Australian Government
Department of the Environment and Energy

Title of Proposal - Inland Rail - Illabo to Stockinbingal

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Transport - Land

1.2 Provide a detailed description of the proposed action, including all proposed activities.

The Australian Government has committed to delivering the Inland Rail Programme which is designed to deliver freight rail services over a distance of 1700 kilometres (km) between Melbourne and Brisbane, via central-west New South Wales (NSW) and Toowoomba in Queensland.
The Inland Rail Programme consists of 13 separate projects, to be delivered over a period of several years (currently anticipated to be about 10 years). Each of these projects (and, in some cases as appropriate, separate work sites within a project) will be subject to an assessment and, if required, approval under the relevant planning or project laws in the relevant jurisdictions. Each assessment will also take into account its part in the Inland Rail programme.
Inland Rail is a major nation-building programme that will enhance Australia's existing national rail network and serve the interstate freight market.
Australian Rail Track Corporation Ltd (ARTC) (the proponent) is seeking approval to construct and operate the Illabo to Stockinbingal section of Inland Rail (the proposed action)
The proposed action is approximately 37 km in length of new rail line. The proposed action, as currently designed, includes the construction of new rail line and the installation of 43 new culverts and five new bridges, two turnouts, two crossing loops, 13 public/private level crossings as well as other ancillary facilities and construction works (refer to Section 2).
It diverges from the Main South line between Illabo and Bethungra, and runs north toward Stockinbingal.

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Illabo to Stockinbingal	1	-34.81006043237	147.74685008413
Illabo to Stockinbingal	2	-34.773689271702	147.82238108999
Illabo to Stockinbingal	3	-34.706402685487	147.82426936514
Illabo to Stockinbingal	4	-34.662644088931	147.83474070913
Illabo to Stockinbingal	5	-34.607701399781	147.83559901602

Area	Point	Latitude	Longitude
Illabo to Stockinbingal	6	-34.571947938963	147.83971888906
Illabo to Stockinbingal	7	-34.556398157896	147.86529643423
Illabo to Stockinbingal	8	-34.501385163646	147.87868602163
Illabo to Stockinbingal	9	-34.502233969038	147.88297755606
Illabo to Stockinbingal	10	-34.557670521914	147.8692446459
Illabo to Stockinbingal	11	-34.573502757158	147.84452540762
Illabo to Stockinbingal	12	-34.610668386764	147.84057719595
Illabo to Stockinbingal	13	-34.661514528735	147.83971888906
Illabo to Stockinbingal	14	-34.707249397895	147.82873256094
Illabo to Stockinbingal	15	-34.777355309277	147.82632930166
Illabo to Stockinbingal	16	-34.81259735651	147.74839503653
Illabo to Stockinbingal	17	-34.810201374649	147.74667842276
Illabo to Stockinbingal	18	-34.81006043237	147.74685008413

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland).

The Project is situated in South West Slopes region of central NSW between the towns of Illabo and
Stockinbingal and within the larger Riverina Local Land Services (LLS) area. Illabo is a small town located at the
southern end of the proposed action, 16 km north?east of Junee and 32 km south?west of Cootamundra. The
town is located on the Olympic Highway between Junee and Bethungra. At the 2006 census, Illabo had a
population of 190 people, in 2011 the town was included in the Bethungra locality which was recorded to have
a population of 414 people.
In May 2016 the Cootamundra Shire and Gundagai Shire formed a new council, Cootamundra?Gundagai
Regional Council. Stockinbingal, at the northern end of the proposed action in the former Cootamundra Local
Government Area (LGA), had a population of 244 people at the 2011 census. The town is located on Burley
Griffin Way between Temora and Harden, 19 km north?west of Cootamundra. As of the 2011 census the Junee
Shire LGA had a population of 5,879 people and the former Cootamundra Council LGA had a population of
7,334 people. These numbers are expected to remain fairly stable over the next fifteen years in the Junee

Council area, and to potentially decrease in the former Cootamundra Shire (NSW Department of Planning and
Environment 2014).
The major towns surrounding the Project area are Wagga Wagga to the south, Young to the north?east and
Cootamundra between the Illabo and Stockinbingal on the Olympic Highway. There are no towns located
between Illabo and Stockinbingal.

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

222 hectares corridor footprint, 39.7 hectares EPBC listed TEC within footprint

1.7 Is the proposed action a street address or lot?

Lot

1.7.2 Describe the lot number and title. Please refer to uploaded map 1.4_appendix_a_-_location_images

1.8 Primary Jurisdiction.

New South Wales

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

Yes

1.9.1 Please provide details.

The Australian Government has committed a total of $9.3 billion to deliver Inland Rail.

1.10 Is the proposed action subject to local government planning approval?

No

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 06/2019

End date 06/2021

1.12 Provide details of the context, planning framework and State and/or Local

government requirements.

The proposal is declared to be State significant infrastructure (SSI) and will be assessed under Division 5.2 of the EP&A Act. In summary:
? under State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP), the proposal is classified as 'development for the purpose of a railway or rail infrastructure on behalf of a public authority' and so may be carried out without development consent under the EP&A Act;
? where development is permissible without consent, it can be declared to be SSI by a SEPP, usually State Environmental Planning Policy (State and Regional Development) 2011;
? relevantly the SRD SEPP provides two potential avenues for the project to be declared to be SSI:
? where ARTC is carrying out the proposal and the capital investment value is greater than $50 million (clause 14 and Schedule 3 of the SRD SEPP); and
? where ARTC has formed the opinion that the proposal is likely to significantly affect the environment (clause 14 and item 1 of Schedule 3 of the SRD SEPP);
? ARTC has formed the opinion that both of these situations will apply, and the proposal is therefore declared to be SSI.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders.

Stakeholder and community consultation for Inland Rail is an integral part of informing scoping investigations
for the proposal EIS.
In 2010 the Australian Government completed the Inland Rail Alignment Study to determine if an inland
railway line is required. In late 2013, the then Deputy Prime Minister, the Hon Warren Truss MP, established
an Inland Rail Implementation Group (IRIG) to develop a delivery programme for the implementation of Inland
Rail. The IRIG was chaired by former Deputy Prime Minister, the Hon John Anderson AO, with senior
representatives from the Australian, New South Wales, Queensland and Victorian governments, and ARTC.
To support the IRIG investigations, ARTC was tasked with developing a Programme Business Case, including a
ten year delivery schedule, cost estimate, development strategy and a detailed analysis of the economic
benefits of Inland Rail. The Inland Rail Implementation Group took a consultative approach, engaging with a
broad range of stakeholders including potential future users as well as individuals, communities and others
who would live and work along the alignment to understand the breadth of issues associated with Inland Rail.
The IRIG delivered the Business Case to the Australian Government in September 2015. At this

time, the 2010
Inland Rail Alignment Study was endorsed by the IRIG and is the base case for further work by ARTC.
Key stakeholders for the proposal include (but not limited to):
? Federal and State Members.
? Representatives of local council at Gundagai Regional and Junee Shire Councils.
? Australian and State government departments and agencies (e.g. Roads and Maritime Services, Country
Trains), as well as the State Government appointed operator of the Country Rail Network.
? Business, freight and agricultural stakeholders (e.g. NSW Farmers Association, GrainCorp).
? Landowners within and surrounding the proposal site.
? Local Community.
? Environment stakeholders (e.g. Wagga Wagga Local Land Services, Rural Fire Service Region West).
? Community groups (e.g. Illabo Show Society).
? Peak bodies.
? Local Aboriginal Land Councils and cultural knowledge holders.
? Service providers (e.g. telecommunications, utilities, medical and emergency).
Please refer to the consultation summary in 1.13.1.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project.

Environment Protection and Biodiversity Conservation Act 1999
Under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) a referral is required to
the Commonwealth for projects, or ‘actions’, that are likely to have a significant impact on a matter of national
environmental significance (MNES) or the environment on Commonwealth land. An approval from the
Commonwealth Minister for the Environment may be required for a referred project. If so, that project is a
controlled action under the EPBC Act.
This EPBC Act referral has been formed to seek a determination on whether the impacts of the project are
likely to be significant and whether the project is a controlled action requiring approval under the EPBC Act.
ARTC's preliminary view is that the project is a controlled action.
Should the Minister determine that the project is a controlled action, the bilateral agreement between the
New South Wales and Commonwealth Governments under the EPBC Act will apply and will allow the
Commonwealth Minister to rely on the SSI assessment process under the EP&A Act as the assessment for the
purposes of the EPBC Act.

This referral document refers to the "EIS". In this document, that reference is to the EIS which will be
prepared under the EP&A Act, noting that it is possible that the same document will be relied upon for the
purposes of the EPBC Act.

1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

Yes

1.16.1 Identify the nature/scope and location of the related action (Including under the relevant legislation).

The Illabo to Stockinbingal project is one of 13 separate projects in the Inland Rail Programme. Each of the 13
projects is delivered as a separate, but related action, as each project:
? will be subject to separate State assessments;
? will be delivered within different timeframes;
? will be separately procured, with it being likely that there will be a separate contract for each project;
? is designed so that it can be constructed and operated independently of each other project;
? will be delivered on State?owned land, with tenure different between each jurisdiction;
? will be subject to separate referrals under the EPBC Act, if required.
Separate projects that are within the Inland Rail Programme that are in proximity to the project are the Parkes
to Narromine project (EPBC 2016/7731), the Narrabri to North Star project (EPBC 2016/7729)

Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

• Profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;

• Significant Impact Guidelines 1.1 – Matters of National Environmental Significance;

• Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.

2.1 Is the proposed action likely to have ANY direct or indirect impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to have ANY direct or indirect impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to have ANY direct or indirect impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
An assessment of the impacts of the proposed	Superb Parrot (Polytelis swainsonii) The

Species	Impact
action on EPBC listed threatened communities and species either recorded or likely to occur was completed (2.14 ? Appendix D). Due to the lack of data and detailed surveys for the project, a precautionary approach has been taken for the assessments of significance which concluded that the project may have a significant impact on: Threatened fauna: -Superb Parrot (Polytelis swainsonii). -Regent Honeyeater (Anthochaera phrygia). -Swift Parrot (Lathamus discolor). Threatened flora: -Swainsona murrayana (Slender Darling Pea). -Caldenia arenaria (a Spider Orchid with no commonly used common name). -Caldenia concolor (Crimson Spider Orchid). -Austrostipa wakoolica (a Spear Grass). The proposed action will impact up to 39.7 ha of EPBC listed TECs within the investigation corridor, as a result of vegetation clearing. This includes two TECs; - 18.3 ha of EPBC endangered Grey Box Woodland - 21.4 ha of the critically endangered EPBC Box Gum Woodland.	Superb Parrot (Polytelis swainsonii) which occurs within the investigation corridor are part of the South?west Slope Region population which is one of two key breeding populations (Department of the Environment and Energy 2016e) and the source of less established populations in northern Victoria and the NSW Central?west Slope and North?west Plain Regions (Department of the Environment and Energy 2016e). The population within the investigation corridor is therefore considered to be part of a key source population for breeding and dispersal and an important population. This species was recorded at two locations within the investigation corridor, one of which is likely to contain roosting and breeding habitat for the species (based on surveys of the properties and information provided by the landholders). As no targeted surveys have been undertaken, a precautionary approach has been taken and the project is considered likely to have a significant impact on the Superb Parrot (Polytelis swainsonii) due to: -The importance of the population as a keybreeding population. -Presence of critical habitat for this species in the form of box?gum woodlands of the tableland slopes that provide breeding habitat. -Clearing of approximately 43.8 ha of foraging, roosting and nesting habitat which may disrupt the breeding cycle of the important population. -Potential to interfere with the recovery of the species due to impacts to nest sites and foraging habitat within the vicinity of a colony.
as above	Regent Honeyeater (Anthochaeraphrygia) & Swift Parrot (Lathamus discolor) The investigation corridor also contains potential habitat for Regent Honeyeater (Anthochaera phrygia) (listed as Critically Endangered) and Swift Parrot (Lathamus discolor) (listed as Endangered). As no targeted surveys have been undertaken, a precautionary approach has been taken and as such it is considered that the proposed action may have a significant impact on the species as the investigation corridor is potentially critical to the survival of the species due to presence of potential

Species	Impact
	breeding or foraging areas.
as above	Swainsona murrayana (Slender Darling Pea) & Caldenia arenaria (a Spider Orchid with no commonly used common name) & Caldenia concolor (Crimson Spider Orchid) & Austrostipa wakoolica (a Spear Grass) No threatened plants species were recorded during the rapid field validation surveys. The rapid field verification surveys were not targeted surveys in that they were not undertaken during peak flowering periods and did not involve targeted searches throughout all available habitat (limited site access) within the study area. Available habitat for these species were estimated based on a combination of broad?scale vegetation mapping and rapid field verification within areas were access was available. Subsequently, targeted surveys will be required during the EIS stage of the proposal to confirm areas of potential habitat to be impacted and whether the species occurs within the construction footprint. The proposal will require the direct removal or modification of the following habitat for each species: Swainsona murrayana and Caladenia arenaria – approximately 19.08 ha of potential habitat in the form of: ? Western Grey Box – White Cypress Pine tall woodland on loam soil on alluvial plains of NSW South ? Western Slopes and Riverina Bioregions. ? Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western ? Slopes and Riverina Bioregions. ? White Box – Blakely's Red Gum shrub/grass woodland on metamorphic hillslopes in the mid?southern part of the upper slopes sub?region of the NSW South?western Slopes Bioregion. ? Blakely's Red Gum – Yellow Box grassy tall woodland of the NSW South?western Slopes Bioregion. ? White Box – White Cypress Pine – Western Grey Box shrub/grass/forb woodland in the NSW Southwestern Slopes Bioregion. ? White Box grassy woodland in the upper slopes sub?region of the NSW Southwestern Slopes Bioregion. ? Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in

Species	Impact
	NSW South?western Slopes Bioregion. Austrostipa wakoolica – approximately 24.33 ha of potential habitat in the form of: ? Western Grey Box – White Cypress Pine tall woodland on loam soil on alluvial plains of NSW South ? Western Slopes and Riverina Bioregions. ? Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions. ? White Box – Blakely's Red Gum shrub/grass woodland on metamorphic hillslopes in the mid?southern part of the upper slopes sub?region of the NSW South?western Slopes Bioregion. ? Blakely's Red Gum – Yellow Box grassy tall woodland of the NSW South?western Slopes Bioregion. ? White Box – White Cypress Pine – Western Grey Box shrub/grass/forb woodland in the NSW Southwestern Slopes Bioregion. ? White Box grassy woodland in the upper slopes sub?region of the NSW Southwestern Slopes Bioregion. ? Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South?western Slopes Bioregion. Native grassland complex. ? River Red Gum shrub/grass riparian tall woodland or open forest wetland mainly in the upper slopes sub?region of the NSW South Western Slopes bioregion and western south east Highlands Bioregion. Caladenia concolor – approximately 0.59 ha of potential habitat in the form of: ? Black Cypress Pine – Red Stringybark – red gum – box low open forest on siliceous rocky outcrops in the NSW South?western Slopes Bioregion. ? White Box – Blakely's Red Gum shrub/grass woodland on metamorphic hillslopes in the mid?southern part of the upper slopes sub?region of the NSW South?western Slopes Bioregion. Possible indirect impacts on the species' habitat may include sediment deposition from surface water flow, downslope of areas of soil disturbance, and the spread and proliferation of weeds.
as above	TEC's (Grey Box Woodland and Box Gum Woodland) The proposed action will impact up to 46.3 ha of native vegetation (including two

Species	Impact
	TECs) which provide potential habitat for the above seven species, reducing potential foraging, breeding, roosting habitat, area of occupancy, and increasing fragmentation on these species within in the locality. Fauna injury or death has the greatest potential to occur during vegetation clearing. Some mobile species, such as birds, may be able to move away from the path of clearing unless they are a nesting or roosting hollow dependant bird such as the Superb Parrot (Polytelis swainsonii). However, other species that are less mobile (ground dwelling reptiles and mammals), or those that are nesting or roosting in tree hollows during the day (nesting birds, arboreal mammals and microchiropteran bat species), may find it difficult to escape roosts and move rapidly over relatively large distances when disturbed. Indirect impacts to fauna may include fragmentation of habitat, increased edge effects in areas of remaining habitat and increased noise during construction and operation. The extent of fragmentation and edge effects will depend on the final location and design of the proposed action, however, given the current fragmentation and disturbance to habitats these are unlikely to increase significantly. Many of these impacts can be avoided or reduced through appropriate design, implementation of erosion and sediment controls and clear demarcation of the works areas, to confine the impacts of the activities. Indirect impacts to flora would include disturbance resulting from construction, earthmoving and stockpiling of materials. Indirect impacts may persist long after construction and may include facilitation of weed infestation (where soils are disturbed and seed sources are present) and pollution of waterways through mobilised sediments.

2.4.2 Do you consider this impact to be significant?

Yes

2.5 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed migratory species, or their habitat?

Yes

2.5.1 Impact table

Species	Impact
The PMST identified nine migratory species known or predicted to occur based on potential habitat within the investigation corridor. Of these species three are considered to have a moderate or higher likelihood of occurring and include: ? Rainbow Bee?eater (Merops ornatus). ? Cattle Egret (Ardea ibis). ? Great Egret (Ardea alba).	While migratory bird species may use the investigation corridor and have records in the locality, the investigation corridor is not considered to be of sufficient quality to support these species and would not be considered 'important habitat' for migratory birds as defined under the EPBC Act Policy Statement 1.1 Principal Significant Impact Guidelines (Department of the Environment 2013), in that the investigation corridor does not contain: ? Habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species. ? Habitat utilised by a migratory species which is at the limit of the species range. ? Habitat within an area where the species is declining. As such, it is considered unlikely that the proposed action would significantly impact migratory species.

2.5.2 Do you consider this impact to be significant?

No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action to be taken on or near Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

No

2.10 Is the proposed action a nuclear action?

No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No

2.13 Is the proposed action likely to have ANY direct or indirect impact on any part of the environment in the Commonwealth marine area?

No

Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

Generally, the fauna habitats across the investigation corridor fall into two categories; disturbed habitats and
remnant patches of native woodlands. Containing mixture of exotic and native plants, and providing habitat
for a wide variety of native and introduced species of animal such as Rabbit (Oryctolagus cuniculus), Fox
(Vulpes vulpes), Brown hare (Lepus europaeus), Feral Deer (Cervus sp.) and Feral Cat (Felis catus).
NSW BC Act listed threatened fauna species identified by BioNet known to occur within the investigation
corridor are the Superb Parrot (Polytelis swainsonii), Grey Crowned Babbler (Pomatostomus temporalis
temporalis) and Spotted Harrier (Circus assimilis). Species identified by BioNet that are known to occur within
the Junee and the former Cootamundra LGA areas include the following BC Act threatened fauna species; birds
of prey include Little Eagle (Hieraaetus morphnoides) and Black Falcon (Falco subniger), blossom feeding
nomads include Swift Parrot (Lathamus discolor), Little Lorikeet (Glossopsitta pusilla), Regent Honeyeater
(Anthochaera phrygia), Painted Honeyeater (Grantiella picta) and Black?chinned Honeyeater(Melithreptus
gularis gularis), woodland birds include Brown Treecreeper (Climacteris picumnus victoriae), Speckled Warbler
(Chthonicola sagittata), Varied Sittella (Daphoenositta chrysoptera), Flame Robin (Petroica phoenicea),
Diamond Firetail (Stagonopleura guttata), Hooded Robin (Melanodryas cucullata cucullata) and Turquoise
Parrot (Neophema pulchella), mammals include Grey?headed Flying?fox (Pteropus poliocephalus) and Koala
(Phascolarctos cinereus) and numerous microchiropteran bat species.
Ninety nine species of flora were recorded. This included four exotic species that were either Weeds of
National Significance (Wons) (Australian Weeds Committee 2015) and/or species declared as noxious weeds
under the Noxious Weeds (NW) Act 1993 for the Junee Shire Council Local Control Authority

and the former
Cootamundra Shire Council Local Control Authority (NSW Department of Primary Industries 2015)

No BC listed threatened flora species have been recorded within 5 km of the preferred alignment (Office of
Environment & Heritage 2016), however potential habitat is present for the BC listed threatened flora species
such as Caladenia concolor, Swainsona sericea, Swainsona murrayana, Senecio garlandii, Caladenia arenaria,
Diuris tricolor, Austrostipa wakoolica and Cullen parvum.

3.2 Describe the hydrology relevant to the project area (including water flows).

The proposed action is located within the Murrumbidgee and Lachlan catchment, which are sub catchments
within the Murray Darling Basin. The catchment divide lies closer to Stockinbingal and therefore most of the
investigation corridor is within the Murrumbidgee catchment.
The proposed action will cross four creeks including Dudauman Creek, Ironbong Creek, Ulandra Creek,
Powderhorn Creek and numerous crossings over small shallow ephemeral creeks.
All of these watercourses are at the top of the catchments for their respective valleys and are likely to only
flow during rainfall events.

3.3 Describe the soil and vegetation characteristics relevant to the project area.

The 1:250 000 Cootamundra Geology Map indicates that the northern and southern sections of the
investigation corridor pass through Quaternary alluvium and colluvial deposits consisting of gravel, sand, silt
and clay.
The central section of the study area passes through the Frampton Volcanics which consist of, rhyolite,
rhyodacite, dacite, quartz, sandstone, siltstone and conglomerate. Sodic soils are also present south of
Stockinbingal. Sodic soils have a higher sodium content and therefore increases the chance of salinity
occurring in those sections of the alignment.

3.4 Describe any outstanding natural features and/or any other important or unique

values relevant to the project area.

No outstanding natural features occur within the Investigation corridor.

3.5 Describe the status of native vegetation relevant to the project area.

The majority of the vegetation within the preferred alignment has been previously cleared and/or extensively
modified as a result of historic and current agricultural grazing and cropping.
The desktop assessment and rapid field verification of vegetation along the investigation corridor is
outlined in table 3.4 of the attachment 2.14 Desktop Study
The total amount of native vegetation impacted as a result of clearing is up to 46.3 ha. Two TECs that are listed
under the BC Act are present within this area; equating to 18.3 ha of Endangered Grey Box Woodland, and
21.4 ha of the Critically Endangered Box Gum Woodland.

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

N/A

3.7 Describe the current condition of the environment relevant to the project area.

Historically, the majority of vegetation has been cleared for agricultural purposes with the exception of some
isolated remnant vegetation patches, roadside vegetation, isolated paddock trees and vegetation located
along rivers and their tributaries. The majority of the study area is agricultural land with much of the
groundcover vegetation severely disturbed due to past and ongoing cropping, burning and grazing.

3.8 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the project area.

A preliminary assessment of nonindigenous heritage included a search of the following databases; State
Heritage register, Australian Heritage Places Inventory, Australian Heritage Database (including Commonwealth and National heritage lists), Cootamundra Local Environmental Plan 2013, and Junee Local
Environmental Plan 2012. Searches of the relevant state and local heritage registers identified

several local
heritage items within and adjacent to the investigation corridor in Stockinbingal listed in the Cootamundra LEP.
Local heritage items within the investigation corridor include Stockinbingal Railway Station, Kurrajong trees
and falls within the Stockinbingal Heritage Conservation Area. However, the investigation corridor is
sufficiently large enough to avoid impact upon these heritage items.
No potential impacts of the proposed action on any National Heritage places or Commonwealth Heritage
places have been identified.

3.9 Describe any Indigenous heritage values relevant to the project area.

A preliminary assessment of Indigenous heritage (Niche 2016) included a desktop review in line with the
Aboriginal heritage due diligence process to identify whether or not Aboriginal objects or places are, or are
likely to be, present in the project corridor.
The assessment involved a review of the following databases and resources:
-A search of the Aboriginal Heritage Information Management System (AHIMS) managed by the NSW
Office of Environment and Heritage (OEH) for recorded Aboriginal objects and places within or in close
proximity to the alignment.
-State Heritage Register (SHR) for any heritage listed item that is within or close to the referral area.
-Develop a basic predictive model using GIS. The predictive model would include areas with moderate to
high potential for Aboriginal objects and Potential Archaeological Deposits (PADs).
The proposed action will involve the disturbance of some previously undisturbed areas and has the potential
to impact both known Aboriginal sites and unidentified Aboriginal sites and landforms with potential to
contain sites and areas of cultural heritage value.
Further archaeological survey work and assessment will be undertaken to ensure recorded archaeological sites
and archaeologically sensitive landforms are assessed and managed appropriately.

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area.

The majority of the proposed action would occur on privately owned land.

3.11 Describe any existing or any proposed uses relevant to the project area.

The proposed action traverses undeveloped rural areas and the land surrounding the investigation corridor is
used for grazing and agriculture. The major industries in the area include livestock, wool and wheat. The
majority of the land has been cleared and disturbed for agricultural activities, however some patches of
remnant vegetation remain.
The future use of the land will be a working rail corridor and associated infrastructure.

Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action.

At the time of referral, preliminary information is available regarding measures to avoid or reduce impacts.
Further baseline data, design information and confirmation of suitable management approaches will be
developed in the next stage of the proposal.

Design

All of the projects that are part of the Inland Rail programme will be designed and assessed in a consistent
way, guided by an overarching Environmental Strategy. Environmental assessment during the design phase
will address design, construction and operational phase impacts and management measures. Detailed
requirements for environmental assessment and design will also be specified in project tender documentation. This information is still under development, and will also incorporate any assessment
requirements provided by the NSW and Australian governments, if relevant and available at the time of
tender release.
Opportunities to minimise earthwork extents, avoid significant impacts to creeks and watercourses through
sensitive design, avoid or reduce impacts to areas of sensitive habitat (including habitat loss, habitat
fragmentation and mortality) will be key considerations throughout design. Opportunities to minimise
amenity impacts (noise, air quality, visual) will also be key drivers of subsequent design processes.

Construction

A construction environmental management plan will be developed to ensure management and mitigation
measures and conditions of approval are clearly documented, and are implemented during the construction

phase of the proposal. This will include definition of no?go zones, requirements for post?works rehabilitation,
and scheduling of works where necessary to minimise impacts during breeding periods or times of
heightened environmental sensitivity.

Operation

ARTC have established an environmental process that applies to operations on their network. This includes
an environmental policy, an environmental management system and a pollution incident response
management plan.

In all their activities, ARTC commits to:

Taking prompt action in response to noncompliance and other environmental complaints.

Having effective relationships with all environmental agencies and regulators.

Ensuring agreements between contractors and rail operators comply with our Environmental Management
System.

Ensuring employees are inducted so they can perform their duties.

Project specific environmental management or monitoring requirements identified through future stages of
design and impact assessment will be incorporated into the relevant operational management
documentation. These management and monitoring measures will be determined based on current
guidelines and scientific knowledge, with input from relevant government agencies. At this stage of the
process the exact nature of this documentation is yet to be determined, however the existing ARTC
Environmental Protection Licences for operations in New South Wales and South Australia provide an
example of how this is addressed in these jurisdictions. A project specific example is the ARTC operational
environmental management plan for the Southern Sydney Freight Line, which was developed in accordance
with the conditions of approval from the New South Wales Department of Planning.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved.

Avoidance and reduction of impacts to matters of national environmental significance and other environmental values have been a key factor in option assessment and route selection processes for the
proposal and across the Inland Rail programme.

While indicative alignments have been investigated to date these are preliminary and have only been subject
to preliminary investigations. The proposal site therefore includes a broad corridor to allow for an optimal

alignment to be further refined during the design process including detailed environmental investigations. As the proposal progresses, impact avoidance and reduction will remain key drivers in design development.

The proposal will undergo environmental assessment in line with Commonwealth and NSW legislative requirements, preferably under the bilateral agreement between the Australian Government and the State of NSW. This process will provide further detail regarding environmental outcomes, and the data upon which these assessments and proposed outcomes are based. This includes the completion of further studies and design development. Key aspects to be addressed include:

-Further definition of habitat and vegetation impacts, through iterative design and environmental assessment.

-Confirmation of the location of matters of national environmental significance and NSW protected matters habitat and species presence, and significance of populations, through targeted ecological investigations, in accordance with relevant NSW and Commonwealth survey guidance.

-Confirmation of other environmental values in the proposal site.

-Design development to avoid, reduce or manage impacts to identified environmental values.

-Determination of environmental offset requirements for matters of national environmental significance and NSW protected matters impacts. A programme?wide approach to biodiversity offset management is currently being considered.

The proposal’s environmental outcomes should also be considered in the context of the overall intent and outcomes of the ultimate Inland Rail programme. The establishment of a freight rail route that provides a comparable level of service to road freight is expected to negate or delay the need for progressive upgrades of the National Highway and associated environmental impacts.

Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

Listed threatened species and communities - Yes

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action.

An assessment of the impacts of the proposed action on EPBC listed threatened communities and species
either recorded or likely to occur was completed (2.14 ? Appendix D). Due to the lack of data and detailed
surveys for the project, a precautionary approach has been taken for the assessments of significance which
concluded that the project may have a significant impact on:
Threatened fauna:
-Superb Parrot (Polytelis swainsonii).
-Regent Honeyeater (Anthochaera phrygia).
-Swift Parrot (Lathamus discolor).
-Threatened flora:
-Swainsona murrayana (Slender Darling Pea).
-Caldenia arenaria (a Spider Orchid with no commonly used common name).
-Caldenia concolor (Crimson Spider Orchid).
-Austrostipa wakoolica (a Spear Grass).

Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail.

Yes, through implementation of ARTC's Code of Practice, Environmental Management System, and
Environmental Management Plans for a variety of construction projects, ARTC has maintained a satisfactory
record of responsible environmental management.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application.

N/A

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

Yes

6.3.1 If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework.

ARTC Environmental Management System

ARTC Code of Practice for environmental impact assessment of development proposals in NSW

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

Yes

6.4.1 EPBC Act No and/or Name of Proposal.

2016/7729 – Australian Rail Track Corporation Ltd/Transport ? Land/Narrabri to North Star/New South
Wales/Narrabri to North Star Section of Inland Rail, NSW (22 June 2016)
2016/7731 – Australian Rail Track Corporation Ltd/Transport ? Land/Parkes to Narromine/New South
Wales/Parkes to Narromine Section Inland Rail, NSW (22 June 2016)
2009/4897 – Upgrade of approx. 32km of Main Northern Railway, including construction of 3rd track,
Main Northern Railway between Maitland Junction and Minimbah (NSW) (18 May 2009)
2009/4783 – Melbourne to Sydney Rail Upgrade Project – Passing Lane 2, Near Hume Highway,
between Donnybrook Road and Beveridge Road (VIC) (06 March 2009
2008/4500 – Northern East Rail Revitalisation, Glenrowan Station (VIC) (08 October 2008)
2007/3795
– Passing Land 2 between Donnybrook Road and Beveridge Road level crossings, Melbourne to
Sydney Rail Corridor (VIC) (22 October 2007)
2005/2393 – South Sydney Freight Rail Line, Sefton Park to Macarthur (NSW) (18 November 2005)
2005/1948 – Sandgate Rail Grade Separation, Newcastle (NSW) (13 January 2005)

Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
ARTC 2010, Melbourne-Brisbane Iland Rail Alignment Study (Final Report Executive Summary) . Australian Weeds Committee 2015, Weeds of National Significance (WoNS) <http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html>. Department of Environment and Climate Change 2008, Controlling Erosion and Sediment , Department of Environment and Climate Change, viewed 12 November 2008, <http://www.environment.nsw.gov.au/sustainbus/landscapeErosionSediment.htm>. Department of Infrastructure and Regional Development 2016, Inland Rail—a new rail connection between Melbourne and Brisbane, viewed 14 June 2016, <https://infrastructure.gov.au/rail/inland/>. Department of the Environment 2013, Significant Impact Guidelines 1.1 - Matters of National Environmental Significance Department of the Environment, Canberra. Department of the Environment 2016, Protected Matters Search Tool , <http://www.environment.gov.au/webgisframework/apps/pmst/pmst.jsf>.	The information presented in this referral has been compiled from detailed desktop assessments of various databases and relevant literature as well as rapid field validation surveys and habitat-based assessments. Surveys were undertaken in the last eighteen months using standard field survey techniques. Further and more detailed assessments will be undertaken as part of the EIS process.	na

Reference Source	Reliability	Uncertainties
Fairfull, S, Witheridge, G & Fisheries, N 2003, Why Do Fish Need to Cross the Road: Fish Passage Requirements for Waterway Crossings , NSW Fisheries. NSW Department of Primary Industries 2015, NSW WeedWise , NSW Department of Primary Industries; Agriculture., viewed 30 May 2016 <http://weeds.dpi.nsw.gov.au/>. Office for Environment & Heritage 2016, BioNet the Atlas of NSW Wildlife Database Search , <http://www.environment.nsw.gov.au/atlaspublicapp/UI_Modules/ATLAS_/AtlasSearch.aspx Office of Environment & Heritage 2016, OEH principles for the use of biodiversity offsets in NSW , viewed 11 May 2016, <http://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm>. Office of Environment and Heritage 2014, BioBanking Assessment Methodology 2014 , Sydney. Parsons Brinckerhoff 2015, Melbourne-Brisbane Inland Rail Engineering and Technical Services - Alignment Development and Assessment Report- Illabo to Stockinbingal , Prepared for ARTC.		

Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

ARTC have identified a number of locations or alternative routes for detailed operational modelling and
environmental and economic analysis.
The 2010 Inland Rail Alignment Study (IRAS) used a desktop analysis to identify an optimum corridor and
establish the blueprint for the development of a railway to meet the future freight demands of eastern
Australia (ARTC 2010). The 2010 IRAS identified two broad options for the route between Illabo and
Stockinbingal which included a brownfield and a greenfield option.
The 2010 IRAS recommended the greenfield alignment as being the preferred option as it avoided the
Bethungra Spiral whilst offering significant improvements on run time. This was adopted as the Base Case
alignment.
The 2015 Alignment Development and Assessment Report (ADAR) reviewed the 2010 Inland Rail Alignment
Study Base Case. The ADAR considered changes to constraints since the 2010 IRAS, and optimised the
alignment in view of known constraints.
Subsequent to the completion of the ADAR, additional alignment options were developed during the review of
information as part of the options assessment stage. Access to land ownership information prompted a
refinement that minimised impacts on property owners. It is a further refinement of the Base Case which aims
to minimise the potential impact on land holder severance, road crossings and to lessen impacts on sensitive
receivers.
As a result, six alignment options were considered by ARTC using a Multi Criteria Analysis (MCA) that
compared cost, property acquisition, regulatory approvals, constructability, operational and environmental
issues.
The MCA process for I2S was broken into three sub?sections in order to determine an overall outcome for a
preferred alignment. Each of these sub?sections had various options, these are as follows:

Illabo to Stockinbingal (South)

A total of 6 different route options were investigated for this section of works;

Base Case ? Total route length of 36.5km, diverging from the main south line between Illabo and Bethungra and heading north towards Stockinbingal. Minimum horizontal radius 800m, minimum transition lengths 70m. 2 Turnouts, 10 passive crossings, 1 active crossing, 1 rail over river bridge, 1 rail over rail bridge, 45 rail over creek culverts.

Option 1 ? Alignment generally follows the Base Case with a total length of 36.1km with curve easing's to accommodate a minimum radius of 1200m. Minimum transition lengths 100m to allow 115km/h operation. Maximum vertical grade 1.26%. Land take is slightly increased from base case, in some areas individual property impacts have been significantly increased. 2 turnouts, 10 passive crossings, 1 rail over river bridge, 1 rail over rail bridge, 43 rail over creek culverts.

Option 2 ? Alignment removes a number of reverse curves and is generally straight, with more cut, resulting in an alignment with a total length of 35.4km. Minimum horizontal radius 1200m with 100m transitions to allow 115km/h operation Maximum vertical grade 1.25%. To minimise cutting through steep terrain, short steeper grades will be required. Alignment differs from base case by up to 450m in some areas 2 turnouts, 9 passive crossings, 1 active crossing, 1 rail over river bridge, 1 rail over rail bridge, 44 rail over creek culverts.

Option 3 ? Alignment generally follows the base case until deviating prior to Run Boundary Creek crossing to run on the eastern side of the base case and follow the topography. The alignment remains on the eastern side of Ironbong Creek increasing the impact on one property but shifting the alignment away from three other properties. Total length 36.2km. Minimum horizontal radius 1200m with 100m transitions allowing 115km/h operation. Maximum vertical grade 1.25%. Alignment requires minimal changes in rising and falling grades within close distances generally as per the base case route running along the valley (improving drivability over Option 2). Alignment differs from base case by up to 600m in some areas. 2 turnouts, 9 passive crossings, 1 active crossing, 1 rail over river bridge, 1 rail over rail bridge, 43 rail over creek culverts

Option 4 – Alignment generally follows the base case before deviating onto a similar route as Option 3 before crossing Ironbong Creek and then generally following the Base Case route, total length

36.2km. Minimum horizontal radius 1200m with 100m transitions allowing 115km/h operation. Maximum vertical grade is 1.25%. Alignment differs from the base case by up to 600m in some areas.
2 turnouts, 9 passive crossings, 1 active crossing, 1 rail over river bridge, 1 rail over rail bridge, 41 rail
over creek culverts.
Option 5 ? Alignment generally follows option 4 and deviates to the east in a number of locations.
Minimum horizontal radius 1200m with 100m transition allowing for 115km/h operation. Maximum
vertical grade is 1.2%. 2 turnouts, 9 passive crossings, 1 active crossing, 1 rail over river bridge, 1 rail
over rail bridge.

Dudaman Road

A total of 5 different route options were investigated for this section of works;
Base Case – The Base case alignment has been designed running on the western side of Dudaman
Road staying close to the road to minimise impact in the south but deviates away from the rail where
the road geometry changes running north between two fields
Option B – This has been designed to run on the western side of Dudaman Road but follows the road
reserve further to the north. Following the road reserve has different land impacts.
Option C – This has been designed to run on the western side of Dudaman Road cutting through the
existing road in two locations requiring a road diversion to avoid two level crossings.
Option D – This has been designed to run on the eastern side of Dudaman Road crossing the existing
road at a location where existing geometry can be maximised to enable construction of a level crossing for Dudaman Road, road diversions required to maintain access and avoid additional crossings.
Option E ? Option E has been designed to run on the eastern side of Dudaman Road crossing the
existing road at a location where existing geometry can be maximised to enable construction of a
level crossing for Dudaman Road, road diversions required to maintain access and avoid additional
crossings.

Stockinbingal

A total of 4 different route options were investigated for this section of works;
Option A – Base Case ? The Base case rail alignment has been designed running on the western side of
Stockinbingal crossing the Giffin Line with a grade separated Rail over Rail crossing. Clearance at the
Burlie Griffin Way requires modification to the road to enable a grade separated road crossing with
required clearances to be achieved. Option assumes that road is relocated to a road under rail

crossing.
Option B ? The Base case rail alignment has been designed running on the western side of Stockinbingal crossing the Giffin Line with a grade separated Rail over Rail crossing. Clearance at the
Burlie Griffin Way requires modification to the road to enable a grade separated road crossing with
required clearances to be achieved. Option assumes that road is relocated to a road over rail crossing.
Option C ? The Base case rail alignment has been designed running on the western side of Stockinbingal crossing the Giffin Line with a grade separated Rail over Rail crossing. Rail has been
modified to provide clearance at the existing Burlie Griffin Way without road relocation (Rail has been
raised).
Option D – This option modifies the IR alignment and existing trackwork to provide for an at grade
junction arrangement still enabling existing train movements east ? west via two turnouts on the IR
alignment and modified existing track alignments. Existing northbound track has also been modified
to enable consolidated road over rail crossings.
There were a number of variants identified for the alignment in the southern half of the proposed corridor.
These were assessed against the base case in order to determine a preferred route. Within the northern part
of the proposed corridor, the proposed alignment primarily follows a common route, separating around
Dudaman Road. In addition to the North and South variants, there were a number of options identified for the
Stockinbingal junction area which needed to be assessed to provide an overall preferred alignment solution.

These options are being assessed via Multi Criteria Analysis to inform final preffered design alignment. The MCA is not yet completed.

8.1 Select the relevant alternatives related to your proposed action.

Locations

8.3 What is the extent and location of your proposed alternative action?

Area	Point	Latitude	Longitude
options within the corridor	1	-34.797998496071	147.75572347169
options within the corridor	2	-34.797434642038	147.75572347169
options within the corridor	3	-34.755416673234	147.81614827637
options within the corridor	4	-34.628104448835	147.81786489014
options within the corridor	5	-34.498333021973	147.86730336671
options within the corridor	6	-34.496069415803	147.8927092505
options within the corridor	7	-34.563385409334	147.87931966309
options within the corridor	8	-34.643358358533	147.83640431885
options within the corridor	9	-34.774595313298	147.84292745118
options within the corridor	10	-34.814066714805	147.7704863501
options within the corridor	11	-34.797998496071	147.75572347169

8.4 Provide a brief physical description of the property on which the alternative proposed action will take place and the project location (e.g. Proximity to major towns, or for off-shore projects, shortest distance to mainland.

The alternative option routes are situated in a similar area to the proposed option route. Impacts will
therefore be the same or similar to the preferred option.

8.5 What is the size of the development footprint or work area of the alternative?

greater than 40ha impact to EPBC TEC

8.6 Is the alternative proposal a street address or lot?

Lot

8.6.2 Describe the lot number associated with the alternative proposal.

refer to map.

Minimising impacts involves reducing the loss of habitat or significant species as far as practicable. Through
detailed surveys, it is usually possible to fine?tune the proposed action (alignment and width of footprint) to
minimise loss of important vegetation communities or habitats and avoid significant plant species or habitat
features. The final footprint is also subject to engineering constraints and safety standards.

8.7 Is there a different local government area and council contact for the alternative?

No

8.8 Provide details of the context, planning framework and State/Local Government requirements.

State Legislation
NSW Environmental Planning and Assessment Act 1979
The NSW Environmental Planning and Assessment Act 1979 (EP&A Act) and Environmental Planning and
Assessment Regulation 2000 (EP&A Regulation) establish a framework for the assessment and approval of
developments in NSW. They also provide for the making of environmental planning instruments, including
state environmental planning policies (SEPPs) and local environmental plans (LEPs), which determine the
permissibility and approval pathway for development proposals and form a part of the environmental
assessment process.
Under State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP), the proposed action is
classified as ‘development for the purpose of a railway or rail infrastructure on behalf of a public authority’ and
so may be carried out without development consent under the EP&A Act.
The capital investment of the proposed action is estimated to be greater than $50 million. In addition, ARTC
has formed the opinion (based on its assessment to date) that the proposed action is likely to significantly
affect the environment. As a result of each of these circumstances, the proposed action is declared State
Significant Infrastructure (SSI) under clause 14 and Schedule 3 of State Environmental Planning Policy (State
and Regional Development) 2011. The proposed action must therefore be assessed and

approved by the NSW
Minister for Planning under Part 5.1 of the EP&A Act before it can be carried out. An EIS must be prepared as
part of the assessment.

8.9 Describe any public consultation that has been, is being or will be undertaken (including with Indigenous stakeholders).

Illabo to Stockinbingal (South) – Option 5 Preferred
To assist in community consultation and further alignment refinement the investigation corridor for the route
shall remain wide enough to cover all options in the
north and Option 1, 3 and 5 but design will progress based on further development of Option 5. This
corridor shall be narrowed further following additional community consultation.
Dudaman Road – Option B Preferred
Findings of this assessment were discussed, and it was agreed that Option B would be progressed in
the concept design but the investigation corridor would remain wide to enable incorporation of further
stakeholder and community consultation.
Stockinbingal – Option C Preferred
No additional consultation undertaken for this option.

8.10 Describe any environmental impact assessments that have been, is being or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project for the alternative.

Environment Protection and Biodiversity Conservation Act 1999
Under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) a referral is required to
the Commonwealth for projects, or ‘actions’, that are likely to have a significant impact on a matter of national
environmental significance (MNES) or the environment on Commonwealth land. An approval from the
Commonwealth Minister for the Environment may be required for a referred project. If so, that project is a
controlled action under the EPBC Act.
This EPBC Act referral has been formed to seek a determination on whether the impacts of the project are
likely to be significant and whether the project is a controlled action requiring approval under the EPBC Act.
ARTC's preliminary view is that the project is a controlled action.
Should the Minister determine that the project is a controlled action, the bilateral agreement between the

New South Wales and Commonwealth Governments under the EPBC Act will apply and will allow the
Commonwealth Minister to rely on the SSI assessment process under the EP&A Act as the assessment for the
purposes of the EPBC Act (see the more detailed discussion in section 4).
This referral document refers to the "EIS". In this document, that reference is to the EIS which will be
prepared under the EP&A Act, noting that it is possible that the same document will be relied upon for the
purposes of the EPBC Act.

8.11 Is the alternative activity part of a staged development or a component of a larger project?

No

8.12 Nominate any matters of National Environmental Significance that are likely to be impacted by this alternative proposal by ticking the relevant checkboxes.

Listed threatened species or any threatened ecological community

8.12.1 Please provide further information on potential impacts of matters of environmental significance that you have nominated above.

The alternative option routes are situated in a similar area to the proposed option route. Impacts will
therefore be the same or similar to the preferred option.

8.13 Describe any impacts on the flora and fauna relevant to the alternative proposal.

The alternative option routes are situated in a similar area to the proposed option route. Impacts will
therefore be the same or similar to the preferred option.

8.14 Describe the hydrology relevant to the alternative proposal (including water flows).

The alternative option routes are situated in a similar area to the proposed option route. Impacts will
therefore be the same or similar to the preferred option.

8.15 Describe the soil and vegetation characteristics relevant to the alternative proposal.

The alternative option routes are situated in a similar area to the proposed option route. Impacts

will
therefore be the same or similar to the preferred option.

8.16 Describe any outstanding natural features and/or unique values relevant to the alternative proposal.

No outstanding natural features occur within the Investigation corridor.

8.17 Describe the remnant native vegetation relevant to the alternative proposal.

The alternative option routes are situated in a similar area to the proposed option route. Impacts will
therefore be the same or similar to the preferred option.

8.18 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the alternative proposal.

N/A

8.19 Describe the current state of the environment relevant to the alternative proposal.

Illabo to Stockinbingal (South)
A total of 4 different route options were investigated for this section of works, workshop attendees agreed
there is merit to depart from the Base Case but also recognised the sensitivities of this route section from a
property impact and / consultation perspective. The MCA process indicated that the Option 5 provided the
greatest improvement over the Base Case due to reduced property impacts, improved earthworks balance and
improved road crossing sites. Key improvements over the Base Case include;
? increased minimum curvature and improved rail geometry,
? less interaction with Ironbong Creek
? improved earthworks balance and mass haul
? reduced overall property impacts (indirect impacts),
? improved road crossing locations.
Based on the assessment Option 2 can be eliminated from further assessment due to high cost associated with the large cutting. To assist in community consultation and further alignment refinement the investigation corridor for the route shall remain wide enough to cover all options in the
north and Option 1, 3 and 5 but design will progress based on further development of Option 5. This
corridor shall be narrowed further following additional community consultation.

Dudaman Road
It was agreed that Option B would be progressed in the concept design but the investigation corridor would
remain wide to enable incorporation of further stakeholder and community consultation. Option B was
selected due to:
? reduced land impacts from the Base case,
? reduced public level crossings,
? offers cost savings in comparison to Option C for realignment of Dudaman road. Option C scored the
highest but had an increase in capital cost and similar overall land impacts as additional land is required for the road diversion.
Stockinbingal
To finalise the preferred alignment it was identified that a more focused engineering assessment was
required for the alignment options at Stockinbingal where the alignment is required to cross Burley
Griffin Way and the existing rail line (Griffin Line). During previous stages of the project different potential junction arrangements have been discussed and assumptions made but this still presents an
area of uncertainty in determining a preferred alignment.
The Base Case option assumes a grade separated crossing for both the road and the rail crossing this
investigation but rail grading in 2010 provides limited clearance at the existing road crossing. Road relocation
is required to underpass closer to the existing rail corridor. The assessment of Stockinbingal junction indicated
that Option C – Rail over (both Burley Griffin
Highway and existing Griffith Line) was the preferred option.

8.20 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the alternative proposal.

The alternative option routes are situated in a similar area to the proposed option route. Impacts will
therefore be the same or similar to the preferred option.

8.21 Describe any Indigenous heritage values relevant to the alternative proposal.

The alternative option routes are situated in a similar area to the proposed option route. Impacts will
therefore be the same or similar to the preferred option.

8.22 Describe any other important or unique values relevant to the alternative proposal.

No outstanding natural features occur within the Investigation corridor.

8.23 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the alternative proposal.

The majority of the proposed action would occur on privately owned land.

8.24 Describe the existing uses of the area relevant to the alternative proposal.

The proposed action traverses undeveloped rural areas and the land surrounding the investigation corridor is
used for grazing and agriculture. The major industries in the area include livestock, wool and wheat. The
majority of the land has been cleared and disturbed for agricultural activities, however some patches of
remnant vegetation remain.

8.25 Identify any proposed uses of the area relevant to the alternative proposal.

The alternative option routes are situated in a similar area to the proposed option route. Impacts will
therefore be the same or similar to the preferred option.

8.26 What are the proposed measures for any alternative action to avoid or reduce impact?

This proposed action follows the general principles of Avoid, Minimise and Mitigate to minimise impacts to
biodiversity, and endeavours to, in order of consideration:
Avoid impacts on habitat, through the planning process.
Minimise impacts on habitat, through the planning process.
Mitigate impacts on habitat, though the use of a range of mitigation measures.
The avoidance of impacts can be achieved through the planning process. This process involves a preliminary
examination of a number of possible site options and their potential impacts on the environment and other
factors (for example, economic and social considerations). Those potential sites that best fit the environmental, social and economic criteria are then short?listed. This was completed as part of the site
selection process.
Minimising impacts involves reducing the loss of habitat or significant species as far as practicable. Through
detailed surveys, it is usually possible to fine?tune the proposed action (alignment and width of

footprint) to
minimise loss of important vegetation communities or habitats and avoid significant plant species or habitat
features. The final footprint is also subject to engineering constraints and safety standards. Residual impacts that cannot be avoided or minimised are mitigated wherever possible.
In order to address the potential impacts of the proposed action on biodiversity, the following mitigation
measures are recommended.

8.27 Do you have another alternative?

No

Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Environment Manager

9.2.2 First Name

Stephanie

9.2.3 Last Name

Mifsud

9.2.4 E-mail

smifsud@artc.com.au

9.2.5 Postal Address

GPO Box 14
Sydney NSW 2001
Australia

9.2.6 ABN/ACN

ABN

75081455754 - AUSTRALIAN RAIL TRACK CORPORATION LIMITED

9.2.7 Organisation Telephone

0282935126

9.2.8 Organisation E-mail

smifsud@artc.com.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:..... Not applicable ..... Date: .....

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

9.2.9.3 Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made

Person proposing the action - Declaration

I, Stephanie Mifsud on behalf of ARTC, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature:..... Date: 18/6/18

I, _____, the person proposing the action, consent to the designation of _____ as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:..... Date: .....

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Environment Manager NSW

9.5.2 First Name

Stephanie

9.5.3 Last Name

Mifsud

9.5.4 E-mail

smifsud@artc.com.au

9.5.5 Postal Address

GPO Box 14
Sydney NSW 2001
Australia

9.5.6 ABN/ACN

ABN

75081455754 - AUSTRALIAN RAIL TRACK CORPORATION LIMITED

9.5.7 Organisation Telephone

0282935126

9.5.8 Organisation E-mail

smifsud@artc.com.au

Proposed designated proponent - Declaration

I, Stephanie Mifsud, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:..... Date: 18.6.18

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Environment Manager NSW

9.8.2 First Name

Stephanie

9.8.3 Last Name

Mifsud

9.8.4 E-mail

smifsud@artc.com.au

9.8.5 Postal Address

GPO Box 14
Sydney NSW 2001
Australia

9.8.6 ABN/ACN

ABN

75081455754 - AUSTRALIAN RAIL TRACK CORPORATION LIMITED

9.8.7 Organisation Telephone

0282935126

9.8.8 Organisation E-mail

smifsud@artc.com.au

Referring Party - Declaration

I, Stephanie Mifsud, I declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature:..... Date: 18.6.18

Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. 1.4_appendix_a_-_location_images.pdf
2. 1.13.1_consultation_summary_illabo.docx
3. 2.14_appendix_b_epbc_act_and_protected_matters_report.pdf
4. 2.14_appendix_c_likelihood_of_occurence.pdf
5. 2.14_appendix_d_nsw_only_epbc_act_impact_assessments.pdf
6. 2.14_desktop_study.pdf
7. 6.3.2_-_artc_environmental_policy.pdf
8. 8.13.1_memo_-_outcomes_of_mca_2_and_preferred_options_-_i2s.pdf