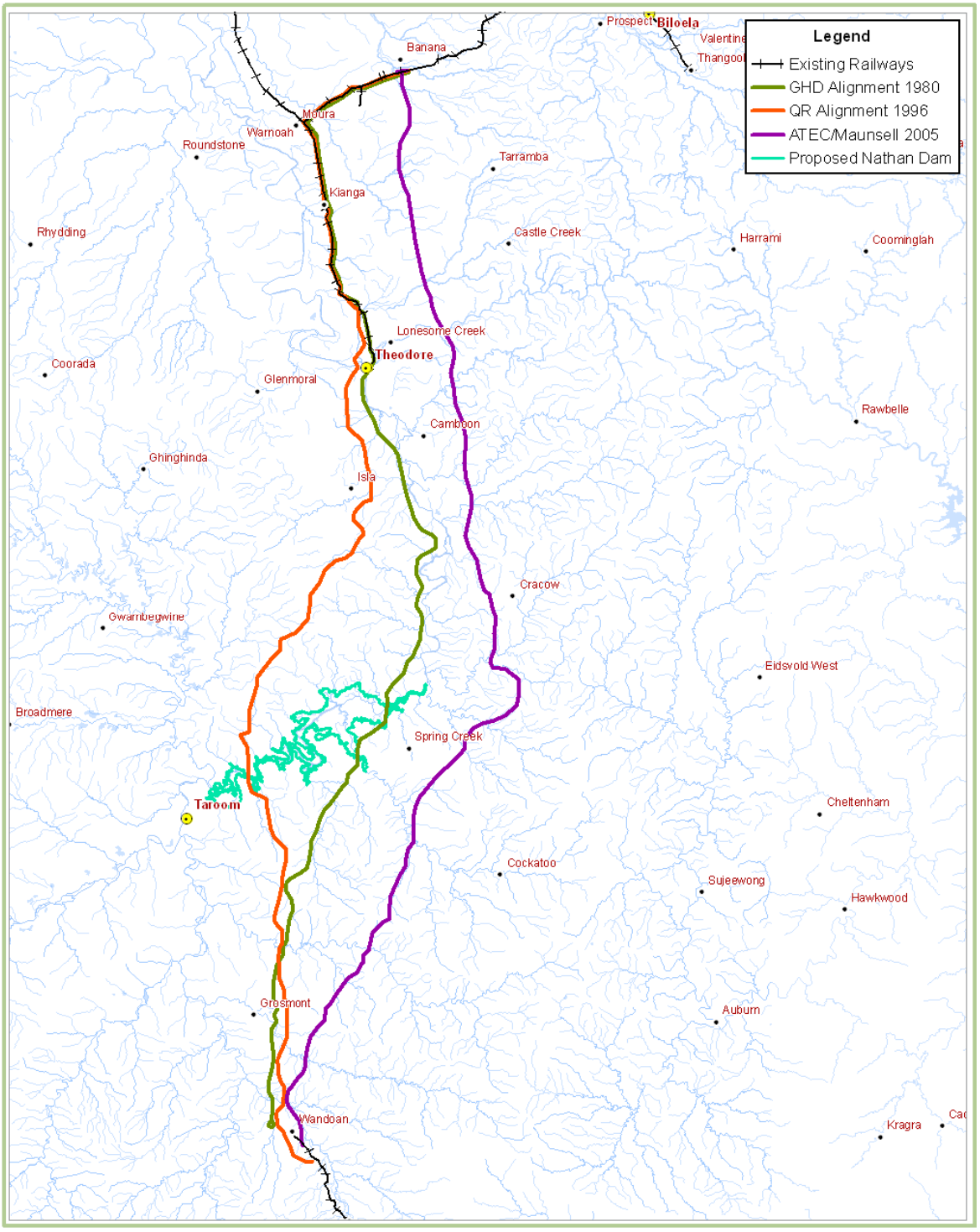

Figure 1-3: Historic Alignment Options Assessed

As well as the three studies identified, additional investigations have been undertaken by various private organisations, however these are not publicly available and therefore have not been considered as part of this study. It is understood that these alignments followed one of the three alignments identified above and in almost all cases joined the Moura line at Theodore.

GHD Alignment 1980

As the detailed information of the GHD report of 1981 is not publicly available the assessment was based on the information obtained relating to the location of the proposed corridor. The review analysed the alignment based on the general terrain and environmental factors, which are freely available. While the alignment may have some merits in utilising the existing corridor between Moura and Theodore, the additional land required to ensure suitable grades, curve radii and speeds, along with the reconstruction works required to bring the existing corridor up to current standards to carry 26 tonne axle loads, with possible higher loads in the near future, suggests a new corridor would be required.

At the time this option was being considered, it was expected the annual coal tonnage would be in the order of 5 Mtpa, current forecasts are predicting approximately 42 Mtpa. All trains would pass through the existing townships of Moura and Theodore.

South of Theodore the GHD alignment passes through the Precipice National Park, and a significant area of land expected to be inundated by the proposed Nathan Dam. It would also pass through large areas of remnant vegetation, and regional ecosystems declared as 'endangered' and 'of concern'. Along this section of the alignment, the route would have required extensive earthworks including a tunnel up to one kilometre long in the vicinity of the Precipice National Park.

QR Alignment 1996

The QR Ltd report of 1996 identifies the upgrade and use of the existing Theodore branch corridor as part of the railway. This alignment would have experienced the same issues as the alignment proposed in the GHD report. The QR Ltd alignment then passes to the west of the GHD alignment South of Theodore, and while it avoids any National Parks, it did sever a known fauna corridor between the Isla Gorge and Precipice National Parks along the Nathan Range. The alignment then passed through similar terrain to the GHD alignment, and would have required a tunnel 500 m long through the range crossing. The section where the alignment crossed the proposed Nathan Dam would have required a number of bridges, being however shorter in length than those required by the GHD alignment. The alignment then passed through extensive areas of remnant vegetation and a number of areas listed as 'of concern' with an expected proportional impact on fauna.

ATEC/Maunsell Alignment 2005

The final alignment considered was the ATEC/Maunsell alignment of 2005. It is a new construction from the tie in to the south-east of Wandoan, passing to the east of Wandoan to a point to the south-east of Banana. This alignment had the potential to inhibit the growth of Wandoan in an easterly direction, as the proposed mining area is to the west of Wandoan and the Leichhardt Highway. North of Wandoan, the alignment avoids all major centres to join the Moura line near Banana.

The proposed alignment followed roads for most of its alignment, and may have had some impacts on property access points. The alignment however avoids the proposed area for the Nathan Dam, and had significantly fewer bridge crossings than the previous two alignments. The ATEC/Maunsell alignment avoided all National Parks and State Forests, and passed through predominantly non-remnant vegetation.

Alternative Route Option Conclusion

Following consideration of these three alignments the ATEC/Maunsell alignment was deemed to have the least potential environmental impacts by avoiding ecosystems listed as 'of concern' and 'endangered', National Parks and State Forests. The ATEC/Maunsell alignment was selected as a basis for the preferred corridor through which a refined alignment was developed for the Surat Basin Railway. The alignment passes through areas predominantly considered containing 'non-remnant' vegetation. The alignment has fewer bridges as it does not cross any major rivers, and avoids the proposed Nathan Dam site. The original ATEC/Maunsell alignment has been refined in subsequent stages of the Project, in particular at Wandoan where it now passes to the west, thus allowing continued future expansion to the east. The overall length of this alignment is similar to the other alignments, however allows flatter grades and curves with larger radii reducing operational costs and emissions when compared to the other alignments considered.

1.6.3 Alignment Refinement

With a base corridor selected, (ATEC/Maunsell 2005 alignment) alternatives were investigated with the objective of investigating additional alignments that could minimise severance issues by passing close to back property boundaries, passing closer to ridges to avoid areas of possible black soil, and alternative range crossings to reduce the length and height of bridging through the main range.

A 50 m digital elevation model grid was developed using 90 m pixel Shuttle Radar Topography Mission (SRTM) obtained from elevation data processed from radar images captured in February 2000. With at least two radar looks per pixel this dataset has been found to be accurate to a large extent and has been used to model most of the criteria which were affected by terrain.

However, the modelling of catchments requires a hydrologically correct model and the 9 Second (250 m) Digital Elevation Model (DEM 9S) sourced from Geoscience Australia was found to be the most suitable dataset for the study area. Catchment data was developed from the DEM 9S model with a schedule of culvert/bridge sizes developed based on the size of the catchment for a stream where the proposed alignment crosses it.

Environmental data, including regional ecosystems considered endangered, of concern and not of concern, National Parks, and State Forests, as well as Commonwealth declared areas were included in a Multi Criteria Assessment (MCA) model based on current GIS information and discussed further in the Assessment Rationale Section. The potential clearing per each alignment option was calculated relative to each regional ecosystem type.

The purpose of operating Quantm in Stage 1 of the Project was to generate alignments, quantities and costs for each of the MCA options, to enable the options to be compared.

Quantm was utilised to generate alignments and necessary outputs for the southern section options where topography is more complex. The process involved collecting and inputting constraints into Quantm, running un-seeded optimisations, identifying corridors and desirable alignments, modifying constraints and re-running seeded horizontal and vertical optimisations.

The northern section, due to its very flat (rail friendly) topography did not require the rigour required in the southern section provided by Quantm. The alignments north of approximate chainage 115 km were developed from an assessment of topography, property boundaries, land use, homestead locations, connection points to the Moura system. Horizontal alignments were initially sketched on print outs of the study area before being developed within a model generated in 12D. Alignments were then refined taking into account ruling maximum grades, minimum curve radii and possible passing loop locations.

Once the preliminary alignment design had been completed within 12D, the alignment was incorporated into a GIS model to undertake counts of road and water course crossings and known areas of cultural significance, while preliminary earthworks volumes were calculated with 12D.

A total of 14 distinct alignments were developed from Wandoan to Cracow with an additional four alignments developed to further investigate the base case and a Cracow Creek option. A total of 11 different alignments north of Cracow to Banana were developed and a further four alignments generated and compared back to the base case alignment.

Multi Criteria Assessment Rationale

A multi criteria analysis (MCA) framework was used as the basis for assessing and evaluating the previously investigated alignments. A catalyst for the MCA assessment was the feedback received through the community engagement process with local government groups, key stakeholders and impacted landowners during late 2007. The MCA technique is a standard planning tool in which criteria are identified, weighted and the performance of each option given a rating. Sensitivity testing of the weightings and ratings is then carried out to determine the relative performance of each option.

For the Project, a MCA technique has been adapted providing:

- A method that forces a review of assumptions and requires criteria based decision-making;
- A high level review sufficient to differentiate and score the options; and
- A means of determining the differences between the preferred route and any other options that may be identified for all or part of the alignment.

The MCA process for the Surat Basin project was a multi stage process whereby each stage was assessed in turn and conclusions reached. All stages were addressed at two project group workshops and outcomes agreed. Considerable work was also carried out separate to that forum: collecting and analysing data, reviewing criteria and workshop outcomes and reporting. The (mostly) linear stages of the MCA technique that were adapted for the Project are as follows:

1. Definition of criteria;
2. Assessment methods to evaluate/measure each criteria;
3. Weighting of criteria;
4. Development of definitive list of options;
5. Performance rating of options; and
6. Evaluation of options.

The outcome of the first project group workshop conducted on 26 June 2007 defined the key criteria for consideration in assessing route options and developed a weighting system around those options to establish a focus for the engineering and environmental consultancy team investigations. The workshop attendees received a briefing on the Project MCA process and broke out into groups to investigate the specific criteria under the four broad categories: Strategic, Social, Environmental and Engineering/Operational criteria; and the method of assessment and the relative weightings of each. Each of the groups in turn reviewed the other group's criteria by category and refined the criteria.

The result of each group was explored in the workshop and the following percentage weightings were agreed. To ensure consistency across assessment criteria, the MCA framework shows the

categories upon which the assessments are based. The criteria groupings are in Table 1-3 and are in general alignment with the concept of Sustainable Development, and consider factors within this context.

Table 1-3: MCA Category Weightings

Category	Weighting
Strategic (Cost/Revenue/Timing/Interfaces/Engineering)	60%
Social	10%
Environmental	30%

Figure 1-4 represents a more detailed rationalisation of the MCA categories.

Criteria and Weighting	STRATEGIC – Economic and Engineering 60%				
	Capex 40%	Whole of Life 25%			Coal Catchment 35%
		Operating	Maintenance	Sustaining Capital	
Basis of Assessment	Use Quantm costing data as basis for relative assessment of options.	$/km/annum	$/km/annum	Estimate of $/annum	Ratio of known coal deposits production to distance of spur from route option (MTPA/km)

Criteria and Weighting	SOCIAL 10%				
	Cultural Heritage 20%		Safety/Social 40%		Amenity 40%
	Indigenous	European	Road Crossings	Community Infrastructure	
Basis of Assessment	Identify No. of known sites within 500m from centreline	Identify No. of known sites within 500m from centreline	Calculate No. of at grade crossings along alignment	No. of schools, hospitals etc within 500m from centreline.	No. of properties / homesteads within 500m from centreline

Criteria and Weighting	ENVIRONMENT 30%				
	Flora 60%			Fauna 20%	Water 20%
	Endangered RE	Of Concern RE	Not of Concern RE		
Basis of Assessment	Ha of regional ecosystems impacted			Ha of remnant vegetation impacted	No of creek and river crossings

Figure 1-4: Category Rationalisation

The results of the MCA process identified that north and south of Cracow, the base case alignment with some minor changes provided a sound alignment to progress forward with a more detailed engineering investigation. This modified base case alignment formed the basis for investigations conducted for the Initial Advice Statement as the first step in the EIS process, as described in Section 1.8.2 and 1.8.4. The MCA process also identified an alternative range crossing which appeared to offer significant capital and operating cost savings.

Preferred Alignment

A study area has been identified for the purpose of the EIS, within which the preferred coal/freight alignment is located, as shown in Map 2 – Study Area in the Map Folio. Detailed maps showing the preferred alignment in relation to individual properties have been presented to each directly impacted land owner as part of the consultation process and are shown in the map folio as aerial photographs. The preferred alignment was optimised for coal/freight traffic and designed to accommodate the following operating scenarios:

- Narrow gauge coal railway;
- Narrow gauge coal/freight railway; and
- Dual gauge coal/freight railway.

1.7 Co-location Opportunities

Further to the related projects listed above in Section 1.4, a number of additional rail, water and gas pipeline infrastructure projects have been identified as critical requirements to open up new mines in the Surat Basin for the export of coal and gas through the Port of Gladstone. Opportunities may exist for efficiency gains and the mitigation of environmental and property impacts through the co-location of other proposed linear infrastructure near or parallel to the rail corridor (such as water and gas pipelines and electricity transmission and distribution).

The Queensland State Government has expressed an interest in coordinating potential alignments for other projects; a process that was facilitated by the Department of Infrastructure and Planning (DIP) through a meeting held on 10 June 2008 to which proponents of all known potential major projects, who share an interest in the area covered by the Surat Basin Coal Province were invited. The purpose of this meeting was to facilitate the process of co-location by sharing information (e.g. route options, project timeframes) between potential infrastructure providers with a mutual interest in the Surat Basin and to consider opportunities to coordinate or enhance any of the impact mitigation strategies proposed for the rail corridor.

Typically, a rail alignment has greater physical constraints in terms of suitable grades and curve radii than the services that could be co-located near the preferred alignment. Therefore from a physical alignment perspective the Project does not preclude the potential opportunity for co-location. As an outcome of the DIP initiated meeting the Project Stage 2 engineering design included the developed of a concept plan for a potential shared corridor for co-location of assets including gas, water and electricity. This concept plan was shared with SunWater, gas company representatives and the Coordinator-General's office.

Based on this concept plan and subsequent discussion the Project adopted a 200 m wide corridor during indigenous cultural heritage and nature conservation field surveys to include the potential corridor area for other parallel services (refer to Aerial Photographs in Map Folio for study corridor). Based on advice from SunWater representatives, the 200 m corridor was reduced to 120 m corridor between Cockatoo Creek and Banana as the route for water supply was no longer compatible with the preferred alignment.

The Project findings of both heritage and conservation surveys of the corridor have been shared between project proponents in order to reduce the impacts on existing owners by limiting the necessary requests for property access.

Following on from this, in October 2008, the DIP released an Invitation to Offer (DIP-0740-08 Surat Basin to Gladstone Multi-User Linear Infrastructure and Services Corridor Investigation) to determine

the suitability for development of a Multi-User Linear Infrastructure and Services Corridor adjacent to the proposed Surat Basin Rail alignment. This study will specifically address viable opportunities to co-locate infrastructure into a common corridor to maximise positive economic, environmental and social outcomes for the region and state. The two reports that make up this study will:

- Assess the viability of the SBR alignment as a Multi-User Linear Infrastructure and Services Corridor; and
- If the SBR alignment is not suitable, then identify the best alternative alignment for a Multi-User Linear Infrastructure and Services Corridor from the Surat Basin (near Wandoan) through to Gladstone.

The potential users of a Multi-User Linear Infrastructure and Services Corridor identified by the DIP in this Invitation to Offer document include, but are not limited to:

- SunWater (Glebe Weir and Nathan Dam water pipelines Dawson River to Wandoan)
- Santos Gladstone LNG (Gladstone Liquefied Natural Gas Project – Santos' future operation is focused on increasing the size and productivity of its coal seam gas fields in the Surat Basin. The 425 km gas transmission pipeline planned from Comet Ridge to the Gladstone LNG plant is anticipated to be of nominal diameter 650–800 mm).
- Queensland Gas Company (Queensland Curtis LNG project – The Interconnection Pipeline Network linking QGC's production areas will generally extend from an area east of Tara to west of Wandoan. There is potential for further laterals to feed into the Interconnection Network from the south and north).
- Powerlink (currently undertaking studies which are considering alternative options of extending to Wandoan from different points in the network):
  - at 132 kV from Coolumboola (east of Miles) to Wandoan; or
  - at 275 kV from Auburn River (north of Mundubbera) to Wandoan; or
  - at 275 kV from Western Downs (new site in the vicinity of Braemar or Kogan) to Wandoan; or
  - at 275 kV from Halys (near Tarong) to Wandoan.
- Origin Energy (pipeline corridor from Wallumbilla to the Darling Downs Power Station).
- Impel (Southern Cross LNG proposes to construct an open access LNG terminal on Curtis Island, including an LNG plant, two storage tanks and loading facilities. Impel also proposes to build a 400 km open access pipeline).

The implications of locating other forms of linear infrastructure within or near the rail corridor will determine the width of the corridor, the concentration of construction works within a given area and the potential for overlap between the project timeframes.

The width of any future services corridor will need to be sufficient to accommodate the co-location of below and above ground linear infrastructure and will be dependant upon the infrastructure proposed for the multi-user corridor as an outcome of the Corridor Investigation Study. Adequate buffer distances between the rail and other services, particularly those that are potentially hazardous, will be a critical factor for the recommendations of the Corridor Investigation Study. It is likely that for this reason the sharing of SBR bridges and culverts will not be practical since safe buffer distances

would not be possible where either asset poses a potential hazard to the other. In the case of the Downfall Creek Bridge, being the largest bridge structure of the Project, the greater physical constraint associated with the rail design requirements has resulted in the crossing location being logistically unpractical for other services, which would likely find more suitable crossings points that are more economical to construct and closer to the existing road access.

In areas where linear infrastructure co-location is feasible, it is likely that construction works could be concentrated in localised areas and given the proposed timeframes for the considered projects (ranging from 2009 - 2015) there is the potential for an overlap in construction phases of the individual projects. The cumulative positive and negative socio-economic and environmental effects will be considered by DIP in response to recommendations from the Corridor Investigation Study.

Any co-located infrastructure projects will need to undertake separate environmental assessment and meet appropriate regulatory requirements.

1.8 The Environmental Impact Assessment Process

1.8.1 Context of EIS in Approval Framework

The EIS has been prepared in accordance with the *State Development and Public Works Organisation Act 1971* (SDPWO Act).

The Project has proceeded through a number of steps in the legislative approvals process, resulting in the need for this EIS, specifically:

- On 19 November 2007, the Proponent lodged an Initial Advice Statement (IAS) for the Project with the Coordinator-General (CG) under the SDPWO Act. The IAS provided an outline of the proposed Project, including its rationale and potential impacts;
- On 30 November 2007, the CG declared the Project to be a 'significant project for which an EIS is required', under s.26(1)(a) of the SDPWO Act;
- On 3 January 2008, the Proponent referred the Project to the Commonwealth Minister for Environment, Water, Heritage and the Arts for a determination as to whether the Project would constitute a 'controlled action' under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), Referral No 2008/3944. On 22 February 2008, the Commonwealth Minister determined that the Project is not a 'controlled action' and therefore does not require assessment under the EPBC Act; and
- On 12 April 2008, the CG advertised the draft Terms of Reference (ToR) for public comment with written submissions invited up until close of business on 16 May 2008. The ToR were finalised on 23 June 2008.

The Project also has the potential to trigger a variety of legislation, conventions and policies which operate at different levels of jurisdiction. These include:

- Legislation, conventions and agreements which operate at a Commonwealth level and have particular relevance to the Project;
- State legislation and policies which will be triggered (or have the potential to be triggered) by the Project; and
- Local Government policy documents and planning instruments.

Section 17 sets out the details of government policy, legislation and associated licence or permit applications relevant to this Project.

1.8.2 Requirement for an EIS

This EIS has been prepared as a requirement of the provisions of the SDPWO Act and the declaration on 30 November 2007 of the Project as a 'significant project for which an EIS is required'.

Accordingly, this EIS is being managed by the Queensland Department of Infrastructure and Planning (DIP) on behalf of the CG. The DIP has prepared the ToR that underpins this EIS and has invited relevant Queensland and local government representatives and other relevant authorities to participate in the process as advisory agencies.

The process of undertaking an EIS in accordance with the provisions of the SDPWO Act is set out in Figure 1-5.

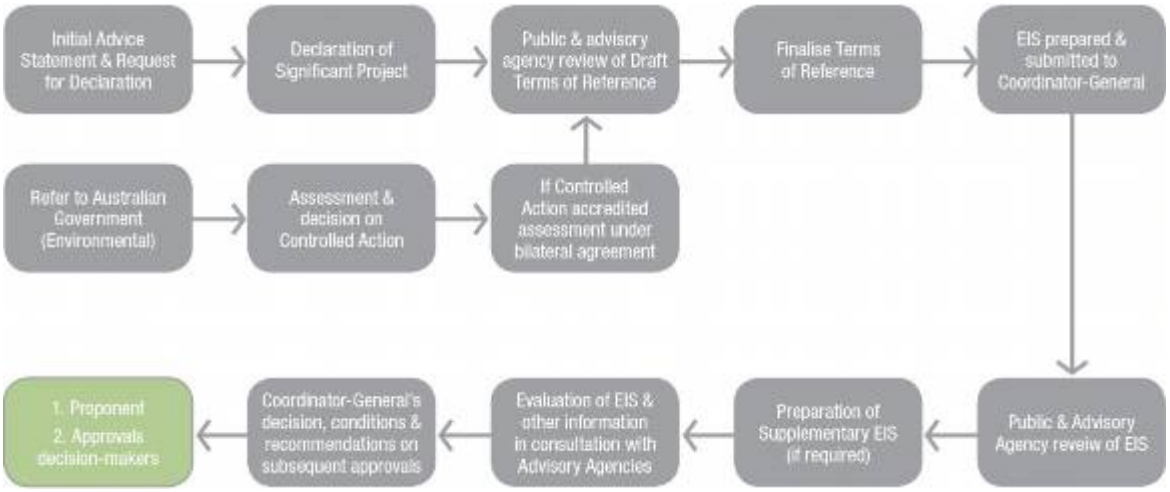

Figure 1-5: The EIS Process

As can be seen from this Figure, the initial steps of the EIS process have been completed as discussed in Section 1.8.1.

The EIS has now been prepared and submitted for public and advisory agency review. This step in the process commenced with the public notice that appeared in relevant newspapers circulating in the district, the state and nationally. The notice stated:

- Where copies of the EIS are available for inspection and how it can be purchased;
- That submissions may be made to the CG about the EIS; and
- The submission period.

Further details of how a submission can be made are provided in Section 1.9.7.

Depending on the outcomes of the public and advisory agency review, the Proponent may be required to prepare a Supplementary Report to the EIS that addresses specific matters raised in submissions on the EIS.

At the completion of the EIS phase, the CG will prepare a report (CG Report) evaluating the EIS and other relevant material, pursuant to s.35 of the SDPWO Act. The CG Report will include an assessment and conclusion about the environmental effects of the Project and any associated mitigation measures. Material that will be assessed will include:

- The EIS;
- Properly made submissions and other submissions accepted by the CG; and
- Any other material the CG thinks relevant to the Project such as a Supplementary Report to the EIS, comments and advice from advisory agencies and other entities, technical reports and legal advice.

The CG Report will be publicly notified on the DIP website at www.dip.qld.gov.au. The CG Report will also be presented to:

- The Proponent;
- The *Integrated Planning Act 1997* (IP Act) Assessment Manager;
- The Queensland Minister for Sustainability, Climate Change and Innovation; and
- The Queensland Minister for Transport, Trade, Employment and Industrial Relations.

1.8.3 Objectives of the EIS

The purpose of this EIS is to:

- Provide public information on the need for, potential and likely, direct and indirect effects of the Project on the natural, social and economic environment;
- Set out acceptable standards and levels of impacts (both beneficial and adverse) on environmental values; and
- Demonstrate how potential environmental impacts can be managed.

To achieve this, potential environmental, social and economic impacts of the Project have been identified and assessed and, where possible, provisions have been made to avoid or mitigate adverse impacts. In doing so:

- Potential impacts have been defined as direct, indirect and cumulative (that is impacts accumulating over time and impacts exacerbated by intensity or scale or frequency or duration of impacts both at the site and remote to the site);
- All phases of the Project, namely pre-construction, construction, operation and maintenance phases, have been addressed; and
- Assessment of the potential impacts of the Project, including selection of the preferred alignment within the study area, is based on sound environmental protection and management criteria.

An important role of the EIS is to provide information for the formulation of the Environmental Management Plan (EMP) for the Project (Section 18).

1.8.4 Scope of the EIS

Terms of Reference

The ToR determines the breadth and depth of investigations required for the EIS for a significant project (as defined by the SDPWO Act). The complete and final ToR for this significant project is contained in Appendix B and a table cross-referencing where each provision of the ToR is addressed in this EIS is given in Appendix C.

As stated at Section 1.3, Draft ToR was made available for public and advisory agency comment for over four weeks from 12 April 2008. Submissions to the Draft ToR were received by the CG up until close of business on 16 May 2008. Final ToR were prepared by DIP, on behalf of the CG, having regard to submissions received from interested parties, including interested individuals, community organisations and government agencies. The final ToR was released on 23 June 2008.

Study Area

A study area has been identified for the purpose of the EIS, within which the preferred coal/freight alignment is located, as shown in Map 2 – Study Area in the Map Folio. Revisions to the study area have been made since the Initial Advice Statement was published in response to early field surveys and stakeholder consultation. The key changes to the study area were:

- The narrowing of preferential alignment options allowed for in the original study area;
- Inclusion of stock routes within the study area that were previously excluded; and
- Wider area of investigation immediately north of Cracow.

This study area represents the area investigated in the preparation of this EIS and varies in width from one to about five kilometres. Within this area a number of route options were considered during the preparation of the EIS. This process is described in more detail in Section 1.6.3. The results of the desktop studies, field investigations, community consultation and design engineering provide an important means of determining the preferred alignment.

While a broad study area has been identified for the purpose of the EIS, the eventual multi-user corridor width will nominally be 60 m but wider as required to accommodate embankments and cuttings as required. The width of the rail corridor will be sufficient to accommodate the proposed single-track formation and passing loops as well as vehicle access and construction tracks, culverts and bridges and signalling and communications equipment. A detailed Project description is provided in Section 2.

1.8.5 Structure of EIS

This EIS consists of four documents:

- EIS Summary;
- Volume 1: Main Text (this document);
- Volume 2: Appendices; and
- Volume 3: Map Folio

The EIS Summary conveys the most important aspects and options relating to the Project as a stand alone document. The structure of the EIS Summary generally follows that of the EIS, and focuses on key issues to enable the reader to obtain a clear understanding of the Project and its potential adverse

and beneficial environmental, social and economic impacts and the management measures to be implemented by the Proponent to mitigate all residual impacts.

This document is the main body of the EIS and specifically addresses the requirements outlined in the ToR. Specifically, the EIS Main Text includes:

- An overview of the Proponent and its operations;
- A description of the Project's objectives and rationale, as well as its relationship to strategic policies and plans;
- A description of the entire Project, including associated infrastructure requirements;
- A description of feasible alternatives capable of substantially meeting the Project's objectives;
- Descriptions of the existing environment, particularly where this is relevant to the assessment of impacts;
- An assessment of direct and indirect, combined, short- and long-term, beneficial and adverse impacts, as well as cumulative impacts in combination with other known activities;
- Measures for avoiding, minimising, managing and monitoring residual impacts, including a statement of commitment to implement the measures;
- An outline of the various approvals required for the Project to proceed; and
- A description of the stakeholder consultation undertaken and responses to issues raised during public and the Stakeholder consultation.

Factual information contained in the main text is supported by appendices containing relevant data, technical reports and other sources of the EIS analysis. Where appropriate, the main report is supported by maps and aerial photography contained in the Map Folio at a scale of 1:300,000 and 1:15,000 respectively.

1.9 Public Consultation Process

Since project inception, community engagement has formed an integral part of the Project, helping to inform key decisions and connecting the Project team to the local community and landowners. The community engagement approach has been driven by a strong commitment to create community awareness and understanding of the Project and effectively engage affected landowners. Complementing this has been a strong focus on working with local government and other agencies to address critical socio-cultural issues and community infrastructure requirements.

A Community and Stakeholder Relations (C&SR) Plan was developed, outlining how community engagement 'fits' into the overall Project, including the community engagement strategy and methodology, specific objectives, planned activities, communication responsibilities, and protocols and processes. The Plan was prepared as a stand-alone document to support and guide the Proponent's community engagement activities through the life of the Project and it is closely aligned to the overarching Communication Guide and Strategy for the Project. The C&SR Plan is intended to be a 'living document', written with a flexible approach in mind to adapt to the changing needs of the Project.

The C&SR Plan underpinned the approach and activities adopted throughout the EIS process, where communication activities focused on introducing the Project to those potentially impacted landowners and setting the scene for a strong and ongoing relationship into the future between the

Proponent and the stakeholders. Neighbouring landowners and members of the broader community were engaged through distribution of the Rail Update newsletter, website, communication points such as the hotline and email address and a series of Community Information Days held in April 2008.

1.9.1 Objectives

A number of key objectives were developed to drive and support the Project. Activities undertaken after the Project's official announcement supported aspects of all the following community engagement objectives:

- Creating broader community awareness and understanding of the project;
- Developing strong relationships with directly impacted stakeholders, guiding them through the process and providing an effective point of call for any issues or enquiries;
- Facilitating representative community participation and input into the negotiable aspects of the project design;
- Developing a land acquisition and property entry protocol, and facilitating the project team in undertaking investigations supporting the development of the EIS; and
- Delivering an effective community engagement strategy, consistent with the overarching project goals and communication objectives.

1.9.2 Engagement Strategy

Underpinned by the community engagement objectives, a strategy was adopted that acknowledged the Project's regional context and focused on a grass roots approach that:

- Prioritised engagement with stakeholders directly impacted by the project and/or with a significant stake in the project;
- Acknowledged and valued the strength of local community networks and the roles they play in information distribution and community support;
- Facilitated collaboration and relationship building with landowners, and importantly, harnessed local knowledge and insight to help inform decision making; and
- Collaborated with other related projects throughout the region to minimise consultation fatigue and reduce the potential for confusion/frustration.

1.9.3 Identifying Stakeholders and the Level of Engagement

The C&SR Plan identified a preliminary list of stakeholders to be considered and engaged at varying levels. This list has continued to evolve and become more robust throughout the EIS development. These included:

- Directly impacted and adjacent landowners (located in the study area);
- Community and environment stakeholders (including national and regional community and environmental groups, local groups, Landcare groups, etc.);
- Public sector stakeholders (including Federal and State Government Agencies/Departments, etc.);
- Elected representatives;

- Business and industry stakeholders (industry bodies, service authorities, business groups, significant businesses in the area, etc.);
- Cultural heritage related stakeholders (Indigenous and European); and
- Other influencers such as significant lobbyists.

The level and tools of engagement were tailored to different stakeholder groups based on the level of Project impact and their communicated needs for interaction. This differentiation included:

- An individual, relationship-driven approach adopted for potentially directly affected and adjacent landowners within the study area, including the properties impacted by the central and eastern rail alignment options;
- Key stakeholders, including local community and environmental groups, Council and elected representatives were engaged on a number of levels, including one-on-one communication, letters, broader communication materials such as newsletters and the website, and also responses to specific enquiries; and
- The broader community, as well as any interested members of the public, were kept informed through project updates, community information days and project communication points such as the email address, 1800 hotline and website.

The Community and Stakeholder Relations team helped facilitate communication between the public sector stakeholders and the wider project team during development of the EIS. The project team is working closely with both local councils to collaborate on issues such as camp locations, services and local road impacts to protect their important community assets. In future, this could result in the formation of local road reference groups with representatives from our successful contractor, the Proponent, councils and key stakeholders to develop an asset management approach to their infrastructure. For a full list of stakeholder engaged as part of the EIS process, see Appendix D.

1.9.4 Snapshot of Activities

Table 1-4: Snapshot of Consultation Activities

Activity	Details
Engaging members of the community	To date over 390 people and organisations were added to the stakeholder database, incorporating potentially directly affected landowners, adjacent landowners, environmental and community groups, members of Council, interested community members and supplier organisations. Of these, over 220 stakeholders were actively engaged either through direct contact, hotline or email enquiries or written correspondence.
Engaging with potentially directly affected landowners	The Project team has been in contact with 95.7 per cent of private property owners within the Project study area, meeting directly with more than 90 per cent of them. The study area incorporated 92 distinct private property owners (including the Wandoan options). This has been reduced to 56 distinct private property owners impacted by the preferred alignment.
Newsletters	7,638 addresses within and surrounding the Surat Basin Rail study area received editions 1 and 2 of the Rail Update newsletter during April and August 2008 respectively.

Activity	Details
Community information days	Approximately 170 local residents attended community information days at Theodore (18 April 2008) and Wandoan (21-22 April 2008). These events were advertised in the Theodore State School newsletter, Central Telegraph and Chinchilla News.
EIS investigations	With the help and permission of landowners, the Project team was able to access private property to conduct important environmental and engineering investigations as part of the EIS.
Project communication points	Landowners and other interested stakeholders were able to stay in touch with the Project team via emails, the 1800 hotline and reply paid address (see details below).
Targeted letters	Formal project communication was sent to all landowners within the study area on a number of occasions to introduce the Project, confirm briefings, follow-up on meetings and advise on important Project matters such as the release of the Draft ToR and development of a Cultural Heritage Management Plan. Project information was also sent to key local stakeholders such as environmental, community and progress groups, encouraging contact with the Project team.
Council, elected representatives and agencies	The Project team engaged members of the respective Councils and elected representatives to keep them informed about details of the project and planned community engagement activities. These included telephone conversations, formal letters, meetings with members of the Proponent and Project team and formal agency briefings conducted on 21 April 2008 and 30 April 2008.

1.9.5 Discussion of the Community Engagement Activities to Date

December 2007

The first wave of community engagement activities followed Premier Anna Bligh's public announcement of the Surat Basin Rail project as 'significant' in November 2007. These activities focused on contacting and meeting with landowners whose properties fell within the Project study area. One-on-one interpersonal communication was supported by tailored information kits, a single point of contact and close ongoing liaison throughout the EIS Process. This relationship building approach aimed at guiding and supporting landowners through the Project investigation and planning stages, creating an environment where issues and concerns could be quickly identified and appropriately addressed.

During the first half of December 2007, the SBR Project team conducted individual briefings with over 90 per cent of landowners within the Project study area at a location and time convenient to landowners. This included 75 individual briefings representing 83 distinct landowners. A further five per cent of landowners were contacted, leaving only four distinct property owners that were not able to be reached.

These meetings introduced the SBR Project, provided background information and context to the Project and began the process of gathering important feedback from landowners that would assist in the design of the preferred alignment and would contribute to this EIS. The meetings were supported by information kits containing a high level map showing the study area from Wandoan to Banana, an

individual property map showing the Project study area, a Project Fact Sheet, project contact details, Land Access Fact Sheet and Land Access Protocol.

Following this program of activities the Project team worked to ensure information gathered from landowners, including potential issues and concerns as well as information on their individual farming operations, was noted and considered in developing a preferred alignment for the rail route.

April 2008

April 2008 marked the release of the Draft Terms of Reference (ToR) for the EIS for public and agency comment and also coincided with the release of the first Rail Update newsletter to over 7,500 addresses surrounding the Project between Wandoan and Banana. A program was developed to introduce the Project to the broader community and invite feedback from interested stakeholders both on the Draft ToR and the Project in general. Community Information Days were organised for Theodore (18 April 2008) and the Wandoan Show (21-22 April 2008) to display information about the Project and introduce the community to members of the Project team, who were also on hand to discuss any issues and concerns held by individual businesses and residents.

Following a period of public consultation, 21 submissions were received. These included 14 submissions from Advisory Agencies, two from Local Governments and five from members of the public, including one that represented seven local landowners. All submissions were reviewed and considered by the Coordinator General in finalising the ToR, which formed the check sheet that would enable government and non-government agencies to ensure the EIS has addressed all matters of significance.

The Project team received valuable feedback from Draft ToR submissions and attendees at the Community Information Days.

Issues and concerns recorded throughout the display period included:

- Locations of construction camps;
- Lack of available land for sale in Wandoan caused by Native Title issues;
- Delays in settlements on land to be acquired by Xstrata Coal (this issue was not related to the Project);
- Construction of Nathan Dam and its effect on the Project;
- Opportunities for local contractors and shortages of labour;
- The impacts of a dual gauge rail option; and
- Safe access across the rail line for school bus transport.

August – September 2008

Initial landowner feedback and requests for information and Project details framed the final pre-EIS community engagement campaign. A similar approach was taken to the first meetings with potentially directly affected landowners, incorporating individual informal-style meetings at the landowners' homes. These meetings included both one-on-one briefings and small group workshops made up of neighbouring landowners with natural ties or shared values and concerns. The objectives for August – September meetings were two-fold:

- Advising landowners of the preferred alignment selection, both in a broader sense and specific to their properties; and

- Introducing landowners to the potential land acquisition and agreement process, including the Joint Venture's commitments, a possible Government-led State Development Area (SDA), and broad timeframes and expectations.

These meetings were supported by a suite of information including detailed individual property maps, standard technical drawings for structures such as fencing, access arrangements and stock crossings, information on land access and protocols, as well as a State Government fact sheet on the potential SDA process. Coinciding with landowner meetings was the distribution of the Rail Update 2 newsletter to over 7,500 addresses in and around the Project study area.

Over a four week period between 11 August and 5 September 2008, the Project team held over 50 meetings with 70 distinct landowners. The Project team took an integrated approach to the meetings with representatives from the CSSR Team, the Proponent, the DIP, and a Land Acquisition Advisor.

General feedback from landowners inferred they were now ready and willing to work collaboratively with the Project team to minimise impacts to their properties, businesses and lives. Discussions held and information provided will lead in to the next round of landowner engagement activities and land acquisition negotiations.

Working with Landowners

Following community engagement activities, information received was referred to the broader Project team for consideration and to help inform EIS development and the design of the preferred alignment. Where possible, comments and concerns were incorporated in the design to achieve a more positive outcome both for the Project and the landowners. Importantly, where the preliminary alignment was not able to be moved to reduce impact on a property, the reasons and constraints behind such a decision were communicated to respective landowners.

After introducing the Project and preliminary alignment in December 2007, a number of residents in the Cracow North area of the project raised concerns about the location of the alignment and information gathered some time ago in developing the Project. As a result of this feedback, the project team undertook a Multi-Criteria Analysis (MCA) of the area, taking into account a range of engineering, environmental and community factors in refining the preliminary alignment (see Alignment Refinement Section 1.6.3 for detailed discussion of the MCA process). The MCA included a review of the earlier work undertaken and feedback received from landowners. This process illustrated the project's collaborative approach to engaging with potentially directly affected landowners and reached an improved outcome both for the Project and some of the respective properties.

At the Theodore information day, landowners raised concerns about not utilising an existing stock route along the Leichhardt Highway from Lonesome Creek towards Banana to locate the rail alignment. This information was referred to the project's design team for consideration and prompted further investigation and assessment of this option. It was determined that relocating the alignment to the existing stock route would require extensive works to existing infrastructure, the Leichhardt Highway and a total relocation of this section of the route. The Project team engaged those landowners interested in the stock route option to provide feedback and the results of the investigation process to them.

Recording Information

A stakeholder database has been developed using Consultation Manager, an online stakeholder database management system. This system has provided simple and practical tools for effective data entry and storage, as well as support for manageable and transparent communication and reporting

processes. Employing a stakeholder database management system for the Surat Basin Rail project has assisted project information sharing for geographically dispersed team members, provided an appropriate stakeholder issues tracking mechanism and assisted with consultation activity reporting tasks. Consultation Manager has been updated and managed on a regular basis as an important part of the community engagement process.

Project Communication Points

Throughout the life of the SBR Project, the Project team has been accessible to the public for enquiries and one-on-one discussion via:

- 1800 112 143 – hotline staffed between 8:30 am and 5:00 pm Monday to Friday
- info@suratbasinrail.com.au
- Surat Basin Rail
  Reply Paid 1823
  Milton BC QLD 4064
- www.suratbasinrail.com.au

Summary of Consultation Events

The graph below shows the number of communication that occurred prior to the release and public display of the EIS, including the number of calls received to the Project hotline, the number of individual calls out made by the Project team, number of meetings, etc.

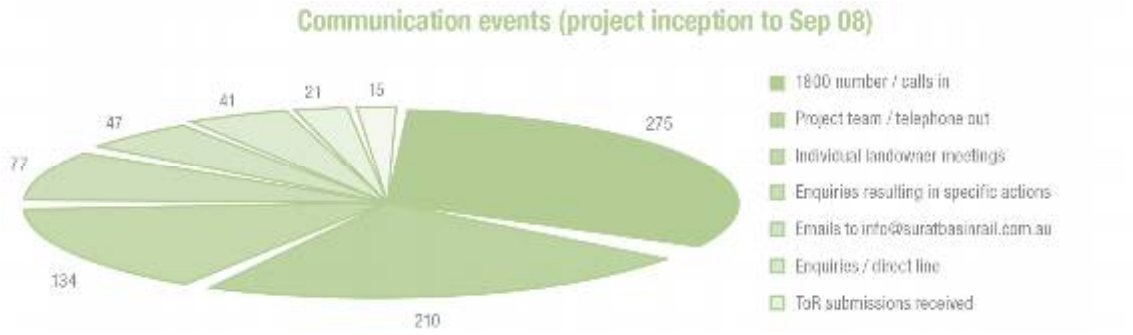

Figure 1-6: Communication Events

1.9.6 Integration of Community Issues with the EIS

Figure 1-7 shows the top ten issues raised during consultation undertaken to date. Section 13.3 provides a discussion of these issues in the context of the Project impacts, both beneficial and adverse, on the local community.

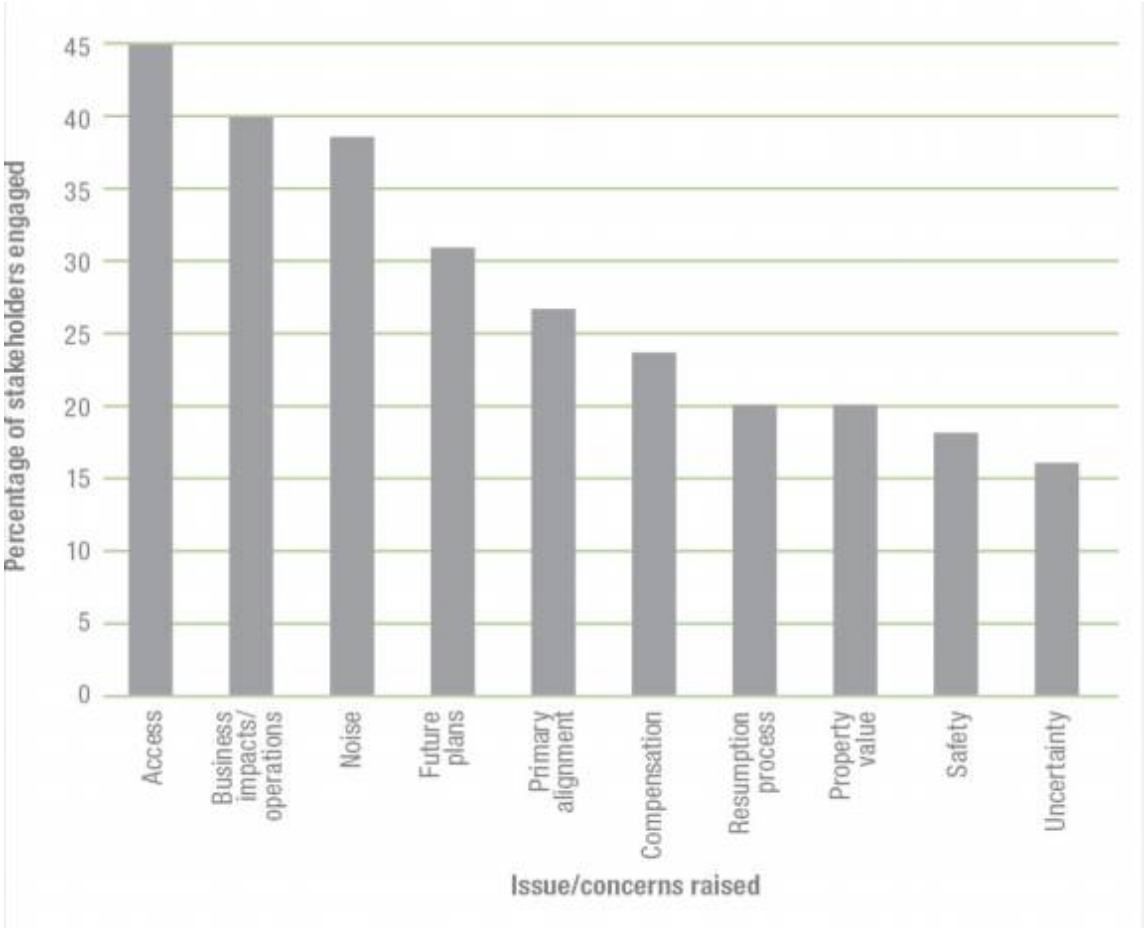

Figure 1-7: Issues and Concerns Raised

Throughout the Project to date, the community engagement program has maintained a flexible approach to be able to respond to emerging issues and concerns, and feedback on the most appropriate methods of interaction and communication with key stakeholders. Such an approach has resulted in a responsive Project team that has been able to address landowner feedback on the preferred alignment and investigate the use of an existing stock route for the rail corridor. Further, it has allowed the Project team to gauge the issues that are most important to people and focus on providing more information on them.

The stakeholder database system has been used to track and report on issues both from an individual landowner perspective and also collectively on all stakeholders engaged. Through formal correspondence, newsletters, telephone conversations and meetings, stakeholders have been informed of emerging issues and how the Project team is addressing them.

Since the first field trip for the Project, feedback, issues and concerns identified by stakeholders have helped inform the development of the Environmental Impact Statement (EIS) and the Project in general. Many of the issues communicated by landowners, local community and environmental groups and members of the public have been addressed in corresponding sections of the EIS. Other

concerns, such as those regarding access, fair and equitable compensation and ensuring viable business solutions will continue to be worked through with landowners and key stakeholders, along with broader social and environmental concerns.

Community Engagement to Continue

By carefully documenting stakeholder concerns, the community engagement process continues to work closely with the design team to develop a number of solutions, which will bolster a sustainable and productive relationship for both the community and the company. The Project team is committed to ongoing engagement of the local community and key stakeholders, and values the relationship built. Active engagement will continue to be a key feature of this Project in to the future.

Specific objectives of planned community engagement activities will include:

- Providing an effective EIS public display delivery, in line with appropriate guidelines and the Proponents' approach to meaningful community engagement;
- Building relationships with community opinion leaders with an interest in the Project;
- Building stronger links with regional local government, State and Federal members;
- Further developing relationships with key regional organisations, e.g. the Dawson Valley Development Association, regional emergency services; and
- Planning for a regional presence in the construction and operational phases.

Guided by the Project's key community engagement document – the Community and Stakeholder Relations Plan – community engagement activities have followed a hierarchical structure. For stages 1 and 2, the focus of planned activities was primary stakeholders, who were either potentially directly affected by the Project or had a significant stake in the Project (i.e. local community and environmental groups). This included a close, relationship-driven approach to landowners.

The public display of the EIS will see proactive activities targeting the wider community impacted by the Project. With the publication of the EIS and completion of environmental and engineering investigations, the Project team will now be in a position to present detailed Project information to local residents and businesses to engage them in the EIS process and encourage dialogue and feedback about the Surat Basin Rail.

A tailored and collaborative approach will be adopted within the wider community, through to the Project's bankability stage. This will be achieved through a mixture of community engagement tools including:

- Continued operation of all Project communication points, including the 1800 hotline, email address, reply paid postal address and the website;
- Continued use of Consultation Manager as the ongoing stakeholder database management tool;
- Progress meetings with directly affected landowners;
- Briefings with key stakeholders and community members;
- Community information days and public displays;
- Local and media advertising;
- Telephone contact with key stakeholders; and
- Formal correspondence.

Following the EIS, other key activities planned include landowner and land acquisition support as the Project moves closer to bankability, complemented by a stronger focus on local and broader community engagement.

Project Construction and Beyond

As with all major projects, community engagement is a dynamic process aimed at maintaining good community relationships. As the Project moves towards construction, community engagement will widen to include major population areas, and increase contact with key stakeholder groups including all levels of government. Community engagement will liaise directly with preferred contractor(s) to ensure that a prescriptive regime of protocols is in place to respect the rights of affected landholders, and to develop an appropriate code of conduct in corporate cultures to minimise friction with local communities.

During this phase, the Proponent will work closely with the Project media relations advisors to ensure that the wider community is aware of the economic and social impacts resulting from the Project.

As construction activity subsides, Surat Basin Rail and its preferred Rail Manager will work closely with elected representatives and local stakeholders to maintain and enhance its corporate presence for the life of the Project.

1.9.7 Public Submissions

During the public display period of the EIS, the public and government agencies are encouraged to lodge submissions to the CG.

Submissions will be accepted until 5pm on 23 March 2009.

Submissions should be made in writing to:

EIS Project Manager – Surat Basin Rail
Significant Projects Coordination
Department of Infrastructure and Planning
PO Box 15009
City East QLD 4002
Tel +61 7 3224 2171
Fax +61 7 3225 8282
suratbasinrail@dip.qld.gov.au

1.10 Project Approvals

Given the regional and State significance of the Project and the nature of environmental elements within the study area, there are a number of Commonwealth and State environmental legislative requirements that need to be addressed prior to construction.

The likely approvals for the Project are discussed in Section 17.

1.11 Planning Process and Standards

Section 4.5.2 refers to relevant State and regional planning policies and evaluates the Project's consistency with existing land uses and long-term policy framework for the study area.