

Generic draft terms of reference for an environmental impact statement

Name of NON-RESOURCE project

DRAFT 19 August 2015

Template version control. Delete this table before releasing the document

Date	Details of update
27 March 2015	Updated branding and copyright notice.
13 March 2015	Replaced reference to the Strategic Cropping Land Act with references to the Regional Planning Interests Act
15 January 2015	Clarified requirement for final EIS to be consistent with government policies and plans in effect at the time of CG approval, See para 6.8. Fixed paragraph numbering throughout.
23 December 2014	CG approved adding reference to social impact assessment guideline and requirement for the EIS to provide a summary of impacts and proposed mitigation measures at the end of each technical chapter. Document rebranded
12 August 2014	Editing instructions updated.
11 June 2014	Aboriginal cultural heritage section updated, following advice from DATSIMA. See E14/159725 and E14/159750.
28 January 2014	Version 1 released, based on Resource project version.

The Department of State Development

Copyright

This publication is protected by the *Copyright Act 1968*.

Licence



This work is licensed to the Department of State Development under a Creative Commons Attribution (CC BY) 3.0 Australia licence. To view a copy of this licence, visit:
<http://www.creativecommons.org/licenses/by/3.0/au/>

You are free to copy, communicate and adapt this publication, as long as you attribute it as follows:

© State of Queensland, Department of State Development, August 2015.



The Queensland Government is committed to providing accessible services to Queenslanders of all cultural and linguistic backgrounds. If you have difficulty understanding this publication and need a translator, please call the Translating and Interpreting Service (TIS National) on telephone 131 450 and ask them to contact the Queensland Department of State Development on (07) 3452 7009.

Disclaimer

While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

Any references to legislation are not an interpretation of the law. They are to be used as a guide only. The information in this publication is general and does not take into account individual circumstances or situations. Where appropriate, independent legal advice should be sought.

Copies of this publication are available on our website at www.statedevelopment.qld.gov.au and further copies are available upon request to:

Department of State Development
PO Box 15009 City East, Queensland 4002.
100 George Street Brisbane Qld 4000 (Australia)

Phone: 13QGOV (137468)
Fax: 07 3405 1122
Email: info@dsd.qld.gov.au
Web: www.statedevelopment.qld.gov.au

D14/21450

Contents

Part A. About these terms of reference	2
1. Statutory basis	2
2. Accredited process for controlled actions under Commonwealth legislation [only for bilateral projects].....	2
3. EIS guidelines	2
4. More information	2
Part B. Content of the EIS	3
5. General approach	3
6. Mandatory requirements of an EIS	3
7. Further requirements of an EIS	4
8. Executive summary	5
9. Introduction	5
Project proponent.....	5
The environmental impact assessment process	5
Project approvals process	5
10. Project description.....	6
Proposed development	6
Site description.....	6
Climate.....	7
Proposed construction and operations	7
Infrastructure requirements	8
11. Assessment of critical matters	8
Land use	9
Flora and fauna	10
Water quality	11
Hazards, health and safety.....	12
Social and economic	13
Content of the EIS for matters of national environmental significance [only for bilateral projects].....	14
12. Assessment of routine matters	18
Air	19
Noise and vibration.....	20
Water resources.....	20
Biosecurity	22
Waste management	22
Cultural heritage.....	23
Transport.....	23
13. Appendices to the EIS.....	24
Acronyms and abbreviations	25
Appendix 1. Policies and guidelines	26

Part A. About these terms of reference

1. Statutory basis

- 1.1. The Coordinator-General has declared the [Declared name of NON-RESOURCE project] project to be a 'coordinated project for which an environmental impact statement (EIS) is required' under section 26(1)(a) of the *State Development and Public Works Organisation Act 1971* (SDPWO Act). This declaration initiates the statutory environmental impact assessment procedure of Part 4 of the SDPWO Act, which requires a proponent to prepare an EIS for the project.
- 1.2. These terms of reference (TOR) set out the matters the proponent must address in an EIS for the project and are approved by the Coordinator-General under section 30 of the SDPWO Act.

2. Accredited process for controlled actions under Commonwealth legislation [only for bilateral projects]

- 2.1. On XX Month 20XX, the Commonwealth Minister for the Environment determined the XYZ project is a 'controlled action' under the EPBC Act, due to the likely potential impacts on matters of national environmental significance (MNES) (reference number EPBC 201X/XXXX).
- 2.2. The EIS process has been accredited under the Bilateral Agreement for the assessment of the project under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act), hence the EIS must state the controlling provisions for the project and describe the particular aspects of the environment that led to the controlled action decision.
- 2.3. The assessment of the controlling provisions, mitigation measures and any offsets for residual impacts must be described and illustrated in a stand-alone report in the EIS that fully addresses the matters relevant to the controlling provisions. Requirements for MNES are set out on pages 14–18 of this TOR.

3. EIS guidelines

- 3.1. This TOR should be read in conjunction with *Preparing an environmental impact statement: Guideline for proponents*, which explains the following:
 - (a) participants in the EIS process
 - (b) consultation requirements
 - (c) EIS format and copy requirements.
- 3.2. In addition, subject-specific guidelines are referenced throughout this TOR; refer to Appendix 1 for a list of these policies and guidelines.

4. More information

- 4.1. For information about the project or the EIS process conducted under the SDPWO Act, visit www.dsdip.qld.gov.au/cg

Part B. Content of the EIS

5. General approach

- 5.1. For the purposes of the EIS process, 'environment' is defined in Schedule 2 of the SDPWO Act and includes social and economic matters.
- 5.2. The EIS should give priority to the critical matters associated with the project (specified in section 11 of this TOR).
- 5.3. The detail at which the EIS deals with matters relevant to the project should be proportional to the scale of the impacts on environmental values. When determining the scale of an impact, consider its intensity, duration, cumulative effect, irreversibility, the risk of environmental harm, management strategies and offsets provisions.

6. Mandatory requirements of an EIS

- 6.1. For all the relevant matters, the EIS must identify and describe the environmental values that must be protected. Environmental values are specified in the *Environmental Protection Act 1994* (EP Act),¹ the Environmental Protection Regulation 2008 (EP Regulation), environmental protection policies (EPPs) and relevant guidelines.²
- 6.2. The assessment should cover both the short and long terms and state whether any relevant impacts are likely to be irreversible. Also discuss scenarios of unknown, unpredictable impacts.
- 6.3. Provide all available baseline information relevant to the environmental risks of the project. Provide details about the *quality* of the information provided, in particular: the source of the information; how recent the information is; how the reliability of the information was tested; and any uncertainties in the information.
- 6.4. Provide detailed strategies in regard to all critical matters for the protection, or enhancement as desirable, of all relevant environmental values in terms of outcomes and possible conditions that can be measured and audited. In general, the preferred hierarchy for managing likely impacts is: (a) to avoid; (b) to minimise/mitigate; and (c) if necessary and possible, to offset.
- 6.5. Impact minimisation measures should include ongoing monitoring and proposals for an adaptive management approach, as relevant, based on monitoring. The proposed measures should give confidence that, based on current technologies, the impacts can be effectively minimised over the long-term.
- 6.6. Each matter assessed in the EIS (as described in section 11 and 12 of this TOR) should include a concise summary of the potential impacts of the project and the measures proposed by the proponent to avoid, minimise, mitigate and/or offset those impacts.

¹ Part 3, Division 2, Subdivision 1, section 9

² For example, the *Queensland Water Quality Guidelines* and the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (refer to Appendix 1 for details).

-
- 6.7. Present feasible alternatives of the project's configuration (including individual elements) that may improve environmental outcomes. Discuss the consequences of not proceeding with the project.
 - 6.8. Describe the extent to which the construction and operation of the project would:
 - (a) meet all statutory and regulatory requirements of the State
 - (b) be consistent with Queensland Government policies, plans and guidelines current and publicly available at the time the draft EIS and any revised draft EIS is provided to the Coordinator-General.

If there is conflict between the project and government policies, plans and guidelines, provide supporting information on any merit in allowing that conflict to occur.

7. Further requirements of an EIS

- 7.1. The assessment and supporting information should be sufficient for the administering authority to decide whether an approval should be granted. Where applicable, sufficient information should be included to enable approval conditions to be decided.
- 7.2. To the extent of the information available, the assessment should endeavour to predict the *cumulative* impact³ of the project on environmental values over time and in combination with impacts created by the activities of other adjacent and upstream and downstream developments and landholders—as detected by baseline monitoring. This will inform the decision on the EIS and the setting of conditions. The absence of a comprehensive cumulative impacts analysis need not be fatal to the project. The EIS should also outline ways in which the cumulative impact assessment and management could subsequently be progressed further on a collective basis.
- 7.3. Include a consolidated description of all the proponent's commitments to implement management measures (including monitoring programs). Should the project proceed, these should be able to be carried over into the approval conditions as relevant.
- 7.4. Provide all geographical coordinates throughout the EIS in latitude and longitude against the Geocentric Datum of Australia 1994 (GDA94).
- 7.5. An EIS should also describe the expected benefits and opportunities associated with the project.
- 7.6. An appropriate public consultation program is essential to the impact assessment process. The proponent should consult with Local, State and Commonwealth government agencies, and potentially affected local communities.
- 7.7. The EIS should describe the consultation that has taken place and how the responses from the community and agencies have been incorporated into the design and outcomes of the project.
- 7.8. Include, as an appendix, a public consultation report detailing how the public consultation plan was implemented, and the results.

³ Cumulative impact is defined as 'combined impacts from all relevant sources (developments and other activities in the area)'.

8. Executive summary

- 8.1. The executive summary should describe the project and convey the most important and preferred aspects and environmental management options relating to the project in a concise and readable form. It should use plain English, avoid jargon, be written as a stand-alone document and be structured to follow the EIS. It should be easy to reproduce and distribute on request to those who may not wish to read or purchase the whole EIS.

9. Introduction

- 9.1. Clearly explain the function of the EIS, why it has been prepared and what it sets out to achieve. Include an overview of the structure of the document.

Project proponent

- 9.2. Describe the following:
- (a) the designated proponent's full name, postal address and ABN, if relevant (including details of any joint venture partners)
 - (b) the nature and extent of business activities
 - (c) proponent's experience
 - (d) proponent's environmental record, including a list of any breach of relevant environmental laws during the previous ten years
 - (e) proponent's environmental, health, safety and community policies.

The environmental impact assessment process

- 9.3. Provide an outline of the environmental impact assessment process, including the role of the EIS in the Coordinator-General's decision making process. The information in this section is required to ensure readers are informed of the process to be followed and are aware of any opportunities for input and participation.
- 9.4. Inform the reader how and when properly made public submissions on the EIS will be addressed and taken into account in the decision-making process.

Project approvals process

- 9.5. Provide an outline of the approvals required to enable the project to be constructed and operated. Explain how the environmental impact assessment process (and the EIS itself) informs the issue of the leases/licences/permits/consents required by the proponent before construction can commence. Provide a flow chart indicating the key approvals and opportunities for public comment.

- 9.6. The State Development Assessment Provisions (SDAP) prescribed in the Sustainable Planning Regulation 2009 set out the matters of interest to the state for development assessment where the chief executive of SPA is the assessment manager for development applications. If the proponent intends to satisfy the information requirements of future development assessment decisions under SDAP for any component of the project during this coordinated project EIS process, the material provided in accordance with sections 10-12 of this TOR should be sufficient to permit those assessments to be completed for that project component. Further information on SDAP requirements can be assessed from www.dsdip.qld.gov.au/development-applications/sdap

10. Project description

Proposed development

- 10.1. The EIS must describe and illustrate at least the following specific information about the proposed project:
- (a) project title
 - (b) project description
 - (c) project objectives
 - (d) expected capital expenditure
 - (e) rationale for the project
 - (f) regional and local context of the project's footprint (with maps at suitable scales)
 - (g) relationship to other major projects and/or developments (of which the proponent should reasonably be aware)
 - (h) workforce numbers to be employed by the project during its various phases
 - (i) where personnel would be accommodated
 - (j) proposed construction staging and likely schedule of works.

Site description

- 10.2. Provide real property descriptions of the project land and adjacent properties; any easements; any tenures; and identification number of any lease for the project land that is subject to the application. Key transport, state-controlled roads, rail, air, port/sea and other infrastructure or services in the region and to the site should be described and mapped.
- 10.3. Describe and illustrate the topography of the project site and surrounding area, and highlight any significant features shown on the maps. Include and name rivers and creeks. Maps should include a scale, and have contours at suitable increments relevant to the scale, location, potential impacts and type of project, shown with respect to Australian Height Datum (AHD) and drafted to GDA94.
- 10.4. Describe and illustrate specific information about the proposed project including the precise location of the proposed development in relation to designated and protected areas such as erosion prone areas, the coastal management district, marine park boundaries, fish habitat areas and World Heritage Areas.

- 10.5. Where relevant, describe and map in plan and cross-sections the geology and landforms, including catchments, of the project area. Show geological structures, such as aquifers, faults and economic resources (such as agricultural products) that could have an influence on, or be influenced by, the project's activities.
- 10.6. Where relevant, describe, map and illustrate soil types and profiles of the project area at a scale relevant to the proposed project. Identify soils that would require particular management due to wetness, erosivity, depth, acidity, salinity or other features.
- 10.7. Plans and drawings provided must be detailed enough to enable the Coordinator-General and advisory agencies to adequately assess the application.

Climate

- 10.8. Describe the site's climate patterns that are relevant to the environmental assessment, with particular regard to discharges to water and air and the propagation of noise. Climate information should be presented in a statistical form including long-term averages and extreme values, as necessary.

Proposed construction and operations

- 10.9. Describe the following information about the proposal:
 - (a) all pre-construction activities (e.g. vegetation clearing, site access, interference with watercourses and floodplain areas, including wetlands)
 - (b) existing infrastructure and easements on the potentially affected land
 - (c) the proposed construction methods, associated equipment and techniques
 - (d) location, design and capacity of water supply, telecommunications, power generation and transmission infrastructure
 - (e) any infrastructure alternatives, justified in terms of ecologically sustainable development (including energy and water conservation)
 - (f) hours of operation for proposed construction works, including night time works
 - (g) the sequencing and staging of activities
 - (h) the capacity of high-impact plant and equipment, their chemical and physical processes, and chemicals or hazardous materials to be used
 - (i) the known locations of new or altered works and structures and infrastructure necessary to enable the construction and operation of the development
 - (j) any activity that is a prescribed ERA
 - (k) location of quarry operations the project may source materials from
 - (l) the range of land uses and site layout
 - (m) built form and design specifics
 - (n) operation detail (e.g. hours of operation for project components)
 - (o) the commissioning process including landscaping and the rehabilitation of affected areas after construction
 - (p) management structure of final development (e.g. body corporate)
 - (q) infrastructure requirements (e.g. roads, electricity, telecommunications, sewerage)

- (r) location and scale of parking requirements.

Infrastructure requirements

Objectives

The project should provide necessary infrastructure to service the development that:

- (a) maintains or enhances services to existing users
- (b) ensures any required works are compatible with existing infrastructure.

- 10.10. This section should detail, with concept and layout plans, requirements for new infrastructure, or the upgrading and/or relocating of existing infrastructure to service the project. Infrastructure to be considered should include water supply, energy supply, telecommunications, stormwater, waste disposal and sewerage.
- 10.11. Describe the typical service corridors or clearances for sewerage and recycled water mains in relation to other services.

11. Assessment of critical matters

[Requirements for all routine (i.e. non-critical) matters to be included here. No MNES controlling provisions to be included in this section. Relevant matters will be moved to 'Critical matters' if required. The final TOR will include additional site-specific requirements that must be addressed in the EIS. The requirements will be developed from the description of the project given in the initial advice statement and take account of comments made by government agencies and members of the community on the draft TOR.]

- 11.1. This section sets out the scope of critical matters that should be given detailed treatment in the EIS. A critical matter is an aspect of the proposal that is reasonably expected to have one or more of the following characteristics:
 - (a) a high or medium probability of causing serious or material environmental harm or a high probability of causing an environmental nuisance⁴
 - (b) considered contentious in the public domain, for example, has been the subject of extensive media coverage and/or there is a public perception that an activity has the potential to cause serious or material environmental harm or an environmental nuisance (regardless of the likelihood of occurrence).
- 11.2. The final scope of critical matters will be determined by the Coordinator-General when finalising the TOR. In the course of preparing the EIS, information may become available that warrants a change of scope.

⁴ 'Material environmental harm', 'serious environmental harm' and 'environmental nuisance' are defined in Part 3, sections 15, 16 and 17 of the *Environmental Protection Act 1994*.

Land use

Objectives

Development should be designed and operated to:

- (a) improve environmental outcomes
- (b) contribute to community wellbeing
- (c) contribute to social, economic and environmental sustainability.

Information requirements

- 11.3. Provide a copy of the proposed plan of development (or local area plan) explaining how the plan may vary the XYZ planning scheme.
- 11.4. Discuss the compatibility of the project with the surrounding area and the XXX region, taking into consideration the proposed measures that would be used to avoid or minimise impacts. The discussion should include:
 - (a) existing and proposed land uses, in and around the project area, referring to regional plans and the local government planning scheme
 - (b) any tenures overlying and adjacent to the project site, and any to be applied for as part of this project
 - (c) state interests identified in the State Planning Policy (SPP)
 - (d) locational factors influencing the choice of site.
- 11.5. Discuss the proposal in the context of the XXX statutory regional plan and the XXX planning scheme for XXX Regional Council.
- 11.6. Describe and illustrate the visual impact of the construction and operation of the project. Include major views, view sheds, outlooks, and features contributing to the amenity of the area, including assessment from private residences.
- 11.7. Present feasible alternatives of the project's configuration (including individual elements) that may improve environmental outcomes.
- 11.8. Outline how the project will maintain or enhance general public access to or along the foreshore, unless this is contrary to the protection of coastal resources or public safety.
- 11.9. If the project may impact on:
 - (a) living areas in regional communities
 - (b) high-quality agricultural areas
 - (c) strategic cropping land, or
 - (d) regionally important environmental areas

as defined in the *Regional Planning Interests Act 2014* (RPI Act), provide the studies and approach to addressing the requirements of that Act.⁵ Specifically identify any RPI Act requirements that are not being addressed in this EIS process.

⁵ Refer to: www.dsdp.qld.gov.au/infrastructure-and-planning/regional-planning-interests-act.html

- 11.10. Identify potential and actual areas of acid sulfate soils. Where potential areas are identified, further investigations (including field surveys) should be undertaken in accordance with the SPP and accepted industry guidelines.
- 11.11. Detail any known or potential sources of contaminated land. Describe how any proposed land use may result in land becoming contaminated.
- 11.12. Identify existing and potential native title rights and interests possibly impacted by the project and the potential for managing those impacts by an Indigenous Land Use Agreement or other measure.

Flora and fauna

Objective

Matters of environmental significance are valued and appropriately safeguarded to support healthy and resilient ecosystems and ensure the sustainable, long-term conservation of biodiversity and the social, economic, cultural and environmental benefits it provides.

Information requirements

- 11.13. Describe the likely impacts on the biodiversity and natural environmental values of affected areas arising from the construction and operation of the project. Take into account any proposed avoidance and/or mitigation measures. The assessment should include, but not be limited to, the following key elements:
 - (a) matters of state environmental significance and national environmental significance
 - (b) terrestrial and aquatic ecosystems (including groundwater-dependent ecosystems) and their interaction
 - (c) biological diversity including listed flora and fauna species and regional ecosystems
 - (d) the existing integrity of ecological processes, including habitats of threatened, near-threatened or special least-concern species
 - (e) the integrity of landscapes and places, including wilderness and similar natural places
 - (f) actions of the project that require an authority under the *Nature Conservation Act 1992* and *Water Act 2000* (for example, riverine protection permits) and/or would be assessable development for the purposes of the *Vegetation Management Act 1999* (VMA), the *Fisheries Act 1994* or the *Coastal Protection and Management Act 1995*
 - (g) chronic, low-level exposure to contaminants or the bio-accumulation of contaminants
 - (h) impacts on native fauna due to proximity to the site and site impacts (e.g. lighting, noise, waste).
- 11.14. Propose practical measures for protecting or enhancing natural values, and assess how the nominated quantitative indicators and standards may be achieved for nature conservation management. In particular, address measures to protect or preserve any threatened or near-threatened species.

- 11.15. Describe strategies for protecting Ramsar wetlands; and discuss any obligations imposed by state or Commonwealth legislation or policy, or international treaty obligations (that is, Japan–Australia Migratory Birds Agreement (JAMBA), China–Australia Migratory Birds Agreement (CAMBA) and Republic Of Korea–Australia Migratory Birds Agreement (ROKAMBA)).
- 11.16. Assess the need for buffer zones and the retention, rehabilitation or planting of movement corridors, and propose measures that would avoid the need for waterway barriers, or propose measures to mitigate the impacts of their construction and operation.
- 11.17. Describe how the achievement of the objectives would be monitored and audited, and how corrective actions would be managed.
- 11.18. Where Queensland legislation or policy requires an offset for a significant residual impact on a particular natural environmental value, the offset proposal(s) shall be presented in a form consistent with relevant legislation and policy.

Water quality

Objective

Development is planned, designed, constructed and operated to protect environmental values of Queensland waters and supports the achievement of water quality objectives.

Information requirements

- 11.19. Describe the hydrology within the study area and the adjoining tidal waterways in terms of water levels, discharges and freshwater flows. Detail the interaction of freshwater flows with different tidal states.
- 11.20. Detail the chemical and physical characteristics of surface waters and groundwater within the area that may be affected by the project. Include a description of water quality variability associated with climatic and seasonal factors, variability of freshwater flows and extreme events.
- 11.21. Identify the quantity, quality and location of all potential discharges of water and wastewater by the project, whether as point sources (such as controlled discharges) or diffuse sources (such as irrigation to land of treated sewage effluent).
- 11.22. Describe the proposed management of existing and/or constructed waterbodies on the project site to maintain water quality, including any proposed exchange of tidal water.
- 11.23. Assess the potential impacts of any discharges on the quality and quantity of receiving waters taking into consideration the assimilative capacity of the receiving environment and the practices and procedures that would be used to avoid or minimise impacts.
- 11.24. Describe how the achievement of the objectives would be monitored and audited, and how corrective actions would be managed. Describe mitigation strategies and contingency plans for:
 - (a) potential accidental discharges of contaminants and sediments during construction and operation

- (b) stormwater run-off from the project facilities and associated infrastructure
- (c) flooding of relevant river systems, the effects of tropical cyclones and other extreme events
- (d) management of acid sulfate soils (see also paragraph 11.10).

Hazards, health and safety

Objectives

- (a) The risk of, and the adverse impacts from, natural hazards are avoided, minimised or mitigated to protect people and property and enhance the community's resilience to natural hazards.
- (b) Developments are to be appropriately located, designed and constructed to minimise health and safety risks to communities and individuals and adverse effects on the environment.

Information requirements

General

- 11.25. Describe the potential risks to people and property that may be associated with the project in the form of a preliminary risk assessment for all components of the project and in accordance with relevant standards. The assessment should include:
- (a) potential hazards, accidents, spillages, fire and abnormal events that may occur during all stages of the project, including estimated probabilities of occurrence
 - (b) identifying all hazardous substances to be used, stored, processed or produced and the rate of usage
 - (c) potential wildlife hazards, natural events (for example, cyclone, storm tide inundation, flooding, bushfire, landslide, shoreline erosion) and implications related to climate change
 - (d) how the project may potentially affect hazards away from the project site (for example, changing flooding characteristics).
- 11.26. Outline measures required to ensure that the proposed project avoids the release of hazardous materials as a result of a natural hazard event.
- 11.27. Provide details on the safeguards that would reduce the likelihood and severity of hazards, consequences and risks to persons, within and adjacent to the project area(s). Identify the residual risk following application of mitigation measures. Present an assessment of the overall acceptability of the impacts of the project in light of the residual uncertainties and risk profile.
- 11.28. Provide an outline of the proposed integrated emergency management planning procedures (including evacuation plans, if required) for the range of situations identified in the risk assessment developed in this section.
- 11.29. Outline any consultation undertaken with the relevant emergency management authorities, including the Local Disaster Management Group.

Erosion prone areas

- 11.30. If the project proposes permanent buildings or structures in a coastal management district, detail how coastal erosion risks are avoided or mitigated and identify any development free buffers.

Storm tide inundation

- 11.31. Describe storm tide inundation risk for a range of annual exceedance probabilities for the site, and assess (through hydrodynamic modelling) how the project may affect storm tide hazard vulnerability of nearby premises. Take into consideration potential sea-level rise scenarios.
- 11.32. The assessment should consider all infrastructure associated with the project including levees, roads and linear infrastructure and all proposed measures to avoid or minimise risks to life, property, community (including damage to other properties) and the environment during storm tide events.

Flooding

- 11.33. Describe flood risk for a range of annual exceedance probabilities (including Probable Maximum Flood) for the site, and assess how the project may change flooding characteristics. Take into consideration potential sea-level rise scenarios. Include a discussion of historical events.
- 11.34. The assessment should consider all infrastructure associated with the project including levees, roads and linear infrastructure and all proposed measures to avoid or minimise risks to life, property, community (including damage to other properties) and the environment during flood events.

Social and economic

Objectives

The construction and operation of the project should aim to:

- (a) avoid or mitigate adverse social and economic impacts arising from the project
- (b) capitalise on opportunities potentially available for capable local industries and communities where this does not have a significant negative impact on the project or reduce net economic benefits to the State.

Information requirements

- 11.35. In accordance with the Coordinator-General's *Social impact assessment guideline*, describe the likely social impacts (positive and negative) on affected communities, taking into account proposed mitigation measures.
- 11.36. Identify the relevant stakeholders (local and regional) and the likely economic impacts arising from each key stage of the construction and operation of the project. Proponents should quantify economic impacts where suitable data and methodology can be applied. Otherwise, these should be assessed qualitatively.
- 11.37. The economic analysis could consider but is not limited to potential impacts the project may have on:

- (a) labour demand, including the ability for labour to be drawn from the existing local workforce, and the potential effects this may have on local businesses.
- (b) relevant prices, which might include wages, input costs and/or household goods and services.

Content of the EIS for matters of national environmental significance [only for bilateral projects]

Background and context

- 11.38. The Commonwealth Minister for the Environment has determined the project will impact upon the following controlling provisions under the EPBC Act: ~~that do not apply~~
- (a) World Heritage properties (sections 12 and 15A)
 - (b) National Heritage places (sections 15B and 15C)
 - (c) wetlands of international importance (sections 16 and 17B)
 - (d) listed threatened species and communities (sections 18 and 18A)
 - (e) listed migratory species (sections 20 and 20A)
 - (f) Commonwealth marine areas (sections 23 and 24A).
- 11.39. The EIS must be prepared pursuant to the bilateral agreement between the Commonwealth of Australia and the State of Queensland. This will enable the EIS to meet the impact assessment requirements under both Commonwealth and Queensland legislation. The project will require approval from the responsible Commonwealth minister under Part 9 of the EPBC Act before it can proceed.
- 11.40. Once the EIS has been prepared to the satisfaction of the Coordinator-General and MNES addressed to the satisfaction of the Australian Government Department of the Environment, the EIS will be made available for public comment.
- 11.41. The proponent may be required by the Coordinator-General or the Department of the Environment to provide additional material to address matters raised in submissions on the EIS.
- 11.42. At the conclusion of the environmental assessment process, the Coordinator-General will provide a copy of the report to the Commonwealth Minister for the Environment, in accordance with Part 13, section 36(2) of the State Development and Public Works Organisation Regulation 2010 (Qld).
- 11.43. After receiving the evaluation report and sufficient information about the relevant impacts of the action, the Commonwealth Minister for the Environment has 30 business days to consider whether the impacts of the proposal are acceptable, or not, and to decide whether or not to approve each controlling provision.
- 11.44. The minister's decision is separate to the approval decisions made by Queensland state agencies and other agencies with jurisdiction on state matters.
- 11.45. Consideration should be given to any relevant policy statements available from www.environment.gov.au, including:
- (a) *Matters of National Environmental Significance: Significant impact guidelines 1.1*

-
- (b) *Environment Protection and Biodiversity Conservation Act 1999*
Environmental Offsets Policy.
- 11.46. In accordance with Section 3.1 of Schedule 1 of the bilateral agreement, the EIS must:
- (a) assess all the relevant impacts that the action has, will or is likely to have
 - (b) provide enough information about the action and its relevant impacts to allow the Commonwealth Minister for the Environment to make an informed decision whether or not to approve the action
 - (c) address the matters set out in Schedule 4 of the Environment Protection and Biodiversity Conservation Regulations 2000 (Cwlth) (EPBC Regulations).
- 11.47. The MNES section of the EIS should bring together assessments of impacts from other chapters and produce a stand-alone assessment in a format suited for assessment under the EPBC Act.
- 11.48. The project should initially be assessed in its own right followed by an assessment of the cumulative impacts related to all known proposed developments in the region with respect to each controlling provision and all identified consequential actions. Cumulative impacts not solely related to the project development should also be assessed.
- 11.49. Predictions of the extent of threat (risk), impact and the benefits of any mitigation measures proposed, should be based on sound science and quantified where possible. Reference all sources of information relied upon and provide an estimate of the reliability of predictions. Also identify and evaluate any positive impacts.
- 11.50. The extent of any new field work, modelling or testing should be commensurate with risk and should be such that when used in conjunction with existing information, provides sufficient confidence in predictions that well-informed decisions can be made.
- 11.51. Project alternatives must be discussed in accordance with Schedule 4, section 2.01(g) of the EPBC Regulations.
- 11.52. The following content requirements are based on these matters and considerations, with the addition of directions specific to the proposed action and the receiving environment.

World Heritage properties [delete if not applicable]

Wet Tropics World Heritage Area

- 11.53. Identify and describe the characteristics and values of the Wet Tropics World Heritage Area that are likely to be impacted by all stages of the proposed development.
- 11.54. Values include, but are not restricted to, exceptional natural beauty and aesthetic importance of the area, species of conservation significance and the significant regional habitat for listed threatened and migratory species.
- 11.55. Discuss the potential direct, indirect and consequential impacts on each area, place, site or reserve, including: [\[update list as required\]](#)
- (a) modification, destruction, fragmentation, isolation or disturbance of an important or substantial area of habitat

- (b) impacts on other users of the area
 - (c) the potential impacts on important amenities, navigation, culturally and historically significant sites, threatened or migratory species or sensitive habitat
 - (d) the extent to which impacts can be forecasted or predicted, and management
 - (e) the potential visual impacts.
- 11.56. Analyse the impact of the action on the values at the proposed location, and how this in turn impacts on the overall values of the Wet Tropics World Heritage Area.
- 11.57. Describe any mitigation and management measures proposed to protect or enhance impacts on the Wet Tropics World Heritage Area.

National Heritage places [delete if not applicable]

Wet Tropics National Heritage Area

- 11.58. Assess and discuss all potential and likely impacts to the National Heritage values of the Wet Tropics of Queensland National Heritage place identified for all stages of the proposed development.
- 11.59. Analyse the impact of the action on the values at the proposed location and how this in turn impacts on the overall values of the Wet Tropics of Queensland National Heritage place.
- 11.60. Describe any mitigation and management measures proposed to protect or enhance impacts on the Wet Tropics of Queensland National Heritage place.

Wetlands of international importance [delete if not applicable]

- 11.61. Assess and discuss the potential impacts of all stages of the proposed development on any wetlands of international importance, including:
- (a) description of the location, extent and ecological characteristics and values of those wetlands that are potentially affected by the project
 - (b) areas of the wetland being destroyed or substantially modified
 - (c) substantial and measurable changes to the hydrological regime of the wetlands, for example a substantial change to the volume, timing, duration or frequency of ground and surface water flows to and within the wetland
 - (d) the habitat or lifecycle of native species, including invertebrate fauna and fish species, dependent upon the wetland being seriously affected
 - (e) substantial and measurable change in the water quality of the wetlands—for example, a substantial change in the level of salinity, pollutants, or nutrients in the wetland; or water temperature that may adversely impact on biodiversity, ecological integrity, social amenity or human health
 - (f) invasive species that may be harmful to the ecological character of the wetlands, if introduced to or spread in the wetland.
- 11.62. Describe any mitigation measures proposed to protect or enhance impacts on the wetland site affected by the project.

Listed threatened species and communities [delete if not applicable]

- 11.63. Describe the listed threatened species and ecological communities identified below (including EPBC Act status, distribution, life history and habitat).
- 11.64. Consider and assess the impacts to the listed threatened species and ecological communities and any others that are found to be or may potentially be present in areas that may be impacted by the project. Identify which component of the project is of relevance to each listed threatened species or ecological community or if the threat of impact relates to consequential actions, resulting from:
- (a) a decrease in the size of a population or a long-term adverse effect on an ecological community
 - (b) reduction in the area of occupancy of the species or extent of occurrence of the ecological community
 - (c) fragmentation of an existing population or ecological community
 - (d) disturbance or destruction of habitat critical to the survival of the species or ecological community
 - (e) disruption of the breeding cycle of a population
 - (f) modification, destruction, removal, isolation or reduction of the availability or quality of habitat to the extent that the species is likely to decline
 - (g) modification or destruction of abiotic (non-living) factors (such as water, nutrients or soil) necessary for the ecological community's survival
 - (h) the introduction of invasive species that are harmful to the species or ecological community becoming established
 - (i) interference with the recovery of the species or ecological community
 - (j) action that may be inconsistent with a recovery plan.
- 11.65. Identify and evaluate any positive impacts.
- 11.66. Describe any mitigation measures proposed to reduce the impact on the listed threatened species and ecological communities and the anticipated benefit of proposed mitigation measures. Describe any offsets proposed to compensate for residual impacts. Supporting evidence should be provided to demonstrate the appropriateness of mitigation measures proposed. Where the likely success of mitigation measures cannot be supported by evidence, identify contingencies in the event the mitigation is not successful.

List of potential listed threatened species and their status

- 11.67. Address impacts on the following listed species:

(a) XXX

List of potential listed threatened communities

- 11.68. Address impacts on the following listed threatened communities:

(a) XXX

Impact on a listed migratory species [delete if not applicable]

- 11.69. Describe the listed migratory species identified below (including EPBC Act status, distribution, life history, habitat and the like).

- 11.70. Assess and describe the impacts to the listed migratory species identified below and any others that are found to be or may potentially be present in areas that may be impacted by the project. Identify which component of the project is of relevance to each species or if the threat of impact relates to consequential actions, resulting from:
- (a) the destruction, isolation or modification of habitat important to a migratory species
 - (b) the introduction of invasive species in an important habitat that would be harmful to a migratory species
 - (c) the disruption of the lifecycle (breeding, feeding, migration, or resting behaviour) of an ecologically important proportion of the population of a migratory species
 - (d) interference with the recovery of the species or ecological community
 - (e) action that may be inconsistent with a recovery plan.
- 11.71. Any positive impacts should also be identified and evaluated.
- 11.72. Describe and discuss any mitigation measures proposed to reduce the impact on migratory species and the anticipated benefit of proposed mitigation measures.

List of potential migratory species

11.73. Address impacts on the following migratory species:

- (a) XXX

Impact on Commonwealth marine areas [delete if not applicable]

- 11.74. Assess and discuss the potential direct, indirect and consequential impacts of all stages of the proposed development on the Commonwealth marine environment, including, but not limited to:
- (a) impacts resulting from an increase in vessel movement from the proposed location [or proposed marina etc], and the potential for boat strike on marine fauna in the Commonwealth marina area
 - (b) impacts on other users of the area
 - (c) potential risk of pest species becoming established in the Commonwealth marine area.

12. Assessment of routine matters

Matters to be assessed in an EIS fall into two categories: critical or routine. The division of critical and routine matters is determined in consultation with the proponent; however, the Coordinator-General makes the final decision.

- 12.1. The following subsections list the routine matters for coordinated projects, with (where applicable) a reference to the relevant objectives. In some cases, not all the matters may be relevant, while in others the list may not be exhaustive.
- 12.2. For each routine matter identified below, the level of detail should be proportional to the risk or magnitude of impacts. As a minimum, the proponent should supply sufficient information that confirms the risks/impacts are not significant.

Air

Objective

Development is planned, designed, constructed and operated to protect the environmental values of air.

Information requirements

- 12.3. Fully describe the characteristics of any contaminants or materials released that may be released as a result of the construction or operations of the proposal, including point source and fugitive emissions. Emissions (point source and fugitive) during construction, commissioning, operations and upset conditions should be described.
- 12.4. Predict the impacts of the releases from the activity on environmental values of the receiving environment using recognised quality assured methods. The description of impacts should take into consideration the assimilative capacity of the receiving environment and the practices and procedures that would be used to avoid or minimise impacts. The impact prediction must:
- (a) address residual impacts on the environmental values (including appropriate indicators and air quality objectives) of the air receiving environment, with reference to sensitive receptors⁶. This should include all relevant values potentially impacted by the activity, under the EP Act, EP Regulation and Environmental Protection (Air) Policy 2008 (EPP (Air))
 - (b) address the cumulative impact of the release with other known releases of contaminants, materials or wastes associated with existing development and possible future development (as described by approved plans and existing project approvals)
 - (c) quantify the human health risk and amenity impacts associated with emissions from the project for all contaminants whether or not they are covered by the National Environmental Protection (Ambient Air Quality) Measure or the EPP (Air).
- 12.5. Describe the proposed mitigation measures and how the proposed activity will be consistent with best practice environmental management. Where a government plan is relevant to the activity or site where the activity is proposed, describe the activity's consistency with that plan.
- 12.6. Describe how the achievement of the objectives would be monitored, audited and reported, and how corrective actions would be managed.

⁶ For example, the locations of existing residences, places of work, schools, etc., agricultural or ecologically significant areas/species that could be impacted.

Noise and vibration

Objective

Development is planned, designed, constructed and operated to protect the environmental values of the acoustic environment.

Information requirements

- 12.7. Fully describe the characteristics of the noise and vibration sources that would be emitted when carrying out the activity (point source and general emissions). Describe noise and vibration emissions (including fugitive sources) that may occur during construction, commissioning, upset conditions, and operation.
- 12.8. Predict the impacts of the noise emissions from the construction and operation of the project on the environmental values of the receiving environment, with reference to sensitive receptors,⁶ using recognised quality assured methods. Discuss separately the key project components likely to present an impact on noise and vibration for the construction and operation phases of the project.
- 12.9. Taking into account the practices and procedures that would be used to avoid or minimise impacts, the impact prediction must address the:
 - (a) activity's consistency with the objectives
 - (b) cumulative impact of the noise with other known emissions of noise associated with existing development and possible future development (as described by approved plans)
 - (c) potential impacts of any low-frequency (<200 Hz) noise emissions.
- 12.10. Describe how the proposed activity, and in particular, the key project components described above, would be managed to be consistent with best practice environmental management for the activity. Where a government plan is relevant to the activity, or the site where the activity is proposed, describe the activity's consistency with that plan.
- 12.11. Describe how the achievement of the objectives would be monitored and audited, and how corrective actions would be managed.

Water resources

Objectives

The construction and operation of the project should aim to meet the following objectives:

- (a) equitable, sustainable and efficient use of water resources
- (b) environmental flows, water quality, in-stream habitat diversity, and naturally occurring inputs from riparian zones support the long-term maintenance of the ecology of aquatic biotic communities
- (c) the condition and natural functions of water bodies, lakes, springs and watercourses are maintained—including the stability of beds and banks of watercourses
- (d) volumes and quality of groundwater are maintained and current lawful users of water (such as entitlement holders and stock and domestic users) and other beneficial uses

of water (such as spring flows and groundwater-dependent ecosystems) are not adversely impacted by the development.

Information requirements

- 12.12. Provide details of any proposed impoundment, extraction, discharge, injection, use or loss of surface water or groundwater. Identify any approval or allocation that would be needed under the *Water Act 2000*.
- 12.13. Detail any significant diversion or interception of overland flow. Include maps of suitable scale showing the location of diversions and other water-related infrastructure.
- 12.14. Develop hydrological models as necessary to describe the inputs, movements, exchanges and outputs of all significant quantities and resources of surface water and groundwater that may be affected by the project. The models should address the range of climatic conditions that may be experienced at the site, and adequately assess the potential impacts of the project on water resources. The models should include a site water balance. This should enable a description of the project's impacts at the local scale and in a regional context including proposed:
 - (a) changes in flow regimes from structures and water take
 - (b) alterations to riparian vegetation and bank and channel morphology
 - (c) direct and indirect impacts arising from the development.
- 12.15. Provide information on the proposed water usage by the project, including details about:
 - (a) the ultimate supply required to meet the demand for full occupancy of the development, including timing of demands
 - (b) the quality and quantity of all water supplied to the site during the construction and operational phases based on minimum yield scenarios for water reuse, rainwater reuse and any bore water volumes
 - (c) a water balance analysis
 - (d) a site plan outlining actions to be taken in the event of failure of the main water supply.
- 12.16. Describe proposed sources of water supply given the implication of any approvals required under the *Water Act 2000*. Estimated rates of supply from each source (average and maximum rates) must be given and proposed water conservation and management measures must be described.
- 12.17. Determination of potable water demand must be made for the project, including the temporary demands during the construction period. Include details of any existing town water supply to meet such requirements. Detail should also be provided to describe any proposed on-site water storage and treatment for use by the site workforce during construction and operational phases.
- 12.18. Provide detailed designs for all infrastructure utilised in the treatment of on-site water including how any onsite water supplies are to be treated, contaminated water is to be disposed of and any decommissioning requirements and timing of temporary water supply/treatment infrastructure is to occur.

- 12.19. Describe how the development will impact or alter the XYZ Regional Water Supply Strategy and XXX Council's Trunk Infrastructure Policy.

Biosecurity

Objectives

The construction and operation of the project should aim to ensure:

- (a) the spread of weeds and pest animals is minimised
- (b) existing weeds and pests are controlled.

Information requirements

- 12.20. Propose detailed measures to control and limit the spread of pests and weeds on the project site and adjacent areas. This includes declared plants under the *Plant Protection Act 1989* and the Land Protection (Pest and Stock Route Management) Regulation 2003, weeds of national significance, and designated pests under the *Public Health Act 2005*.

Waste management

Objective

Any waste transported, generated, or received as part of carrying out the activity is managed in a way that protects all environmental values.

Information requirements

- 12.21. For wastes besides wastewater (which is addressed in paragraph XX), describe all the expected significant waste streams from the proposed project activities during the construction and operational phases of the project.
- 12.22. Define and describe the objectives and practical measures for protecting or enhancing environmental values from impacts by wastes. Take into account best practice waste management strategies and the Environmental Protection (Waste) Policy 2000 and the Environmental Protection (Waste) Regulation 2000.
- 12.23. Assess the proposed management measures against the preferred waste management hierarchy, namely: avoid waste generation; cleaner production; recycle; reuse; reprocess and reclaim; waste to energy; treatment; disposal. This includes the generation and storage of waste.
- 12.24. Describe how nominated quantitative standards and indicators may be achieved for waste management, and how the achievement of the objectives would be monitored, audited and managed.
- 12.25. Provide details on natural resource-use efficiency (such as energy and water), integrated processing design, and any co-generation of power and by-product reuse as shown in a material/energy flow analysis.

Cultural heritage

Objective

The construction and operation of the project should aim to ensure that the nature and scale of the project does not compromise the cultural heritage significance of a heritage place or heritage area.

Information requirements

- 12.26. Unless section 86 of the *Aboriginal Cultural Heritage Act 2003* (ACH Act) applies, the proponent must develop a Cultural Heritage Management Plan in accordance with the requirements of Part 7 of the ACH Act.
- 12.27. For non-Indigenous historical heritage, undertake a study of, and describe, the known and potential historical cultural and landscape heritage values of the area potentially affected by the project. Any such study should be conducted by an appropriately qualified cultural heritage practitioner. Provide strategies to mitigate and manage any negative impacts on non-Indigenous cultural heritage values and enhance any positive impacts.

Transport

Objectives

The construction and operation of the project should aim to:

- (a) maintain the safety and efficiency of all affected transport modes for the project workforce and other transport system users
- (b) avoid or mitigate impacts on the condition of transport infrastructure
- (c) ensure any required works are compatible with existing infrastructure and future transport corridors.

Information requirements

- 12.28. The EIS should include a clear summary of the total transport task for the project, including workforce, inputs and outputs during the construction and operational phases.
- 12.29. Present the transport assessment in separate sections for each project-affected mode (road, rail, air and sea) as appropriate for each phase of the project.
- 12.30. Provide sufficient information to allow an independent assessment of how existing transport infrastructure will be affected by project transport at the local and regional level (for example, local roads and state-controlled roads).
- 12.31. Include details of the adopted assessment methodology for impacts on roads within the road impact assessment report in accordance with the *Guidelines for Assessment of Road Impacts of Development*.
- 12.32. Discuss and recommend how identified impacts will be mitigated. Mitigation strategies and are to be prepared in close consultation with relevant transport authorities (including Local Government).

13. Appendices to the EIS

- 13.1. Appendices should provide the complete technical evidence used to develop assertions and findings in the main text of the EIS.
- 13.2. No significant issue or matter should be mentioned for the first time in an appendix—it must be addressed in the main text of the EIS.
- 13.3. Include a table listing the section of the EIS where each requirement of the TOR is addressed.
- 13.4. Include a glossary of terms and a list of acronyms and abbreviations.

Acronyms and abbreviations

The following acronyms and abbreviations have been used in this document.

Acronym/abbreviation	Definition
AHD	Australian Height Datum
EIS	environmental impact statement
EP Act	<i>Environmental Protection Act 1994</i>
EP Regulation	Environmental Protection Regulation 2008
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cwlth)
EPBC Regulations	Environment Protection and Biodiversity Conservation Regulations 2000 (Cwlth)
EPP	Environmental Protection Policy (under the EP Act)
GDA94	Geocentric Datum of Australia 1994
MNES	matters of national environmental significance (under the EPBC Act)
SDAP	State Development Assessment Provisions prescribed in the Sustainable Planning Regulation 2009
SDPWO Act	<i>State Development and Public Works Organisation Act 1971</i>
SPA	<i>Sustainable Planning Act 2009</i>
TOR	terms of reference
VMA	<i>Vegetation Management Act 1999</i>

Appendix 1. Policies and guidelines

Please check the validity of these references before publication. If any are out of date, please advise the business improvement team. Add references to planning schemes or other policy documents as required, in alphabetical order.

Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, *The Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, Australian Water Association (Artarmon) and NZ Water and Wastes Association (Auckland), viewed 13 March 2015,

www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html

The Coordinator-General 2013, *Preparing an environmental impact statement: Guideline for proponents*, Department of State Development, Infrastructure and Planning, Brisbane, viewed 13 March 2015, www.dsdip.qld.gov.au/fact-sheets-and-guidelines/coordinated-projects.html

The Coordinator-General 2013, *Social impact assessment guideline*, Department of State Development, Infrastructure and Planning, Brisbane, viewed 5 January 2015,

www.dsdip.qld.gov.au/resources/guideline/social-impact-assessment-guideline.pdf

Department of Environment and Resource Management 2009, *Queensland Water Quality Guidelines, Version 3*, Department of Environment and Resource Management, Brisbane, viewed 13 March 2015,

www.ehp.qld.gov.au/water/guidelines

Department of Main Roads 2006, *Guidelines for Assessment of Road Impacts of Development*, Department of Main Roads, Brisbane, viewed 13 March 2015, www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Guidelines-for-assessment-of-road-impacts-of-development.aspx

Department of Natural Resources and Mines 2014, *Preparing an environmental impact statement*, viewed 13 March 2015, www.dnrm.qld.gov.au/our-department/corporate-publications/preparing-an-environmental-impact-statement

Department of State Development, Infrastructure and Planning, 2013, *State Development Assessment Provisions*, viewed 13 March 2015, www.dsdip.qld.gov.au/development-applications/sdap.html

Department of State Development, Infrastructure and Planning 2014, *State Planning Policy July 2014*, viewed 13 March 2015, www.dsdip.qld.gov.au/resources/policy/state-planning/state-planning-policy-jul-2014.pdf

Department of State Development, Infrastructure and Planning 2014, *RPI Act Forms Guidelines and Fact Sheets October 2014*, viewed 13 March 2015, www.dsdip.qld.gov.au/regional-development/rpi-act-forms-guidelines-and-fact-sheets.html



The Coordinator-General
PO Box 15517, City East Qld 4002
tel 13 QGOV (13 74 68)
fax +61 7 3225 8282
info@dsd.qld.gov.au

www.statedevelopment.qld.gov.au