CopperString 2.0

Project commitments register

Volume 3 Appendix J

1. Introduction

1.1 Purpose

This section includes a consolidated description of all commitments made by CuString Pty Ltd (CuString) to implement management measures (including monitoring programs) to minimise and mitigate CopperString 2.0 Project (the Project) impacts. This section addresses the requirements of Section 8.3 of the Terms of Reference for the Project's Environmental Impact Statement (EIS).

The commitments listed in Table 1-1 are categorised according to chapters presented in the EIS with a reference to the relevant section/s of the applicable chapters. Due to the prescriptive nature of the terms of reference, some commitments have been duplicated in various chapters of the EIS however, they have been consolidated in the table with multiple section references as required.

These commitments will be finalised with regard to any conditions imposed by the State of Queensland and the Commonwealth of Australia as a result of the EIS process and will be incorporated into the construction and operational Environmental Management Plans for the Project.

Table 1-1 List of proponent commitments

Commitment	Section of the EIS
Volume 1	
Chapter 1 Introduction	
CuString will plan, implement and monitor the mitigation and management measures of the Environmental Management Plan and Field Development Plan that will be implemented to minimise and avoid adverse environmental impacts that may result if the Project proceeds.	1.6.1
CuString and their technical service partners and Construction Contractors are committed to obtaining all relevant approvals, including all necessary environmental approvals, prior to the commencement of construction and complying with all required approvals for the Project.	1.7
Chapter 2 Project description	
Transmission towers will be designed to maintain a mid-span clearance of the transmission line above local terrain in compliance with Queensland legislation.	1.9
The potential locations of the associated infrastructure will be finalised during the detailed design of the Project Sites will be determined after careful consideration of all physical constraints such as sensitive environmental areas, rock/soil types, significant watercourse/infrastructure crossings, existing land use and amenity. The finalisation of these sites will be achieved through ongoing negotiations with landholders and relevant government agencies as appropriate e.g. local councils, Department of Transport and Main Roads (TMR) and the Department of Community Safety.	1.9
The construction program will be structured so that where possible peak construction activities in areas susceptible to flooding are programmed to occur outside of the wet weather period. Areas at high risk of flooding and erosion will be targeted for construction during the dry months.	2.2.2 5.1
A road use management plan (RUMP) will be developed for the Project and will include consultation with the relevant transport authorities, such as DTMR, Queensland Rail and local councils.	2.2.3
Access tracks will generally be contained within the transmission line easement where practical. Existing cleared access tracks will be utilised where practical. The access tracks for the Project will be constructed to a standard suitable for dry weather use for 4WDs at low speed.	3.2

Commitment	Section of the EIS
Suitable weed control measures will be implemented during construction and operation of the Project. The Project will support biosecurity management programs and will consult with local government weed and pest management officers and landholders.	3.2
Cultural heritage clearance for the Project will be managed in accordance with the Cultural Heritage Management Plans (CHMPs) being developed for the Project.	4.4
Where work is proposed to be conducted in proximity to a sensitive receptor, the timing of construction will consider the noise, dust, vibration and light impacts of the construction process and of access issues.	5.1.2
A complaints handling process, including a complaints register, will be developed as part of the Stakeholder and Community Engagement Plan, which will include regular reviews and reporting procedures.	5.1.2
At laydown/delivery areas along the transmission line, deliveries will occur in a manner to ensure that audible noise is not clearly heard by an individual who is an occupier of a building outside of the hours of 6.30 am to 6.30 pm Monday to Saturday (as per the requirements of the Environmental Protection Act 1994).	5.1.2
Appropriate vegetation management measures shall be incorporated in the Construction Environmental Management Plan. These shall include the presence of qualified fauna spotter/catcher(s) during clearing and identification and delineation of vegetation to be preserved.	5.2.2, 6.4
Vegetation clearing will typically be conducted by bulldozers. Heavy duty mulchers may also be used. More refined hand or mechanical clearing methods will be employed for smaller clearing operations in environmentally sensitive areas and riparian zones. Vegetation felled near watercourses will be kept out of the channel.	5.2.2
The Project will consult landholders and other stakeholders on appropriate uses for timber of commercial value.	5.2.2
The Construction Environmental Management Plan shall include erosion and sediment control measures which takes into consideration the International Erosion Control Association’s Best Practice Erosion and Sediment Control Guidelines (IECA, 2008). The plan will include onsite drainage, stormwater runoff control, vegetation clearing, earthworks, site exit and egress points and soil stockpile management.	5.2.3, 6.4, 9.5
A plan for the handling and temporary storage of topsoil and spoil during construction activities at the transmission tower sites will be developed.	5.2.4

Commitment	Section of the EIS
In the unlikely event that blasting is required, a licenced contractor will be required to manage all health and safety risks.	5.2.4
Helicopters will be employed as the primary means of installing insulator strings, conductor draw lines and overhead earth wires to reduce additional vehicle movements and compaction of soils.	5.2.6
The transmission network will be subject to a detailed testing and commissioning plan and a number of performance trials to verify the integrity of the transmission lines and substation infrastructure. A series of system tests will be conducted to ensure power quality performance and any required Australian Energy Market Operator testing.	5.4
A workforce attraction and retention strategy will be used to assist in establishing and stabilising the workforce for the construction of the Project.	6.1.1
CuString will work with local government councils, education and training providers, and labour force suppliers to develop a local business participation strategy and an Indigenous Participation Plan that will reflect: • Maximising local participation and employment (including work readiness if appropriate) • Maximising Indigenous participation and employment Employment of apprentices and trainees (including work readiness if appropriate).	6.1.1
Construction camps will be developed (as needed) by specialist contractors that will construct and operate the camps. The contractors will be responsible for ensuring the facilities meet all applicable occupational health and safety requirements, including those relating to food preparation and storage, ablutions and water quality, vector and vermin control and safety and emergency services. All camps will be built to current industry standards and the requirements of local government laws and approval conditions.	6.1.2
A Rehabilitation plan that outlines measures for rehabilitating temporary construction sites, including temporary construction camps, following completion of the construction schedule will be developed.	6.1.2
Where existing bores are used to access water for the Project, a pump test and drawdown investigation will be undertaken to ensure adequate yields will be available for construction use and for surrounding users. Ongoing monitoring will be undertaken and a management plan developed if yields decrease	7.1.4

Commitment	Section of the EIS
Water quality testing will be undertaken to determine the treatment requirements of groundwater obtained for construction camps to ensure compliance with the Australian Drinking Water Guidelines (2011), version 3.5.	7.1.4
An adequate communications system will be established at each construction camp to ensure that the site and camp offices can effectively control the activities of staff in the field and comply with the emergency planning and response procedures developed for the Project.	7.2.1
Chapter 4 Legislation and approvals	
CuString will pursue a designation of premises by the Treasurer, Minister for Infrastructure and Planning or a local government for deployment of infrastructure in accordance with Planning Act, Chapter 2, Part 5.	4.1.7 Appendix M
CuString will pursue regulatory approval to be licensed as a transmission authority and an electricity entity.	4.1.7
The final corridor selection for the Project will require an easement of 120 m in width, for the Renewable Energy Hub and CopperString Core transmission line sections to allow for future duplication, 120 m in width for the interconnecting lines with existing circuits at Ergon's Chumvale Substation and 60 m in width for the Mount Isa Augmentation and southern connections to Selwyn, Cannington and Phosphate Hill. Prior to the construction of the transmission network, the easements required for the Project will need to have been acquired by CuString.	4.1.7
Volume 2	
Chapter 5 Land	
CuString will consult with the owners of any other infrastructure (rail, road, electricity, gas and water) that the Project may cross to detail the transmission line crossing, then once the detailed design and staging of the Project is finalised arrange any planned outages.	5.4
Final design of the Corridor selection will avoid, where practical, areas including areas of: • Cultural significance • Contaminated lands • Historical working and existing infrastructure.	5.4

Commitment	Section of the EIS
In circumstances when it is not possible to avoid, disturbances will be minimised, mitigated and remediated	
CuString commits to obtaining relevant Commonwealth, state and local approvals for the construction and operational phases of the Project prior to construction.	5.4
CuString will prepare and implement an Environmental Management Plan	5.4
Separation distances to sensitive land uses will be maintained as far as practical to ensure amenity to visitors and local residents is not adversely impacted	5.5
There will be ongoing engagement and consultation with landholders and stakeholders to exchange information on Project infrastructure design and construction to investigate how land use conflicts can be managed.	5.5
Rural land fragmentation and disturbance to landholder practices will be avoided as far as practicable to mitigate disruptions to agricultural production.	5.5
Exploration and mining land will be avoided as far as practicable to mitigate disruptions to current and future mining operations.	5.5
Stock routes will be avoided as far as practicable to mitigate disruptions to operation of stock routes..	5.5
Disused and abandoned workings will be avoided as far as practical to mitigate risk to Project personnel and property.	5.5
Disturbance to potentially contaminated land will be avoided as far as practical through discussion with landholders to further delineate known sites and identify potential contamination on properties not listed on the EMR. Site Project infrastructure and activities will be located away from potentially contaminated land as far as practical.	5.5
Further consultation with landholders and other stakeholders such as the Department of Defence will be undertaken to further define UXO risk.	5.5
In-principle approval for the construction of the Project prior to registration of easements on State leasehold land will be sought from DNRME. In-principle approval should be appropriately conditioned with consideration to landholder consent, cultural heritage and native title assessments and insurance requirements.	5.5
Landholder agreements will be secured and managed in accordance with Volume 3 Appendix E Land acquisition protocol.	5.5

Commitment	Section of the EIS
Mitigation and management measures detailed in Volume 3 Appendix O Visual amenity will be reviewed and considered in detailed design including tower heights, tower placement and vegetation screening for substations.	5.5
Chapter 6 Geology and soils	
An unexpected finds protocol will be developed as part of the environmental management plan with procedures to follow in the event of discovery of fossils or items of heritage significance.	6.4
CuString will develop a Road Use and Traffic Management Plans will address wet weather aspects associated with the use of unsealed access tracks. Many soils in the study area are susceptible to varying types of erosion. To mitigate this impact, an erosion and sediment control plan will be developed and implemented. This will be used in conjunction with a vegetation management plan and rehabilitation plan to prevent cumulative impacts to the geology and soils.	6.4
Chapter 7 Flora and fauna	
Direct impact to areas of high ecological value will be avoided through the process of corridor realignments or spanned across wherever possible using higher towers as appropriate to the ecological values and the terrain constraints. In areas of high ecological value this will enable vegetation below 20 m to be retained and mature trees over 20 m may be trimmed if necessary for safety and operational requirements	7.5
Direct impact to watercourses will be avoided by locating towers so the alignment can completely span watercourses wherever possible. No towers will be located within a watercourse or its riparian zone.	7.3.11
Micro-siting of towers will occur to avoid key localised ecological resources such breeding, nesting or refuge sites for conservation significant species such as the black-throated finch (southern), squatter pigeon (southern), Julia Creek dunnart, ornamental snake, greater glider.	7.3.11
In areas of importance for conservation significant species where high levels of fauna connectivity is unavoidably impacted, retention of remnant vegetation strips will be considered to maintain connectivity and reduce habitat fragmentation / isolation. This will be undertaken in areas where the vegetation strips will not impact the operational safety of the network infrastructure.	7.4.1

Commitment	Section of the EIS
Temporary and permanent structures and infrastructure will be located in areas of non-remnant vegetation wherever possible to minimise clearing of vegetation (in particular of concern)	7.4.1
A Flora and Fauna Management Plan will be developed prior to construction commencing. The Flora and Fauna Management Plan will include details relevant to the general management of flora and fauna impacts as well as Species Management Plans for identified conservation significant species that will be impacted. Where necessary, the Flora and Fauna Management Plan will incorporate flora and fauna monitoring activities. Specifically, ongoing monitoring and survey requirements necessary to assess the persistence and health of conservation significant populations will be outlined (i.e. EVNT flora and fauna species impacted by the Project). For more information on the flora and fauna management plan, refer to Volume 3 Appendix O Environmental management plan.	7.5
The Construction Environmental Management Plan will include rehabilitation measures for areas to be temporarily disturbed during construction will be developed prior to construction commencing with the overall aim of minimising the amount of land disturbed at any one time during the construction of the Project. As soon as practicable after cleared areas are no longer required (i.e. temporary construction camps, laydown areas, quarries, borrows, turning circles and access tracks), rehabilitation will commence. Temporary construction infrastructure will be decommissioned and removed from site. The sites will then be rehabilitated. Rehabilitation measures will include: • Removal of potentially hazardous stored substances • Remediation of any contaminated areas • Grading of disturbed surface to a state generally consistent with a natural topography (if required) and to ensure that permanent drainage lines are not compromised • Application of topsoil and revegetation with species adapted to the site. • Requirements and mechanisms for post-construction monitoring of rehabilitation success. Certain vegetation cleared during construction may be chipped or mulched and used in the rehabilitation of erosion prone areas. Any temporary watercourse crossings will be rehabilitated to a similar profile to minimise flood erosion risks. The Construction Environmental Management Plan include procedures for revegetation species selection, ground preparation and sowing/planting.	6.1.2, 6.4, 7.5, 8.5
Where practical the corridor selection will be located within pre-existing disturbed areas and avoid sensitive areas (e.g. wetlands and semi-evergreen vine thicket).	7.5

Commitment	Section of the EIS
A Construction Environmental Management Plan which includes weed and pest management measures will be developed prior to construction commencing. The plan will include details relating to the monitoring, management and, where necessary, eradication of weeds, disposal of green waste, and vehicle/plant weed wash down protocols.	7.5
Pre-clearance surveys will be undertaken during the detailed design phase within known and potential habitat areas of conservation significant species and within significant communities such as Of Concern REs in order to plan infrastructure placement, tower heights, spans and resulting clearing to avoid known occurrences and habitat for conservation significant species	7.5
The extent of vegetation clearing (and no-go areas) will be clearly identified on construction plans and in the field using high visibility fencing or flagging in the vicinity of high conservation significant areas. Clearing extent will be communicated to construction supervisors	7.5
Where infrastructure must cross waterways, areas of existing disturbance (i.e. existing tracks or clearing) will be used. Where this is not practicable, the Project footprint will be minimised and large habitat trees retained. Waterway crossings in known habitat for conservation significant flora and fauna species will aim to avoid occurrences of conservation significant flora species. Transmission lines will span across the riparian habitat corridors wherever possible.	7.5
A CEMP will be prepared and implemented for standards such as weed hygiene, erosion, fuels and hazardous substances, fire, etc. The CEMP will include protocols to limit injury and mortality to fauna including management of risks associated with open excavations, trenching, waterbodies and responses and reporting for roadkill and adverse incident protocols	7.5
A Traffic Management Plan will be developed for the construction site with designated access routes, speed limits and sensitive ecological areas (i.e. particularly areas where squatter pigeons have the potential to occur on access roads).	7.5
Erosion and sediment control measures will be developed as part of the CEMP for the Project.	7.5
A Waste management procedures will be prepared as part of the CEMP. These will detail the location and specifications for disposal and removal of waste from the construction site. Responsible waste management practices (e.g. not leaving out food waste and not feeding wildlife) will be implemented and followed by all construction personnel. All waste will be stored in secure temporary holding containers and transported off site.	7.5

Commitment	Section of the EIS
Chapter 8 Biosecurity	
Management strategies with reference to biosecurity will be developed to reflect the level of risk proposed for Project activities and Project work fronts.	8.4.6
All relevant personnel working in the field on the Project will receive an induction regarding biosecurity matters and management requirements relevant to their specific work activities and Project work front.	8.4.6
A formal biosecurity survey will be undertaken within six months of construction commencing.	8.5
The Construction Contractor(s) will undertake a detailed assessment of biosecurity risks associated with specific work activities and construction methods	8.5
Prior to leaving their point of origin for access to the Project site, all vehicles, plant, equipment and machinery shall be cleaned down and be accompanied by a current and certified Biosecurity Declaration Form from the entity responsible for the clean down.	8.5
Prior to leaving a Project work front, or moving between Project properties, work fronts or biosecurity risk areas, all vehicles, plant, equipment and machinery shall undergo clean down at designated facilities and a new Biosecurity Declaration Form completed.	8.5
CuString will develop and implement a movement control plan and species specific biosecurity treatment procedures	8.5
Chapter 9 Water resources and water quality	
Access tracks, stockpiles, and laydown/delivery areas will be located as far as practicable away from important wetlands, waterways and drainage lines.	9.4.1
Taller transmission line structures will be employed near waterways to ensure that spanning of riparian vegetation is achieved where practicable and disturbance is minimised.	9.4.1
Riparian vegetation will be retained where practicable to maintain waterway bank stability.	9.4.1
Ground disturbance will be minimised wherever practical by using existing cleared areas for construction laydown/delivery areas and material stockpiles.	9.4.1

Commitment	Section of the EIS
All disturbed areas will be rehabilitated as soon as practicable in order to establish ground cover and limit the duration that disturbed ground surfaces are exposed to erosive processes.	9.5
Careful consideration of site constraints and placement of towers and associated infrastructure to avoid/minimise direct disturbance to water features.	9.5
Utilise existing access tracks wherever possible for access to the Project and when crossing waterways comply with DAF Accepted development requirements for operational work that is constructing or raising waterway barrier works	9.5
Use existing licensed and authorised sources of construction material (e.g. aggregate) from local suppliers.	9.5
Implement best practice erosion and sediment controls during construction.	9.5
Design temporary and permanent infrastructure with industry standard stormwater management controls.	9.5
Locate infrastructure away from flood prone areas where practicable or provide appropriate flood immunity.	9.5
Utilise existing licenced and authorised water sources during construction in consultation with Council, DNRME and landholders	9.5
Transport, store, use and dispose potentially contaminating substances in accordance with manufactures specifications, legislative requirements and industry best practice	9.5
Design, construct, operate and decommission STPs in accordance with manufactures specifications, legislative requirements and industry best practice.	9.5
Chapter 10 Air and greenhouse gas	
CuString will consider implementation of the following mitigation opportunities for the management of air quality: • Development of dust and stockpile management procedures within the Environmental Management Plan • Undertake progressive rehabilitation and stabilisation of disturbed areas in accordance with a rehabilitation plan • Maintain a complaints register for the management and tracking of complaints • Development of a Greenhouse gas offset plan.	10.4

Commitment	Section of the EIS
CuString will consider implementation of mitigation measures to reduce the production of greenhouse gases with regards to fuel combustion and gas-insulated electrical components. Offset strategies will also include the development of a GHG Offset Plan and consideration of options regarding GreenPower sources from a renewable source or contributions to another credited offset program. This strategy will depend on Federal and State climate change policy current at the time the Project is approved.	10.5 Appendix V
Chapter 11 Noise and vibration	
Environmental Work Plans will be prepared immediately prior to construction by the Construction Contractor which will illustrate the access routes to the site for points along the corridor selection.	11.4
Targeted landholder communication will be conducted prior to especially noisy activities such as blasting activities (if required) and helicopter (aerial) stringing of lines.	11.4
A complaints register will be maintained. Should non-vexatious noise complaints be received, noise monitoring may be undertaken at the locations concerned. Reasonable and feasible measures will be implemented to reduce noise impacts.	11.4
Chapter 12 Waste management	
Waste will be dealt with following the waste management hierarchy, where avoidance of waste generation is the most desirable course of action and disposal of waste is the least desirable course of action.	12.5
Waste generation will primarily be mitigated and managed by reducing (avoiding), recycling and reusing. If waste requires disposal it will be disposed of by licensed waste management facilities.	12.5
Waste management procedures will be prepared as part of the CEMP that will include specific measures for storing, transporting and disposing of wastes developed in consultation with operators of local waste management facilities	12.5
Where necessary, restricted invasive plants material will be disposed in accordance with the biosecurity measures in the CEMP.	12.5

Commitment	Section of the EIS
Chapter 13 Traffic and transport	
During construction, traffic impacts will come from many sources including air, sea, road and rail impact and each of these impacts will have mitigation measures outlined in the Traffic management plan to minimise environmental impacts.	13.5
A Traffic management plan will be developed for the Project by the haulage contractor and will include consultation with the relevant transport authorities (including DTMR, QR and local councils). This plan will be supplied to Queensland Rail detailing the traffic volumes expected to traverse level rail crossings, the frequency and period of operation. This will include peak traffic volumes, such as daily workforce movements in addition to heavy, over dimensional vehicles that will cross rail structures including level crossings.	13.6
A Road Use and Traffic management plans will be developed for the Project and will include consultation with the relevant transport authorities, such as DTMR, Queensland Rail and local government councils.	13.6
CuString and their technical service partners and Construction Contractors are committed to obtaining all relevant approvals, including all necessary environmental approvals, prior to the commencement of construction and complying with all required approvals for the Project.	13.6
Chapter 14 Social	
Opportunities for integration of the workforce into local communities may be identified through meetings between a representative of the Construction Contractor and the local council and chamber of commerce to manage or alleviate any positive or negative interactions between the Project workforces and the community.	14.4.3.2
CuString will consider all Project design processes available to reduce the consequences of potential social impacts. These include the location of construction camps and location of laydown areas and concrete batching plants.	14.5.3
It is CuString's strong preference that a voluntary and commercial agreement is reached with landholders in the acquisition of an interest (easement) required for the Project. This process will follow detailed land access negotiations with landholders regarding the possible alignment for the corridor selection and other specific issues regarding current and future land uses or operations.	14.5.3
The land access management plan will identify agreed access arrangements during construction and operation, rehabilitation requirements after construction and communication arrangements for each property.	14.5.3

Commitment	Section of the EIS
A community and stakeholder engagement plan will guide engagement with stakeholders during construction of the Project. The plan will act as a key mechanism to foster dialogue with communities and stakeholders and manage and monitor potential social impacts and opportunities of the Project. The Plan will include: • Identification of key stakeholders • Key messages • Engagement methods and activities • Complaints management procedure.	14.5.3
The Workforce management plan will include a: • Training and education program that will maximise employment including indigenous employment and train indigenous and non-indigenous workers who require additional qualifications to work on the Project. • Code of conduct that describes the expected standard of behaviour for all personnel (construction and operation). • Measures to develop a strong mental health culture and promote wellbeing within the workforce.	14.5.3
The local and Indigenous business participation plan will maximise opportunities for local and Indigenous businesses though relationships with local businesses, suppliers and key stakeholders and giving preference to local, regional and Indigenous-owned businesses in tendering evaluation.	14.5.3
Chapter 15 Cultural heritage	
Agreeing and executing a Cultural Heritage Management Plans (CHMP) with each Aboriginal party to identify a clear process for managing Aboriginal cultural heritage, including cultural heritage survey and management processes. The mitigation measures included within the CHMPs will be comprehensive and entail a number of possible procedures that will include (but not be limited to): • In the first instance, avoiding Indigenous cultural heritage, wherever practical; • Carrying out further detailed field investigations; • Collecting and relocating cultural heritage items, as agreed with the relevant Aboriginal parties	15.4

Commitment	Section of the EIS
• Inform personnel and contractors of the appropriate measures to adopt in the event of the discovery of an archaeological artefact	
CuString will develop and implement a CEMP with procedures for stopping work in the event of the discovery of an archaeological artefact until a suitably qualified cultural heritage practitioner can assess the item/site and follow a process of identification and recording. In addition, all contractors will be required to undergo cultural heritage inductions to ensure awareness of obligations in preserving significant cultural heritage. the inclusion of cultural heritage awareness training in inductions and procedures for managing archaeological finds in the construction environmental management plan.	15.4
Chapter 16 Economics	
The Project will include a Training Policy and an Indigenous Economic Opportunities Plan to ensure maximise local employment, training and business supply opportunities for Aboriginal and Torres Strait Islander Queenslanders.	16.6
CuString will aim for at least 15 percent of the total man-hours to be undertaken by apprentices and/or trainees and through other workforce training. Head office and administration roles will work Monday to Friday to minimise staff upload costs associated with weekend work and to attract local workers.	16.6
In all instances, the Project will strive to include members of Indigenous communities and people with a disability. Skills assessment and recruitment and training programs will be offered.	16.6
As the Project is based in a regional area and travel will include off road driving, 4WD training will be a pre-requisite for engineers and site-based staff.	16.6
CuString envisages that the admin, camp cleaning/kitchen hand roles will be filled by local people and businesses. Employees will be given training and develop new skills in reception, administration, cost control systems and software packages as required.	16.6
The following training programs will take place: • Approximately 20 workers will be on the Civil Training programme. • For every five people on site there would be one first aid officer. Accordingly, approximately 50 workers will undertake a Senior First Aid course. • Site engineers are mentored by the Project Engineers will be offered various developmental programmes.	16.6

Commitment	Section of the EIS
The Project will engage the following high-level strategies to operationalise this policy: • Recognise that involving local industry in projects provides economic benefits to all parties. • Ensure that Queensland and Australian suppliers, contractors and manufacturers are given full, fair and reasonable opportunity to tender and participate in all stages of the Project. • Use Australian standards and codes in the formulation of specifications, tenders and the letting of contracts (except where it is unreasonable to do so). • Seek to maximise levels of goods and services, including design services, from local companies where they are competitive with respect to cost, quality and timeliness. • Seek to incorporate the Queensland Charter for Local Content into contracts entered into with third parties for the supply of goods and services. • Encourage private sector project proponents, who are not formally subject to the provisions of the policy, to apply the principles espoused in the policy to their projects on a voluntary basis as 'good corporate citizens'.	16.6
Chapter 17 Hazards, health, and safety	
A Road Use Management Plan (RUMP) should be prepared to address the increase of traffic on local roads and highways during construction. This will include but is not limited to details about movements of heavy vehicles, transport of construction workers, and details regarding access to transmission line easements.	
The hazards and risks identified during the risk assessment process will be maintained within a risk register that is continually updated and relevant. The risk register will be reviewed at least annually to ensure that high level hazards and risks continue to be adequately controlled.	17.5
CuString will develop and implement a Risk Management Plan which will include, but not be limited to the following: • Application of Design and Construction Standards • Safety in Design Reviews • Construction Safety Management Plans • Construction Environmental Management Plans	17.5

Commitment	Section of the EIS
• Construction Quality Management Plans • Operational Safety Management Systems • Operational Environmental Management Plans • Asset Management Strategy and Plans • Bushfire Management Plan • Emergency Response Planning • Stakeholder Communications and Engagement Plan.	
The RUMP will be developed in consultation with DTMR and local government councils. A specific plan will be developed for oversized loads.	17.3.9
Development of environmental and safe work methods (ESWMS) in accordance with industry best practice to minimise the risk of exposure to electrified equipment during the operation of the Project. The Queensland Electrical Safety Office (ESO) and Energy Networks Australia (ENA) have separately published a number of guidelines and codes that will be adopted to minimise the risk to personnel. These include: • Australian Standard AS 5804 (Series) High-voltage live working • Electrical safety code of practice 2013 - Managing electrical risks in the workplace • Electrical safety code of practice 2020 - Working near overhead and underground electric lines • Electricity safety codes of practice 2020 – Works • National Electricity Network Safety Code (ENA DOC 001-2019) • ENA Guidelines for Safe Vegetation Management (ENA DOC 023-2009) • ENA National Guideline for Mobile Plant Earthing (ENA DOC 031-2011) • Vegetation Risk Management for Overhead Electricity Networks – Guideline (ENA DOC 038-2018) • National Guidelines for Manual Reclosing of High Voltage Electrical Apparatus Following a Fault Operation (Manual Reclose Guidelines) (ENA DOC 042-2018)	17.4.7

Commitment	Section of the EIS
• National guidelines for safe approach distances to electrical and mechanical apparatus (ENA NENS 04-2006) • National guidelines for the selection, use and maintenance of personal protective equipment (PPE) for electrical arc hazards (ENA NENS 09-2014).	
A register of all hazardous materials will be kept updated including relevant safety data sheets for each substance. Appropriate training will be provided including methods for handling, storage and clean-up of hazardous substance and chemical spills. Applicable PPE will be provided.	17.4.7
Substations will be designed in accordance with relevant Australian Standards for the prevention of fire and explosion hazards. Automatic electrical protection systems and separation distances of transformers from buildings will minimise the risk of explosion or fire.	17.4.7
All personnel conducting aerial work must have the required accreditations. Specific ESWMS will be developed for each activity involving aerial work. Aerial inspection of the transmission line will be in accordance with the principles of the National guidelines for aerial surveillance of overhead electricity networks (ENA NENS 08-2006).	17.4.7
Standard policies on vehicle use and driver safety (such as speed limits, seat belt requirements, vehicle maintenance and zero drug and alcohol limits) will be implemented.	17.4.7
The prevention of aircraft contact with the transmission infrastructure will incorporate: • Ongoing landholder consultation on the location of the transmission lines; • Utilisation of transmission line identification markers in areas of aircraft use, in accordance with AS 3891.1– 2008; • Consulting South32 regarding the fitting of hazard lights on the most prominent transmission towers and sight balls on the transmission lines in the vicinity of Trepell Aerodrome. • Recording of the transmission line on navigation mapping in conjunction with CASA, Air Services Australia and Royal Australian Air Force – Aeronautical Information Service; • Ensuring CuString personnel conducting aerial activities are accredited to do so and operate in accordance with the ESWMS and fatigue management plans under the Operational Safety Management System; • Advising other electricity entities of the location of the transmission line infrastructure; and	17.4.9

Commitment	Section of the EIS
• Encouraging private aircraft operators to conduct fixed wing aerial mustering in accordance with the techniques identified in the Aerial Mustering Code of Practice (Pastoralists and Graziers Association of Western Australia, 2003).	
CuString commits to undertaking further consultation with landholders regarding the safety of aerial work operations.	17.4.9
CuString will conduct detailed Safety in Design Reviews of each major Project component. These reviews are intended to confirm that risk mitigation (safety, environment, operational) are incorporated into the Project design and to identify opportunities for improvement where potential gaps are identified.	17.4.10
The use and storage of hazardous materials will be in accordance with current Australian Standards and industry codes of practice. Where available, provisions will be made to include licences and compliance with all associated conditions to ensure the level of risk is minimised.	17.4.14
The Construction EMP will include a safety management sub plan, which will be generated on the basis of a Construction Risk Assessment. The risk assessment will involve a cross section of the construction workforce, in accordance with best practice risk management principles. Ongoing supervision will be provided to ensure compliance with the Safety Management Plan.	17.5.1
A Construction EMP will be prepared to address the environmental management strategies including performance criteria, management actions and monitoring, auditing and reporting requirements and to specify areas of responsibility related to the construction phase of the Project.	17.5.1
A construction Quality Management Plan will ensure that the construction of the Project, including the risk mitigation factors, is delivered in accordance with the prescribed specification. It will include detailed audits and reviews at predetermined hold points in a gated approach.	17.5.1
An Operational EMP will be prepared to provide specific environmental management requirements to ensure that operational activities have minimal adverse effects on the environment and surrounding community.	17.5.1
An overall asset management strategy will be developed and this will be supported with management plans focusing on such aspects as condition monitoring and preventative maintenance, corrective maintenance, asset replacement and augmentation, change management, etc. Formal policies and standards will be developed based on asset life considerations and standard operating procedures will be developed to ensure that these policies and standards are delivered.	17.5.1

Commitment	Section of the EIS
A Bushfire Management Plan will be developed and will consider both network design and operating features relevant to fire prevention, as well as environmental procedures, such as vegetation management, to manage and mitigate the potential consequences of an ignition.	17.5.1
Formal procedures will be developed to ensure that there are adequate resources to allow ongoing consultation with the community and to respond to community concerns such as network operations issues, environmental issues and outline landholder communication paths.	17.5.1
CuString will maintain a state of emergency preparedness as a commitment to its workforce, local communities and other relevant stakeholders. A detailed Emergency Management Plan will be developed for the Project that details emergency response procedures should an emergency situation arise.	17.5.4
Standard policies on vehicle use and driver safety (such as speed limits, seat belt requirements, vehicle maintenance and zero drug and alcohol limits) will be implemented.	17.4.7
CuString will develop a structured health and safety management system for construction and operation of the Project in accordance with AS 5577-2013 and AS/NZS 4801-2001: Occupational health and safety management systems, which includes policies, objectives and procedures for ensuring the health and safety of personnel, the community and other associated stakeholders.	17.5
Training and health and safety updates will be provided to personnel and contractors where appropriate, through regular toolbox talks. Personnel trained in first aid will be present on site at all times and approximately 20 percent of the workforce will have formal first aid qualifications.	17.5
The Emergency Management Plan will be developed in consultation with the relevant emergency service providers including the Department of Community Safety (which includes the Queensland Ambulance Service, Queensland Fire and Rescue Service, Rural Fire Service and Emergency Management Queensland), local government councils and other relevant community stakeholders. The Emergency Management Plan will include reference to the State Planning Policy, Mitigating the Adverse Impacts of Flood, Bushfire and Landslide and local government disaster management plans, where appropriate. Emergency service providers will be updated on amendments and revisions to the management plan, where appropriate.	17.4.9

Commitment	Section of the EIS
The Emergency Management Plan and emergency response procedures will be communicated to all personnel associated with the Project through inductions and toolbox talks. Copies of the Emergency Management Plan will be required to be kept in prominent workplace locations and will be made available on site during construction.	17.4.9
The Emergency and Disaster Management Plan will be developed in consultation with relevant interested parties and include measures to manage operational responses to risks associated with hazards that have a broader impact e.g. bushfires and flashovers.	17.4.9
Chapter 18 Matters of National Environmental Significance	
The corridor selection will avoid environmentally sensitive areas when determining the corridor detailed design.	18.7
All potential environmental impacts of the Project have been assessed and comprehensive management plans have been developed to manage potential impacts.	
An adaptive management and monitoring protocol will be developed and included in the environmental management plan to monitor the ongoing impacts during the life of the Project.	18.7
The Project will mitigate potential environmental impacts through design criteria and industry standard management measures.	18.7
Chapter 19 Environmental Management	
Various sub-plans will be developed and implemented in relation to the environmental aspects for the Project • Field development plan and rehabilitation plan • Erosion and sediment control plan • Stormwater Management Plan • Dust management plan • Noise and vibration management plan • Greenhouse gas management plan • Weed and pest management plan	19.3

Commitment	Section of the EIS
• Flora and fauna connectivity strategy • Environmental offsets plan • Species specific management plan • Waste management plan • Risk management plan • Road use management plan • Traffic management plan • Social impact management plan • Stakeholder engagement plan • Outrage management plan	
Key components that will be integrated into the management plans are outline of the potential impacts and the details of the specific mitigation measures. The roles and responsibilities for who will be implementing the plan and the monitoring and reporting requirements will be included to act as a guide on site. Relevant stakeholders will be engaged as necessary as part of the development of these plans.	19.3
The components of the environmental management plan will include: • Environment and Sustainability Policy • Planning, objectives and legal obligations • Resources, roles, responsibilities and authorities • Competence, training and awareness • Communication, consultation and involvement • Documentation, document control and records • Operational controls • Emergency preparedness and response	19.2

Commitment	Section of the EIS
• Monitoring, inspections and audits • Incident management • Complaints management • Non-conformity, corrective action and preventative action • Environmental reporting • Management review and continuous improvement.	
CuString will develop and implement an environmental management plan for construction and operation The Construction EMP and EMP (Operation) will set out a detailed procedure for managing environmental impacts during the construction and operation of the Project respectively and will be developed in accordance with the objectives, performance criteria, management measures and monitoring requirements stipulated in the Project Framework EMP. The Construction EMP and EMP (Operation) will also incorporate the approval conditions issued for the Project and any relevant commitments made by CuString in the EIS.	19.2
CuString will engage with relevant affected parties in the development of environmental management plans	19.2
CuString is committed to ensuring that: • Environmental harm and pollution is minimised through the active identification and management of environmental risks; • Ensuring the efficient use of resources, recycling of materials and reduction of waste; • Compliance is maintained with relevant environmental legislation, regulation and standards as well as project approval conditions; • An environmental management system is implemented that is developed in accordance with AS/NZS ISO 14001; and • Regular review and analysis of environmental performance is undertaken to identify and implement continual improvement	19.2

Commitment	Section of the EIS
CuString will ensure that the Construction Contractor's environmental record and policy aligns with CuString corporate values to achieve compliance with legislation and approved conditions.	19.2
Employees and contractors will undergo site inductions and training relating to environmental management in accordance with the EMP documentation	19.2
The EMP will include the development and implementation of a grievance and dispute resolution procedure to ensure any complaints from landholders and other stakeholders are managed effectively and efficiently. Where necessary, this may include monitoring or changes to environmental management plans and procedures	19.2
The EMS framework will facilitate continual improvement in performance by the review and, where necessary, revision of the environmental management plans, procedures and monitoring.	19.2
Chapter 20 Cumulative impacts	
The proposed mitigations are existing commitments within the EIS which are considered to be adequate to also mitigate the cumulative effects of other projects and include: • Direct impact to areas of high ecological value will be avoided through the process of corridor realignments or spanned across wherever possible using higher towers as appropriate to the ecological values and the terrain constraints. • A Road Use Management Plan (RUMP) and a Traffic Management Plan will be developed for the Project and will include consultation with the relevant transport authorities such as DTMR, Queensland Rail and local government councils. • Prior to leaving a Project work front, or moving between Project properties, work fronts or biosecurity risk areas, all vehicles, plant, equipment and machinery shall undergo clean down. • Implementation of the waste management hierarchy to reduce the volumes of waste required to be disposed of to the landfill.	20.4.2
Chapter 21 Environmental offsets	
Where offsets are required under approval conditions an Offset Management Plan will be development.	21.7

Commitment	Section of the EIS
Volume 3	
Appendix AC Electro-magnetic field specialist study	
Should apiarists consider placement of bee hives inside the easement, CuString will provide advice of suitable techniques to shield the bee hives from the electric field generated by the transmission line.	Appendix AC
Particular mitigation measures that are to be included in the design of the transmission infrastructure include: • Voltage balancing of the transmission lines by phase transposition. • Designing the transmission network to operate remotely from a central control centre, limiting the occupational exposure to times of repair or maintenance. • Restricting access to the substation sites by use of security fencing. This will limit the exposure of the general public to higher fields within the substation.	Appendix AC
CuString recognises that electrical and magnetic fields (EMF) is an issue of great importance to local communities and nearby residents. CuString as part of the Stakeholder and Community Engagement Plan will endeavour to: • Remain up to date with the latest scientific research into possible linkages between EMF and adverse health impacts; • Liaise closely with the community to ensure they are educated and informed of emerging research and EMF policy development; and • Encourage concerned stakeholders to liaise with independent organisations in relation to EMF and transmission infrastructure (i.e. ARPANSA).	Appendix AC