

TRANSPORT ENERGY WATER TELECOMMUNICATIONS

infrastructure report card 2010

*Tasmania*



ENGINEERS  
AUSTRALIA

# Communiqué

Tasmania must have adequate infrastructure such as transportation and communications systems, water and energy supply if it is to have a viable economy and to support the economic, environmental and social aspirations of its current population and future generations.

In 2005, Engineers Australia took the initiative to raise community awareness about the importance of infrastructure in the 2005 Tasmanian Infrastructure Report Card. This report gave a strategic overview of various infrastructure sectors and provided an independent assessment of the fitness for purpose of Tasmania's key assets. The Report Card found that much of Tasmania's infrastructure required critical changes to be fit for its current and future demands.

Five years on, we are again examining the state of Tasmania's infrastructure to see what progress has been made and what needs to happen in the future if Tasmania is to live up to its potential as an island community with a unique natural and cultural environment and relatively prosperous lifestyle.

Overall, Tasmania's infrastructure is stressed, and is mostly rated as either adequate or poor. The 2010 Report Card recognises that there have been some improvements in potable water and wastewater infrastructure since 2005. We have seen major structural and regulatory reform in the potable and wastewater sector and construction and replacement of new reservoirs, storage dams and pipelines, such as the new reservoir at Mornington and upgrades of Swansea's potable supply system. The Huon Valley Regional Water Scheme will improve the quality of water for Huonville, Franklin, Geeveston and Cygnet, as will the replacement of the Distillery Creek water treatment plant for the people of Launceston. Wastewater treatment facilities have been upgraded in Smithton and Ulverstone, and the new plant at Cambridge will allow the decommissioning of five old-style plants. The challenge will be to ensure that planning regimes are put in place for the long term and that funding is maintained in this area.

Areas where the ratings remained the same, such as stormwater and electricity, indicate that significant infrastructure works have been completed in these areas. There has been an improvement in stormwater quality across the State with the installation of many gross pollutant traps, and guidelines have been developed to assist local government, developers and the construction industry to fulfil their stormwater responsibilities. Funding for future works is an issue for stormwater, as is the maintenance of expertise in this area. The commissioning of Basslink and the Aurora Energy Tamar Valley power station, and upgrades to transmission and distribution systems have been major developments for electricity in Tasmania. Ensuring ongoing

generation capacity and addressing the vulnerability of Basslink as the only transmission line connecting Tasmania to the mainland will be issues that need to be addressed in the future.

In examining transport infrastructure, State roads was the only sector to maintain its rating due mainly to the backlog of work being partly addressed. Local and national roads and ports have lost ground since the last report. While some major upgrades and bypass work have been completed or are underway, there has been a deterioration in the quality of roads due to increases in freight usage and pavements exceeding their design life. To improve the rating for the future, there will need to be better planning, funding and delivery of road infrastructure. Port infrastructure appears to be adequate at present in terms of capacity, but integrated land use, and transport planning outcomes will have a substantial effect on capacity in the future.

The 2010 report includes a rating for rail, airports, irrigation, and gas, which were not rated in 2005. While telecommunications was not rated in 2005, it was rated in a separate report in 2007. Of these, rail received a fail rating on the basis that Tasmanian rail is inadequate for current and future purposes. While there has been some rail infrastructure work carried out recently, or currently underway, there is no plan for the future of Tasmanian rail, and the level of investment to provide an effective and efficient rail service would be very substantial.

Tasmanian airports fared better, recognising that infrastructure has improved considerably in recent times. Gas infrastructure is also recognised as being in good shape, but is vulnerable due to the single transmission pipeline. As well, expansion of the distribution system has ceased. Irrigation has seen significant projects completed or in progress, including the Meander Dam and associated pipelines, together with increased effluent re-use schemes, but faces the challenge of long-term sustainability, for instance, soil salinity problems.

The planning, funding and infrastructure capacity and condition of telecommunications infrastructure achieved an adequate rating. This recognises the planning and funding of the National Broadband Network in Tasmania, as well as the introduction of competition into the Tasmanian market. Poor coverage in some areas will need to be addressed in the future.

## Communiqué - continued

Ratings are given below for the current and past Tasmanian and National Report Cards.

Infrastructure Type	Tasmania 2010	Tasmania 2005	National 2005	National 2001
Roads overall	C-	Not rated	C	Not rated
National roads	C+	B-	C+	C
State roads	C	C	C	C-
Local roads	D	D+	C-	D
Rail	F	Not rated	C-	D-
Ports	B-	B	C+	B
Airports	B	Not rated	B	B
Potable water	B-	C Metropolitan D Non-metropolitan	B-	C
Wastewater	C	C- Metropolitan D Non-metropolitan	C+	C-
Stormwater	C-	C-	C-	D
Irrigation	B-	Not rated	C-	D-
Electricity	B-	B-	C+	B-
Gas	C	Not rated	C+	C
Telecommunications	C+	Not rated	Not rated	B

Inadequate infrastructure has major economic and social consequences. Engineers Australia remains concerned that:

- Critical changes are required to Tasmania's infrastructure to make it fit for current and future needs
- Long-term integrated infrastructure planning is missing, as is transparent advisory and decision-making mechanisms
- Given its small and rapidly ageing population compared to other States, infrastructure funding will always be a critical issue
- Skills shortages in the engineering, construction and planning disciplines will continue to impact on Tasmania's ability to plan and deliver future infrastructure projects
- Maintenance and rejuvenation of ageing assets need to be funded on a sustainable basis.

## Recommendations

1. Government must take responsibility for implementing a long-term integrated infrastructure plan for the State.
2. The structure and mechanisms for developing and achieving the long-term plan must be open and transparent and must include wide consultation with industry, the professions and the community at large.
3. Strategies must be developed alongside the infrastructure plan to ensure that Tasmania has, and can access, adequate skills to deliver infrastructure projects.
4. Investment in infrastructure must increase overall.
5. Private sector funding for infrastructure must be encouraged and infrastructure delivery models that include the private sector must have the appropriate allocation of risk to deliver the best project outcome.
6. In the context of the F rating for rail, further short-term investment is required to maintain an operational service while an integrated transport strategy (a component of the recommended integrated infrastructure plan) is prepared to determine the long-term future of rail in Tasmania.
7. Greater cooperation and resource sharing at a local government level is required to plan and deliver more efficient infrastructure provision and maintenance.

## Ratings Summary

Infrastructure Type	Grade	Comment
<b>Roads overall</b> <b>National roads</b> <b>State roads</b> <b>Local roads</b>	<b>C-</b> <b>C+</b> <b>C</b> <b>D</b>	<p>These ratings recognise that local roads are generally poor and failures are common due to the employment of reactive maintenance practices. State roads have maintained their standard, with the additional expenditure on these roads resulting in some of the backlog of work being addressed. National roads have deteriorated due to increasing freight usage and road pavements exceeding their design life, while the significant investment on national roads has principally been catch-up expenditure.</p>
<b>Rail</b>	<b>F</b>	<p>This rating recognises that infrastructure is inadequate for current and future purposes, and that the magnitude of the works required to provide any reasonable utility from this infrastructure is enormous.</p>
<b>Ports</b>	<b>B-</b>	<p>This rating recognises that while capacity at ports is currently adequate, over the longer term, substantial problems will arise due to a lack of efficient and effective integration in the provision of road, rail and port infrastructure.</p>
<b>Airports</b>	<b>B</b>	<p>This rating recognises that the airport infrastructure has improved considerably over the last few years, and is adequate to meet existing and foreseeable future demand.</p>
<b>Potable water</b>	<b>B-</b>	<p>This rating recognises that the current infrastructure is largely adequate and the 2009 reforms of the water sector will significantly improve water services, provided the committed funding materialises.</p>
<b>Wastewater</b>	<b>C</b>	<p>This rating recognises that improvements have been made in recent years to infrastructure in problem areas and there have been significant increases in the volumes of recycled water used. The 2009 reforms of the water and sewerage sector will significantly improve sewerage services, provided the committed funding materialises.</p>

Infrastructure Type	Grade	Comment
<b>Stormwater</b>	<b>C-</b>	<p>This rating recognises that significant localised stormwater initiatives have been implemented and the application of WSUD is becoming widespread. However, the State-wide stormwater strategy is yet to be approved and funding for stormwater projects secured.</p>
<b>Irrigation</b>	<b>B-</b>	<p>This rating recognises that there has been a significant expansion in irrigation infrastructure and improved irrigation practice. However, there are concerns about the sustainability of the expanded irrigation systems.</p>
<b>Electricity</b>	<b>B-</b>	<p>This rating recognises that Tasmania's generation system coupled with the interconnector has high supply reliability and security. It also reflects the ongoing improvements that are underway to enhance the quality of the transmission and distribution networks.</p>
<b>Gas</b>	<b>C</b>	<p>This rating recognises that the assets of the gas sector are of a high quality. However, supply is at risk of major disruption due to the single transmission pipeline and expansion of the distribution system has stopped.</p>
<b>Telecommunications</b>	<b>C+</b>	<p>This rating recognises that fixed telephone services are excellent and mobile phone coverage is generally adequate in major population centres and transport corridors. There is generally sufficient capacity in broadband infrastructure to meet present demand, but utilisation is price-dependent. Broadband demand is rapidly growing and difficult to predict with technological advances and new services. While intrastate backhaul is available, many places are served by only one link, which results in security and pricing issues. Interstate backhaul choice has improved with the commissioning of the Basslink fibre cable.</p>

# Rating Details

The objective of the Report Card is to rate the quality of economic infrastructure at a State level. Ratings have been based on an assessment of asset condition, asset availability and reliability, asset management, sustainability (including economic, environmental and social issues) and resilience. The rating assesses infrastructure policy, regulation, planning, provision, operation and maintenance.

Ratings are defined in terms of meeting the needs of the community, economy and environment in terms of sustainability, effectiveness, efficiency and equity.

Ratings used are comparable with those of past Report Cards and are below.

Grade	Description	Definition
A	Very good	Infrastructure is fit for its current and anticipated future purposes
B	Good	Minor changes required to enable infrastructure to be fit for its current and anticipated future purposes
C	Adequate	Major changes required to enable infrastructure to be fit for its current and anticipated future purposes
D	Poor	Critical changes required to enable infrastructure to be fit for its current and anticipated future purposes
F	Inadequate	Inadequate for current and anticipated future purposes

**Full report at**  
**[www.engineersaustralia.org.au/irctas](http://www.engineersaustralia.org.au/irctas)**



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