



Report of the Queensland Ombudsman



QUEENSLAND
ombudsman



The Airport Link Project Report

An investigation into complaints
about night-time surface work.

June 2011

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27 June 2011

The Honourable R J Mickel MP
Speaker
Parliament House
George Street
BRISBANE QLD 4000

Dear Mr Mickel

In accordance with s.52 of the *Ombudsman Act 2001*, I hereby furnish to you my report, *The Airport Link Project Report—An investigation into complaints about night-time surface work*.

Yours faithfully

A handwritten signature in black ink, appearing to read "Phil Clarke".

Phil Clarke
Queensland Ombudsman

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Table of contents

Dictionary and abbreviations	viii
Executive summary	xiv
Chapter 1: Introduction.....	1
1.1 Background	1
1.2 The Project	2
1.3 The parties.....	9
1.4 Project progress.....	13
Chapter 2: Complaint and issues for investigation	14
2.1 The complaint	14
2.2 Other residents' contact with my Office	15
2.3 Complaints generally	16
2.4 Issues for investigation	17
2.5 Issues for this report	18
2.6 Issues for future report.....	18
Chapter 3: Jurisdiction.....	19
3.1 Overview.....	19
3.2 Jurisdiction in relation to the parties	19
Chapter 4: About Ombudsman investigations.....	21
4.1 Procedure for gathering evidence	21
4.2 Standard of proof and sufficiency of evidence.....	21
4.3 Investigative steps taken to date.....	21
4.4 Procedural fairness or natural justice	23
4.5 References to legal advice.....	24
4.6 Responses of agencies.....	24
4.7 De-identification	25
Chapter 5: Relevant legislation and policy.....	26
5.1 State Development and Public Works Organisation Act 1971	26
5.2 SDPWO Act regulatory tools.....	30
5.3 Environmental protection legislation – offence of causing environmental nuisance.....	31
5.4 EP Act regulatory tools	31
5.5 Imposed conditions.....	32
5.6 Relevant noise standards and policies	35
5.7 PPP policies and guidelines.....	40

Chapter 6: Project documents	42
6.1 Overview.....	42
6.2 EIS – October 2006	43
6.3 Supplementary EIS – April 2007	47
6.4 Evaluation report – May 2007	47
6.5 Request for project change – 2008	49
6.6 Change report.....	49
6.7 Woolloowin request for project change	50
6.8 Woolloowin change report	51
6.9 TJH submission	51
6.10 Opinions and recommendations.....	52
Chapter 7: Steps leading to 24/7 work.....	61
7.1 Overview.....	61
7.2 TJH decision to work 24/7.....	62
7.3 Advice to and response from the general community.....	68
7.4 Night-time surface work in Project precincts.....	78
7.5 Response to community regarding 24/7 work	81
7.6 Queensland Ombudsman meeting with agency officers.....	83
7.7 Analysis	87
Chapter 8: Is surface construction work permitted at night?	101
8.1 Overview.....	101
8.2 Opinion of Senior Counsel for KWRA	101
8.3 DIP and CNI legal advice	101
8.4 Queen’s Counsel’s opinion	102
8.5 Is surface construction work permitted at night?	104
Chapter 9: Excessive noise under imposed condition 7(b)	105
9.1 Overview.....	105
9.2 Guide to noise terms.....	106
9.3 Noise goals.....	107
9.4 What construction work is subject to the noise goals?	108
9.5 What is excessive noise?.....	105
9.6 Outline of noise modelling and monitoring reports	131
9.7 Analysis of Airport Link monitoring reports	144
9.8 Assessing noise generated against the goals	153
9.9 Analysis of noise reports by WM.....	188
9.10 Summary	194

Chapter 10: Investigation and enforcement of imposed condition 7(b)	197
10.1 Overview.....	197
10.2 What is an enforceable condition?	197
10.3 Relevant statutory provisions	197
10.4 Powers of the parties	198
10.5 Steps taken and view formed by CG and DIP	199
10.6 Steps taken and view formed by DERM.....	203
10.7 Is imposed condition 7(b) enforceable?.....	210
Chapter 11: Coordination, resourcing and future monitoring.....	215
11.1 Overview.....	215
11.2 CG	215
11.3 DERM's jurisdiction.....	216
11.4 Joint regulatory responsibility	217
11.5 CNI's role	218
11.6 DIP resources	226
11.7 DERM resources	228
11.8 Monitoring.....	232
11.9 CG coordination with DERM about regulation of noise.....	250
11.10 Reporting to Minister	260
Bibliography	264

Dictionary and abbreviations

2008 request for project change	Airport Link Request for Project Change, CNI, May 2008, available at http://www.airportlinkeis.com/OtherLinks/RfPC/INDEX.HTM as at 2 November 2010
2009 request for project change	Airport Link Wooloowin Worksite Modification Request for Project Change, CNI, June 2009, available at http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/airport-link-wooloowin-worksite-modification_rfpc-part-a.pdf and http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/airport-link-wooloowin-worksite-modification_rfpc-apedices.pdf and http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/submission-response.pdf as at 2 November 2010
24/5	24 hours per day, 5 days per week
24/7	24 hours per day, 7 days per week
Airport Link monitoring reports	Monthly environmental monitoring reports produced by TJH
ANE	Air Noise and Environment Pty Ltd
ANE Clayfield report	Report of Air Noise and Environment Pty Ltd about Clayfield worksite, for TJH, dated 17 September 2009
ANE Toombul report	Report of Air Noise and Environment Pty Ltd about Toombul worksite, for TJH, dated 9 February 2010
AS	Australian Standard
ASK	ASK Consulting Engineers
ASK report	Report of ASK Consulting Engineers, for KWRA, dated 26 March 2010
BCA	Building Code of Australia
BCC	Brisbane City Council
BrisConnections	The group of companies, including: <ul style="list-style-type: none">• BrisConnections Operations Pty Ltd• BrisConnections Finance Pty Ltd• BrisConnections Contracting Pty Ltd• BrisConnections Nominee Company Pty Ltd• BrisConnections Holding 2 Pty Ltd as trustee for the BrisConnections Holding Trust• BrisConnections Management Company Ltd as Trustee for the BrisConnections Investment Trust

BTR	<i>Breaking trust: A community investigation into Airport Link condition breaches</i> , Kalinga Woolloowin Residents Association, June 2010, available at http://woolloowin.org/breaking/trust/The_Breaking_Trust_Report.pdf as at 11 November 2010
CDIMP	Concept Design and Impact Management Plan
CG	The corporation sole constituted under the SDPWO Act and constituted by the person who at the material time is the Coordinator-General. See s.8 of the SDPWO Act. The person from time to time holding the title of Coordinator-General
CG's clarification	The passage that appears under the heading 'Coordinator-General's clarification and reinforcement of the term "excessive noise"' at http://www.dip.qld.gov.au/projects/transport/tunnels-and-bridges/airport-link-tunnel-project.html as at 21 December 2010
CG's statement of clarification	CG's clarification
Change report	Coordinator-General's Change Report on the Environmental Impact Statement for the Airport Link Project, July 2008, available at http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/airport-link-change-report1.pdf and http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/appendix-1-change-report-airport-link.pdf as at 2 November 2010
Clem7	Clem Jones Tunnel, formerly referred to as the North South Bypass Tunnel
CLG	Community Liaison Group
CNI	City North Infrastructure Pty Ltd
CNI report	Report of City North Infrastructure Pty Ltd, compiled at the request of the CG, dated April 2010
condition 7(b)	Condition 7(b) located in appendix 1, schedule 3 of the change report
condition 9	Condition 9 located in appendix 1, schedule 3 of the change report
contractor	The principal contractor constructing a significant project
daytime	Between 6.30am and 6.30pm
DECC	Department of Environment and Climate Change NSW
DEEDI	Department of Employment, Economic Development and Innovation
DERM	Department of Environment and Resource Management

DIP	The department that was formerly the Department of Infrastructure and Planning and after the machinery of government changes on 21 February 2010, is now the Department of Employment, Economic Development and Innovation
DLCS	Davis Langdon Certification Services
DTMR	Department of Transport and Main Roads
EIS	Environmental impact statement, but in this report particularly referring, where the context permits or requires, to Airport Link Environmental Impact Statement, SKM Connell Wagner, October 2006, available at http://www.airportlinkeis.com/OtherLinks/EIS/Index.htm as at 2 November 2010
EOI	Expression of Interest
EP Act	<i>Environmental Protection Act 1994</i>
Evaluation report	Coordinator-General's Report on the EIS for the proposed Airport Link Project, May 2007, available at http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/airport-link-c-g-report.pdf and http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/mp_airport_link_cg_report_appendix1.pdf as at 2 November 2010
exceedence	An instance of a noise level that exceeds the noise goals
excessive noise	Condition 7(b) of the CG's imposed conditions contains the phrase 'excessive levels of noise'. In my report the phrase is abridged, where appropriate, to 'excessive noise'
Heggies	Heggies Pty Ltd
Heggies report	Report of Heggies Pty Ltd, for the CG/DIP, dated 21 May 2010
imposed conditions	Conditions imposed by the CG under s.35(4)(d) and s.35(1)(2)(dc) of the SDPWO Act
KWRA	Kalinga Woolloowin Residents Association Inc.
NCRs	Non-conformance reports issued by TJH in relation to the CG's imposed conditions
NIAPSP	Noise Impact Assessment Planning Scheme Policy, BCC, available at http://www.brisbane.qld.gov.au/bccwr/lib181/appendix2_noiseimpact_ps_p.pdf as at 11 November 2010
night-time	Between 6.30pm and 6.30am
night-time noise goals	The numerical noise goals set out in condition 9(d)(i) and (ii)
night-time	Project construction work and activity associated with it (except spoil

surface work	haulage, special circumstances work and tunnelling work) between the hours of 6.30pm and 6.30am
night-time work	Project construction work and activity associated with it, conducted between the hours of 6.30pm and 6.30am
NMA	Noise Mapping Australia
noise goals	The numerical noise goals set out in condition 9
noise nuisance	Unreasonable interference or likely unreasonable interference by noise with a quality of the environment that is conducive to public amenity (see s.15 of the EP Act)
NSW	New South Wales
NSW Guideline	Interim Construction Noise Guideline, State of NSW and Department of Environment and Climate Change NSW, DECC 2009/265, ISBN 978 1 74232 2179, July 2009
Officer A	Manager, Brisbane City North, DERM
Officer B	Senior Environmental Officer, Brisbane City North, DERM
Officer C	Executive Director, Infrastructure Projects, DIP
Officer D	Director, Infrastructure Projects, DIP
Officer E	Director, Land Acquisition and Management (acting as Director of Compliance Unit, DIP)
Officer F	Senior Project Officer, Compliance Unit, DIP
Ombudsman Act	<i>Ombudsman Act 2001</i>
PPP	An acronym for public-private partnership. In this report, it is the facilitation, through contractual agreements between government and private enterprise, of the construction of public infrastructure.
Proactive monitoring program	A program of noise monitoring coordinated by the CG as described in section 11.8.3 of this report
Proponent	Has the meaning given in s.24 of the SDPWO Act, namely the person who proposes a significant project and includes a person who, under an agreement or other arrangement with the person who is the existing proponent of the project, later proposes the project. In the case of the Airport Link Project, the State is the proponent
Proposed report	Report, in draft form, provided to the then Coordinator-General/Director-General of DIP, the Director-General of DERM and the Chief Executive Officer of CNI by the Acting Ombudsman under cover of letters dated 5 January 2011
PUPs	Public Utility Providers (for example, Energex)

R category	The relevant residential category selected under NIAPSP
Reactive monitoring program	A program of noise monitoring in response to information provided to the CG, DIP and/or DERM by community members as described in 11.8.1 of this report
Schedule 4	Schedule 4 located in appendix 1 of the change report
SDPWO Act	<i>State Development and Public Works Organisation Act 1971</i>
SEP	Site Environmental Plans produced by TJH
significant project	Means a project declared under s.26 of the SDPWO Act to be a significant project
SP Act	<i>Sustainable Planning Act 2009</i>
special circumstances work	Surface work that, as described in condition 7(b), should be conducted at night-time on Monday, Tuesday, Wednesday, Thursday or Friday. The examples given in condition 7(b) are: <ul style="list-style-type: none">• Works on arterial roads to avoid peak traffic flows• Works in rail corridors• Works involving and transport of large pre-fabricated components (for example, bridge works)
State	Government of the State of Queensland
State government	Government of the State of Queensland
Supplementary EIS	Airport Link EIS Supplementary Report, SKM Connell Wagner, April 2007, available at http://www.airportlinkeis.com/ on 2 November 2010
surface work	Project construction work and activity associated with it (except spoil haulage, special circumstances work and tunnelling work)
TBM	Tunnel boring machine
the Project	The Airport Link Project and associated works, including the Airport Roundabout Upgrade and the Northern Busway (Windsor to Kedron)
the Project documents	The Airport Link Project documents stated in chapter 6
TJH	Thiess John Holland – a joint venture between Thiess Pty Ltd and John Holland Pty Ltd, and its sub-contractors
TOR	Terms of reference
WHO	World Health Organization

WHO guidelines	<i>Night Noise Guidelines for Europe</i> , published by WHO, in 1999 and upgraded in 2009
WM	Wilkinson Murray, acoustical consultants engaged by my Office
WM report	The report of Wilkinson Murray dated November 2010
Wooloowin change report	Coordinator-General's Change Report Airport Link Project—Wooloowin Worksite Modification, October 2009, available at http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/cg-change-report-oct-2009.pdf as at 2 November 2010
worksite	One of the following five precincts where Project construction work is carried out: <ul style="list-style-type: none">• Toombul/Kalinga Park• Bowen Hills• Kedron• Wooloowin• Lutwyche/Windsor

Executive summary

Background

In November 2008, construction began in Brisbane on a \$4.8 billion infrastructure project known as the Airport Link Project (the Project). The Project was said to be the largest of its kind then under construction in Australia.

The Project consisted of three major programs of work:

- the Airport Link, a 6.7 km toll road, mainly underground, linking the city to the northern suburbs and the airport
- the Northern Busway, a two-lane, two-way road, some underground, for buses only, connecting the Royal Brisbane & Women's Hospital to Kedron via the Lutwyche Road and Gympie Road corridor
- an Airport Roundabout Upgrade that included improved connections to the airport precinct, the Gateway Motorway and Kingsford Smith Drive, and replacement of the existing Gateway Motorway overpass at the roundabout with a new four-lane overpass.

There are several main precincts for the Project containing worksites located in suburbs along the Project corridor.

The Project is more than halfway completed and on schedule for completion by mid 2012.

I commenced duty as Queensland Ombudsman on 10 January 2011. Mr David Bevan was Queensland Ombudsman from 16 September 2001 to 17 September 2010. This investigation was commenced by Mr Bevan as Ombudsman and was an ongoing investigation at the time of my appointment.

The parties

The proponent of the Project, that is, the person or entity who proposed the Project, is the State of Queensland (State).

A group of companies, to which I will collectively refer as BrisConnections, contracted with the State to build the Project. Under a public-private partnership, BrisConnections will finance, design, construct, commission, operate and maintain Airport Link for a period of 45 years. BrisConnections will be able to collect tolls from motorists who use the Airport Link tunnel.

BrisConnections will also design and build the Northern Busway (Windsor to Kedron) and the Airport Roundabout Upgrade, before handing the infrastructure back to the State.

TJH is an unincorporated joint venture between Thiess Pty Ltd and John Holland Pty Ltd, which entered into a contract with BrisConnections to undertake the design and construction of the Project.

City North Infrastructure Pty Ltd (CNI) is a company wholly owned by the State. Individual shareholders have been issued shares held in trust on behalf of the Department of Infrastructure and Planning (DIP), Department of Transport and Main Roads (DTMR) and Queensland Treasury Holdings Pty Ltd.

CNI represents the State in the procurement, delivery and contract management phase of the Project. CNI's role is to provide management services on behalf of the State in relation to the agreement between the State and BrisConnections. This includes managing, on behalf of the State, risks, issues or disputes that arise and negotiating and coordinating any modifications to the delivery of the Project.

The Coordinator-General (CG) is a corporation sole, created under the *State Development and Public Works Organisation Act 1971* (SDPWO Act), and a separate legal entity. The CG plans, delivers and coordinates control of a program of works and planned developments throughout the State.

The CG declared the Project a 'significant project' for which an environmental impact statement (EIS) was required. In May 2007, the CG prepared a report evaluating the EIS, taking into account public submissions. As part of this report, he also imposed conditions on the construction of the Project under s.35G of the SDPWO Act.

The two conditions that are relevant in this report are condition 7(b) (which is relevant to the question of what noise from night-time surface work is 'excessive') and condition 9(d) (which sets out noise goals, the exceedence of which triggers the application of mitigation measures and monitoring).

In July 2008, the CG prepared a 'change report' evaluating a request for change to the Project, taking into account public submissions. Condition 7(b) and condition 9(d) did not change.

Until February 2011, in relation to significant projects under the SDPWO Act, DIP, through its Compliance Unit, undertook compliance activities on behalf of the CG. The CG's Office now sits in the Department of Employment, Economic Development and Innovation (DEEDI).

The CG has also provided jurisdiction to the Department of Environment and Resource Management (DERM) to enforce specific imposed conditions, including condition 9(d).

Complaint

In June 2010, my Office received a complaint from the Kalinga Wooloowin Residents Association Inc. (KWRA) about the impact of Project construction. The complaint followed many months of construction work on the Project and frustration by KWRA members in trying to have their concerns resolved through TJH, State government departments and other agencies.

The residents' concerns heightened from 6 August 2009 when surface works at the Toombul (Kalinga Park) site began taking place 24 hours per day, five days per week (24/5). On 7 November 2009, work at the Toombul site began 24 hours per day, seven days per week (24/7). At various times, work in the Bowen Hills precinct has been undertaken most nights for an extended period.

In particular, KWRA alleged:

- Before residents were notified in October 2009 that work was to commence 24/7 at Kalinga Park on 7 November 2009, they were assured that, except for very limited special circumstances, 24/7 surface construction would never occur.

- The documentation contained in the EIS unequivocally shows that, except for special circumstances, surface construction works were only ever intended to take place between the hours of 6.30am and 6.30pm, Monday to Saturday.

Following an assessment of the KWRA complaint, my Office commenced an investigation in August 2010. The investigation focused on the administrative actions of the CG, DIP, DERM and CNI.

Noise from night-time surface work was the issue of most concern to residents because of its impact on their sleep. Noise directly emanating from the worksites was of primary concern, although noise associated with employee and other vehicular movement was also of significant concern. Generally, noise from work associated with tunnelling is not impacting on residents' sleep.

Consequently, I gave priority to the investigation of issues relating to noise from night-time surface work. This report focuses solely on that aspect, and not noise associated with employee and other vehicular movement at the worksites.

Issues for investigation

The specific issues for investigation were:

- whether the Project documents and other information available to the community adequately conveyed the possibility of night-time surface work being undertaken during the Project
- whether the Project conditions permitted night-time surface work
- the adequacy of steps taken by the CG, DIP, CNI and DERM to monitor and enforce compliance with the Project conditions about night-time surface work
- the suitability of the Project conditions to protect the community from excessive noise arising from night-time surface work.

This report details the outcome of my investigation.

Role of Ombudsman

In investigating the administrative actions of public sector agencies, I must consider whether those actions are (among other things):

- unlawful, unreasonable or unjust
- taken on irrelevant grounds or having regard to irrelevant considerations
- based wholly or partly on a mistake of law or fact or
- wrong.

I am empowered under the *Ombudsman Act 2001* (the Ombudsman Act) to make recommendations to the principal officer of an agency that action be taken to rectify the effect of maladministration or to improve administrative practice within that agency.

I have jurisdiction over DIP and DERM¹ and the CG.²

¹ Section 8(1), Ombudsman Act.

² Section 9(1)(d), Ombudsman Act.

CNI's actions in administering the Project are administrative actions taken for, or in the performance of, functions conferred on the CG or DIP which, as noted above, are agencies under the Ombudsman Act. CNI's actions in administering the Project are therefore administrative actions of an agency under s.10(c) of the Act, and fall within my jurisdiction.

I do not have jurisdiction to investigate, or make recommendations about, the actions of BrisConnections or TJH.

Public report

The Ombudsman Act provides that I may present a report to the Speaker for tabling in the Assembly, as I consider appropriate, on a matter arising from the performance of my functions. I have decided to report to Parliament on my investigation for the following reasons:

- The many complaints by residents about aspects of the Project, and their extensive reporting in the media, indicate that this is a matter of considerable public interest.
- There has been criticism of a number of government agencies and their failure to enforce the CG's imposed conditions.
- A number of public infrastructure projects have been announced by the government and the outcome of this investigation may assist in the administration of those projects.
- Lessons from this report may be of benefit to other government regulators.

Investigative process

The investigation has been conducted informally, that is, without the use of coercive investigation powers.

In assessing the complaint my officers:

- electronically recorded an interview with representatives of KWRA
- met with some KWRA members at their residences and spoke to a number of members who contacted my Office
- conducted several site inspections of the areas affected by the Project that were publicly accessible
- electronically recorded an interview with representatives of DIP, CG and CNI
- obtained relevant documentation from the agencies, including a lengthy submission from the Director of Infrastructure Projects in DIP dated 27 July 2010.

During the course of the investigation my officers:

- held preliminary meetings with representatives of CG, DIP, CNI and DERM to discuss the investigation and the relevant issues
- considered documentation provided by CG, DIP, CNI and DERM in response to a request of each agency made in letters dated 23 August 2010
- attended DERM and DIP offices to inspect electronic and hard copy files
- considered a response from the CG (Mr Graeme Newton) dated 8 October 2010 relating to the former CG's clarification of the meaning of 'excessive noise' in condition 7(b) of the change report

- interviewed four officers from DIP and two officers from DERM to obtain specific information about their agencies' actions
- had discussions with numerous members of the community affected by the works (some of whom were associated with KWRA) and obtained information about the effect of the works on them and any attempts they had made to have their concerns addressed
- conducted site inspections at the properties of some of the members of the community who had contacted us, including out of hours
- were shown a number of construction sites and activities taking place therein by senior officers of BrisConnections, TJH and CNI
- received numerous written submissions from members of the community affected by the works and copies of documents relating to complaints they had made to the relevant agencies about the works
- made inquiries with the BCC about noise monitoring it had conducted in the affected areas
- obtained legal advice from Mr Robert Wensley QC relating to the interpretation of several imposed conditions
- obtained advice from Wilkinson Murray (WM), acoustical consultants, about noise issues relevant to my Office's investigation
- invited BrisConnections and TJH to make a submission on issues relevant to the investigation, which was accepted by TJH. A submission was received from TJH on 19 November 2010.

Proposed report

To satisfy the obligation of affording procedural fairness, a proposed report dated 5 January 2011 was given by the Acting Ombudsman to:

- the CG, who was then also the DG of DIP
- the DG of DERM
- the Chief Executive Officer of CNI.

Responses were sought by 31 January 2011, with extensions granted due to the agencies dealing with the aftermath of the Brisbane floods and other natural events affecting Queensland. Responses were received during February and March 2011.

As the Acting Ombudsman considered that some of the comments in the proposed report could be regarded as adverse to former Coordinators-General, Mr Ken Smith and Mr Colin Jensen, each was provided with the opportunity to make submissions on the proposed adverse comment.³

Outcomes of this investigation

In this report, I formed 41 opinions and made 24 recommendations about noise from night-time surface work.

I will consider other administrative practices in relation to the Project in a further report, including the handling of complaints about the Project works.

The key outcomes of the investigation are:

³ Section 55, Ombudsman Act.

- The Project documents and other information available to the community did not adequately convey the possibility of night-time surface work being undertaken during the Project.
- When 24/5 work commenced at the Kalinga Park worksite in August 2009, the agencies were approached by TJH before commencing. Information was provided, but TJH was not required to provide reasons or obtain approval from the CG before proceeding.
- Based on advice received by my Office from Mr Robert Wensley QC, who considered legal advice obtained by KWRA and the agencies, surface work on the Project can be carried out between 6.30pm and 6.30am Monday to Saturday and on Sunday and public holidays as long as those works do not generate excessive noise, vibration, dust and traffic.
- The meaning of 'excessive noise' is not defined in the Project documents and has been the subject of considerable discussion by the agencies during the course of the Project, resulting in the CG issuing a statement of clarification of its meaning. The failure to provide earlier guidance on the term impacted on the effective regulation of noise from night-time surface work from the Project.
- Advice obtained by my Office from Mr Robert Wensley QC and from acoustical consultants WM has helped to provide guidance to the agencies and the community on the meaning of excessive noise.
- Based on a set of assumptions taken into account by WM, which I consider are reasonable for reasons set out in the report, in respect of nearby residences with windows open, I consider there is evidence of regular and considerable excessive noise from night-time surface work at the Kalinga Park worksite since such work commenced in August 2009. My opinion is not a determination as to whether there has been excessive noise from night-time surface work in the past. My opinion is instead an indication of the gravity of the issue of noise from night-time surface work, based on the assumptions outlined
- At my Office's instigation, and in considering the material available in the proposed report (including the conclusions of WM), the CG reviewed the information available about noise from night-time surface work arising from the Project, particularly at Kalinga Park after 24/7 works commenced, and concluded that there was no basis to retrospectively proceed with the use of statutory processes under the SDPWO Act.
- In respect of a question that arose during the investigation about whether condition 7(b) can be enforced, should it be necessary, I conclude that the condition is enforceable through the existing powers available to the CG under the SDPWO Act, with the assistance from DERM under existing powers under the EP Act.
- To date, meaningful and effective monitoring of noise from night-time surface work has not been undertaken by DERM, or coordinated by the CG, particularly through proactive monitoring activities.
- In my view, agencies must be prepared to take necessary regulatory action to protect the community from excessive noise for the remainder of the Project, including by gathering and analysing more specific information about noise from night-time surface work on the Project, using the regulatory powers at their disposal.
- To undertake that work, the agencies need to consider the resources at their disposal, develop and publish a statement of the roles and responsibilities of each about noise from night-time surface work and any proactive monitoring proposed, and employ strategies to gather the information that is relevant to assessing whether excessive noise from night-time surface work is occurring at worksites.

The CG has recently provided information that indicates that he was committed to establishing a structured, cohesive and integrated approach to the coordination and management of noise from night-time surface work arising from the Project, which my report notes is pleasing. Implementation of my recommendations will aid that process.

In addition to making recommendations specific to the remainder of the Project, the report provides guidance on a range of issues that should assist the conduct of future significant projects. Implementation of my recommendations will:

- require proponents, in the EIS process, to clearly and unambiguously communicate to the community the likely extent and duration of night-time surface work
- improve the resolution of issues around background noise readings for determining the classification of noise sensitive receptors under NIAPSP and establishing a process for complaints about the classification to be settled by the CG
- overcome issues around entry to the sleeping areas of properties where an internal noise goal for sleep disturbance is utilised by incorporating a façade reduction approach to noise monitoring
- improve the coordination of regulatory responsibilities for significant projects by requiring written agreements between the CG and other agencies detailing the responsibilities of each party.

As indicated, a further report will focus on issues that may add to the lessons learnt in this investigation.

Opinions

Opinion 1

Some members of the community reasonably formed a view based on statements in the EIS that surface work would be limited to the daytime, except in special circumstances.

Opinion 2

Condition 7(b) is inconsistent with the understanding of some members of the community that surface construction work would only occur during the daytime except in special circumstances.

Opinion 3

There is no evidence that the community was intentionally misled by any party about the possibility of night-time surface work during the Project.

Opinion 4

As a result of correspondence received from the State government leading up to and following the commencement of the Project, but before notification of the works commencing, some members of the community reasonably formed the view that:

- (a) 24/7 work was not a possibility and
- (b) night-time surface work would only occur in special circumstances.

Opinion 5

The reaction of some members of the community as reported through the Toombul CLG minutes to the announcement of 24/5 works and then 24/7 works at Kalinga Park suggests that some members of the community were not alive to the possibility of such work occurring during the Project.

Opinion 6

TJH and BrisConnections were not required to obtain approval to conduct night-time surface work from the CG, DIP or CNI.

Opinion 7

CNI, DIP, CG and DERM took steps to satisfy themselves that TJH would be able to achieve compliance with the CG's imposed conditions upon commencement of night-time surface work at Kalinga Park.

Opinion 8

TJH is not required to give reasons for its decision to conduct night-time surface work to the CG, DIP or CNI.

Opinion 9

BrisConnections is required, if asked under clause 38.5 of the Project Deed, to give reasons for the decision to conduct night-time surface work to the CG, DIP or CNI.

Opinion 10

Condition 7(b) allows surface work to be carried out between 6.30pm and 6.30am Monday to Saturday and on Sunday and public holidays as long as those works do not generate excessive noise, vibration, dust and traffic.

Opinion 11

The CG's failure to define excessive noise in the Project documents led to:

- condition 7(b) being inadequate to allow the effective regulation of noise from night-time surface work
- the interpretation of the meaning of 'excessive noise' in condition 7(b) being unnecessarily complex
- the regulation of noise from night-time surface work being unnecessarily time and cost intensive.

Opinion 12

The CG's failure to issue the clarification to TJH until 28 April 2010 and to the CLGs until 7 May 2010 was unreasonable in view of:

- night-time work commencing at Kalinga Park in August 2009
- DERM raising concerns just before night-time work commencing at Kalinga Park about enforcing condition 7(b) in the absence of a definition of the term 'excessive noise'
- complaints having been received by DIP that led to the request for legal advice on 25 November 2009
- the legal advice having been received by DIP on 23 December 2009.

The CG's failure constitutes unreasonable administrative action for the purposes of s.49(2)(b) of the Ombudsman Act.

Opinion 13

The following paragraphs of the CG's statement clarifying and reinforcing the meaning of excessive noise:

The Coordinator-General has clarified and reinforced the term 'excessive noise' with reference to the *Coordinator-General's Change Report on the Environmental Impact Statement for the Airport Link Project, July 2008*.

The Coordinator-General has taken the view that the generation of excessive noise, as stated in condition 7, occurs when noise measured at a sensitive place (for example inside a bedroom of a home nearby which has had mitigation measures applied) exceeds the noise goals stated in the Coordinator-General's Report, appendix 1, schedule 3, condition 9, or the background noise (whichever is greater).

Internal noise goals for sleeping areas have been set for the project during night hours (from 6.30pm to 6.30am). These noise goals are based on existing national standards for sleep disturbance. The goals are detailed at appendix 1, schedule 3, condition 9 (d) (i) and (ii).

are reasonable in that they accurately reflect the professional and other advice DIP had obtained about the practicalities of measuring the internal noise goals contained in condition 9.

Opinion 14

The numerical criteria in condition 9 provide a reasonable indication of excessive noise in the context of night-time surface work for the Project, with the proviso that the night-time criterion of 40 dBA LAeq for steady, temporary noise in R4-R6 areas is at the upper end of relevant criteria and should be applied only with care.

Opinion 15

The Airport Link monitoring reports do not provide sufficient information to permit the CG, DIP or DERM to make any meaningful analysis of exceedences of the noise goals in condition 9.

Opinion 16

The type of noise as intermittent or steady state is adequately distinguished by the noise goal criterion in condition 9.

Opinion 17

In the noise reports examined by my Office, both the intermittent and steady state components have generally been considered.

Opinion 18

CNI's acceptance of TJH's application of the temporary noise goal for monitoring was unreasonable.

Opinion 19

The CG's/DIP's acceptance of CNI's conclusion about TJH's application of the temporary noise goal for monitoring was administrative action that was unreasonable and/or wrong for the purposes of s.49(2)(b) of the Ombudsman Act.

Opinion 20

The CG's failure to define the terms 'temporary' and 'long term' in the context of noise from construction work in the Project documents led to:

- the noise goals in condition 9(d) being subjective and therefore inadequate for DERM and the CG to easily determine whether there had been exceedences of the noise goals
- the interpretation of the meaning of the terms 'temporary' and 'long term' in condition 9(d) being unnecessarily complex
- the regulation of the application of mitigation measures and noise monitoring being unnecessarily time and cost intensive.

Opinion 21

The CG's failure to detect and promptly and thoroughly consider TJH's adoption of the R categories or the numerical noise goals in assessing whether noise generated by the Project works exceeded those noise goals in condition 9 was unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

Opinion 22

The façade reduction method of assessing internal noise levels contained in the CG's statement of clarification of excessive noise is generally accepted industry practice, especially where the façade attenuations of the relevant residences have been explicitly measured.

Opinion 23

Unless a façade reduction approach is adopted, noise monitoring may be carried out in the sleeping areas of:

- residences with installed mitigation measures
- residences with no installed mitigation measures.

Opinion 24

The CG's statement of clarification that 'Noise goals were set for the project based on noise measured in sleeping areas after all reasonable and practicable mitigation and management measures have been applied' constitutes administrative action that was unreasonable and/or wrong for the purposes of s.49(2)(b) and s.49(2)(g) of the Ombudsman Act, in that it omits to also state that in a residence that has had noise mitigation applied to the sleeping area as a result of predictive modelling, monitoring is to be undertaken with the mitigation active. However, in a residence that has not had noise mitigation applied to the sleeping area, monitoring is to be undertaken with the sleeping area in the state in which it is normally occupied.

Opinion 25

Based on the assumptions identified by Wilkinson Murray, in respect of nearby residences with windows open there is evidence of regular and considerable 'excessive noise' within the meaning of condition 7(b) from night-time surface work at the Kalinga Park worksite since such work commenced in August 2009.

Opinion 26

DERM did not advise TJH that the s.451 notices had been adequately answered.

Opinion 27

DERM's admitted failure to take action in respect of the findings contained in the Heggies report constitutes administrative action that was unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

Opinion 28

I consider that:

- condition 7(b) is enforceable
- powers are available to the CG under the SDPWO Act and DERM under the EP Act to compel TJH and/or other entities to comply with condition 7(b) (specifically, to ensure that noise from night-time surface work is not excessive).

Opinion 29

Having regard to schedule 4, the CG has primary responsibility for ensuring night-time surface work complies with condition 7(b) and for taking appropriate regulatory action when there is prima facie evidence of non-compliance with the condition.

Opinion 30

DERM has jurisdiction under the EP Act to:

- investigate alleged noise nuisance from night-time surface work
- take regulatory action (whether administrative or statutory) against a person who has caused an environmental nuisance, to the extent that the imposed conditions do not authorise the environmental nuisance.

Opinion 31

The main purpose of CNI is to facilitate the completion of the Project.

Opinion 32

There is no agreement that requires CNI to oversee and investigate compliance with the imposed conditions in schedule 3, appendix 1 of the change report on a once off or continuing basis.

Opinion 33

DERM is the lead agency for the regulation of environmental nuisance in Queensland.

Opinion 34

DERM has failed to effectively monitor compliance with the noise goals in condition 9 and such failure constitutes administrative action that was unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

Opinion 35

DERM has failed to undertake an effective reactive monitoring program in respect of compliance with the noise goals in condition 9. This constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

Opinion 36

The CG has a coordination role in respect of the monitoring of noise from the Project to ensure compliance with condition 7(b), part of which is to ensure that a proactive monitoring program is in place.

Opinion 37

Other than arranging testing through Heggies Pty Ltd in response to complaints, the CG has not established or coordinated a proactive monitoring program to ensure compliance with the imposed conditions. This constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

Opinion 38

DERM has a partner role in respect of monitoring noise from the Project to ensure compliance with the noise goals in condition 9. Part of that role is to ensure that a proactive monitoring program is in place.

Opinion 39

DERM has not established an effective proactive monitoring program to monitor compliance with the CG's imposed conditions. This constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

Opinion 40

The failure of the DIP Compliance Unit to properly monitor DERM's regulation of noise from night-time surface work from the Project constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

Opinion 41

Until at least April 2011, the CG has failed to establish a structured, cohesive and integrated approach to the coordination and management of noise from night-time surface work sufficient to demonstrate his coordination role has been effectively discharged under the SDPWO Act. This constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

Recommendations

Recommendation 1

The CG incorporate, in the terms of reference for each future EIS, the requirement to clearly and unambiguously communicate to the community any possibility of night-time surface work, the circumstances in which that work may be undertaken, and the likely duration (if known) in order that the CG may receive and consider submissions made by the community.

Recommendation 2

The CG and DERM review the information in the Airport Link monitoring reports relating to noise, and request that TJH include the following information, as a minimum, in future Airport Link monthly reports:

- the street address or location where monitoring was undertaken, the location of the noise generating activities and the location and height of the noise meter microphone
- whether internal or external monitoring was undertaken and whether mitigation has already been applied
- nature of the mitigation applied
- the date, time and duration of monitoring undertaken
- atmospheric conditions prevailing when monitoring undertaken
- names and relevant qualifications of monitoring personnel
- a clear description of the construction activities taking place and the plant and machinery being used
- the relevant R category for the receptor, including whether there has been any change in category and any explanation for the change
- the criterion applied, that is, for steady state noise, temporary or long term, and rationale for selection of the criterion for the type of work being conducted at the time of monitoring
- the relevant CG goal for steady state noise
- the relevant CG goal for intermittent noise
- any façade reduction applied
- monitoring results against the relevant CG goals or façade reduction levels
- continue to highlight in red the exceedences by the Project
- where exceedences are claimed to be a combination of Project work and external factors, an assessment to be made by TJH of the dominant noise source and if the dominant source is Project work, record the entry as an exceedence attributable to the Project.

Recommendation 3

DERM monitor and evaluate the information contained in the revised monthly reports to assist it in investigating exceedences of the noise goals.

Recommendation 4

In the event the information gained as a result of Recommendation 3 indicates noise from night-time surface work may constitute noise nuisance, DERM:

- report its assessment to the CG
- consider whether its regulatory powers under the EP Act should be exercised.

Recommendation 5

The CG publish on DIP's website, a statement clarifying the meaning of the terms 'temporary' and 'long term' for steady construction noise under condition 9(d).

Recommendation 6

The CG publish on DIP's website, a statement clarifying the meaning of the terms 'major road' and 'minor road' under condition 9(f).

Recommendation 7

As AS 1055 shows indicative background noise levels for the various R categories in day, evening and night periods, the CG ensure that, for future projects where NIAPSP applies, provision is made for background noise readings to be taken pre-construction for the period 10.00pm to 7.00am which, together with detailed consideration of the receiving environment and other relevant matters, will form the basis for determining the night-time R category.

Recommendation 8

In any future significant project where:

- night-time goals rely on a determination of the R category under NIAPSP
- the contractor has changed the classification of any sensitive receptor property identified in predictive modelling as R1-R3 to R4-R6

the CG have in place a system by which the owner of the sensitive receptor property may complain directly to the CG and the CG will coordinate an evaluation of the change in consultation with the authority that holds jurisdiction of any condition that may be affected by the change and make a decision about the change.

Recommendation 9

For the remaining stages of the Project, the CG:

- evaluate any proposed change by TJH of the R category to R4-R6 where predictive modelling reports previously identified that an R1-R3 category applied to particular noise sensitive receptors
- make a decision about the change
- advise DERM and TJH of the decision.

Recommendation 10

In determining the R category to be applied to a certain sensitive receptor, the CG and DERM take into account available background noise readings and, if unavailable, obtain:

- for night-time noise, the LA90 background noise level in each acoustically similar locality, in the absence of noise from the Project
- for daytime noise, the contribution of noise from a minor or major road to the total LAeq noise level in each acoustically similar locality, in the absence of noise from the Project.

Recommendation 11

In any future significant project where internal noise goals for sleep disturbance are utilised, the CG should prescribe, in imposed conditions, a façade reduction approach where:

- entry to sleeping areas for monitoring purposes cannot be achieved
- broader noise testing programs around worksites to determine the likely impact on sleeping areas is required or desirable.

Recommendation 12

The CG remove the statement 'Noise goals were set for the project based on noise measured in sleeping areas after all reasonable and practicable mitigation and management measures have been applied' from the DIP website and replace it with a statement to the effect that 'In a residence that has had noise mitigation applied to the sleeping area as a result of predictive modelling, monitoring is to be undertaken with the mitigation active. However, in a residence that has not had noise mitigation applied to the sleeping area, monitoring is to be undertaken with the sleeping area in the state in which it is normally occupied'.

Recommendation 13

DERM ensure that all responses to statutory notices issued under the EP Act are received, assessed and replied to.

Recommendation 14

For all future significant projects where there is joint regulatory responsibility between the CG and another agency, the CG have appropriate arrangements in place in accordance with the relevant legislation (supported by a written agreement such as a memorandum of understanding) identifying which agency is the lead agency for specified categories of cases and the responsibilities of the lead agency and partner agencies.

Recommendation 15

The CG/Director-General of DIP:

- assess the capacity of the DIP Compliance Unit to discharge the CG's and DIP's responsibility to coordinate compliance with conditions on significant projects
- if necessary, acquire or engage sufficient human and technical resources to meet their obligations to coordinate compliance with such conditions.

Recommendation 16

The Director-General of DERM:

- assess the capacity of DERM to discharge its responsibilities about noise regulation in Queensland, including responsibilities about noise from significant projects under the SDPWO Act
- if necessary, acquire or engage sufficient human and technical resources to meet the obligations to discharge those responsibilities.

Recommendation 17

In addition to the matters identified in my Recommendation 2 about the information contained in the Airport Link monitoring reports, I consider the CG should request TJH to produce external monitoring results in the monthly reports.

Recommendation 18

The CG and/or DERM issue a notice, or notices, under s.323 and/or 451 of the EP Act and/or SDPWO Act requiring BrisConnections or TJH to investigate and report on:

- the plant and machinery proposed to be used in future night-time surface work at any worksite along the project corridor until the Project's completion
- the sound power levels of that plant and machinery, and the measures that can be taken to muffle or screen those levels including the use of temporary and mobile noise barriers
- any reasons why amelioration measures cannot reasonably or practically be taken.

Recommendation 19

If the CG and/or DERM does not have sufficient evidence to issue a notice, or notices, mentioned in Recommendation 18 or otherwise decides not to, the CG and/or DERM should provide the Ombudsman with reasons why, within two weeks of the date of publication of this report.

Recommendation 20

The CG and/or DERM evaluate the relevant responses to the notices mentioned in Recommendation 18.

Recommendation 21

Within four weeks of the date of publication of this report, the CG in conjunction with DIP and DERM, develop and publish on DIP's website a statement about the roles and responsibilities of the CG, DIP, DERM and CNI about noise from night-time surface work, including proactive monitoring proposed to be undertaken, who is to do which monitoring, and the methodology of that monitoring.

Recommendation 22

Within two weeks of the CG and/or DERM's receipt of any responses to any notices mentioned in Recommendation 18, the statement mentioned in Recommendation 21 is to be revised to set out the general details of a proactive monitoring program, informed by the response to the notice.

Recommendation 23

For the duration of the Project, the CG arrange receipt of a monthly briefing note from the DIP Compliance Unit that:

- gives an update on the implementation of my recommendations
- includes information from DERM on compliance issues

and, as may be required, give instructions to the DIP Compliance Unit and DERM about those issues and environmental coordination issues generally arising from the Project.

Recommendation 24

The CG regularly report to the Minister to advise him about:

- the regulation of noise from night-time surface work
- environmental coordination and the status of environmental regulation in each significant project.

Chapter 1: Introduction

I commenced duty as Queensland Ombudsman on 10 January 2011. Mr David Bevan was Queensland Ombudsman from 16 September 2001 to 17 September 2010. This investigation was commenced by Mr Bevan as Ombudsman and was an ongoing investigation at the time of my appointment.

1.1 Background

In June 2010, my Office received a complaint from the Kalinga Wooloowin Residents Association Inc. (KWRA) about the impact from construction of the Airport Link Project, being undertaken by Thiess John Holland (TJH), on behalf of the successful bidder for the Project, BrisConnections.

The complaint followed many months of construction work on the Project and apparent frustration by KWRA members in trying to have their concerns resolved through TJH, relevant State government departments and other agencies.

The residents' concerns heightened from 6 August 2009 when surface works at the Toombul (Kalinga Park) site began taking place 24 hours per day, five days per week (24/5).⁴ On 7 November 2009, work at the Toombul site began to be undertaken 24 hours per day, seven days per week (24/7). At various times, work in the Bowen Hills precinct has been undertaken most nights for an extended period.⁵

Following assessment of the KWRA complaint, my Office commenced an investigation in August 2010. The investigation has focused on the administrative actions of the Coordinator-General (CG), the State government departments concerned, relevantly the Department of Infrastructure and Planning (DIP) and Department of Environment and Resource Management (DERM) and the wholly owned State government company City North Infrastructure Pty Ltd (CNI).⁶ The issues for investigation are set out at 2.4 below.

Noise from night-time surface work is the issue of most concern to residents because of the impact on their sleep. Noise directly emanating from the worksites is of primary concern, although noise associated with employee and other vehicular movements is also of significant concern. My Office has been told that some residents are on medication to deal with the effects of sleep deprivation. Generally, noise from work associated with tunnelling is not impacting on residents' sleep.

During my investigation KWRA called for a moratorium on night-time work associated with the Project through the Minister for Infrastructure and Planning. In making the request, the president of KWRA stated:⁷

I make this call in recognition of the enormous toll this project's night work is exacting on hundreds of residents, who are missing out on sleep, abandoning homes, and suffering serious health problems as a result of Airport Link's round the clock noise,

⁴ Memo from City North Infrastructure Pty Ltd to Minister for Infrastructure and Planning, 15 October 2009.

⁵ For example, BrisConnections (22 April 2010) Community Notice – Night Work – Ventilation Station Outlet [accessed at http://www.brisconnections.com.au/Portals/0/docs/0729_100319_BH_Night%20Work%20-VSO_APPROVED.pdf on 12 November 2010].

⁶ See discussion about CNI Pty Ltd at section 1.3.5 of this report.

⁷ Letter from KWRA to the Minister for Infrastructure and Planning, 7 September 2010.

dust, vibration and truck movements in residential areas. Each KWRA meeting is being joined by an increasing number of residents – from all along the project corridor – who are being driven to distraction by the side effects of this massive construction project.

It is important to note that residents are overwhelmingly supportive of this important infrastructure development. They are overwhelmingly unsupportive of the way its contractors are conducting the project and treating the communities of northern Brisbane with disdain.

The Minister for Infrastructure and Planning responded to the president of KWRA on 8 October 2010 to indicate that the State has no ability under the project deed or the CG's imposed conditions to direct TJH to cease night-time works.

I have given priority to the investigation of issues relating to noise from night-time surface work. This report focuses solely on that aspect, not associated noise from employee and other vehicular movements at the worksites. I will consider other administrative practices in relation to the Project in a further report.

As I mention in chapter 4, the agencies have reviewed a proposed version of this report. CNI has submitted that throughout the proposed report:

... references to various night-works are not qualified by indications as to whether they are surface works, special circumstances work, tunnelling works or Public Utility Plant (PUP) works.

To be clear, in this report (and in the proposed report) I have defined 'night-time surface work' to mean:

Project construction work and activity associated with it (except spoil haulage, special circumstances work and tunneling work) between the hours of 6:30pm and 6:30am.

1.2 The Project

1.2.1 Project components

BrisConnections was chosen by the State to:

- finance, design, construct, commission, operate and maintain the Airport Link
- construct the Windsor to Kedron section of the Northern Busway
- construct the upgrade to the Airport Roundabout.

The Airport Link consists of:⁸

a 6.7km toll road, mainly underground, connecting the Clem7 Tunnel, Inner City Bypass and local road network at Bowen Hills, to the northern arterials of Gympie Road and Stafford Road at Kedron, Sandgate Road and the East West Arterial leading to the airport.

⁸ BrisConnections (2009) Airport Link [accessed at <http://www.brisconnections.com.au/TheProject/AirportLink/tabid/137/Default.aspx> on 18 October 2010].

Airport Link will be the first major motorway linking Brisbane city to the northern suburbs and airport precinct, avoiding up to 18 sets of lights.

The Northern Busway (Windsor to Kedron) consists of:

a two-lane, two-way road for buses only, connecting the Royal Brisbane & Women's Hospital to Kedron via the Lutwyche Road and Gympie Road corridor.

The busway will be underground for approximately 1.5km from Truro Street, Windsor through to Sadlier Street, Kedron, surfacing at the new, state-of-the-art Lutwyche and Kedron Brook busway stations.⁹

The Airport Roundabout Upgrade consists of:

- improved connections to the airport precinct, the Gateway Motorway and Kingsford Smith Drive
- replacing the existing Gateway Motorway overpass at the roundabout with a new four-lane overpass
- high capacity 'fast diamond' signalised intersection to replace the existing roundabout
- new four-lane 750 metre flyover bridge linking the East-West Arterial Road and the Airport Drive over the Gateway Motorway overpass
- widening of the East-West Arterial Road to three lanes in each direction
- surface road improvements to Airport Drive.¹⁰

In this report, unless otherwise indicated, the Airport Link, Northern Busway (Windsor to Kedron) and the Airport Roundabout Upgrade are collectively described as 'the Project'.

1.2.2 Project delivery

Under a public-private partnership (PPP) BrisConnections will finance, design, construct, commission, operate and maintain Airport Link for a period of 45 years. BrisConnections will also design and build the Northern Busway (Windsor to Kedron) and the Airport Roundabout Upgrade, before handing it back to the State. The combined projects total \$4.8 billion in design and construction costs.¹¹

BrisConnections has contracted with TJH, a joint venture between Thiess Pty Ltd and John Holland Pty Ltd, to perform the engineering and construction work on the Project.

City North Infrastructure Pty Ltd (CNI) oversees the delivery of the Project for the State.

More information on the role of these bodies is set out in 1.3 below.

⁹BrisConnections (2009) Airport Link [accessed at <http://www.brisconnections.com.au/TheProject/AirportLink/tabid/137/Default.aspx> on 18 October 2010].

¹⁰BrisConnections (2009) Airport Link [accessed at <http://www.brisconnections.com.au/TheProject/AirportLink/tabid/137/Default.aspx> on 18 October 2010].

¹¹BrisConnections (2009) Project Delivery [accessed at <http://www.brisconnections.com.au/TheProject/ProjectDelivery/tabid/135/Default.aspx> on 18 October 2010].

1.2.3 Project timeline

1.2.3.1 Pre-construction¹²

Date	Event
July–August 2005	The State and Brisbane City Council begin a detailed feasibility study into Airport Link. Preliminary studies for Northern Busway preferred corridor begin.
October 2005	Preferred corridor announced. CG declares Airport Link a significant project under the <i>State Development and Public Works Organisation Act 1971</i> .
November 2005	Airport Link Environmental Impact Statement (EIS) investigations begin. CG invites comment on draft Terms of Reference for Airport Link EIS. Northern Busway Draft Concept Design and Impact Management Plan (CDIMP) developed.
October 2006	Public submissions invited on EIS.
February 2007	Private sector invited to submit Expressions of Interest (EOI) in Airport Link and Northern Busway (Windsor to Kedron) projects.
April 2007	EOIs close. Four groups respond.
April 2007	A Supplementary EIS report addressing the submissions made on the EIS released.
May 2007	Airport Link EIS evaluated in CG's evaluation report.
June 2007	Three of the four groups that submitted EOIs invited to proceed to the bidding phase.
December 2007	Bids close. Three groups submit bids. Evaluation begins.
May 2008	BrisConnections announced as the preferred bidder for Airport Link, Northern Busway (Windsor to Kedron) and the Airport Roundabout Upgrade.
May 2008	Request for Project change to reflect changes to the tunnel alignment, construction methods and changes to the road network at the tunnel portals submitted by CNI on behalf of the State.
June 2008	Public consultation conducted on the changes to the Project reference designs for the Airport Link and Northern Busway (Windsor to Kedron) projects. Contractual close was reached on 2 June 2008.
July 2008	CG's change report released. Financial close reached.

¹² Most of the information in the table is from CNI (2008) Timeline [accessed at http://www.citynorthinfrastructure.com.au/project_information/timeline.html on 13 October 2010]; however, the dates of the Project documents have been added for completeness.

1.2.3.2 Construction¹³

Date	Event
November 2008	Construction of the Airport Link and the Northern Busway (Windsor to Kedron) commences.
December 2008	Drill and blast excavation commences at Bowen Hills.
January–December 2009	Construction of cut and cover structure and tunnel boring machine (TBM) launch box at Toombul (Kalinga Park).
March 2009	First roadheader commences tunnelling at Truro Street site, Windsor – mid tunnel point.
April 2009	Construction of the Airport Roundabout Upgrade commenced.
April 2009	Roadheader tunnelling commenced at Federation Street site, Bowen Hills.
May 2009	24-hour tunnelling operations commenced across the Project.
June 2009	Roadheader tunnelling commenced in Kedron.
June 2009	Request for Project change submitted by CNI on behalf of the State to establish a new worksite at Rose Street, Woolloowin, to facilitate improved construction access to the mainline tunnels.
October 2009	Woolloowin change report issued by CG.
November 2009	First TBM arrives from Germany for assembly.
March 2010	Second TBM arrives from Germany for assembly.
May 2010	First TBM lowered in launch box for assembly underground.
mid 2010	First TBM commences tunnelling from Kalinga Park, Toombul excavating the eastbound Airport Link tunnel.
September 2010	Second TBM commences tunnelling from Kalinga Park, Toombul excavating the westbound Airport Link tunnel.
November 2010	Eastbound lanes of Airport Flyover opened to traffic.
mid 2011	Airport Roundabout Upgrade due for completion.
mid 2012	Airport Link and Northern Busway (Windsor to Kedron) due for completion.

1.2.4 Main Project worksites

There are a number of main precincts for the Project and within the precincts are a number of worksites in suburbs along the Project corridor. The following identifies the precincts and worksites and generally describes the work that is being conducted.

Bowen Hills

The Bowen Hills precinct:

represents the southern or 'city' connection to the Airport Link and Northern Busway projects.

The Northern Busway (Windsor to Kedron) will connect with the recently opened Northern Busway Stage 1 near the Royal Brisbane & Women's Hospital, via an adjoining bridge structure crossing Breakfast Creek and Bowen Bridge Road before merging onto the existing Lutwyche Road alignment and extending to Kedron.

¹³ Most of the information in the table is from CNI (2008) Frequently Asked Questions [accessed at http://www.citynorthinfrastructure.com.au/community_information/faq.html on 13 October 2010] and BrisConnections (2009) Construction [accessed at <http://www.brisconnections.com.au/Construction/tabid/61/Default.aspx> on 13 October 2010]; however, the dates of the Project documents have been added for completeness.

An integrated network of roads and bridges will enable the Inner City Bypass, Clem7 and local road network in Bowen Hills to connect with the Airport Link tunnel.¹⁴

Three key worksites have been established in the Bowen Hills precinct to enable construction of Airport Link and Northern Busway (Windsor to Kedron): Federation Street; Northey Street; and the southern side of Enoggera Creek.

Key construction activities to be undertaken in the Bowen Hills precinct up to 2012 include:

- 24 hour roadheader tunnelling from the Federation St site, Bowen Hills to excavate the north and southbound Airport Link tunnels up to Constitution Road, Windsor
- Airport Link entry/exit for Bowen Hills, including construction of the southbound Lutwyche Road off-ramp
- Construction of 12 bridges in total - for the Airport Link road and Northern Busway
- Road bridges to connect the Airport Link tunnel with the Inner City Bypass, Clem7 tunnel, Bowen Bridge Road, Lutwyche Road and Campbell Street in Bowen Hills
- Stage two of the Northern Busway - including the busway bridge linking the Northern Busway Stage 1 (RCH to Windsor) at Bowen Bridge Road, with the new bus stop at Federation Street, before merging with Lutwyche Road
- Construction of a ventilation station and outlet for the Airport Link tunnel.¹⁵

Kedron

The Kedron precinct:

provides the northern suburbs' connection to both the Airport Link toll road and the Northern Busway. Throughout construction, Kedron will be a hub of activity as it falls at the centre of the project's alignment.

Major surface works, construction of four new bridges and tunnelling will be undertaken to connect the local road network at Gympie and Stafford Roads to the Airport Link tunnel. The new Kedron Brook Busway Station (opposite the Emergency Services Complex) will also incorporate a kiss 'n' ride and enhanced pathway connections.

The Airport Link Operations Centre (ALOC), to be built at the corner of Stafford and Gympie Roads in 2010, will incorporate the Tollroad Control Centre providing 24-hour surveillance and safe operation of the Airport Link toll road.¹⁶

Seven key worksites have been established in the Kedron precinct enabling construction of Airport Link and Northern Busway: Stafford Road; Gympie Road east; Gympie Road west; Kedron Brook; Perry Street; Kedron Brook Building site; and Lutwyche Road.

¹⁴BrisConnections (2009) Bowen Hills [accessed at <http://www.brisconnections.com.au/Construction/BowenHills/tabid/186/Default.aspx> on 19 October 2010].

¹⁵BrisConnections (2009) Bowen Hills [accessed at <http://www.brisconnections.com.au/Construction/BowenHills/tabid/186/Default.aspx> on 19 October 2010].

¹⁶BrisConnections (2009) Kedron precinct [accessed at <http://www.brisconnections.com.au/Construction/Kedron/tabid/188/Default.aspx> on 19 October 2010].

Key construction activities to be undertaken in the Kedron precinct up to 2012 include:

- Construction of the Airport Link westbound off-ramp (for motorists travelling from Toombul and exiting at Gympie/Stafford Roads) and northbound off-ramp (for motorists travelling from Brisbane city and exiting at Gympie/Stafford Roads)
- Two new overpass bridges, connecting with the westbound and northbound off-ramps, enabling motorists to exit the Airport Link tunnel at Kedron and continue onto Gympie/ Stafford Roads
- Construction of the southbound and eastbound on-ramps (for motorists travelling from Stafford/Gympie Roads to Brisbane city and the airport)
- New Gympie Road carriageway bridge to replace the existing bridge over Kedron Brook
- Construction of new Gympie Road - allowing the Gympie Road carriageway to be shifted east (from Kedron Brook to Arnott Street)
- Traffic diversion onto the new Gympie Road carriageway and bridge over Kedron Brook; demolition of existing Kedron Brook bridge
- Construction of the Northern Busway, including the Kedron Brook Busway Station, a bridge over Kedron Brook and tunnel construction along the western side of Gympie Road, surfacing past Somerset Road
- Construction of the ventilation station and outlet behind the Emergency Services Complex
- Airport Link Operations Centre situated at the corner of Cremorne Road / Stafford Road/ Gympie Road
- Re-instatement and upgrade to the Kedron Brook following completion of construction.¹⁷

Toombul

The Toombul precinct:

represents the eastern connection of the Airport Link project. On project completion in 2012, the Toombul precinct will be a vital gateway connecting motorists to the airport and Australia Trade Coast, and south-west to Brisbane's CBD.

At the heart of the precinct is Kalinga Park – popular parkland with community facilities and cycleways adjacent to Schulz Canal.

Kalinga Park will become a focal point in 2010 as the site where two of Australia's largest tunnel boring machines will be assembled and launched to excavate the Airport Link mainline tunnel.

At project completion, Kalinga Park will be re-instated and returned to the community, with new BBQ facilities and children's playground and enhanced waterway and pathways.¹⁸

Three key worksites have been established in the Toombul precinct enabling construction and on-site management of the Toombul connection to Airport Link: Centro Toombul overflow car park (site offices), Ross Park and Kalinga Park. Key construction activities to be undertaken in the Toombul precinct for Airport Link:

¹⁷ BrisConnections (2009) Kedron precinct [accessed at <http://www.brisconnections.com.au/Construction/Kedron/tabid/188/Default.aspx> on 19 October 2010].

¹⁸ BrisConnections (2009) Toombul [accessed at <http://www.brisconnections.com.au/Construction/Toombul/tabid/189/Default.aspx> on 19 October 2010].

- Excavation and construction of a Tunnel Boring Machine (TBM) launch box in Kalinga Park where two TBMs will be lowered in parts for assembly underground
- Tunnelling operations - the TBMs will commence excavation of the mainline tunnel from Kalinga Park, moving south-west to Lutwyche, where the machines will be disassembled - starting early 2010
- An underpass beneath the North Coast Railway line
- An underpass beneath Sandgate Road to connect the Airport Link tunnel with East-West Arterial Road
- Construction of the buried ventilation station and its above-ground outlet adjacent to Sandgate Road
- Widening of Sandgate Road over Schulz Canal to accommodate a new signalised intersection
- Widening of East-West Arterial Road to accommodate two eastbound and two westbound lanes that will also form the ramp connections to the Airport Link tunnel.¹⁹

Wooloowin

The Wooloowin worksite:

is located on the vacant block of land bound by Park Road, Rose Street and Kent Road at Wooloowin.

Roadheader excavation at this site is now underway to construct a cavern that will link to the mainline Airport Link tunnel. This cavern will create a passage for the project's two tunnel boring machines as they travel west from Kalinga Park through to Lutwyche in mid-2010.

An access shaft approx 12m in diameter x 42m deep has been constructed at the Wooloowin site, providing direct access to the Airport Link tunnel for roadheader excavation of the caverns and civil, mechanical and electrical fit-out of the tunnels. The Wooloowin worksite will be operational for 29 months and does not represent a change to the project's design. At the end of the 29 months the land will be reinstated.²⁰

The Wooloowin worksite was approved in the change report of the CG in October 2009.

Windsor-Lutwyche

The Windsor-Lutwyche precinct:

Truro Street houses a major worksite where great progress is being made underground to excavate the Airport Link and Northern Busway tunnels.

Five roadheader machines will operate from the Truro Street site to tunnel both north and south-bound, while further north along Lutwyche Road, surface works continue for construction of the new Lutwyche Busway Station.

Local community landmark Pop's Fig signals the entrance to the Northern Busway tunnel at Truro Street. The Lutwyche Busway Station with open-air entrance plaza and new bus stops at Truro Street will enhance local connectivity, pedestrian safety and travel times for public transport users.

¹⁹ BrisConnections (2009) Toombul [accessed at <http://www.brisconnections.com.au/Construction/Toombul/tabid/189/Default.aspx> on 19 October 2010].

²⁰ BrisConnections (2009) Wooloowin worksite [accessed at <http://www.brisconnections.com.au/Construction/Wooloowin/tabid/195/Default.aspx> on 19 October 2010].

On completion in 2012, surface construction areas in this precinct will be returned to the State for future development.²¹

Three major worksites have been established in the Windsor-Lutwyche precinct enabling construction of Airport Link and Northern Busway: Truro Street (tunnelling site); Lamington Avenue and Lutwyche Road.

Key construction activities to be undertaken in the Windsor-Lutwyche precinct up to 2012 include:

- Diversion of Lutwyche Road southbound between Bradshaw Street and Norman Avenue
- Excavation of the Lutwyche Busway Station bridge
- Construction of the new Lutwyche Busway Station
- Re-alignment of Lutwyche Road to return to its original alignment
- A new southbound bus stop at Truro Street at the entrance to the Northern Busway
- A new northbound bus stop outside Windsor State School.²²

1.3 The parties

1.3.1 Proponent

The State of Queensland (State) is the proponent for the Project.²³

1.3.2 Coordinator-General

The CG is a corporation sole, created under the *State Development and Public Works Organisation Act 1971* (SDPWO Act), and is therefore a separate legal entity.

The CG plans, delivers and coordinates a program of works and planned developments throughout the State.²⁴

For the Project, the CG:²⁵

- declared it to be a 'significant project' for which an environmental impact statement (EIS) was required
- prepared terms of reference (TOR) for an EIS
- published the proponent's EIS for public and agency consultation and review
- evaluated the environmental effects of the Project
- prepared a report that evaluated the EIS and nominated conditions for the construction of the Project.

Due to the machinery of government changes that occurred on 21 February 2010, the CG and the relevant sections of the former DIP have now been incorporated into the Department of Employment, Economic Development and Innovation (DEEDI).

²¹ BrisConnections (2009) Windsor-Lutwyche precinct [accessed at <http://www.brisconnections.com.au/Construction/WindsorLutwyche/tabid/187/Default.aspx> on 19 October 2010].

²² BrisConnections (2009) Windsor-Lutwyche precinct [accessed at <http://www.brisconnections.com.au/Construction/WindsorLutwyche/tabid/187/Default.aspx> on 19 October 2010].

²³ DIP (July 2010) Submission to the Queensland Ombudsman – Preliminary Inquiries. In the early stages the State Government and Brisbane City Council commenced a detailed feasibility study into Airport Link.

²⁴ DIP (2007-2009) Coordinator-General [accessed at <http://www.dip.qld.gov.au/coordinator-general/index.php> on 12 November 2010].

²⁵ See SDPWO Act.

1.3.3 Department of Infrastructure and Planning

In relation to the Project, DIP, through its Compliance Unit, undertakes compliance activities on behalf of the CG.

Due to the machinery of government changes that occurred after the proposed report was forwarded, the CG and the relevant sections of the former DIP have been incorporated into DEEDI. However, for the readability of this report, I will continue to refer to that department as DIP.

1.3.4 Department of Environment and Resource Management

For the Project, the CG has provided jurisdiction to DERM to enforce specific imposed conditions including condition 9(d), which sets out noise goals, the exceedence of which triggers the application of mitigation measures and monitoring.

1.3.5 City North Infrastructure Pty Ltd

City North Infrastructure Pty Ltd (CNI) is a company, which is wholly owned by the State. Individual shareholders have been issued shares held in trust on behalf of DIP, Department of Transport and Main Roads (DTMR) and Queensland Treasury Holdings Pty Ltd.²⁶

Following approval from the Treasurer under s.44 of the *Financial Administration and Audit Act 1977* (since repealed by the *Financial Accountability Act 2009*), the State established CNI in 2006 to act for it in overseeing and managing the delivery of the Project.²⁷

CNI is governed by a board of directors comprising a chairman and five directors drawn from within the State government and externally. The board representatives from within government include the Deputy Coordinator-General (chairman), two officers from the DTMR and one from Queensland Treasury.²⁸

CNI represents the State in the procurement, delivery and contract management phase of Airport Link, Northern Busway (Windsor to Kedron) and Airport Roundabout Upgrade projects. CNI's website states that it acts autonomously as a 'Special Purpose Vehicle'.²⁹

CNI's role is to provide management services on behalf of the State in relation to the agreement between the State and BrisConnections. This includes managing, on behalf of the State, risks, issues or disputes that arise and negotiating and coordinating any modifications to the delivery of the Project.

CNI's website states:

²⁶ CNI (2010) Annual Report 2009-2010 [accessed at <http://www.dip.qld.gov.au/resources/publication/spv/city-north-infrastructure/city-north-infrastructure-annual-report-2010.pdf> on 12 November 2010] page 16.

²⁷ CNI (2010) Annual Report 2009-2010 [accessed at <http://www.dip.qld.gov.au/resources/publication/spv/city-north-infrastructure/city-north-infrastructure-annual-report-2010.pdf> on 12 November 2010] page 3.

²⁸ CNI (2010) Annual Report 2009-2010 [accessed at <http://www.dip.qld.gov.au/resources/publication/spv/city-north-infrastructure/city-north-infrastructure-annual-report-2010.pdf> on 12 November 2010] page 14.

²⁹ CNI (2008) Home [accessed at <http://www.citynorthinfrastructure.com.au/> on 12 October 2010].

We don't create the project. We don't build the project. We do make it happen, by linking government vision with the infrastructure and construction industry specialists who will bring the vision of world-class infrastructure in Queensland to life. Our involvement is complete, from business case and environment assessment, through to procurement, contract management, handover, and community engagement.³⁰

1.3.6 BrisConnections

The group of companies, which makes up what I refer to in this report as BrisConnections,³¹ includes:

- BrisConnections Operations Pty Ltd
- BrisConnections Finance Pty Ltd
- BrisConnections Contracting Pty Ltd
- BrisConnections Nominee Company Pty Ltd
- BrisConnections Holding 2 Pty Ltd as trustee for the BrisConnections Holding Trust
- BrisConnections Management Company Ltd as trustee for the BrisConnections Investment Trust.

These companies are registered on the Australian Stock Exchange.

After a tendering process in 2007 and 2008, BrisConnections has contracted with the State to build the Project.

Under a public-private partnership (PPP), BrisConnections will finance, design, construct, commission, operate and maintain Airport Link for a period of 45 years. Once the Airport Link tunnel is completed, BrisConnections will be able to collect tolls from motorists who choose to use this road.

BrisConnections will also design and build the Northern Busway (Windsor to Kedron) and the Airport Roundabout Upgrade, before handing the infrastructure back to the State.

BrisConnections' website states that:

A Public-Private Partnership (PPP) is a contractual arrangement between Government and the private sector which harnesses the skills and capability of the private sector in designing, constructing, operating, maintaining and financing major infrastructure projects.

One of the key characteristics of a PPP is that the Government maintains control of the infrastructure by monitoring the private sector's performance.³²

³⁰ CNI (2008) Home [accessed at <http://www.citynorthinfrastructure.com.au/> on 12 October 2010].

³¹ The result of my Office's search of the term 'BrisConnections' in <http://www.search.asic.gov.au/gns001.html> on 14 September 2010.

³² BrisConnections (2009) Frequently Asked Questions [accessed at <http://www.brisconnections.com.au/TheProject/FAQs/tabid/79/Default.aspx> on 13 October 2010].

1.3.7 Thiess John Holland

TJH is an unincorporated joint venture between Thiess Pty Ltd and John Holland Pty Ltd.³³ TJH entered into a contract with BrisConnections to undertake the design and construction of Airport Link, Northern Busway (Windsor to Kedron) and Airport Roundabout Upgrade.

1.3.8 Other parties

There are a number of other parties associated with overseeing the Project. They include an independent verifier who conducts an audit of TJH's compliance with the CG's imposed conditions.

My Office has considered the reports of the independent verifier in the course of the investigation.

The CG's imposed conditions for the Project require a six monthly construction compliance report, prepared by an independent and appropriately qualified person. The reports have been prepared by Simon Leverton BSc., DipEd, MAppSc. of Davis Langdon Certification Services (DLCS).

DIP reviews the construction compliance reports and may make recommendations to the CG if any further action is considered necessary.

1.3.9 Kalinga Wooloowin Residents Association Inc.

The Kalinga Wooloowin Residents Association Inc. (KWRA) was incorporated under the *Associations Incorporation Act 1981* in August 2009 and was formed in response to the proposed Wooloowin worksite that was announced to the public in June 2009.³⁴

The KWRA website states that it has taken up the task of representing all residents impacted by the Airport Link Project with its footprint covering the entire Project and its committee headed up by community representatives for all the major Project sites.³⁵ KWRA says that it currently has over 200 members.³⁶

The KWRA website further states:

The KWRA's number one short term objective is to prevent the Proposed Wooloowin Worksite based on a number of key arguments including the commonly accepted view that this proposed industrial site is not in fitting with our quiet community setting and was never included in the original Airport Link proposal.

The KWRA has longer term goals which include the promoting and improving our community and seeing through objectives such as reinstating the Kalinga name and area. Another objective is to protect and preserve the physical, social and historical fabric of Wooloowin, and to prevent the further intensification of traffic flows and the degradation of lifestyles and liveability of this inner city community.³⁷

³³ DIP (July 2010) Submission to the Queensland Ombudsman – Preliminary Inquiries.

³⁴ KWRA (June 2010) About us [accessed at <http://wooloowin.org/about/> on 12 October 2010].

³⁵ KWRA (June 2010) Home [accessed at <http://wooloowin.org/> on 12 October 2010].

³⁶ KWRA (June 2010) About us [accessed at <http://wooloowin.org/about/> on 12 October 2010].

³⁷ KWRA (June 2010) About us [accessed at <http://wooloowin.org/about/> on 12 October 2010].

1.4 Project progress

Construction of the Airport Link and the Northern Busway (Windsor to Kedron) projects began in November 2008 and the construction of the Airport Roundabout Upgrade began in April 2009.

A BrisConnections media release on 15 October 2010 stated:³⁸

Airport Link and the Northern Busway are due for completion in mid-2012, with the Airport Roundabout Upgrade on track to be fully open to traffic more than a year ahead of schedule.

The eastbound lanes of the new Airport Flyover were officially opened to traffic on 8 November 2010, a year before the original scheduled completion date of November 2011.³⁹

TJH's media release of 29 March 2011 stated that the Airport Link projects were then 70% complete.⁴⁰

³⁸ BrisConnections and TJH (15 October 2010) Media Release [accessed at http://www.brisconnections.com.au/Portals/0/docs/101015_Northern%20Busway%20breakthrough%20Media%20release%20APPROVED.pdf on 12 November 2010].

³⁹ BrisConnections (2009) Latest News [accessed at <http://www.brisconnections.com.au/News/tabid/63/Default.aspx> on 12 November 2010].

⁴⁰ Thiess John Holland (29 March 2011) *Media release: Airport Link Bowen Hills structures achieve another milestone.*

Chapter 2: Complaint and issues for investigation

2.1 The complaint

In June 2010, the KWRA, through its president, wrote to my Office and stated:

I now refer the matter to your Office in the form of a complaint about the methods and practices of the Department of Infrastructure and Planning and the decisions or lack of decisions by the Coordinator General. Attached is a copy of the Breaking Trust Report which provides complete detail of the matter.

In his covering letter, the president described 'extreme negative effects' being experienced by residents because of the Project works and said he had reports of residents being prescribed medication to sleep at night and to maintain their mental health.

A copy of the Breaking Trust Report (BTR) can be found on the KWRA website.⁴¹ In summary, the BTR's main points are:⁴²

1. Before residents were notified in October 2009 that work was to commence 24/7 at Kalinga Park on 7 November 2009, they were assured that, except for very limited special circumstances, 24/7 surface construction would never occur.
2. The documentation contained in the EIS unequivocally shows that, except for special circumstances, surface construction works were only ever intended to take place between the hours of 6.30am and 6.30pm, Monday to Saturday.
3. Even though the successful BrisConnections tender contained a significant number of design and construction changes to the Airport Link Project, these changes and the change report itself cannot be used to justify 24/7 work. The documents show clearly that, although there were changes to the Project, there were no changes to the imposed conditions (hours of work and noise goals) under which this work was to be undertaken.
4. KWRA does not agree with the interpretation being placed on the CG's imposed conditions that 24/7 work is permitted. KWRA understands that interpretation flows from the existence of night-time goals in the EIS and the change report and those imposed conditions cannot be used to justify 24/7 surface work. Nowhere in the discussion of the night-time noise goals (in the EIS, the change report, or the technical supporting documents) is there any discussion of night-time surface construction.
5. KWRA is concerned about who gave the 'green light' to TJH to commence 24/7 work, how that occurred, and the consideration of any proposal through the CG's Office, DIP and CNI.
6. Once the view was taken by TJH, CNI and the CG that 24/7 work was permitted, the position of the agencies shifted to how much noise was permitted during night-time surface operations. The position focused on 'What

⁴¹ KWRA (8 June 2010) Breaking Trust: A community investigation into Airport Link condition breaches [accessed at http://woolloomwin.org/breaking/trust/The_Breaking_Trust_Report.pdf on 18 October 2010].

⁴² Summary prepared by my Office for the purposes of preliminary inquiries of the CG, DIP and CNI.

level of noise is excessive?' KWRA says that it took many months from the time 24/7 work commenced for the CG to inform them of his clarification and reinforcement of the term 'excessive noise' (advised in a DIP letter to Toombul Community Liaison Group (CLG) dated 10 May 2010).

7. KWRA believes that those obligated to protect the interests of the community have abandoned them.

2.2 Other residents' contact with my Office

In addition to the complaint from KWRA, my Office has also received numerous complaints from residents affected by noise from night-time work on the Project. Some of the statements provided to my Office are:

Gallway Street, Windsor

1. I have been affected by the Airport Link Project at my residence, as I am only 50-60 metres away from a worksite.
2. The work that has been disturbing me is the traffic noise caused by worksite employees' vehicles, general machinery noises including excavators, pile drivers, rock breakers, the reversing beepers on some of the trucks and the creation of dust.
3. The impact of the works on me personally is that my sleep and that of my partner is frequently disturbed by the traffic and other worksite noise.

Gorman Street, Woolloowin

1. I have been affected by the Airport Link Project since approximately February 2010 at my residence.
2. The works that have been disturbing me is the sound of heavy machinery (eg: bulldozers and trucks), flashing lights in the middle of the night from machinery, on street parking by worksite employees and the creation of dust.
3. The impact of the works on me personally is that I am woken up by the noise. I have become an insomniac. I am regularly woken from my sleep between 10.30pm and 5.00am.

Brookfield Road, Kedron

1. I have been affected by the Airport Link Project for the last 12 months at my residence.
2. The works that have been disturbing me most were the dumping of fill material at all hours on the Stafford Road site, and the relocation of services (and associated works) in and around the site. Noise and dust is also generated by the movement of heavy construction vehicles down the street, and there are also problems with worksite employees parking.
3. The impact of the works on me personally is that I find it difficult to sleep from 11.00pm to 3.00am, and on some nights not at all. This is as a result of the noise from movements and activities on the site and the Stafford Road and Clarence Road relocation works, and the movement of vehicles along Brookfield Road.

The reported effects of the work on the sleep of these residents is consistent with the description given by the president in the KWRA complaint. Although there is some corroborating information as to residents being prescribed medication to sleep,⁴³ I am not in a position to assess the number of residents who may be in the same circumstances.

I have received one submission from a resident who advised that he was not directly affected by noise but was experiencing other problems such as deteriorating local roads, constant road and traffic changes and parking problems. The resident asked that I consider his preference for 24/7 surface works to continue so that the Project will be completed earlier.

2.3 Complaints generally

In considering the extent to which the issue of noise from night-time surface work is affecting the community, my Office has also considered the number and nature of complaints received by TJH, CG/DIP and DERM during the period 1 August 2009 to 31 July 2010.

2.3.1 Complaints received by TJH

The Airport Link monitoring reports produced by TJH relating to the relevant period indicate that on average, 281 complaints were received by TJH from 159 stakeholders each month.

These numbers represent all complaints for the Project and include a wide range of issues. In most of the Airport Link monitoring reports, TJH break down those complaints into categories. However, those categories are not fixed, meaning that different Airport Link monitoring reports comprise different lists of categories. It appears likely that complaints about noise from night-time surface work would be scattered across a number of categories.⁴⁴ On the assumption that most of the complaints represented in TJH's 'out-of-hours' categories were about noise from night-time surface work, about 1,039 complaints were received by TJH between June 2009 and July 2010.

2.3.2 Complaints received by CG/DIP

Information provided to my Office by DIP during the investigation indicates DIP received approximately 69 complaints from 20 complainants about the Project between 1 August 2009 and 31 July 2010.

It was difficult to isolate the complaints about night-time surface work from this material. While the complaints related to a range of issues relevant to the Project, noise was a common complaint.

2.3.3 Complaints received by DERM

DERM gave my Office a folder of printouts that indicated that in the period between January 2009 and July 2010, DERM recorded, in its Ecotrack electronic case management system, only 10 complaints about noise from night-time surface works.

⁴³ There are two examples of which my Office is aware.

⁴⁴ For example, some might be contained in the 'General Site Construction: Site out-of-hours' category while others might be in the 'Piling out-of-hours' category.

DERM also gave my Office a list of 26 people who had complained about the Airport Link Project up until September 2010.

It should be noted that some complainants made complaints to TJH, CG/DIP and/or DERM.

CNI made the following submission about this information:

This section notes that there may be some duplication of complaints between the various bodies that manage noise issues. The complaints system is designed to ensure that there should be almost total duplication of complaints. Complaints that are made directly to CNI, the Coordinator-General, Department of Infrastructure and Planning or Department of Environment and Resource Management are almost always referred back to TJH as the appropriate starting point for a complaint in line with the complaint management process.⁴⁵ Considering that almost all of the complaints will be duplicated between the various agencies, it is more accurate to state that, "In assessing the number of complaints, there will be many duplications as complainants make the same complaint to more than one agency or complainants follow the complaints management process that provides:

1. Complaints must initially be made to TJH;
2. If unsatisfied with TJH's handling of the complaint, they are asked to refer it to CNI; and
3. If unsatisfied with CNI's handling of the complaint, they are then asked to refer it to the Coordinator-General."

The Proposed Report as currently written might be interpreted to suggest that the project suffers a greater number of complaints than it actually receives.

It is also noted that in considering the number of project complaints, the context of the project should be acknowledged. It is noted that the project is a large-scale, complex construction activity in the inner-city suburbs of Australia's third largest city by population. So far the project has involved more than 14 million man-hours of work over 19 work sites with more than 31,000 households within the modeled potential area of impact.

As I have mentioned, I intend to prepare a further report looking at, among other things, whether the agencies' approach to handling complaints, including the process for escalating complaints, was appropriate.

2.4 Issues for investigation

The objects of my investigation communicated to the agencies are:

- 2.4.1 whether the Project documents and other information available to the community adequately conveyed the possibility of night-time surface work being undertaken during the Project
- 2.4.2 whether the Project conditions permitted night-time surface work
- 2.4.3 the adequacy of steps taken by the CG, DIP, CNI and DERM to monitor and enforce compliance with the Project conditions concerning night-time surface work

⁴⁵ Some complaints are not project complaints and, as such, are not referred back to TJH for initial response.

- 2.4.4 the suitability of the Project conditions to protect the community from excessive noise arising from the construction work and any associated activity, including the movement of people and vehicles
- 2.4.5 the adequacy of steps taken by DIP, CNI and DERM to monitor and enforce the Project conditions concerning night-time work other than surface work
- 2.4.6 the suitability of the complaints management system, including the process for escalation of complaints about noise from night-time work from TJH to CNI and DIP
- 2.4.7 the adequacy of the response by CNI, DIP and DERM to complaints about noise from night-time work.

2.5 Issues for this report

For the purposes of this report, the following issues will be dealt with:

- 2.5.1 whether the Project documents and other information available to the community adequately conveyed the possibility of night-time surface work being undertaken during the Project
- 2.5.2 whether the Project conditions permitted night-time surface work
- 2.5.3 the adequacy of steps taken by the CG, DIP, CNI and DERM to monitor and enforce compliance with the Project conditions concerning night-time surface work
- 2.5.4 the suitability of the Project conditions to protect the community from excessive noise arising from night-time surface work.

2.6 Issues for future report

I will consider other administrative practices in relation to the Project in a further report, including the handling of complaints about the Project works.

Chapter 3: Jurisdiction

3.1 Overview

Under the Ombudsman Act, the Ombudsman is an officer of the Parliament⁴⁶ whose functions include investigating the administrative actions of Queensland public sector agencies. The term 'agency' is defined in the Ombudsman Act to include a department, a public authority and a local government.⁴⁷

The term 'public authority' is defined in the Ombudsman Act to include entities established for a public purpose under an Act or established by government for a public purpose under an Act.⁴⁸

Under the Ombudsman Act, I have authority to:

- investigate the administrative actions of agencies on complaint or on my own initiative
- make recommendations to an agency being investigated about ways of rectifying the effects of its maladministration and improving its practices and procedures
- consider the administrative practices of agencies generally and make recommendations, or provide information or other assistance to improve practices and procedures.⁴⁹

The Ombudsman Act widens my jurisdiction by including in an administrative action of an agency, an administrative action taken for, or in the performance of functions conferred on, an agency, by an entity that is not an agency.⁵⁰

If I consider that an agency's actions were unlawful, unreasonable, unjust or otherwise wrong, I may provide a report to the principal officer of the agency. In my report, I may make recommendations to rectify the effect of the maladministration I have identified or to improve the agency's policies, practices or procedures with a view to minimising the prospect of similar problems occurring.

3.2 Jurisdiction in relation to the parties

3.2.1 CG, DIP and DERM

DIP and DERM are both State government departments and fall within the definition of 'agency' in the Ombudsman Act.

The CG is a corporation sole, created under the SDPWO Act. As the position was established for a public purpose under an Act, the CG is a public authority under the Ombudsman Act and is also an agency.

I therefore have jurisdiction to consider the administrative actions of the CG, DIP and DERM.

⁴⁶ Section 11(b), Ombudsman Act.

⁴⁷ Section 12, Ombudsman Act.

⁴⁸ Section 8, Ombudsman Act.

⁴⁹ Sections 6, 7(1) and 12, Ombudsman Act.

⁵⁰ Section 10(c), Ombudsman Act.

3.2.2 CNI

CNI is a company registered under the *Corporations Act 2001* and fully owned by the State. Following approval from the Treasurer under s.44 of the FAA Act the State established CNI in 2006 to act for it in overseeing and managing the delivery of the Project.⁵¹

CNI's actions in administering the Project are administrative actions taken for, or in the performance of, functions conferred on the CG or DIP which, as noted above, are agencies under the Ombudsman Act. CNI's actions in administering the Project are therefore administrative actions of an agency under s.10(c) of the Ombudsman Act, and fall within my jurisdiction.⁵²

3.2.3 BrisConnections and TJH

BrisConnections is a group of companies that has contracted with the State for construction of the Project. BrisConnections is a wholly private entity.

BrisConnections entered into a contract with TJH for the performance of the engineering and construction work for the Project. TJH is a joint venture between Thies Pty Ltd and John Holland Pty Ltd both of which are wholly private entities.

I do not have jurisdiction to investigate, or make recommendations about, the actions of BrisConnections or TJH.

The actions of BrisConnections and TJH are, however, in some respects relevant to my consideration of the administrative actions of agencies and other entities that do fall within my jurisdiction. This report contains information that is publicly available and that my Office obtained from BrisConnections and TJH.

I acknowledge receipt of a submission provided by TJH in response to a request by my Office during the course of the investigation even though TJH is not within my jurisdiction. My officers also benefitted from a tour of some of the worksites led by TJH and BrisConnections staff.

⁵¹ CNI (2010) Annual Report 2009-2010 [accessed at <http://www.dip.qld.gov.au/resources/publication/spv/city-north-infrastructure/city-north-infrastructure-annual-report-2010.pdf> on 12 November 2010] page 3.

⁵² Section 10(c), Ombudsman Act.

Chapter 4: About Ombudsman investigations

4.1 Procedure for gathering evidence

Section 25 of the Ombudsman Act provides as follows:

25 Procedure

- (1) Unless this Act otherwise provides, the ombudsman may regulate the procedure on an investigation in the way the ombudsman considers appropriate.
- (2) The ombudsman, when conducting an investigation:
 - (a) must conduct the investigation in a way that maintains confidentiality; and
 - (b) is not bound by the rules of evidence, but must comply with natural justice; and is not required to hold a hearing for the investigation; and
 - (c) may obtain information from the persons, and in the way, the ombudsman considers appropriate; and
 - (d) may make the inquiries the ombudsman considers appropriate.

4.2 Standard of proof and sufficiency of evidence

The Ombudsman Act outlines the matters on which the Ombudsman must form an opinion before making a recommendation to the principal officer of an agency.⁵³ These include whether the administrative actions investigated are unlawful, unreasonable, unjust, or otherwise wrong.⁵⁴

Although the Ombudsman is not bound by the rules of evidence,⁵⁵ the question of the sufficiency of information to support an opinion of the Ombudsman requires some assessment of weight and reliability.

The standard of proof applicable in civil proceedings is proof on the balance of probabilities. This essentially means that, to prove an allegation, the evidence must establish that it is more probable than not that the allegation is true.

Although the civil standard of proof does not apply in administrative decision-making (including the forming of opinions by the Ombudsman), it provides useful guidance.⁵⁶

4.3 Investigative steps taken to date

My Office's investigation of the complaint issues identified in section 2.5 has been completed. The investigation has been conducted informally,⁵⁷ that is, without the use of coercive investigation powers.⁵⁸

KWRA representatives initially attended my Office in June 2010 during which they submitted a letter of complaint and the BTR.

⁵³ Section 50, Ombudsman Act.

⁵⁴ Section 49(2), Ombudsman Act.

⁵⁵ Section 25(2), Ombudsman Act.

⁵⁶ See *Minister for Immigration and Ethnic Affairs v Wu Shan Liang* (1996) 185 CLR 259 at 282, and see also the discussion in Creyke, R and McMillan, J (2009) *Control of Government Action – Text, cases and commentary, 2nd edition*, LexisNexis Butterworths, Australia at 12.2.20.

⁵⁷ Section 24(a), Ombudsman Act.

⁵⁸ Part 4, Ombudsman Act.

In assessing the complaint my officers:

- electronically recorded an interview with representatives of KWRA
- met with some KWRA members at their residences and spoke to a number of members who contacted my Office
- conducted several site inspections (from public areas only) of the areas affected by the Project
- electronically recorded an interview with representatives of DIP, CG and CNI
- obtained relevant documentation from the agencies, including a lengthy submission from the Director of Infrastructure Projects in DIP dated 27 July 2010.

By letters dated 23 August 2010, the former Ombudsman, Mr David Bevan, advised the following parties of his decision to investigate:

- Mr Geoff Dickie, Acting Coordinator-General
- Mr Paul Low, Acting Director-General, DIP
- Mr David Lynch, Chief Executive Officer, CNI
- Mr John Bradley, Director-General, DERM.

The objectives of the investigation communicated to the parties have been identified in section 2.4 of this report.

During the course of the investigation my officers:

- held preliminary meetings with representatives of CG, DIP, CNI and DERM to discuss the investigation and the relevant issues
- considered documentation provided by CG, DIP, CNI and DERM in response to a request of each agency made in letters dated 23 August 2010
- attended DERM and DIP offices to inspect electronic and hard copy files
- considered a response from the CG (Mr Graeme Newton) dated 8 October 2010 relating to the former CG's clarification of the meaning of 'excessive noise' in condition 7(b) of the change report
- interviewed four officers from DIP and two officers from DERM to obtain specific information about their agencies' actions. These officers were:
 - Manager, Brisbane City North, DERM (Officer A)
 - Senior Environmental Officer, Brisbane City North, DERM (Officer B)
 - Executive Director, Infrastructure Projects, DIP (Officer C)
 - Director, Infrastructure Projects, DIP (Officer D)
 - Director, Land Acquisition and Management (acting as Director of Compliance Unit, DIP) (Officer E)
 - Senior Project Officer, Compliance Unit, DIP (Officer F)
- had discussions with numerous members of the community affected by the works (some of whom were associated with KWRA) and obtained information about the effect of the works on them and any attempts they had made to have their concerns addressed. Most of these community members initiated contact with us and some were contacted from a list provided to us by KWRA of community members who had indicated their wish to provide information for our investigation. Signed statements were obtained from a number of persons relating to what they were experiencing and their efforts to have their concerns addressed through the relevant agencies
- conducted site inspections at the properties of some of the members of the community who had contacted us, including out of hours

- were shown a number of construction sites and activities taking place by senior officers of BrisConnections, TJH and CNI
- received numerous written submissions from members of the community affected by the works and copies of documents relating to complaints they had made to the relevant agencies about the works
- made inquiries with the BCC about noise monitoring it had conducted in the affected areas
- obtained legal advice from Mr Robert Wensley QC⁵⁹ relating to the interpretation of imposed condition 7(b) and imposed condition 9
- obtained advice from Wilkinson Murray (WM), acoustical consultants,⁶⁰ about noise issues relevant to my Office's investigation
- invited BrisConnections and TJH to make a submission on issues relevant to the investigation, which was accepted by TJH. A submission was received from TJH on 19 November 2010
- provided a briefing to KWRA members on the progress of the investigation on 3 March 2011.

4.4 Procedural fairness or natural justice

The terms 'procedural fairness' and 'natural justice' are often used interchangeably within the context of administrative decision-making. The rules of procedural fairness have been developed to ensure that decision-making is both fair and reasonable.

The Ombudsman must also comply with these rules when conducting an investigation.⁶¹ Further, the Ombudsman Act provides that, if at any time during the course of an investigation it appears to the Ombudsman that there may be grounds for making a report that may affect or concern an agency, the principal officer of that agency must be given an opportunity to comment on the subject matter of the investigation before the report is made.⁶²

To satisfy this obligation, a proposed report dated 5 January 2011 was given by the Acting Ombudsman to:

- the CG, who was then also the DG of DIP
- the DG of DERM
- the Chief Executive Officer of CNI.

Their responses were sought by 31 January 2011, which was extended to 14 February 2011.

I received a combined response, dated 14 February 2011, from the CG and the DG of DIP, as these roles are now performed by separate people. Due to machinery of government changes that occurred after the proposed report was forwarded, the former DIP is now called the Department of Local Government and Planning. However, for readability of this report, I will continue to refer to that department as DIP.

⁵⁹ BE (Chem)(Hons) *Qld.*, LLB (Hons) *Qld.*, MEngSc *Qld.*

⁶⁰ Dr Rob Bullen, BSc (Hons), PhD, MASS and Andrew Bioletti, BE (Mechanical).

⁶¹ Section 25(2), Ombudsman Act.

⁶² Section 26(3), Ombudsman Act.

I have also received a response from the Chief Executive Officer of CNI, dated 14 February 2011. I received the DG of DERM's response on 4 March 2011, although a second version of his response was provided to me on 15 March 2011.

I acknowledge the efforts of the agencies to respond to the proposed report at a time when they were dealing with the aftermath of the Brisbane floods and other natural events affecting Queensland.

Section 55(2) of the Ombudsman Act provides that I must not make adverse comment about a person in a report unless I give that person an opportunity to make submissions about the proposed adverse comment. The person's defence must be fairly stated in the report if the Ombudsman still proposes to make the comment. Notices were issued to two former CGs, Mr Ken Smith and Mr Colin Jensen. Both provided responses to the notices.

4.5 References to legal advice

CNI has requested that, in this report, I make no mention of whether those agencies have obtained legal advice. The CG/DIP has requested that I simply refer to legal advice it has obtained as 'professional advice' and make no mention of the content of legal advice it has obtained.

I consider the public interest is served by referring to the existence of legal advice obtained by the agencies, as the fact the agencies obtained that legal advice demonstrates they were attempting to resolve issues around noise from night-time surface work.

I cannot see any purpose in referring to the legal advice instead as 'professional advice'.

Of course, to preserve the agencies' legal professional privilege, I make no mention of the content of the legal advices.

4.6 Responses of agencies

I have carefully considered the information provided by the agencies in their responses to the proposed report, and from Mr Smith and Mr Jensen. Extracts of the particular submissions received by my Office are available separately on a CD.

Where I have formed an alternative opinion or adopted an alternative recommendation from the proposed opinion or proposed recommendation in the proposed report, I have reproduced relevant parts of the agencies' and former CG's responses at that point in the report. Following consideration of submissions, I have not adopted some proposed opinions and proposed recommendations and they have been removed.

It must be noted that in forming my opinions and making my recommendations, I am not expressing any opinion about the conduct of BrisConnections or TJH or their compliance with condition 7(b).

4.7 De-identification

This report is about the responses of various government agencies to complaints about aspects of the delivery of the Airport Link Project, particularly noise from night-time surface work.

In most instances, it was not necessary to identify individuals connected with my investigation and to the extent possible I have therefore deleted from this report:

- references to the names of most senior agency officers and instead referred to their position titles
- references to the names of other agency officers and their position titles
- other information that could identify any officer unless the information is critical to a purpose of this report. Where identification of an officer was critical to the purpose of this report, I have in most cases assigned that officer a unique identifier, for example, Officer A
- references to the names of KWRA members, BrisConnections and TJH officers
- other than where the street number of particular properties where noise monitoring has occurred is disclosed in the Project documents, or is an unoccupied monitoring site, I have de-identified the street number where noise monitoring occurred.

Chapter 5: Relevant legislation and policy

5.1 State Development and Public Works Organisation Act 1971

5.1.1 Background and purpose

The predecessor of the SDPWO Act was passed in 1938. It was primarily concerned with the development of the State and the creation of employment through a coordinated system of public works.⁶³ In 1971, that Act was recast and amended to provide, among other things, a means of environmental coordination of development.⁶⁴ It has been said that these amendments laid the foundation for the CG's role in the facilitation of major private sector developments in Queensland.⁶⁵

In 1999, the Queensland Parliament passed amendments that recognised the national and international trend for the increased involvement of the private sector in the construction, ownership, operation and maintenance of public infrastructure through public-private partnerships (PPPs) and Queensland's desire to foster more PPP projects.⁶⁶

The 1999 amendments introduced, among other things, the EIS process, in recognition of increased community expectations for environmental coordination of certain projects.⁶⁷

Today the purpose of the SDPWO Act is:⁶⁸

... to provide for State planning and development through a coordinated system of public works organisation, for environmental coordination, and for related purposes.

In 2006, the then Deputy Premier, the Honourable Anna Bligh MP, also summarised the purpose of the Act as:⁶⁹

The act facilitates the development of vital infrastructure and other development, both public and private, and the act provides measures to ensure that proper account is taken of the environment in development of these projects.

⁶³ The Honourable J.P. Elder, MP (15 April 1999) Legislative Assembly Record of Proceedings (Hansard) at page 1161 [accessed at <http://www.parliament.qld.gov.au/view/legislativeAssembly/hansard/documents/1999/990415ha.pdf> on 2 November 2010].

⁶⁴ The Honourable J.P. Elder, MP (15 April 1999) Hansard at page 1161 [accessed at <http://www.parliament.qld.gov.au/view/legislativeAssembly/hansard/documents/1999/990415ha.pdf> on 2 November 2010].

⁶⁵ The Honourable J.P. Elder, MP (15 April 1999) Hansard at page 1161 [accessed at <http://www.parliament.qld.gov.au/view/legislativeAssembly/hansard/documents/1999/990415ha.pdf> on 2 November 2010].

⁶⁶ The Honourable J.P. Elder, MP (15 April 1999) Hansard at page 1161 [accessed at <http://www.parliament.qld.gov.au/view/legislativeAssembly/hansard/documents/1999/990415ha.pdf> on 2 November 2010].

⁶⁷ Explanatory Notes to the State Development and Public Works Organisation Amendment Bill 1999 at page 1 [accessed at http://www.legislation.qld.gov.au/Bills/49PDF/1999/StateDev_PubWksOrgAmdB99Exp.pdf on 2 November 2010].

⁶⁸ Preamble, SDPWO Act.

⁶⁹ The Honourable Anna Bligh, Deputy Premier (2 November 2006) Hansard at page 534 [accessed at http://www.parliament.qld.gov.au/view/legislativeAssembly/hansard/documents/2006.pdf/2006_11_02_WEEKLY.pdf]; see also Explanatory Notes to the State Development and Public Works Organisation Amendment Bill 1999 at page 1 [accessed at http://www.legislation.qld.gov.au/Bills/49PDF/1999/StateDev_PubWksOrgAmdB99Exp.pdf on 2 November 2010].

5.1.2 Significant projects and EIS process

Section 25 of the SDPWO Act requires the CG to coordinate the actions of government to ensure that proper account is taken of the environment in connection with certain developments.

Under s.26, the CG can declare a project to be a significant project for which an EIS is required. An EIS is the proponent's statement to the CG about how the proposed project might impact on the environment.

The initial EIS process is as follows:

- The CG must notify the public that an EIS is required for the project and invite comments on the draft terms of reference.⁷⁰
- The CG must, having regard to the comments received, then finalise the terms of reference and give them to the proponent.⁷¹
- The proponent must prepare the EIS to the satisfaction of the CG.⁷² The CG must release the EIS to the public and call for submissions.⁷³
- The CG must evaluate the EIS, the submissions and other material he considers relevant and prepare a report about his evaluation.⁷⁴
- Also, to the extent that the project does not involve a material change of use that, under the SP Act, is impact assessable, and division 4, subdivision 2 and divisions 5, 6, 6A and 7 of the SDPWO Act do not apply to the project, the CG may impose his own conditions⁷⁵ (in this report, referred to as 'imposed conditions').

5.1.3 Project change process

Division 3A of part 4 of the SDPWO Act is about proposed changes to a project after the EIS process.

The division was added to the SDPWO Act in 2005, to allow the proponent to propose a change (proposed change) to the project and have it considered by the CG without the delay of recommencing the EIS process.

The project change process is as follows:

- The proponent may apply to the CG to evaluate the environmental effects of the proposed change, its effects on the project and other related matters.⁷⁶
- The CG may seek further information from other parties (for example, DERM) and the proponent to help make the evaluation.⁷⁷
- The CG must decide whether to require the proponent to publicly notify the proposed change and its effects on the project⁷⁸ and advise the proponent of his decision.⁷⁹

⁷⁰ Section 29, SDPWO Act.

⁷¹ Section 30, SDPWO Act.

⁷² Section 32, SDPWO Act.

⁷³ Section 33, SDPWO Act.

⁷⁴ Section 34, SDPWO Act.

⁷⁵ Section 35G, SDPWO Act.

⁷⁶ Section 35C, SDPWO Act.

⁷⁷ Section 35F(1), SDPWO Act.

⁷⁸ Section 35G(1), SDPWO Act.

⁷⁹ Section 35G(2), SDPWO Act.

- If the CG's decision is to require public notification, the proposed change and its effect on the project is publicly notified in the way decided by the CG and a call made for submissions.⁸⁰
- The CG must then evaluate the proposed change. In doing so, the CG must consider each of the following:
 - the nature of the proposed change and its effects on the project
 - the project as currently evaluated under the CG's report for the EIS for the project
 - the environmental effects of the proposed change and its effects on the project
 - all properly made submissions about the proposed change and its effects on the project
 - the EIS, the submissions about the EIS and other material to the extent the CG considers it is relevant.⁸¹
- The CG must then prepare a 'change report', which sets out his evaluation.⁸² The change report may also amend any of his previously imposed conditions.⁸³
- The CG must give a copy of the change report to the proponent and publish the report.⁸⁴
- The CG's initial report for the EIS and the change reports both have effect for the project.⁸⁵ However, if the reports conflict, the CG's change report prevails to the extent of the inconsistency.⁸⁶

5.1.4 Imposed conditions and s.54G declaration

In 2005, the CG raised his concern about his inability to impose certain conditions on the construction of the Clem7 Tunnel.⁸⁷ Particularly, he stated:

The only question in my mind which remains to be answered, is how best to ensure accountability and transparency in the implementation of the proposed environmental management regime, given that there is no development approval for the town planning 'use' required for the Project [*i.e. a tunnel*] which might otherwise govern the construction and operation of the Project. The absence of an existing mechanism to ensure the Proponent's proposed management regime is implemented could be addressed by a number of mechanisms.⁸⁸

He went on to recommend that the government consider the option of a new ERA (Environmentally Relevant Activity) under the *Environmental Protection Act 1994* (EP Act) or amendments to the SDPWO Act to provide a mechanism by which the proponent's proposed environmental management regime could be attached as conditions to the tunnel project.⁸⁹

⁸⁰ Section 35G(4), SDPWO Act.

⁸¹ Section 35H, SDPWO Act.

⁸² Section 35I(1), SDPWO Act.

⁸³ Section 35I(2)(c), SDPWO Act.

⁸⁴ Section 35J, SDPWO Act.

⁸⁵ Section 35K(1), SDPWO Act.

⁸⁶ Section 35K(2), SDPWO Act.

⁸⁷ Then referred to as the North South Bypass Tunnel Project.

⁸⁸ Coordinator-General (August 2005) Coordinator-General's Report on the Environmental Impact Statement for the proposed North-South Bypass Tunnel Project at page 20 [accessed at <http://www.parliament.qld.gov.au/view/legislativeAssembly/tableOffice/documents/TabledPapers/2005/5105T4253.pdf> on 2 November 2010].

⁸⁹ Coordinator-General (August 2005) Coordinator-General's Report on the Environmental Impact Statement for the proposed North-South Bypass Tunnel Project at page 21 [accessed at <http://www.parliament.qld.gov.au/view/legislativeAssembly/tableOffice/documents/TabledPapers/2005/5105T4253.pdf> on 2 November 2010].

Later that year, a Bill⁹⁰ was introduced into Parliament proposing that the:

- CG be given the ability to impose conditions under the SDPWO Act
- CG and others be given the ability to apply to the Planning and Environment Court for a declaration that there had been substantial compliance with the conditions.

About these changes, the Explanatory Notes to the Bill stated:⁹¹

It is desirable to give certainty to the public and the proponent as well as the consortia bidding for the project that the conditions recommended by the CG can be enforced.⁹²

...

... the CG considers that proponents of significant projects should comply with environmental management plans and other measures designed to lessen the impact of the project even where there is no relevant regulatory approval required for the project.⁹³

...

The nature of the conditions imposed by the CG for a project may be stated as objectives to be achieved in the undertaking of the project or desired outcomes which are capable of being achieved by [a] range of measures, rather [than] prescriptive conditions which have clearly identifiable parameters. Accordingly, it is appropriate for the court to consider a range of relevant policies in determining what order can be made in a proceeding about whether there has been substantial compliance with an imposed condition.

Section 54G(2) now provides that the CG and others may bring a proceeding in the Planning and Environment Court for a declaration about whether there has been substantial compliance with an imposed condition for the undertaking of the Project.

5.1.5 Imposed conditions and the Sustainable Planning Act

Imposed conditions are treated as conditions of a development approval under the SP Act.⁹⁴ Therefore, a person (including contractors and agents)⁹⁵ who contravenes an imposed condition commits an offence of contravening a development approval under s.580 of the SP Act.⁹⁶ The CG and others may also ask a court to remedy or restrain such an offence.⁹⁷

⁹⁰ State Development and Public Works Organisation and Other Legislation Amendment Bill 2005.

⁹¹ Explanatory Notes for Amendments to be moved during consideration in detail by the Honourable Peter Beattie MP – State Development and Public Works Organisation and Other Legislation Amendment Bill 2005 at page 8 [accessed at http://www.legislation.qld.gov.au/Bills/51PDF/2005/StateDevtOLAB05_AinCE.pdf on 2 November 2010].

⁹² Explanatory Notes for Amendments to be Moved During Consideration in Detail by the Honourable Peter Beattie MP – State Development and Public Works Organisation and Other Legislation Amendment Bill 2005 at page 2 [accessed at http://www.legislation.qld.gov.au/Bills/51PDF/2005/StateDevtOLAB05_AinCE.pdf on 2 November 2010].

⁹³ Explanatory Notes for Amendments to be moved during consideration in detail by the Honourable Peter Beattie MP – State Development and Public Works Organisation and Other Legislation Amendment Bill 2005 at page 5 [accessed at http://www.legislation.qld.gov.au/Bills/51PDF/2005/StateDevtOLAB05_AinCE.pdf on 2 November 2010].

⁹⁴ Section 54(C), SDPWO Act.

⁹⁵ Section 54(D)4, SDPWO Act.

⁹⁶ Section 54(D)2, SDPWO Act.

⁹⁷ Section 54F, SDPWO Act and chapter 7, part 3, division 5, SP Act.

5.1.6 Imposed conditions and the Environmental Protection Act

Also, a person who contravenes a development condition of a development approval commits an offence under s.435 of the *Environmental Protection Act 1994* (EP Act).⁹⁸ The CG and others may also ask a court to remedy or restrain such an offence.⁹⁹

5.2 SDPWO Act regulatory tools

In 2008, a number of regulatory tools were added to the SDPWO Act. The two primary tools are:

- **157B Power to give enforcement notice** – If the CG reasonably believes a person has contravened, or is contravening, an imposed condition,¹⁰⁰ he may give the person a written notice (an **enforcement notice**) requiring the person to comply with the condition; or take stated steps the CG considers are reasonably necessary to ensure compliance with the condition.
- **157I Starting proceeding for enforcement order** – The CG may start a proceeding in the Planning and Environment Court for an enforcement order to remedy or restrain a contravention of an imposed condition.

There are no explanatory notes or parliamentary debate to aid my understanding of the reason for the addition of these tools.

5.2.1 DIP's Strategic Compliance Plan

DIP's Strategic Compliance Plan is available on DIP's website.¹⁰¹ According to the Strategic Compliance Plan, the primary role of DIP's Compliance Unit is to evaluate a proponent's compliance with the conditions imposed by the CG and address any non-compliance through education, remediation and/or enforcement action.¹⁰²

The Strategic Compliance Plan states:¹⁰³

The Coordinator-General will choose the most appropriate enforcement option, depending on the situation, the desired outcome and the seriousness of the offence, or threatened offence. In more serious cases or matters where other statutory tools have failed to achieve the desired outcome, the Coordinator-General may decide to prosecute.

DIP has advised my Office that the Compliance Unit employs a range of informal options to ensure a culture of compliance with the imposed conditions including site inspections, regular meetings, warning letters and referral letters to other agencies.¹⁰⁴

⁹⁸ Other offences apply; however, this is the only offence relevant for this report.

⁹⁹ Section 54F, SDPWO Act and s.505 of the EP Act.

¹⁰⁰ An imposed condition under s.35(4)(d) of the SDPWO Act is an enforceable condition for this section – s.157A, SDPWO Act.

¹⁰¹ DIP (undated) Strategic Compliance Plan [accessed at <http://www.dip.qld.gov.au/resources/plan/compliance/strategic-compliance-plan.pdf> on 12 November 2010]

¹⁰² DIP (July 2010) Submission to the Queensland Ombudsman – Preliminary Inquiries.

¹⁰³ DIP (undated) Strategic Compliance Plan [accessed at <http://www.dip.qld.gov.au/resources/plan/compliance/strategic-compliance-plan.pdf> on 12 November 2010] and DIP (July 2010) Submission to the Queensland Ombudsman – Preliminary Inquiries.

¹⁰⁴ DIP (July 2010) Submission to the Queensland Ombudsman – Preliminary Inquiries.

5.2.2 Summary

Since 1999, the SDPWO Act has evolved to provide for and meet the challenges of major infrastructure construction via PPPs. It has incorporated an EIS and project change process to reflect the need for environmental coordination and, where appropriate, reduce the chances of delay in progressing these significant projects. A declaration can now be sought from the Planning and Environment Court where compliance with imposed conditions is in question. A breach of imposed conditions is now an offence under the SP Act and the EP Act. Regulatory tools have also been added to the SDPWO Act with the apparent aim of aiding enforcement of imposed conditions.

5.3 Environmental protection legislation – offence of causing environmental nuisance

Section 15 of the EP Act relevantly provides that environmental nuisance is unreasonable interference or likely unreasonable interference, by noise,¹⁰⁵ with a quality of the environment that is conducive to public amenity.

Under ss.440(1) and (2) of the EP Act, a person must not unlawfully cause an environmental nuisance. Under s.54D(3) of the SDPWO Act, s.440 is to be read as if the imposed conditions were conditions of a development approval.¹⁰⁶ Section 440 goes on to state:

Schedule 1 of the EP Act states:

3 Nuisance regulated by other laws

Environmental nuisance caused by any of the following—

- ...
- (f) development carried out under an approval under the *Sustainable Planning Act 2009* that authorises the environmental nuisance;
- ...

In summary, the offence of causing environmental nuisance (under the EP Act) does not apply if an imposed condition authorises the nuisance. Therefore, it is critical that the terms of imposed conditions clearly state the extent to which nuisance, such as noise, is permitted.

5.4 EP Act regulatory tools

The primary regulatory tools available under the EP Act are:

- **323 Environmental investigation** – If noise nuisance has been caused or is likely to be caused, DERM may require a person (including a company) to conduct or commission an environmental investigation and submit an environmental evaluation report.
- **358 Environmental protection order (EPO)** – DERM may issue an EPO if, after an environmental evaluation, DERM is satisfied that unlawful noise nuisance has been or is likely to be caused.

¹⁰⁵ Among other nuisances.

¹⁰⁶ Section 54(D)3, SDPWO Act.

- **440 Offence of causing noise nuisance** – Causing noise nuisance is an offence for which the offender can be prosecuted. The offence of causing environmental nuisance (under the EP Act) does not apply to the extent that an imposed condition authorises the nuisance.¹⁰⁷
- **451 Requiring information** – DERM may issue a written notice to a person requiring certain information be provided relevant to the administration of the EP Act.
- **505 Restraint of noise nuisance** – DERM and others may bring a proceeding in the Planning and Environment Court to restrain a person from committing the offence of causing noise nuisance.

5.5 Imposed conditions

5.5.1 Evaluation report May 2007 and change report

Imposed conditions are contained in schedule 3 of both the CG's evaluation report of May 2007¹⁰⁸ and the change report.¹⁰⁹ The conditions that are mainly relevant to this report are 7(b) and 9(d). They are the same in both documents. I have set them out in full below.

Condition 7(b) states:

- (b) Collection, unloading and haulage of spoil from construction sites may be undertaken at any time of the day or night between 6.30am Mondays to 6.30pm Saturdays, but with no haulage on Sundays or public holidays. Otherwise, construction activities for works on or above the surface and which generate excessive levels of noise, vibration, dust or construction traffic movements, must only be undertaken between 6.30am to 6.30pm Mondays to Saturdays and at no time on Sundays or public holidays, except for special circumstances where the above-the-surface works should be conducted outside these days and hours. Examples of such special circumstances include:
 - (i) works on arterial roads to avoid disruption to peak traffic flows (eg Inner City Bypass, Lutwyche Road, Gympie Road, East West Arterial);
 - (ii) works in rail corridors; and
 - (iii) works involving and transport of large pre-fabricated components (eg bridge works).

Condition 9(d) states:

- (d) Where the predictive modelling predicts noise goals for sleep disturbance are likely to be exceeded by construction works, consultation and reasonable and practicable mitigation and management measures must be adopted. These measures must be developed in consultation with owners and occupants of potentially-affected premises. The noise goals are:

¹⁰⁷ Section 440(3) and schedule 1, s.3, EP Act.

¹⁰⁸ CG (May 2007) Coordinator-General's Report on the EIS for the proposed Airport Link Project [accessed at <http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/airport-link-c-g-report.pdf> and http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/mp_airport_link_cg_report_appendix1.pdf on 2 November 2010]; see also section 6.3.

¹⁰⁹ CG (July 2008) Coordinator-General's Change Report on the Environmental Impact Statement for the Airport Link Project [accessed at <http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/airport-link-change-report1.pdf> and <http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/appendix-1-change-report-airport-link.pdf> on 2 November 2010]; see also section 6.5.

- (i) For intermittent construction noise, the internal noise goals (sleeping areas) to avoid sleep disturbance during night hours (ie 6.30pm to 6.30am) are:
 - (A) 50 dBA L_{Amax} (for residences within R4 – R6 categories¹¹⁰ as described in NIAPSP), or
 - (B) 45 dBA L_{Amax} (for residences within R1 – R3 categories as described in NIAPSP).
- (ii) For steady construction noise, the internal noise goals (sleeping areas) to avoid sleep disturbance during night hours (ie 6.30pm to 6.30am) are:
 - (A) 40 dBA $L_{Aeq,adj}$ (15 minutes) for temporary noise and 35 dBA $L_{Aeq,adj}$ (15 minutes) for long-term noise (for residences R4 – R6 categories as described in NIAPSP)¹¹¹, or
 - (B) 35 dBA $L_{Aeq,adj}$ (15 minutes) for temporary noise and 30 dBA $L_{Aeq,adj}$ (15 minutes) for long-term noise (for residences within R1 – R3 categories as described in NIAPSP)¹¹²

Schedule 4 of Appendix 1 of the change report is a table setting out the entities the CG nominates to have jurisdiction for each imposed condition.¹¹³

Phase/condition reference	Proponent responsibility/tasks	Entity with jurisdiction	Consultative bodies
Schedule 3, condition 7	General Construction	Co-ordinator-General	Brisbane City Council, Environmental Protection Agency, Department of Main Roads, Queensland Transport
Schedule 3, condition 9	Noise and Vibration	Environmental Protection Agency	Department of Main Roads, Brisbane City Council

5.5.2 Imposed conditions – Woolloowin change report

Imposed conditions applying to the Woolloowin worksite are contained in the CG’s Woolloowin change report.¹¹⁴ The following conditions, in schedule 3, state:

¹¹⁰ NIAPSP, section 6.2.2 – Areas with dense to extremely dense transportation or commercial and industrial activities.

¹¹¹ NIAPSP, section 6.2.2 – Application of AS2107.

¹¹² NIAPSP, section 6.2.2 – Application of AS2107.

¹¹³ See s.54B(3), SDPWO Act and see for example CG (October 2009) Coordinator-General’s Change Report Airport Link Project—Woolloowin Worksite Modification [accessed at <http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/cg-change-report-oct-2009.pdf> on 12 November 2010] at page 37.

¹¹⁴ CG (October 2009) Coordinator-General’s Change Report Airport Link Project—Woolloowin Worksite Modification [accessed at <http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/cg-change-report-oct-2009.pdf> on 2 November 2010]; see also section 6.7.

7. General construction

- (c) Prior to the completion of the acoustic shed, work may only be undertaken at the Woolloowin worksite between 6.30am to 6.30pm daily on Monday – Saturday, and at no time on Sundays or public holidays. After the completion of the acoustic shed work may occur within the acoustic shed at any time, subject to compliance with these conditions.

9. Noise and vibration

- (a) Undertake the Woolloowin project change in accordance with the Construction EMP and the Construction Noise and Vibration EMP Sub-Plan for the Woolloowin project change.
- (b) Prior to site establishment, prepare and implement a Construction Noise and Vibration EMP Sub-Plan for the Woolloowin project change addressing the environmental objectives and performance criteria for noise and vibration management, providing measures to mitigate and manage the adverse environmental impacts from noise and vibration, and to establish early consultation with the owners and occupants of potentially affected sensitive places. The Construction Noise and Vibration EMP Sub-Plan should be based on predictive modelling of the potential construction noise and vibration impacts having regard to the proposed construction methods, the proximity of sensitive places.
- (c) The Construction Noise and Vibration EMP Sub-Plan must include:
 - (i) measures for mitigation of predicted impacts on sensitive places (e.g. installation of acoustic screens, enclosure of worksites) identified in the predictive modelling. Measures may include those contained in the Draft Outline EMP (Construction) in Chapter 19 of the EIS, measures provided in the RFPC or other measures in accordance with these conditions.
 - (ii) programming of activities to avoid, minimise and mitigate noise impacts (e.g. hours of work for particular circumstances or locations)
 - (iii) operational techniques to avoid, minimise and mitigate noise impacts (e.g. use of particular construction techniques to suit circumstances)
 - (iv) for sensitive places identified in the predictive modelling referred to in (b) above, conduct on-going monitoring of construction noise and vibration levels relative to environmental requirements established in the Construction EMP
 - (v) within three days of the commencement of each phase of construction, and at least monthly thereafter, noise monitoring is to be undertaken at representative locations (including the most potentially affected sensitive place) during day-time (6:30am – 6:30pm), evening (6:30pm – 10:30pm) and night-time (10:30pm – 6:30am) for the purposes of comparing the measured noise levels to predictive modelling results. Where the actual measured noise levels vary by more than 2db(A) from the predicted noise levels the model must be re-calibrated to ensure the model accurately predicts the impacts and the higher of the two levels used.
 - (vi) consultative measures (e.g. early, on-going and effective consultation, including advanced notification to owners and occupants of potentially affected properties)
 - (vii) prior to site establishment, building condition surveys must be conducted of properties identified in the predictive modelling above as likely to be adversely affected.

- (d) The proponent must use its best endeavours to complete the construction of the acoustic shed walls to a height of at least 5m prior to the use of a hydraulic hammer (rock breaker) at the Wooloowin worksite. If construction works require the use of a hydraulic hammer prior to the completion of the acoustic shed then the hydraulic hammer may only be used:
- Between 8am – 5pm daily Monday to Friday (not including public holidays)
 - Between 8am – 12 noon on Saturdays
 - If the acoustic barrier is sealed, i.e. all doors and access gates are closed.

5.5.3 Summary

The imposed conditions in the 2007 evaluation report and change report apply to the whole Project. The imposed conditions in the Wooloowin change report apply only to the Wooloowin worksite. Where imposed conditions in the Wooloowin change report conflict with earlier conditions, the latter condition prevails. As I will discuss in this report, condition 7(b) in the 2007 evaluation report and the change report provides that noise from night-time surface work is acceptable if it is not ‘excessive noise’. However, this term is not defined. In contrast, I note the Wooloowin change report imposed conditions are more prescriptive as to the extent noise from night-time surface work is authorised. I will discuss the CG’s increased focus on working hours and noise from night-time surface work since 2009 in chapter 6.

5.6 Relevant noise standards and policies

5.6.1 Environmental Protection (Noise) Policy 2008

The Environmental Protection (Noise) Policy 2008 (EP Noise Policy) is legislation subordinate to the EP Act.

The EP Noise Policy¹¹⁵ states acoustic quality objectives for enhancing or protecting certain environmental values. It does this using a table in schedule 1 of the policy. The relevant part of that table is:

Sensitive receptor	Time of day	Acoustic quality objectives (measured at the receptor) <i>dB(A)</i>			Environmental value
		LAeq,adj,1hr ¹¹⁶	LA10, adj, 1hr	LA1, adj, 1hr	
...					
dwelling (for indoors)	daytime and evening	35	40	45	health and wellbeing
	night-time	30	35	40	health and wellbeing, in relation to the ability to sleep

¹¹⁵ Section 6, EP Noise Policy.

¹¹⁶ See section 9.2 for an explanation of these three notations.

5.6.2 AS/NZS 2107:2000

Section 1, 'Scope' of AS/NZS 2107:2000 titled *Acoustics – Recommended design sound levels and reverberation times for building interiors* provides:

This Standard recommends design criteria for conditions affecting the acoustic environment within occupied spaces. The ambient sound levels recommended take into account the function of the area(s) and apply to the sound level measured within the space unoccupied but ready for occupancy (see Note 1). The Standard is applicable to steady-state or quasi steady-state sounds. The reverberation times recommended are for the occupied state of the enclosure.

This Standard also specifies methods of measuring the ambient sound level and reverberation time in occupied spaces in new and existing buildings.

5.6.3 AS1055:1997

AS 1055:1997 is titled *Acoustics – Description and measurement of environmental noise*. It comprises three parts, namely:

- AS 1055.1 – General procedures
- AS 1055.2 – Application to specific situations
- AS 1055.3 – Acquisition of data pertinent to land use.

Section 1 of AS 1055.1 states:

This Standard sets out general procedures for the description and measurement of environmental noise including repetitive impulsive noise. This Standard does not apply to the measurement or assessment of en route air, rail or water transportation or road transportation on public roads. It also does not apply to noise which consists solely of discrete impulses such as those encountered in shooting and blasting.

This Standard defines the basic quantities to be used for the description of noise in community environments and describes basic procedures for the determination of these quantities.

It excludes the setting of environmental noise criteria. Such levels are set by regulations or organizational policy, not by Standards Australia.

In this Standard all sound pressure level descriptors are A-weighted.

Section 1 of AS 1055.2 states:

This Standard describes data acquisition methods that—

- (a) enable the investigation of specific environmental noise situations; and
- (b) enable specific acoustic situations to be checked for compliance with a specific noise limit.

Section 1 of AS 1055.3 states:

This Standard describes data acquisition methods which—

- (a) enable the description of the environmental noise in a specified area of land to be made in a uniform way; and
- (b) enable the compatibility of any land use activity or projected activity with existing or predicted environmental noise to be assessed.

This Standard gives no guidance for the estimation of the overall uncertainty of the results, but this should be considered in each specific case.

5.6.4 World Health Organization – night noise guidelines for Europe

In 1999, the World Health Organization (WHO) published its findings on the impact of night-time exposure to noise and sleep disturbance. The 1999 guidelines state:¹¹⁷

If negative effects on sleep are to be avoided the equivalent sound pressure level should not exceed 30 dBA indoors for continuous noise. If the noise is not continuous, sleep disturbance correlates best with L_{Amax} and effects have been observed at 45 dB or less. This is particularly true if the background level is low. Noise events exceeding 45 dBA should therefore be limited if possible. For sensitive people an even lower limit would be preferred. It should be noted that it should be possible to sleep with a bedroom window slightly open (a reduction from outside to inside of 15 dB). To prevent sleep disturbances, one should thus consider the equivalent sound pressure level and the number and level of sound events. Mitigation targeted to the first part of the night is believed to be effective for the ability to fall asleep.

In 2009, the WHO upgraded its advice taking into account the research that had been carried out in the intervening period. It reported:¹¹⁸

There is plenty of evidence that sleep is a biological necessity, and disturbed sleep is associated with a number of health problems. Studies of sleep disturbance in children and in shift workers clearly show the adverse effects. Noise disturbs sleep by a number of direct and indirect pathways. Even at very low levels physiological reactions (increase in heart rate, body movements and arousals) can be reliably measured. Also, it was shown that awakening reactions are relatively rare, occurring at a much higher level than the physiological reactions.

The working group agreed that there is sufficient evidence that night noise is related to self-reported sleep disturbance, use of pharmaceuticals, self-reported health problems and insomnia-like symptoms. These effects can lead to a considerable burden of disease in the population.

One thing that stands out is the desire of a large part of the population to sleep with windows (slightly) open. The relatively low value of 21 dB takes this into account already. If noise levels increase, people do indeed close their windows, but obviously reluctantly, as complaints about bad air then increase and sleep disturbance remains high.

The negative aspects of sleep disturbance are not insignificant. Many of the underlying causes of sleep disturbance must be addressed from a community health perspective. There is some evidence that NIAPSP has attempted to do this. It is important to an understanding of this issue that a person does not have to be aroused to a fully wakened state to suffer from sleep disturbance. Adverse physiological reactions occur at sound levels much lower than those which would cause arousal into a wakened state.

There is also the question of natural ventilation. There is no doubt, as the WHO points out, a large proportion of the population prefer to sleep with windows ajar because of the perceived benefits of natural ventilation. It is an imposition on individuals to expect them to sleep with windows shut in a naturally ventilated room if

¹¹⁷ WHO, Night Noise Guidelines for Europe, 1999, page 16.

¹¹⁸ WHO, Night Noise Guidelines for Europe, 2009, page 20.

the purpose of the shut windows is to mitigate external construction noise to a level below which sleep disturbance is unlikely. The WHO guidelines are for Europe where average night-time temperatures are significantly lower than the sub-tropical temperature range of Brisbane.

5.6.5 DERM Noise Measurement Manual

DERM has a *Noise Measurement Manual: For use in testing for compliance with the Environmental Protection Act 1994*.¹¹⁹

The purpose of the manual is:¹²⁰

This manual tells 'authorised persons' as defined in the Environmental Protection Act 1994 how to measure environmental noise to a standard suitable for determining compliance with the Act, its subordinate legislation, and legal instruments issued under the authority of the legislation.

It also aims to inform people other than 'authorised persons' about measuring environmental noise.

The manual explains how to plan a noise measurement, take on-site measurements and report noise measurements.

5.6.6 NSW Interim Construction Noise Guideline

The Department of Environment and Climate Change NSW (DECC) has released an *Interim Construction Noise Guideline*¹²¹ (the NSW Guideline), which was developed by a number of agencies including DECC, NSW Department of Planning, Roads and Traffic Authority, WorkCover NSW and NSW Health together with the Local Government and Shires Associations of NSW.

In preparing the document there was extensive public consultation and the views of industry stakeholders were sought at an early stage and contributed significantly to the document. The Standards Australia committee was consulted to address any potential inconsistencies between the Guideline and relevant standards.¹²²

The *Interim Construction Noise Guideline information sheet*¹²³ says:

The Interim Construction Noise Guideline (the Guideline) sets out ways to deal with the impacts of construction noise on residences and other sensitive land uses. It does this by presenting assessment approaches that are tailored to the scale of construction projects and indicate how work practices can be modified to minimise noise. The Guideline provides detailed advice on the range of work practices and regulatory approaches to manage construction noise.

...

¹¹⁹ *Noise Measurement Manual: For use in testing for compliance with the Environmental Protection Act 1994*, Third edition, 1 March 2000, Queensland Government, Environmental Protection Agency.

¹²⁰ *Noise Measurement Manual: For use in testing for compliance with the Environmental Protection Act 1994*, Third edition, 1 March 2000, Queensland Government, Environmental Protection Agency, page 2.

¹²¹ State of NSW and Department of Environment and Climate Change NSW, *Interim Construction Noise Guideline*, DECC 2009/265, ISBN 978 1 74232 2179, July 2009.

¹²² State of NSW and Department of Environment and Climate Change NSW, *Interim Construction Noise Guideline*, DECC 2009/265, ISBN 978 1 74232 2179, July 2009, page 1.

¹²³ Department of Environment and Climate Change NSW, *Interim Construction Noise Guideline information sheet*, DECC 2009/406, ISBN 978 1 74232 310 7, July 2009, page 1.

The Guideline is primarily aimed at managing noise impacts from construction works regulated by the Department of Environment and Climate Change NSW (DECC). It will be used to assist DECC in setting statutory conditions in licences or other regulatory instruments for construction noise. The Guideline may also be of assistance to local councils in guiding their decision-making on construction projects they regulate.

CNI made the following submission about the whole of section 5.6:

In this section, the relevance of some material is unclear as it post-dates the imposition of the Conditions.

The Proposed Report refers to a number of noise standards and policies in this section which were created after the Coordinator-General's conditions and the contractual arrangements for the Airport Link Project were established.

Those 'relevant noise standards and policies' described below were not available or in force when the Coordinator-General's Imposed Conditions (which are the subject of this report) were finalised in May 2007.

For example, the Proposed Report references the Environmental Protection (Noise) Policy 2008 in clause 5.6.1 which came into effect several months after the conclusion of the Coordinator-General's evaluation report and Coordinator-General's change report and the Airport Link contract was let. The reference in clause 5.6.4 to the World Health Organisation report indicates that it was published in 2009. In clause 5.6.6 of the Proposed Report references [to] the NSW Interim Construction Noise Guideline indicates that it was also created in 2009.

Those 'relevant noise standards and policies' described above were not available or in force when the Coordinator-General's imposed conditions (which are the subject of the Proposed Report) were finalised in May 2007.

To ensure that no confusion results from the references to numerous standards that were not in place at the time of the Conditions being established, **CNI recommends that the Proposed Report acknowledge that many of these policies were created after the Conditions of the Airport Link project were imposed and that the Proposed Report recommends using them as references only for the development of best practice for future projects.**

A former CG, Mr Colin Jensen, made a submission echoing similar sentiments:

I am surprised that you would form the opinion that the noise condition was significantly deficient based on expert advice that appears to rely on policies and standards that were not in place at the time of the condition's drafting. Any condition imposed has to comply with the standards and policies (if any) that applied at the time of writing of the condition. That is the yard stick that should be used to measure the appropriateness of any such condition.

I agree that the standards and policies mentioned in CNI's submission were introduced after the imposition of the imposed conditions. They are relevant to my consideration of possible recommendations for future projects.

5.7 PPP policies and guidelines

5.7.1 National PPP Guidelines – Policy Framework – December 2008

On 19 May 2008, the Honourable Anthony Albanese MP, Minister for Infrastructure and Transport announced the formation of Infrastructure Australia, an 11 member national body ‘tasked with developing a blueprint for unlocking infrastructure bottlenecks and modernising the nation’s transport, water, energy and communications assets’.¹²⁴ Its members have been formally appointed by the Federal Minister for Infrastructure and Transport and represent the private sector, the Commonwealth, states and territories and local government.¹²⁵

Infrastructure Australia’s *National PPP Guidelines – Policy Framework – December 2008*¹²⁶ state:

Accountability

Agencies are responsible for the delivery of their outputs including where PPPs are used to deliver those outputs. Agencies cannot transfer this accountability to the private sector. The conduct of the public sector should always be such that confidence in the probity of the partnership model and the way in which it is implemented can be maintained at all times.

5.7.2 DIP Public private partnerships guidance material – Policy – 2008

DIP’s 2008 *Public private partnerships guidance material – Policy*¹²⁷ states:

Objectives of the policy

Private sector involvement in the provision of a public infrastructure need or service should be encouraged in projects where it can be shown that the state will achieve a better value for money outcome.

The government will develop contractual relationships with the private sector under this policy with the following objectives in mind:

...

- To ensure that infrastructure and related service delivery is provided in accordance with best practice and, where appropriate, to relevant national and international standards

...

Principles of the policy

In developing contractual relationships with the private sector to deliver these policy objectives, the following principles underpin the government’s approach:

¹²⁴ Infrastructure Australia (27 January 2010) Infrastructure Australia Members [accessed at <http://www.infrastructureaustralia.gov.au/council.aspx> on 29 October 2010].

¹²⁵ Infrastructure Australia (27 January 2010) Infrastructure Australia Members [accessed at <http://www.infrastructureaustralia.gov.au/council.aspx> on 29 October 2010].

¹²⁶ Infrastructure Australia (December 2008) *National PPP Guidelines – Policy Framework – December 2008* [accessed at http://www.infrastructureaustralia.gov.au/files/National_PPP_Policy_Framework_Dec_08.pdf on 2 November 2010]

¹²⁷ Department of Infrastructure and Planning (2008) *Public private partnerships guidance material – Policy* [accessed at <http://www.dip.qld.gov.au/resources/guideline/ppp-value-for-money-framework/2-pppguideline-ppp-policy-2008.pdf> on 2 November 2010].

- Performance measures should be established to ensure that the quality of the services delivered meets the needs of the community and that the project outcomes are transparent
- Projects should focus on the output specification (the end result) rather than the input specification (the means of delivery).

...

5.7.3 Summary

PPPs comprise contractual agreements and governments expect infrastructure outcomes to be delivered in accordance with the contractual arrangements and statutory approvals granted for the project. I am supported in this view by the National PPP Policy, DIP's policy and the amendments to the SDPWO Act in the past decade that attempt to tighten regulation (including in the area of environmental impacts) of PPP projects.

CNI made the following submission about the whole of section 5.7:

The National PPP Guidelines mentioned in clause 5.7.1 did not come into existence until after the Airport Link contract was let. **CNI recommends that a similar acknowledgement be adopted for 5.7 as is recommended above in response to 5.6.**

I agree that the National PPP Guidelines introduced after the imposition of the imposed conditions are relevant to my consideration of possible recommendations for future projects.

Chapter 6: Project documents

6.1 Overview

The KWRA alleges the community had been assured that, except for very limited special circumstances, night-time surface work would never occur.¹²⁸ More specifically:¹²⁹

1. The communities had every reason to feel secure that their lives would not be disrupted by night time noise. Every meeting they ever attended, every verbal and written guarantee they ever received assured them that, except for very limited special circumstances, 24/7 surface construction works would **never** occur.
2. This EIS unequivocally shows that, except for special circumstances, surface construction works were only ever intended to take place between the hours of 6.30am and 6.30pm, Monday to Saturday.
3. Even though the successful BrisConnections tender contained a significant number of design and construction changes to the Airport Link project, these changes, and *The Change Report* itself, cannot be used to justify 24/7 work. The documents show clearly that, although there were changes to the project, there were no changes to the conditions (hours of work and noise goals) under which this work was to be undertaken.

In an interview with my officers, a member of KWRA stated:¹³⁰

I think what the problem, or where it stems from is that the expectation from what initially was communicated to residents, to what actually happened was very vast, I think initially residents thought, 'Ok, this is going to happen, there's going to be some disruptions to our lives, you know, it's going to finish at six thirty at night, you know, we can live with that'. But, from what initially we were told to what the reality is, is vastly different, and I think that that's where there's this ... resident anger that, just from the way that they've been treated.

In the interview, another member of KWRA considered that the Project documents did not refer to noise from night-time construction other than in terms of the application of the noise goals to particular, limited activities. The member stated:

KWRA member ... if you go and actually read all the report and read where those night-time noise goals come in and read where the noise consultants talk about the night-time noise goals, they are talking about the spoil conveyor, and the ventilation systems for the 24/7 tunnelling. ... They're what the night-time noise goals are all about. They're not about surface construction work. Is it credible to think that we're going to have ... 24 hour surface construction works with no discussion of the impact? There are no sentences in all of those hundreds and hundreds and hundreds of pages, nothing that talks about ... the impact of night-time construction in the [Kalinga] park.

Interviewer So you said it was only intended for what?

KWRA member For the spoil conveyor ... and the ventilation shaft, as well, now ...

¹²⁸ BTR at page 22.

¹²⁹ BTR at page 22.

¹³⁰ Interview with two KWRA members on 7 July 2010.

This chapter examines the extent to which publicly available documents revealed the possibility of night-time work during the Project.

The documents examined in this chapter (described as ‘Project documents’) are:

- Airport Link Environmental Impact Statement, SKM Connell Wagner, October 2006 (EIS)
- Airport Link EIS Supplementary Report, SKM Connell Wagner, April 2007 (supplementary EIS)
- CG’s Report on the EIS for the proposed Airport Link Project, May 2007 (evaluation report)
- Airport Link Request for Project Change, CNI, May 2008 (2008 request for project change)
- CG’s Change Report on the Environmental Impact Statement for the Airport Link Project, July 2008 (change report)
- Airport Link Woolloowin Worksite Modification Request for Project Change, CNI, June 2009 (2009 request for project change)
- CG’s Airport Link Project—Woolloowin Worksite Modification, October 2009 (Woolloowin change report).

6.2 EIS – October 2006

The EIS¹³¹ for the Project was published on 11 October 2006. The public had the opportunity to comment by 8 December 2006.

Chapter 4 of the EIS is called *Project Description*. In section 4.3.20, under the sub-heading *Workforce*, it states:

Hours of work for the construction phase would be:

Surface/above ground – 6.30am – 6.30pm, Monday to Saturday with no work on Sundays or public holidays, although some out-of-hours work may be required on roads where high traffic volumes during the day preclude normal working hours;
Tunnel works – 7 days per week, 24 hours per day, with all activities underground or within the acoustic sheds; and
Spoil haulage – five and a half days per week, being 6.30am Monday to 6.30pm Saturday, with no haulage on Sundays or public holidays.

In chapter 5, section 5.7.1, under the sub-heading *Work Sites and Working Hours*:

Working hours for surface works would typically be between 6.30am and 6.30pm Monday to Saturday with no works expected to be carried out on Sundays and public holidays.

In some cases, works on major roads may have to be carried out at other times, if approval agencies (relevant sections of BCC, Main Roads and the Police) consider the traffic impacts of daytime works unacceptable. Such works should be identified in the [Traffic Management Plan] (construction). Underground works would continue 24 hours a day.

In chapter 10, section 10.2.3, under the sub-heading *Assessment Criteria* (for noise and vibration from construction):

¹³¹ DIP has advised that TransLink also undertook a concept design and impact management plan for the Northern Busway project. This material was coordinated with the project EIS and, where relevant, integration measures with the project were implemented.

The operation of some equipment, such as tunnelling equipment, would include 24hr, 7 day per week work, whereas above ground work would mostly be limited to 6.30am to 6.30pm Mondays to Saturdays. There would be some circumstances where out of hours work on the surface would be required to avoid or minimise disruption to surface traffic flows or daily patterns of activity.

...

To achieve the objective of preserving community values for noise during construction, where reasonable and practicable, construction activity above ground and outside an acoustically lined work enclosure, should be limited to the hours of 6.30am to 6.30pm Monday to Saturday, excluding public holidays. The Airport Link Project would involve some instances where construction activity would be required to be taken on a 24-hour basis, mostly underground, and that would likely be audible outside of regulated construction hours.

As with the goals established in the Coordinator-General's conditions for NSBT [North South Bypass Tunnel, now Clem7], the construction noise goals for the Airport Link Project relate to goals for the avoidance of sleep disturbance for night-time construction and internal noise for day-time construction. The goals for night-time construction are set out in **Table 10-9**. [original emphasis]

Chapter 19 contains a draft outline *EMP* [Environmental Management Plan] (*Construction*). The draft outline EMP is intended to be indicative of the content of a future approved EMP.¹³²

In section 19.6, performance criteria are nominated. Then, various mitigation measures are identified that are intended to satisfy the performance criteria. This information is presented in table form. The relevant extracts are:

General – Construction	
...	...
Performance Criteria	<p>...</p> <ul style="list-style-type: none"> • Construction works are managed to avoid, or mitigate and manage impacts on the amenity and environmental conditions prevailing in the vicinity of the worksites <p>...</p>
Mitigation Measures	<ul style="list-style-type: none"> • Hours of work: <ul style="list-style-type: none"> ○ Construction activities on or above the surface and which generate excessive levels of noise, vibration, dust or traffic movements should only be undertaken between 6.30am and 6.30pm Mondays to Saturdays and at no time on Sundays or Public Holidays except for special circumstances where the above surface works should be conducted outside these days and hours. ○ Special circumstances include works on Arterial Roads (to avoid disruption to peak traffic flows), works in railway corridors, spoil haulage, or works involving large prefabricated components such as bridge elements or Tunnel Boring Machines; ○ Notify local communities of duration and timing of surface works to be conducted outside of usual working hours.

¹³² EIS at section 19.4.1.

Noise and Vibration – Construction	
Environmental Objective	<ul style="list-style-type: none"> • Maintain a reasonable acoustic environment for living, in particular for sleeping, and use of properties along the corridor of construction influence during construction works. <p>...</p>
Performance Criteria	<ul style="list-style-type: none"> • Demonstrate through predictive modelling of the proposed construction techniques and monitoring ambient noise and vibration readings prior to construction to establish pre-disturbance levels, the likely levels of noise and vibration due to construction works throughout the construction period. • Having regard for the goals for noise and vibration during construction, achieve a 'reasonable' noise and vibration environment within the corridor of construction influence, having regard for the scale and duration of construction works, the nature of the terrain through which the construction works are to pass and the character of land use activities; • Monitor and report regularly on the performance of construction works with regards environmental guidelines for noise and vibration
Mitigation Measures	<p>...</p> <p>Construction Noise Goals</p> <ul style="list-style-type: none"> • Limit above-ground construction works to construction hours in accordance with the general construction management provisions relating to hours of work established in this Draft Outline EMP. • For surface construction works beyond standard construction hours, take reasonable and practical measures to minimise potential impacts to achieve the noise goals established in Tables 1 and 2 below for nearby properties (e.g. provide acoustic screens or barriers). • Reasonable and practicable measures to achieve the construction noise goals may include, for example: <ul style="list-style-type: none"> - Commence advanced notification of works and undertake on-going consultation with potentially affected property owners and occupants. - Establishing temporary noise barriers between construction worksites and sensitive activities (e.g. residential, schools, community facilities). - Launching tunnel construction from within an acoustically screened enclosure, except for surface works and cut and cover construction works that are to be mitigated by effective temporary screens. - Fitting noise-reduction measures to all plant and equipment engaged in above-ground construction works. - With the consent of owners and occupants of potentially-affected premises, undertake off-site mitigation actions such as temporary modifications to nearby buildings or other measures to achieve reasonable environmental conditions. • Undertake predictive modelling of potential construction noise and vibration impacts having regard to the goals set out in Tables 2a, 2b and 3. The proposed construction methods, the proximity of sensitive places, and where the duration of construction exceeds 2 weeks in a particular locality. • Where surface construction noise impacts are predicted due to specific construction activities, reasonable and practicable mitigation and management measures must be adopted and notify in advance potentially affected owners and occupants of adjacent properties. If such activities are to occur often during the

	<p>construction works, then a program for a regular, scheduled occurrence be devised and implemented in consultation with the owners and occupants of nearby properties.</p> <ul style="list-style-type: none"> • Prior to the commencement of works, potentially affected property owners and occupants are to be notified as to the scale, extent and duration of construction works, as required by the consultation and communications program. • Mitigation measures generally are to be designed and implemented to achieve goals for construction noise for acceptable internal living conditions consistent with AS/NZS 2107:2000 and summarised in Table 1 and Table 2 [these tables are noise goals].
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Volume 3 of the EIS comprises technical papers. The paper numbered 6 is the Report 20-1605R3 Airport Link Environmental Impact Statement Construction Noise and Vibration, July 2006,¹³³ prepared by Heggies Pty Ltd. The Executive Summary states:

The most significant potentially intrusive noise scenarios at worksites are extensive initial daytime earthworks. The night-time tunnelling activities are conducted from within proposed acoustic enclosures over the portals and spoil stockpiles. At the most affected residences near worksites, maximum levels of noise from these scenarios has the potential to interfere with normal indoor living (eg interference with passive listening, resting and conversation) over an extended period of time if not properly mitigated.

The Executive Summary contains no reference to any potential for sleep disturbance.

In section 10, under Conclusions, that report states:

10.2.1 'Reasonable' Construction Noise

The recommended definition of 'reasonable' construction noise for the purpose of detailed development of mitigation strategies for this project is as follows:-

- For the daytime, adoption of [a certain noise level].
- For long-term evening and night-time noise sources (*e.g. ventilation plant, and 24 hour spoil handling systems*), 'reasonable' noise levels would be ...
- For temporary evening and night-time noise sources (*e.g. regenerated noise during the underground pass-by of tunnelling machinery*), 'reasonable' noise levels would be ...

6.2.1 Observation

The Project Description, which as I have mentioned is chapter 4 of the EIS, expressly limits surface work to daytime, except where traffic volumes preclude daytime work.

Sections 5.7.1 and 10.2.3 bear a similar connotation, although I note the inclusion of some uncertain terms such as 'typically', 'mostly' and 'where reasonable and practicable' relating to working hours for surface work. I also note the comment that there would be 'some instances where construction activity would be required to be taken on a 24-hour basis, mostly underground ...'

¹³³ Heggies Australia Pty Ltd (July 2006) Report 20-1605R3 Airport Link Environmental Impact Statement Construction Noise and Vibration [accessed at http://www.airportlinkeis.com/OtherLinks/EIS/pdfs/Vol3-TechPapers/06_Noise_and_Vibration.pdf on 2 November 2010].

As I have mentioned, a KWRA member told my officers that she considered that the Project documents did not refer to noise from night-time construction other than in terms of the application of the noise goals to tunnelling, the operation of the spoil conveyor and the operation of the ventilation stack. It appears that the KWRA member formed that view because Heggies, the author of the noise and vibration report, had already formed that opinion.¹³⁴ In the absence of any more specific information in the EIS on that topic, I understand why the KWRA member formed that view.

Most importantly though, the draft outline EMP uses the same wording as the eventual imposed condition 7(b), including the phrase 'Construction activities on or above the surface and which generate excessive levels of noise'. The draft outline EMP goes on to suggest monitoring and mitigation of noise at night in the same way prescribed by the subsequent imposed condition 9. SKM (Sinclair Knight Merz), the author of the draft outline EMP, has confirmed it adopted the wording of the preceding North-South Bypass tunnel (now Clem7) imposed conditions.¹³⁵

6.3 Supplementary EIS – April 2007

A supplementary EIS report addressing the submissions made on the EIS was released in April 2007.

The supplementary EIS stated that 24 hour construction activities would generally be confined to underground tunnelling works and removal of spoil from tunnelling, while surface works generally would be undertaken between 6.30am and 6.30pm Monday to Saturday, with no work on Sunday or public holidays. Again, it was noted that some after-hours activities may be required to avoid undue traffic disruptions.¹³⁶

6.3.1 Observation

I note the inclusion of the uncertain term 'generally'.

6.4 Evaluation report – May 2007

The CG released his report evaluating the EIS and supplementary EIS in May 2007.

In section 2.2, the CG summarised and endorsed the proposal in the following terms:

Surface construction work that may generate excessive levels of noise, vibration, or dust would be restricted to the hours of 6.30am to 6.30pm Monday to Saturday, with no work on Sundays or public holidays. Special circumstances where above ground surface works may be conducted outside these hours might include works on arterial roads, works in rail corridors, and works involving large prefabricated components. Tunnel works would be undertaken 24 hours per day, 7 days per week. Spoil haulage would occur at any time from 6.30am Monday to 6.30pm Saturday with no haulage on Sundays or public holidays.

¹³⁴ Particularly based on what is written in section 10 'Conclusions' in Heggies Australia Pty Ltd (July 2006) Report 20-1605R3 Airport Link Environmental Impact Statement Construction Noise and Vibration [accessed at http://www.airportlinkeis.com/OtherLinks/EIS/pdfs/Vol3-TechPapers/06_Noise_and_Vibration.pdf on 2 November 2010].

¹³⁵ SKM letter to my Office dated 11 November 2010.

¹³⁶ Supplementary EIS at page 23.

In section 4.1.1, about impacts from construction noise (and dust and vibration), the CG concludes:

Following consultation with the EPA, the proponent has established target goals for noise and vibration levels to guide construction planning and management. These are set out in the conditions at Appendix 1, Schedule 3. Advice from the EPA is that the goals are reasonable and achievable. In instances where the goals are likely to be exceeded unavoidably for a period of time, the proponent has indicated that it will implement mitigation measures to manage the impact on affected residents and businesses.

The CG did not discuss the subject of noise at night, except in relation to ventilation stacks.¹³⁷

Also, the CG did not identify any submissions addressing the issue of noise at night in the report. DIP has advised my Office that about 300 submissions were received about the EIS. It has provided copies of three submissions that it says raise the issue of noise at night.¹³⁸ DIP points to these submissions in support of its contention that the EIS did flag the possibility of night-time work on the Project.

These three submissions have been considered.

The first raises the issue of 24 hour work under the section 'Construction', which begins with a discussion about spoil haulage routes. It appears to me that this submission is raising noise from spoil haulage. In this investigation, I am concerned with noise from surface construction at night, not from spoil haulage. It has always been clear that spoil haulage was planned to occur from 6.30am on Monday to 6.30pm on Saturday.¹³⁹

The second contains just one sentence in a one page submission stating that as the submitter is a light sleeper, she would have to move. There is no context around that sentence to give any indication as to what noise source the submitter believed might disturb her sleep. It is possible that the submitter's reference to being a light sleeper might indicate she was referring to tunnelling works and/or spoil haulage, which were always planned to occur from 6.30am on Monday to 6.30pm on Saturday.¹⁴⁰

The third takes issue with 'the draft proposal to undertake construction works 24 hours 6 days a week'. This submitter's primary concern was about the impact of works on early evening functions and during the daytime on weekends. It is not clear from the submission which specific source of noise they were concerned about and therefore I cannot conclude that the submission related to night-time surface work.

In summary, I consider that none of the three submissions provide support for the contention that the EIS addressed the possibility of such work. I believe that had the community been aware that night-time surface work was a real prospect submissions would have been received addressing this issue.

¹³⁷ The CG discusses the impacts of tunnelling in terms of vibration and regenerated noise.

¹³⁸ DIP (July 2010) Submission to the Queensland Ombudsman – Preliminary Inquiries.

¹³⁹ EIS at section 4.3.20.

¹⁴⁰ See section 6.2 of this report.

6.4.1 Observation

The fact the CG did not receive any submissions about the possibility of night-time surface work, or discuss the issue in his evaluation report, is consistent with KWRA's submission that the public understood the proposal to be that night-time surface work would only take place in very limited circumstances.

6.5 Request for project change – 2008

BrisConnections was the successful tenderer for the Project. As I have mentioned, its bid was predicated upon a number of proposed changes to the reference project, which included tunnel alignment, construction methods and changes to the road network at the tunnel portals.

CNI put those proposed changes to the CG in the 2008 request for project change. The request was released for public comment between 31 May 2008 and 30 June 2008.

The 2008 request for project change states, at page 102:¹⁴¹

For possible nightworks to construct the cut and cover tunnels beneath Kedron Brook, effective notification measures would likely be required to achieve the environmental objectives and performance criteria specified in the Coordinator-General's Conditions for general construction and for management of noise and vibration effects of construction.

Report 20-1605-R6 Airport Link Changed Project Noise and Vibration Report is a technical attachment to the 2008 request for project change, which states:¹⁴²

The cut and cover tunnel works across Kedron Brook are proposed for 24 hours per day. Predictions show that construction noise levels will likely exceed the sleep disturbance goals nominated for this project at numerous residences without employing mitigation measures.

The 24 hour cut and cover tunnel work across Kedron Brook is also mentioned on page 15 of that report.

6.5.1 Observation

The possibility of surface work at night-time for the cut and cover tunnel works across Kedron Brook was raised in the request for project change. However, the possibility of night-time surface work more generally across the Project was not canvassed.

6.6 Change report

The change report is the CG's evaluation of the 2008 request for change to the imposed conditions of the Project.

¹⁴¹ CNI (May 2008) Request for Project Change [accessed at <http://www.airportlinkeis.com/OtherLinks/RfPC/INDEX.HTM> on 10 April 2011].

¹⁴² Heggies Pty Ltd (26 May 2008) Airport Link Changed Project Noise and Vibration Report [accessed at <http://www.airportlinkeis.com/OtherLinks/RfPC/pdfs/3.Noise%20and%20Vibration%20Report.pdf> on 12 November 2010] at page 9.

CNI's Airport Link Request for Project Change Response to Submissions (21 July 2008)¹⁴³ is located on DIP's website and appears to form part of the change report. It says:

The existing conditions do not provide for work exceeding either the noise or air quality goals from progressing beyond the hours of 6.30am – 6.30pm Monday to Saturdays.

Condition 7(b) and condition 9 (originally contained in appendix 1, schedule 3 of the CG's evaluation report) are reproduced, without alteration, in appendix 1 of the change report.

6.6.1 Observation

It appears that in mid 2008, CNI and the CG were proceeding on the basis that night-time surface work would not ordinarily occur.

6.7 Woolloowin request for project change

On 17 June 2009, the State requested that the CG evaluate another proposed change to the Project.

In the first half of 2009, CNI proposed the establishment of a new worksite on vacant land at Rose Street, Woolloowin, to facilitate improved construction access to the mainline tunnels.¹⁴⁴

The CG invited public submissions by 17 July 2009.

The 2009 request for project change states:

...

During the site establishment phase, works would be confined to the approved Project construction hours of 06.30 – 18.30 Monday to Saturday, with there being no work on Sundays or public holidays. These hours of work are consistent with the allowable construction hours for the Project. However, they represent a significant decrease for the haulage of spoil. The existing haulage conditions for the Project allow haulage to occur between 06.30 Monday to 18.30 Saturday.

When the acoustic shed is completed and able to provide noise screening to achieve the environmental objectives and goals stated in the Coordinator-General's conditions, the hours of work for activities conducted within the acoustic shed would be extended to meet program requirements.

Tunnelling, as with other sections of the Project, would be conducted within the acoustic shed and acoustic enclosures, on both day and night shifts.

Spoil haulage would not be undertaken outside of normal construction hours and spoil haulage trucks would not be allowed at the proposed worksite out of hours. Some construction materials may have to be delivered to the proposed worksite outside normal work hours. In such circumstances, the loading or unloading of delivery vehicles would only be undertaken within the acoustic shed. For example, several deliveries of

¹⁴³ CNI (21 July 2008) Airport Link Request for Project Change Response to Submissions [accessed at <http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/response-submissions-airport-tunnel.pdf> on 2 November 2010].

¹⁴⁴ DIP (July 2010) Submission to the Queensland Ombudsman – Preliminary Inquiries.

shotcrete would likely be required outside of normal construction hours. The expectation is that a maximum of four concrete truck deliveries may be required between the hours of 18.30 and 06.30. Shotcrete deliveries beyond 22.30 are not proposed. However, if required all shotcrete unloading would occur within the acoustic shed with the roller doors closed.

6.7.1 Observation

This request proposes extensive night-time activities within the Woolloowin acoustic shed and night-time deliveries of shotcrete to the shed. However, I note that the 2009 request for project change states that 'approved Project construction hours' are 6.30am to 6.30pm Monday to Saturday. This request for project change was made only about four weeks before the community around Kalinga Park was advised that TJH would soon undertake works in Kalinga Park 24/5.¹⁴⁵

6.8 Woolloowin change report

The CG imposed conditions on the Woolloowin project change. The relevant conditions are set out in full in section 5.5.2 of this report. In summary, the CG accepted the proponent's proposal and imposed the following requirements about the Woolloowin worksite:¹⁴⁶

- Before the completion of the acoustic shed, work may only be undertaken at the Woolloowin worksite between 6.30am and 6.30pm daily on Monday to Saturday, and at no time on Sunday or public holidays.
- After the completion of the acoustic shed, work may occur within the acoustic shed at any time, subject to compliance with the Woolloowin conditions.
- The proponent is to take certain actions (which are more detailed than condition 9) to mitigate the effects of noise.

The CG also allows up to four shotcrete deliveries per night.¹⁴⁷

6.8.1 Observation

In the Woolloowin change report, the CG approved the proposal to conduct night-time surface work, although mainly within the Woolloowin acoustic shed once it was erected.

6.9 TJH submission

In my Office's request to BrisConnections and TJH of 18 October 2010, they were asked to respond to the following question:

1. Ability to undertake night-time surface work

- Your understanding through the development phase¹⁴⁸ of the Project of TJH's ability to undertake night-time surface work, other than in 'special circumstances'.

¹⁴⁵ See my discussion of the 24/5 works in Kalinga Park in chapter 7.

¹⁴⁶ Woolloowin change report – see conditions 7(c) and 9(a)-9(d) on pages 49, 53 and 54.

¹⁴⁷ Woolloowin change report – see page 22.

¹⁴⁸ Through the EIS process or change reports process.

- Any contractual arrangements with the State, or on behalf of the State, as to TJH's ability to undertake night-time surface work, other than in 'special circumstances'.

In its response on 19 November 2010, TJH advised that the obligations that formed part of the Airport Link tender included compliance with the CG's evaluation report and EIS documentation for the Project. The CG's imposed conditions were subsequently carried over into contractual arrangements between the State and BrisConnections.

TJH indicated that the documentation does not prohibit the undertaking of works at night-time. This was based on:¹⁴⁹

- The *Environmental Protection Act 1994* (EP Act) contains limitations as to the times construction work can be undertaken. The limitation relates to works being undertaken 'between 6.30am and 6.30pm Monday to Saturday and no work on Sundays or Public holidays.' These limitations were not carried forward into any of The Project Conditions.
- The conditions set 'goals' for noise while other environmental aspects (for example, air quality) the conditions set 'limits'. On review of these criteria, and in the absence of a definition for goals and limits within The Conditions, we considered them both on their ordinary meaning, this being:
 - Goals – as being a point at which our efforts are directed or worked towards in a reasonable and practical manner
 - Limits – the greatest amount of something that is allowed during a period of time or activity.
- Further and when read in conjunction with the goals, the Conditions provide for an iterative process for the satisfying of a number of other criteria which include the undertaking of predictive modelling and the application of reasonable and practical mitigation at both the source and the receptor for noise. In cases of 'special circumstances' we believe these criteria do not apply although we still use best endeavours to minimise impacts during these activities.

6.10 Opinions and recommendations

In the proposed report it was posed that the public reasonably reached a conclusion based on the Project documents that surface work during the Project would be limited to the daytime, except in special circumstances, based on:

- the initial Project Description in the EIS that expressly limits the surface work to the daytime, except where traffic volumes preclude daytime work
- other EIS documentation, notwithstanding the inclusion of some uncertain terms such as 'typically', 'mostly' and 'where reasonable and practicable' relating to the working hours for surface work. I also note the comment that there would be 'some instances where construction activity would be required to be taken on a 24-hour basis, mostly underground ...'
- the noise and vibration technical report does not appear to anticipate night-time work.

It was posed that as the CG did not receive any submissions about the possibility of night-time surface work, or discuss the issue in his evaluation report, this supported KWRA's submission that the public understood the proposal to be that night-time surface work would only take place in very limited circumstances.

¹⁴⁹ TJH response, 19 November 2010, page 2.

The proposed report contained the following:

Proposed Opinion 1

The public were reasonably of the view based on the Project documents that surface work would be limited to the daytime, except in special circumstances.

The following discussion sets out the submissions in relation to the proposed opinion.

CG/DIP's response

Please give consideration to amending Proposed Opinion 1 for the following reasons.

EIS

It is acknowledged that the reference in the EIS (in section 4.3.20 'Demand on resources' under the heading 'Workforce') to the hours of work for the construction phase states that surface / above ground work will be 6.30am to 6.30pm, Monday to Saturday (except where traffic volumes preclude daytime work).

Draft Construction Environmental Management Plan

On the other hand, the draft Construction Environmental Management Plan (**EMP**) in the EIS (page 19-17) contains a different description of hours of work.

The draft Construction EMP attempts to balance the requirements of the community and the Project, and provides advice about performance criteria and mitigation measures proposed for the performance of construction work. The part of the Construction EMP dealing with performance criteria and mitigation measures for hours of work (page 19-17) is extracted in the Proposed Report (page 43) and below with underlining added for emphasis:

General – Construction	
<i>Performance Criteria</i>	<p>...</p> <ul style="list-style-type: none"> • <i>Construction works are managed to avoid, <u>or mitigate and manage</u> impacts on the amenity and environmental conditions prevailing in the vicinity of the worksites</i> <p>...</p>
<i>Mitigation Measures</i>	<ul style="list-style-type: none"> • <i>Hours of work:</i> <ul style="list-style-type: none"> ○ <i>Construction activities <u>on or above the surface and which generate excessive levels of noise, vibration, dust or traffic movements should only be undertaken between 6.30am and 6.30pm Mondays to Saturdays and at no time on Sundays or Public Holidays except for special circumstances where the above surface works should be conducted outside these days and hours.</u></i> ○ ... ○ <i><u>Notify local communities of duration and timing of surface works to be conducted outside of usual working hours.</u></i>

Although community consultation on the EIS, submissions received, and the draft Construction EMP canvassed night time work, it is acknowledged the above statement in section 4.3.20 of the EIS could have led other members of the community to believe surface work would be limited to daytime hours, except in special circumstances, at the time the EIS was released for public consultation.

Evaluation Report

Condition 7(b) imposed in the Evaluation Report uses the same wording as the draft Construction EMP to describe the hours of work.

2008 Request for Project Change

The Proposed Report (page 47) refers to the 2008 request for project change and to the Heggies May 2008 report which is an attachment to the 2008 request for project change. Please consider amending the sentence *“That proposal does not appear anywhere in the request for project change”*. It is noted that the 2008 request for project change (at page 102) says:

“For possible nightworks to construct the cut and cover tunnels beneath Kedron Brook, effective notification measures would likely be required to achieve the environmental objectives and performance criteria specified in the Coordinator-General’s Conditions for general construction and for management of noise and vibration effects of construction.”

The Heggies May 2008 report attached to the 2008 request for project change also refers to 24 hour construction at Kedron Brook (at page 9 and page 15).

Alternative wording

Please consider amending Proposed Opinion 1 as follows:

“Elements of the community may have reasonably formed a view based on statements in the EIS that surface work would be limited to the daytime, except in special circumstances.”

CNI’s response

CNI did not comment on proposed opinion 1.

However, CNI made numerous comments about the chapter in which the opinion appeared. In addition to the matters raised by the CG, CNI objected to content in section 6.4 (Evaluation report – May 2007) of the proposed report. Particularly, CNI said that contrary to the Acting Ombudsman’s view, the EIS Team had advised that residents around Clayfield and Toombul had been concerned about night-time work, as they had experienced night-time work with the AirTrain construction. Also, the EIS Team received numerous inquiries about the scale, intensity and duration of the work at Kalinga Park. CNI requested that I remove the view that had the community been aware that night-time surface work was a real prospect, the CG would have received submissions on this issue.

The relevant parts of the CNI submissions are:

6.2.1 Observation

The project description that the Proposed Report refers to is an extract from part of the EIS prepared in 2006 and is not a Condition on the project imposed by the Coordinator-General in 2007.

To balance the community’s desire for the construction timetable to be as short as possible and the environmental objectives to maintain a reasonable acoustic environment for living and use of properties along the corridor of construction influence during construction works, the draft outline Environmental Management Plan

(construction) (“EMP”) in Chapter 19 of the EIS contemplated night time surface construction works that did not exceed the established goals. The elements of this EMP that provided for night works were replicated in imposed condition 7(b) and Chapter 8 of the Proposed Report confirms the effect of this condition.

It is noted that the community impacts would be protracted if no night works were permitted, resulting in significant impacts to both the local and wider communities over an extended construction period. This position concurs with the views expressed by the community during the EIS process and members of the community who approached you in this regard, as indicated on page 19 of the Proposed Report.

6.4 Evaluation report – May 2007

As per CNI’s preliminary observations, Section 6.4 contains inconsistencies and an error of fact.

CNI has sought further information from the EIS Team who conducted the community consultation for the EIS process.

CNI has been advised by the EIS Team that:

“It should be noted that, during preparation of the EIS, the community focus was on the design, construction and operation of AL. In particular, the community at Toombul and Clayfield were concerned about the location and operation of the ventilation outlet and about the location, construction and operational noise from the portals or connections of AL with the surface road network at Sandgate Road and the East West Arterial.

The scale, intensity and duration of construction works in Kalinga Park were one specific concern that was addressed by the project team in numerous meetings with residents, including a site meeting in the local streets and in Kalinga Park. People expressed concerns about construction works, including night works, based on their then recent experiences with the construction of AirTrain, involving night works.

The draft outline EMP (construction) sought to address these concerns and balance the requirements of the community and the Project.”¹⁵⁰

The Proposed Report at Proposed Opinion 9 concludes that Condition 7(b) allows surface work to be carried out between 6:30pm and 6:30am Mondays to Saturdays and on Sundays and public holidays as long as those works do not generate excessive noise, vibration, dust and traffic. Condition 7(b) replicates in part the Draft Outline Construction EMP in Chapter 19 of the EIS.

It is therefore clear that the EIS, together with the Coordinator-General’s imposed conditions (which have been unchanged since May 2007) contemplated the possibility of night time surface work.

The SKM-Connell Wagner Joint Venture has further advised CNI that:¹⁵¹

1. Residents at the North eastern end of the Airport Link project around Clayfield and Toombul were aware of night works due to the Airtrain construction (which also involved night works), and the requirements of mitigation.
2. Residents in other areas also asked about night time works. The initial community information session where some of these concerns were aired attracted 650 people and the community made their comments publicly. We are

¹⁵⁰ SKM-Connell Wagner Joint Venture Memo to CNI dated 28.1.11.

¹⁵¹ The EIS Team advise that the scope and nature of the community sessions (650 people in a single room at times or door knocking and engaging people in the street) meant that minutes were not taken of these meetings.

advised that, in subsequent community information sessions, the EIS and consultation teams discussed with people the conditions anticipated for Airport Link in relation to noise and mitigation, based on similar conditions imposed on the NSBT project (aka Clem7).

3. Members of the Project team including the EIS Team conducted informal discussions with interested people residing in the streets around the proposed worksites at Kedron and Clayfield as part of the community consultation process supporting development of the EIS and reference design. During these sessions, questions were raised about 24/7 works. Again, Project team members discussed with people who enquired, the anticipated scope of the conditions anticipated from the Coordinator-General. These conditions reflected the preliminary findings of the EIS and the similar conditions imposed by the Coordinator-General on the North South Bypass Tunnel (aka Clem7).

The Proposed Report equates the Kalinga Woolloowin Residents Association (KWRA) with the Community. While it is acknowledged that the KWRA clearly represents some element of the community, the KWRA came into existence after the community consultation processes for the EIS and the Change Report for Airport Link and after the Coordinator-General established his Imposed Conditions for Airport Link. Further, we can find no record of principal members of the KWRA ... having made submissions as part of the community consultation on the EIS or 2008 Request for Project Change. ***As CNI noted in its preliminary observations, it is difficult to assess the KWRA or the Community Liaison Group Members (both of which came into existence after the EIS process) as representative of the entire community at the time of the EIS.***

The Proposed Report concludes that the Coordinator-General's imposed condition 7(b) permitted night time surface work. Condition 7(b) was contained within the EIS. Despite this, the Proposed Report observes that the EIS process did not address the possibility of such work (4th paragraph page 47). CNI suggests that, throughout this community consultation process, the EIS clearly included the possibility of such work, and this was replicated in the Coordinator-General's imposed conditions in May 2007. ***CNI suggest that the observation in the 4th paragraph page 47 be removed for consistency with the findings of the proposed report.***

6.4.1 Observation

We refer you to our comments in relation to clause 6.4 above. As noted in CNI's preliminary observations, there are many things contained in the EIS on which no formal comment or submission was received by the Coordinator-General. That does not mean that the community consultation staff did not talk about these issues with the community. For example, planning and managing blast patterns during construction, the methods underpinning the traffic forecasts, background to health risk assessment were all part of the consultation process and little or no comment was received by way of submission in relation to these important things. ***It is unclear how the lack of submissions on any particular point such as night works supports the KWRA contentions. CNI suggest that this purported finding be removed from the Proposed Report.***

6.5 2008 Request for Project Change and 6.5.1 Observation

In response to comments in this paragraph, we note that:

1. The State was the proponent for the Airport Link Project and it was the State that made the Request for Project Change to the Coordinator-General.
2. The Proposed Report states that Report 20-1605-56 Airport Link Changed Project Noise and Vibration Report is a technical attachment to the request for project change. The Proposed Report quotes a paragraph from that report which explicitly states that certain works were proposed for 24 hours a day. The

Proposed Report then states, at 6.5.1, that the possibility of surface works at night-time ... was not explicitly raised in the request for project change. ***The technical report was a part of the Request for Project Change and was publicly notified as part of the Request for Project Change. It is therefore unambiguous that the possibility of 24 hour works was explicitly raised in the Request for Project Change and was publicly available to the community.***

The fact that the community asked questions during the community consultation process regarding night time works and 24/7 works (see above in response to the response to 6.4), further supports the view that the possibility of such works was communicated to the community at the time of the EIS process.

DERM's response

DERM offers no comment on the linkage between the Project documents and the public's view. Conversations between DERM's field officers and members of the community suggest that there were community members who weren't aware that work would be conducted out of daytime hours and there were those who knew night-time works would occur but weren't prepared for the frequency or intensity of those night-time works.

My comment

I note that the 2008 request for project change did canvass the 24 hour cut and cover works across Kedron Brook.

The proposed report noted that the possibility of night-time surface works was disclosed in the draft outline EMP contained in chapter 19 of the EIS. However, the EIS is lengthy. Putting aside the 74 page Executive Summary, volume 2 and volume 3, the EIS is 22 chapters long. It seems reasonable to me that a member of the community, having received direction as to the Project hours of work from chapter 5 (Project Description) and chapter 10 (Noise and Vibration), would not read into the minutiae of the tables in chapter 19 (Draft Outline EMP) in the case that further direction might be found there.

I note the advice, through CNI, of the EIS Team about the concern of certain members of the community about night-time works. However, the proposed opinion concerns the impression given by the Project documents. Based on the view I have expressed in the above paragraph, together with the absence of detailed submissions in response to the EIS about the possibility of night-time surface work, I substantively agree with the proposed opinion.

I have modified the proposed opinion slightly to take in account the possibility that not all members of the community formed the view mentioned, and to confine it specifically to the impression reasonably held of the EIS.

Opinion 1

Some members of the community reasonably formed a view based on statements in the EIS that surface work would be limited to the daytime, except in special circumstances.

The CG's imposed condition 7(b) appears to have been adopted from wording originally contained in the proponent's EIS, namely that only surface construction that generates 'excessive' noise is to be limited to the daytime. The implication is that

surface construction noise that is not excessive (a term that is not defined) can continue into the night.

In the advice Mr Wensley QC provided to my Office about condition 7(b), covered in chapter 8 of this report, he stated:

Put another way, this part of the Condition allows the contractor to undertake construction activities for works on or above the surface at any time, including Sundays and public holidays, provided that excessive levels of noise are not generated.

I must say that this conclusion seems to be at odds with the apparent intent expressed in the original EIS, as well as in the Coordinator-General's report of May 2007 and in the Airport Link Request for Project Change Response to Submissions of 21 July 2008. Maybe an evolutionary series of draftings, resulting in a final Condition which reverses an earlier expressed intention, leading to this result, is the explanation. Alternatively, perhaps there was a considered policy shift. Certainly, it seems to me that the clear tenor of earlier documents, from the original EIS onwards, was that (absent exceptional circumstances) there would never be surface work on Sundays. Now there can be, provided it does not involve spoil haulage or the generation of 'excessive' noise, dust or vibrations.

As I have mentioned, the words of condition 7(b) were part of the imposed conditions for the construction of the Clem7 tunnel. It is not within the scope of my investigation to determine whether, as Mr Wensley suggests, there was an evolutionary series of drafting that changed the intent, or a clear policy shift. Nevertheless, however it came to be, I consider the condition is inconsistent with the understanding members of the community reasonably reached based on the Project documents.

The proposed report contained the following:

Proposed Opinion 2

Condition 7(b) is inconsistent with the understanding of the community, from the Project documents that surface work would only occur during the daytime except in special circumstances.

CG/DIP's response

Please also give consideration to amending Proposed Opinion 2 as follows:

"Condition 7(b) appears to be inconsistent with the understanding of elements of the community that surface construction work would only occur during the daytime except in special circumstances. However, Condition 7(b) is not inconsistent with the draft EMP contained at Chapter 19 of the EIS."

CNI's response

CNI did not comment on proposed opinion 2.

However, CNI made numerous comments about the chapter in which the opinion appeared. In addition to the matters raised by the CG, CNI objected to content in section 6.4 (Evaluation report – May 2007) of the proposed report. Particularly, CNI said that contrary to the Acting Ombudsman's view, the EIS Team had advised that residents around Clayfield and Toombul had been concerned about night-time work, as they had experienced night-time work with the AirTrain construction. Also, the EIS Team received numerous inquiries about the scale, intensity and duration of the work

at Kalinga Park. CNI requested that I remove the view that had the community been aware that night-time surface work was a real prospect, the CG would have received submissions on this issue.

DERM's response

DERM offers no comment on the link between the Project documents and the public's understanding. DERM agrees that condition 7(b) is inconsistent with an understanding that surface work would only occur during the daytime except in special circumstances.

My comment

The proposed report noted the draft outline EMP used the same wording as the eventual imposed condition 7(b).

I have commented on CNI's submission in connection with Opinion 1.

I form the following opinion, which is slightly modified from the proposed opinion:

Opinion 2

Condition 7(b) is inconsistent with the understanding of some members of the community that surface construction work would only occur during the daytime except in special circumstances.

I consider that community consultation through the EIS process needs to be improved for significant projects where any form of night-time surface work is contemplated by a proponent in residential areas. I therefore make the following recommendation:

Recommendation 1

The CG incorporate, in the terms of reference for each future EIS, the requirement to clearly and unambiguously communicate to the community any possibility of night-time surface work, the circumstances in which that work may be undertaken, and the likely duration (if known) in order that the CG may receive and consider submissions made by the community.

CG/DIP's response

The CG accepts Proposed Recommendation 1.

The CG acknowledges that potential impacts associated with possible night-time surface work require more clarity during the EIS phase of a project.

The CG will give consideration to incorporating into the terms of reference for future projects a requirement that the EIS address whether night-time surface construction work may occur, whether such work may impact residential areas and, if so, the circumstances in which that work may be undertaken and the likely duration of that work.

CNI's response

CNI did not comment on proposed recommendation 1.

DERM's response

DERM supports this proposed recommendation.

My comment

As the parties have either agreed or not objected, I now make Recommendation 1 in the form proposed.

Chapter 7: Steps leading to 24/7 work

7.1 Overview

As previously noted, KWRA alleged that the community had been assured that, except for very limited special circumstances, night-time surface work would never occur.

Chapter 6 explored the publicly available documents relating to the establishment of the Project to consider what they revealed about the possibility of night-time surface work during the Project.

This chapter will look at:

- what occurred immediately before the announcement of night-time surface work at the Kalinga Park worksite as evidenced by correspondence and meetings between TJH, BrisConnections, CNI, DIP/CG and DERM¹⁵²
- how 24/5 surface work and then 24/7 surface work at the Kalinga Park worksite unfolded from the perspective of the community as evidenced by the minutes of the CLG meetings and community notices issued by TJH¹⁵³
- what public references were made to the possibility of night-time surface work in precincts other than Toombul in the period before the announcement of night-time surface work at the Kalinga Park worksite as evidenced by minutes of the CLG meetings for the other precincts¹⁵⁴
- the extent to which night-time surface work has been undertaken in the various Project precincts¹⁵⁵
- information provided to the community by government in response to complaints about night-time surface work as evidenced by correspondence¹⁵⁶
- information obtained by my officers during meetings with agency officers about the information the community had been given about the possibility of night-time surface work and their response to TJH's decision to work 24/7.¹⁵⁷

After considering this material, I will examine whether the information available to the community adequately conveyed the possibility of night-time surface work being undertaken during the Project.¹⁵⁸

KWRA advised us that it was concerned about who gave the 'green light' to TJH to commence 24/7 work, how that occurred, and the consideration of the proposal through the CG's Office, DIP and CNI.¹⁵⁹ As a matter of public interest, this chapter also examines those issues.

¹⁵² See 7.2 of this report.

¹⁵³ See 7.3.1 of this report.

¹⁵⁴ See 7.3.2 – 7.3.5 of this report.

¹⁵⁵ See 7.4 of this report.

¹⁵⁶ See 7.5 of this report.

¹⁵⁷ See 7.6 of this report.

¹⁵⁸ Section 2.4 of this report outlines the issues for investigation and section 2.5 outlines the issues for this report.

This chapter addresses the issue in point 2.5.1.

¹⁵⁹ Refer to Section 2.1, point 5, of this report.

7.2 TJH decision to work 24/7

Immediately before the announcement of night-time surface work at the Kalinga Park worksite, there were numerous communications between the parties about the move to undertake night-time surface work. Correspondence passed between TJH, BrisConnections, CNI and DIP/CG. Several meetings also took place between TJH, CNI, DIP/CG and DERM.

30 March 2009 – Letter from CNI to BrisConnections

On 30 March 2009, CNI wrote to BrisConnections¹⁶⁰ and advised:

It has come to our attention that concrete pours and other undefined work have occurred and are planned to take place in the future in the vicinity of Colton Avenue, Kedron, outside normal working hours. This has generated several complaints to date (23/24/25 Feb, 15 Mar). TJH has indicated that it is their intent to continue working outside of hours on a 'complaints based approach' and that there is an apparent lack of understanding of the CG phrase 'special circumstances'.

CNI further advised:

CNI's expects (sic) the approach to meet CG Conditions relating to working hours is as follows:

- Special Circumstances work which may lead to higher noise levels than those stated in the noise goals (ie excessive noise) must be justified as typically work that cannot practicably/safely be undertaken during normal working hours (eg lifting super T's over roads)
- TJH should demonstrate compliance with their Special Circumstances Work procedure,
- If the out of hours work continues and is approved under the above and the Noise Management Procedure to avoid noise disturbance TJH should comply with App1, Sch 3, 9(d): consult with the community and apply 'reasonable and practicable mitigation and management measures and a monitoring programme must be adopted'. Noise predictions or noise modelling should also be undertaken in advance (App1, Sch3, 9) for any work
- The results of the recent attended noise monitoring carried out during evening work should be considered and will determine if the noise exceeds or is within goal levels as per CG conditions.
- CNI would expect any construction work outside of normal working hours which is above the goal levels and therefore not adequately mitigated to be a breach of CG conditions and duly reported as a CG non conformance, especially those that lead to complaints (App1, Sch 3, para 4, Table 1).

14 July 2009 – Letter from TJH to BrisConnections

On 14 July 2009, TJH wrote to BrisConnections¹⁶¹ and said:

As per recent discussions, it is our intention to work a nightshift operation of the Kalinga Park worksite. This shift will support the main dayshift activities and would generally operate between 6.30pm and 6.30am, Monday to Friday, commencing 20 July 2009.

¹⁶⁰ Letter from David Lynch, Chief Executive Officer, CNI, to PPP Cos Representative, BrisConnections dated 30 March 2009, Ref: 09/09234.

¹⁶¹ Letter from Project Director, TJH to General Manager Construction, BrisConnections dated 14 July 2009, Ref: RB:glc:01.01.0338.doc.

The letter outlined the general approach to night-time surface work and advised 'we request the assistance of CNI's Communications team to effect the necessary notification advices'.

17 July 2009 – Letter from BrisConnections to CNI

In a letter from BrisConnections to CNI dated 17 July 2009,¹⁶² TJH's intention to commence night-time surface work at the Kalinga Park worksite in the very near future was noted. The letter requested that CNI review the material attached 'in order that the approval process can be expedited once the additional details are available'.

22 July 2009 – Letter from TJH to BrisConnections

In a letter from TJH to BrisConnections dated 22 July 2009,¹⁶³ it was noted:

The intention to commence night work activities has previously been the subject of numerous discussions between CNI and TJH. These discussions included their expectations with respect to how we would proceed with this work from both communications and operational perspectives.

The letter went on to provide additional detail as to the approach to be taken and noted the intention to commence night-time work in Kalinga Park as of 27 July 2009 subject to the giving of adequate notice to and engaging with nearby residents.

24 July 2009 – Letter from BrisConnections to CNI

In a letter from BrisConnections to CNI dated 24 July 2009,¹⁶⁴ BrisConnections provided information from TJH about a range of matters pertaining to night-time works, including noise modelling results and the communication process. The letter said 'We trust the contents of TJH's letter and this supplementary information is sufficient to enable CNI to authorise the night-work activities at Kalinga Park'.

28 July 2009 – Internal DIP email

An email between two DIP officers on the morning of 28 July 2009 stated:¹⁶⁵

Would [S] have a half hour to meet [A] (Technical Director) from CNI and [R] (Construction Director) from TJH (Airport Link) to discuss night works procedures and their proposed system for application. TJH intention is to apply the new procedures to the Toombul site.

The meeting is an informal presentation and anytime on Wednesday 29/7 after 1:00pm.

28 July 2009 – Letter from BrisConnections to CNI

BrisConnections again wrote to CNI on 28 July 2009¹⁶⁶ and said:

¹⁶² Letter from General Manager Construction, BrisConnections to David Lynch, Chief Executive Officer, CNI dated 17 July 2009, Ref: 1402/07.01.02.

¹⁶³ Letter from Project Director, TJH to General Manager Construction, BrisConnections dated 22 July 2009, Ref: RB:rvdv:01.01.0356.

¹⁶⁴ Letter from General Manager Construction, BrisConnections to David Lynch, Chief Executive Officer, CNI dated 24 July 2009, Ref: 1449/07.01.02.

¹⁶⁵ Email from Project Manager, DIP to Significant Projects Coordination, DIP sent 28 July 2009 at 10.17am. Subject title: 'Re: Please call [A] from CNI re; meeting to discuss night works'.

¹⁶⁶ Letter from General Manager Construction, BrisConnections to David Lynch, Chief Executive Officer, CNI dated 28 July 2009, Ref: 1462/07.01.02.

In our letter of 24 July 2009, we provided information on the planned Toombul Nightworks, and asked for your authorisation in order to proceed with these works.

We now wish to clarify that the information was provided for CNI's information only, as we believe that we do not require CNI's specific approval for such works. However, it is understood that TJH will need to address the environmental goals provided in the Coordinator General's conditions of approval for the projects.

29 July 2009 – Meeting between TJH, BrisConnections, CNI and DIP

A meeting was held on 29 July 2009 between officers from TJH, BrisConnections, CNI and DIP for the purpose of CNI and TJH discussing the process of the proposed planned night-time surface work for Kalinga Park (Toombul Worksite). The minutes¹⁶⁷ stated:

Low level noise will occur from the Toombul worksite that will not impact on the community.

Construction activities will include: fix steel, pouring concrete, reinforcing cages and small cranes will operate throughout the night.

CG condition [9(d) B ii] allows for 24 hour works to occur – steady construction noise stays below 35 dBA noise goal.

30 July 2009 – Letter from CNI to BrisConnections

A letter from CNI to BrisConnections dated 30 July 2009¹⁶⁸ noted the actions TJH was to undertake before and during the night-time surface work activity to comply with the imposed conditions.¹⁶⁹ It states:

CNI is aware of the community concern for this works being undertaken and asks that TJH and BrisConnections continue to liaise with CNI in relation to any concerns that arise from the construction activities.

31 July 2009 – Email from DIP to CNI

An email from a DIP officer to a CNI officer on 31 July 2009 stated:¹⁷⁰

Thank you for the opportunity to provide comments on the draft night works process with the aim to meet the CG's conditions. I have the understanding that noise modelling, monitoring, measuring and community consultation plan is well progressed for piloting at the Toombul site.

In regards to community consultation discussion, it was mentioned that several mitigation strategies are currently being proposed with the aim to seek improvements.

I would like to reiterate our suggestions as part of your consultations with residents to seek further modelling for internal noise monitoring and a step-by-step plan for area

¹⁶⁷ Department of Infrastructure and Planning Minutes of Meeting dated 29 July 2009 prepared by Significant Projects Coordination, Department of Infrastructure and Planning.

¹⁶⁸ Letter from David Lynch, Chief Executive Officer, CNI to PPP Cos Representative, BrisConnections dated 30 July 2009, Ref: 09/41481.

¹⁶⁹ Although the letter refers to the 'Planning Approval', it appears that it means to refer to the CG's imposed conditions.

¹⁷⁰ Email from Project Manager, DIP to Technical Director, CNI sent 31 July 2009 at 1:13pm. Subject title 'Draft Night Works – Toombul site'.

managers including the next day follow-up procedure after a telephone call has been lodged with respect to any night-time disturbances.

Discussions were also held on 'special circumstances' and the methodology for sign off between TJH & BrisConnections. It was determined that DERM would also participate in the sign-off as a consultative measure for future special circumstances and we would support this interface to strengthen the process.

You also mentioned there would be a meeting next week with DERM to provide their input and the opportunity for us to attend, please let me/[Officer F] know the preferred time/date, once it becomes available.

4 August 2009 – Meeting between TJH, CNI, DIP/CG and DERM

On 4 August 2009, a further meeting was held between officers of TJH, CNI, DIP/CG and DERM. The purpose of the discussion was stated in the minutes¹⁷¹ to be 'Request by DIP for TJH to demonstrate how they intend to undertake night-work for compliance with the CG's Conditions of Approval'.

During the meeting, TJH outlined the process it took to determine compliance with the CG's noise goals, which included:

- noise modelling to assess impacts on nearby residents and further refining the construction activities and adjusting the equipment to minimise noise impacts
- mitigation by closing gaps in the noise barriers that had been left for drainage
- mitigation provided to properties identified in the remodelling as potentially exceeding the goal levels
- environmental monitoring during the night-time work activities by the (TJH) Environmental Team undertaken external to the residents with a 10 dB(A) adjustment to take into account the façade
- arranging a direct line of communication between TJH site supervisor and the 1800 complaints hotline during the work.

In this regard, the minutes¹⁷² stated:

Should an exceedence of noise goals occur, the supervisor will immediately alter the work to reduce the noise or if this cannot be done, work will be ceased if noise goals are exceeded. In the event of a complaint, attended monitoring will be undertaken and if there is an exceedence, the works will be altered or ceased.

Further steps in the process included:

- training to be provided to the workforce by the TJH Environmental Team relating to worker behaviour and noise reduction
- TJH to consistently review work and demonstrate effectiveness of noise controls.

During the meeting, DERM raised a number of concerns including the quality of community notices. The minutes¹⁷³ noted:

¹⁷¹ CNI Meeting minutes dated 4 August 2009 prepared and reviewed by CNI.

¹⁷² Agenda Item 2.1, point 7.

¹⁷³ Agenda Item 2.2.

Community notices appear to be generic and poorly targeted – do not have enough information for those being impacted. – TJH should have more specific information in the Notices and CNI will raise queries promptly. Continued improvement of the communication process required.

DERM also raised concerns about the definition of ‘excessive’ in the noise goals, the duration and timing of the works, TJH’s track record of managing complaints and the meaning of ‘special circumstances’.

The minutes¹⁷⁴ noted:

TJH have confirmed that the mitigation measures are currently in place for the night work and should an exceedence occur, action will be undertaken to alter or cease the work.

4 August 2009 – Community notice

A community notice was issued advising the community that 24/5 surface works would be undertaken at the Kalinga Park worksite from 6 August 2009.

5 August 2009 – Internal DIP email

An email between DIP officers on 5 August 2009 stated:¹⁷⁵

A follow-up meeting was held yesterday by CNI to inform DERM of their progress with the development of the draft night works process.

The email then stated that DERM and CNI would like a determination on condition 7(b) and condition 9 and what the term ‘excessive’ means and raised some concerns about this interpretation. It went on to discuss a meeting about conditions likely to be altered due to the changes for the Woolloowin site.

6 August 2009 – Email from CG/DIP to CNI

An email with the subject heading ‘Urgent request’ from the Principal Executive Officer to the Deputy CG, DIP sent to CNI at 8.38am on 6 August 2009 said:¹⁷⁶

CG has requested the following information please as soon as possible:

- precisely what work is being carried out;
- why the need for 24 hour shifts; and
- who gave approval for the 24 hours of operation.

¹⁷⁴ Agenda Item 2.2.

¹⁷⁵ Email from Project Manager, DIP to Steve Mill, Executive Director, DIP and Director, DIP sent 5 August 2009 at 10.01am. Subject title ‘RE: Draft Night Works – Toombul site’.

¹⁷⁶ Email from Principal Executive Officer to the Deputy Coordinator-General, DIP to Director, Media and Communications, CNI sent 6 August 2009 at 8.38am. Subject title ‘Urgent request’.

6 August 2009 – Email from CNI to CG/DIP

CNI responded to the email from CG/DIP at 9.11am on 6 August 2009 by advising:¹⁷⁷

... there was NO formal 'approval' required as such. Under the CoG conditions for Kalinga Park 24 hr works have always been possible. However (sic) before TJH went ahead with the introduction of nightshift CNI ensured that they had a.) put a Site Environmental Plan in place and b.) ensured that all possible mitigation was in place. This was finalised on Monday and a notification to residents was provided on Tuesday with a door-knock yesterday.

6 August 2009 – Commencement of night-time works at the Kalinga Park worksite

The 24/5 surface works commenced on 6 August 2009.

11 August 2009 – DERM request for information about commencement of night-time works at the Kalinga Park worksite

DERM issued a s.451 notice under the EP Act to TJH (Ref BNE 132) about the Kalinga Park worksite requiring information to establish TJH's compliance with the imposed conditions. The information was required by 19 August 2009. TJH's submission to my Office of 19 November 2010 advised that it responded to DERM on 17 August 2009 to which no response was received from DERM.¹⁷⁸

18 August 2009 – Meeting between TJH, CNI, DIP/CG and DERM

Evidence obtained from CNI indicated that there was a meeting between officers of TJH, CNI, DIP/CG and DERM on 18 August 2009. In response to a request to CNI for a copy of the minutes for this meeting, CNI advised:

Unfortunately, the minutes of a meeting held on 18 August 2009 between representatives of TJH, CNI, DIP/CG and DERM were not located. It is the recollection of CNI officers that no minutes were prepared for that meeting.¹⁷⁹

13 October 2009 – Email from CNI to TJH

An email from CNI to TJH on 13 October 2009¹⁸⁰ said:

Following [B's] request for a meeting with the CG, DERM, CNI and TJH to discuss extending the night work at Toombul ... I am raising concerns about the lack of response to previous CNI issues/questions on the existing night time activities. Therefore CNI lack confidence in the management of these night works from a community and environmental impact perspective. For CNI to support you on this request please note the following:

¹⁷⁷ Email from Director, Media and Communications, CNI to Principal Executive Officer to the Deputy Coordinator-General, DIP sent 6 August 2009 at 9.11am. Subject title 'RE: Urgent request'.

¹⁷⁸ Further discussion on the issue of this notice can be found at 10.6.3 in this report.

¹⁷⁹ Letter from David Lynch, Chief Executive Officer, CNI to my Assistant Ombudsman dated 18 November 2010, Reference 10/104563.

¹⁸⁰ Email from Environment Manager, CNI to TJH sent 13 October 2009 at 4.34pm. Subject 'Toombul Night Work – extended scope – Responses required'.

The email goes on to request that a range of information be provided including:

- responses to questions previously asked about the draft site environment plan
- details of responses to 10 complaints received about night-time surface work
- response to an issue raised about the use of a high pressure jet cleaner at the Toombul site during the night shift and whether its use complies with the site environment plan
- ‘an outline of the additional night-work proposed for Toombul, complete with plant lists, activities and locations, start dates, noise modelling and demonstration that previous noise model accuracies have been verified’.

Information from TJH

During the investigation, my Office wrote to BrisConnections and TJH to seek information in relation to the issues for investigation.¹⁸¹ Advice was sought about their recollection of the steps taken to advise DIP, CNI or DERM of TJH’s intention to commence night-time surface work at Kalinga Park. TJH responded by advising:¹⁸²

On 14 July 2009, we submitted a draft community notification to CNI and wrote to BrisConnections notifying them of our intention to commence night works at the Kalinga Park worksite and sought their assistance to affect [sic] the necessary notification advices. BrisConnections subsequently wrote to CNI on 24 July, 2009 confirming the notification.

We cannot comment on the exact date, however we understand that shortly afterwards CNI initiated discussions with the Coordinator General and DERM.

We submitted the Site Environmental Plan (SEP) for the work to CNI and the Coordinator General on 31 July 2009. On 4 August 2009, TJH, along with CNI and the CoG met with DERM and provided a comprehensive overview of, and the rationale for compliance with the conditions, for undertaking night works at the Toombul site.

BrisConnections and TJH were also asked, with respect to the commencement of night-time surface work at Kalinga Park:¹⁸³

The reasons which were given, and by whom, to any of the agencies for commencing night time surface work and for continuing (if that is the case). If none were given please explain why not.

TJH did not answer this question in its response to my Office.

7.3 Advice to and response from the general community

An examination of the minutes of the Toombul CLG meetings and community notices issued by TJH shows how 24/5 surface work and then 24/7 surface work at the Kalinga Park worksite unfolded from the perspective of the Toombul community.

¹⁸¹ Letter from Acting Queensland Ombudsman to Chief Executive Officer, BrisConnections and Project Director, TJH dated 18 October 2010.

¹⁸² Letter from Acting Project Director, TJH to Acting Queensland Ombudsman dated 19 November 2010. Ref: GR:rvdv:02.32.0220, page 3.

¹⁸³ Letter from Acting Queensland Ombudsman to Chief Executive Officer, BrisConnections and Project Director, TJH dated 18 October 2010.

The minutes of the CLG meetings for the precincts other than Toombul in the period before the announcement of night-time surface work at the Kalinga Park worksite show the extent of public references as to the possibility of night-time surface work. These minutes are not a verbatim account of the meeting that took place, nor do they adequately differentiate between tunnelling operations, night-time surface work, special circumstances work and night-time public utility plant work. What constitutes special circumstances work is also imprecisely defined.

7.3.1 Toombul/Kalinga Park

11 November 2008 – CLG Meeting

At the Toombul CLG meeting of 11 November 2008, a CLG member asked what night activities are considered essential. The answer was 'TMB (sic) assembly, delivery of large equipment etc. Residents will be notified prior to night activities'.¹⁸⁴

9 December 2008 – CLG Meeting

At the Toombul CLG meeting of 9 December 2008, the question was asked whether night-time surface work would occur on a regular basis in Kalinga Park. The answer contained in the minutes was 'Night work will occur in Kalinga Park as required – tunnelling work will be ongoing 24/7 however, the majority of this work is underground'.¹⁸⁵

10 February 2009 – CLG Meeting

At the Toombul CLG meeting of 10 February 2009, a CLG member inquired whether the shed being constructed at Kalinga Park was required because of night-work activities that will occur on site. The minuted answer was that 'the shed is being investigated as part of all the work to occur in Kalinga Park – will assist with assembly of TBM and during 24 hour activities, provides flexibility'.¹⁸⁶

12 May 2009 – CLG Meeting

During the Toombul CLG meeting on 12 May 2009 there was discussion about concrete work to construct the diaphragm wall in Kalinga Park finishing after 6.30pm.¹⁸⁷ The minutes indicated that on a few occasions concreting work had finished after 6.30pm but this was due to circumstances that prevented the pour finishing before then. The meeting was told that once started, concreting work must be finished. A number of techniques that were being implemented to ensure that concrete pours do not continue past 6.30pm were listed. The minutes stated:

There may still be the odd occasion when pours will continue after 6.30pm, however, these will be limited to unforeseen circumstances.¹⁸⁸

The minutes went on to say:

CLG member enquired what consequences TJH faces for working past 6.30pm on concrete pours in Kalinga Park.

¹⁸⁴ Toombul Community Liaison Group Minutes of meeting on 11 November 2008, Item 3, page 2.

¹⁸⁵ Toombul Community Liaison Group, Minutes of Meeting on 9 December 2008, Item 4, page 3.

¹⁸⁶ Toombul Community Liaison Group, Minutes of Meeting on 10 February 2009, Item 3, page 2.

¹⁸⁷ Toombul Community Liaison Group, Minutes of Meeting on 12 May 2009, Item 5, page 3.

¹⁸⁸ Toombul Community Liaison Group, Minutes of Meeting on 12 May 2009, Item 5, page 3.

- CNI advised that activities of this nature are considered non-compliances and are reported to the Coordinator-General on a monthly basis.
- CNI commented that TJH try to learn from such non-conformances to avoid them occurring again.
- BrisConnections also advised that if a significant breach occurs it must be reported to the Coordinator-General within two days.¹⁸⁹

9 June 2009 – CLG Meeting

At the 9 June 2009 meeting of the Toombul CLG, the issue of concrete pours continuing after 6.30pm in Kalinga Park was again discussed. TJH advised the meeting that ‘the concrete pours are not planned to go past 6.30pm but inhibiting circumstances have resulted in the work continuing past 6.30pm’.¹⁹⁰

14 July 2009 – CLG Meeting

At the Toombul CLG meeting of 14 July 2009, during the monthly construction update, the meeting was advised of proposed night-time surface work at Kalinga Park commencing in July 2009 for approximately seven months from Monday to Friday 6.30pm to 6.30am.¹⁹¹ Activities to be undertaken included ‘fixing of steel reinforcement and formwork, pouring and finishing of concrete’.

The minutes stated:¹⁹²

Mitigation measures:

- Complete noise wall end of Jackson Street
- Limit work to activities that generate limited noise
- Ongoing environmental monitoring
- Installation of ‘quacker’ type reversing alarms, as opposed to ‘beepers’
- Ensure lighting is angled to minimise spill or glare into neighbouring houses
- Staff briefing prior to start of night shift focusing on safety and community mitigation including noise and lighting.

The minutes¹⁹³ showed the following comments/discussion related to the issue of the proposed night-time works:

- CLG member commented that he believed no surface works would be undertaken at night. CLG member believes the community has been continually misled.
 - CNI advised TJH applied to CNI for an approval to undertake night work in Kalinga Park. CNI advised they will set stringent requirements for working at night
 - TJH advised night shift has been on the agenda as a possibility since 2008. TJH confirmed they were only able to announce the work from today, 14 July 2009.
- CLG member commented the key issue is that before construction began, night work was only spoken about as an ‘as required’. CLG member stated he is not surprised.
 - TJH confirmed night work has always been a possibility and is permitted under the Coordinator-General’s conditions, as long as specific requirements are met.

¹⁸⁹ Toombul Community Liaison Group, Minutes of Meeting on 12 May 2009, Item 5, page 4.

¹⁹⁰ Toombul Community Liaison Group, Minutes of Meeting on 9 June 2009, Item 5, page 3.

¹⁹¹ Toombul Community Liaison Group, Minutes of Meeting on 14 July 2009, Item 5, page 2.

¹⁹² Toombul Community Liaison Group, Minutes of Meeting on 14 July 2009, Item 5, page 2.

¹⁹³ Toombul Community Liaison Group, Minutes of Meeting on 14 July 2009, Item 5, pages 2 and 3.

- ... CLG member also queried the timeframe for announcing Request for Project Change and night works.
 - CNI commented the night work proposal had not been formally received prior to the last CLG meeting and therefore could not be announced. CNI advised there was a process that had to be undertaken before night work is publicly announced.
- CLG member advised that the community is opposed to the introduction of night shift.
 - CNI commented that community comments would be taken into consideration.
- CLG member enquired if the night shift was being introduced as a result of programming.
 - TJH confirmed the night shift will ensure civil work, including the TBM launch box, is complete prior to the start of tunnelling.
- CLG member asked if the community would be notified about the introduction of the night shift.
 - TJH advised a community notification was currently awaiting approval from CNI.

4 August 2009 – Community notice

The community notice issued by TJH on 4 August 2009¹⁹⁴ stated:

From Thursday 6 August 2009, a night shift operation will be introduced in Kalinga Park, Clayfield for the Airport Link Project.

This night shift will support the main dayshift and work activities will be performed in a manner that will minimise external noise.

Nightshift hours will generally occur between 6.30pm to 6.30am, Monday to Friday and will be ongoing for approximately 7 months.

Night shift activities will be monitored to ensure they are unobtrusive.

Main activities will include:

- Fixing of steel reinforcement and formwork
- Pouring and finishing of concrete
- Minor use of cranes.

What to expect:

- Temporary lighting (including use of generators)
- Workers on site during the night
- Some vehicle movements along construction access road
- Limited construction noise.

How we will manage the work:

- Complete noise wall at end of Jackson Street
- Limit work to less noisy activities
- Ongoing environmental monitoring
- Trial the use of 'quacker' type reversing alarms, as opposed to 'beepers'
- Where possible ensure lighting is angled to minimise glare into neighbouring houses

¹⁹⁴ Community Notice – 'Toombul/Clayfield – Start of night shift – Kalinga Park' issued by TJH – Date of issue 4 August 2009, Ref 0425.

- Staff briefing prior to start of night shift focusing on safety and community mitigation.

Want more information?

The community relations team will be doorknocking residents in close proximity to the worksite on Wednesday afternoon the 5th August to discuss this work in more detail.

If you will not be home and would like to organise an alternative time please call 1800 721 783 to make an appointment.

11 August 2009 – CLG Meeting

At the Toombul CLG meeting of 11 August 2009, the following insertion into the minutes of the meeting of 14 July 2009 was agreed:

CLG member suggested all present are unanimously opposed to the introduction of a night shift. Other members of the CLG agreed.¹⁹⁵

During the meeting a 'CLG member inquired how long the night shift was known about before being announced to the CLG'.¹⁹⁶ The minutes did not record a response to this question.

Comments were made by CLG members about the lack of notice about the introduction of the night shift, with the notification delivered on 4 August and the shift commencing on 6 August.¹⁹⁷ The minutes noted:

- CLG member commented that if the community was given more than 2 days' notice about the start of night shift the community would be more accepting of the night shift.
- TJH suggested that in the future they may look to announce work to the CLG members, prior to approvals being sought (if required).
- CNI advised the application and approval process for the night shift was a long process.
- CLG member advised the issue was honesty around the night shift and other upcoming work. CLG member is concerned about 'what is next'.
- TJH advised there was an approval process that needed to be followed. TJH advised they are responsible for community timeframes not CNI. TJH advised that the Toombul community relations team had proposed a community strategy including an information session prior to the night shift commencing – due to programming this did not occur.
- CLG member said he believes the night shift is being introduced due to the rain.
 - TJH commented that 35 days of rain did contribute, but advised the shift is being introduced to ensure the launch box is ready for when the TBMs arrive.¹⁹⁸

9 September 2009 – CLG meeting

At the Toombul CLG meeting of 9 September 2009, there was discussion about noise from night-time surface work at the Kalinga Park worksite and mitigation being undertaken. The expected duration of the night-time surface work was also

¹⁹⁵ Toombul Community Liaison Group, Minutes of Meeting on 11 August 2009, Item 2, page 1.

¹⁹⁶ Toombul Community Liaison Group, Minutes of Meeting on 11 August 2009, Item 4, page 2.

¹⁹⁷ Toombul Community Liaison Group, Minutes of Meeting on 11 August 2009, Item 8, page 3.

¹⁹⁸ Toombul Community Liaison Group, Minutes of Meeting on 11 August 2009, Item 8, page 4.

discussed.¹⁹⁹ The minutes noted 'CLG member commented he does not believe the scope of night-work being undertaken is what the community expected'.²⁰⁰

The minutes²⁰¹ contained the following in relation to the announcement of night-work at Kalinga Park:

- CLG member queried the length of time CNI had known about the Kalinga Park night shift before it was announced to the community. CLG member believes the community is always behind the eight ball.
 - CNI advised that TJH first raised the night shift proposal with CNI in June 2009. Discussions then commenced with CNI technical team. A community notification about the proposed work was submitted to CNI for approval on 14 July 2009. CNI and the project's Independent Verifier were unsure if the proposed work would be compliant with the Coordinator-General's conditions. TJH demonstrated compliance through a number of letters and meetings with CNI and relevant agencies including the Department of Environment and Resource Management and the Coordinator-General. TJH provided a copy of the Site Environmental Plan (SEP) based on predictive noise modelling. TJH notified the Toombul CLG of the work at the 14 July meeting and after more noise modelling and mitigation plans were presented to CNI the community was notified of the work on 4 August.
 - TJH advised they are holding the information session on Saturday to provide the community with an overview of upcoming work at the site. TJH advised information sessions will be held more regularly moving forward to improve the transparency and accessibility of information available to the local community.
 - BC advised construction planning has to be flexible and that changes will continue to occur in line with the requirements of the project.

18 September 2009 – Community notice

A further community notice²⁰² was issued on 18 September 2009, which stated that the night-time surface work was ongoing in Kalinga Park and that, from late September, additional activities would commence on site as part of the night shift. The further activities that were to be undertaken at night were listed along with specific measures taken to mitigate the noise.

13 October 2009 – CLG Meeting

The Toombul CLG met again on 13 October 2009.

Following the environmental monitoring update, there were extensive discussions about noise being generated by night-time surface works and mitigation.²⁰³

The construction update did not mention any changes of work hours for the Project.²⁰⁴

In the general business of the meeting,²⁰⁵ the following discussion occurred:

¹⁹⁹ Toombul Community Liaison Group, Minutes of Meeting on 9 September 2009, Item 5, page 5.

²⁰⁰ Toombul Community Liaison Group, Minutes of Meeting on 9 September 2009, Item 5, Page 5.

²⁰¹ Toombul Community Liaison Group, Minutes of Meeting on 9 September 2009, Item 8, pages 6-7.

²⁰² Community Notice – 'Toombul/Clayfield – Kalinga Park night shift – UPDATE' issued by TJH – Date of issue 18 September 2009, Ref 0508

²⁰³ Toombul Community Liaison Group, Minutes of Meeting on 13 October 2009, Item 3, pages 1-2.

²⁰⁴ Toombul Community Liaison Group, Minutes of Meeting on 13 October 2009, Item 5, page 3.

²⁰⁵ Toombul Community Liaison Group, Minutes of Meeting on 13 October 2009, Item 8, page 6.

- TJH asked if the CLG could go back to discussing the night shift in Kalinga Park.
- TJH is keen to understand the community issues as they want to undertake as much work as possible, while staying within the CoG goals. As the work gets deeper into the hole, TJH are proposing to undertake (sic) excavation and propping work 24 hours a day, 7 days a week.
 - CLG member stated that there is currently very limited respite for the community with only two evenings per week where there is no noise impact. If the work were to ramp up even more or go 24/7 construction, it will create huge issues and widen the footprint of impact in the community.
- CLG member stated that when TJH first presented the plans to work in Kalinga Park at night it was stated that it was in order to recover from 31 days rain. It was further said that it would be essential, quieter types of work only. The work has already gone up significantly since then. The community gets frustrated when TJH says one thing and then does another.
- CLG member queried whether TJH is planning to work Sundays?
 - TJH advised yes, that's what is being looked into at the moment.
 - CNI advised that the conditions on this project are the same as most major projects. CNI heard of these plans today.
- CLG member states that CNI should not let it happen as the community cannot accept 7 days per week. Queried whether the project is on schedule.
 - TJH advised that that (sic) options are being investigated to ensure the project meets its target dates.
- CLG member advised that all members of the CLG strongly oppose the suggestion that construction day and night work in Kalinga Park expands to 7 days a week.
 - CNI advised that no formal request had yet been made to CNI. If a request is made to CNI then they will meet with CoG and DERM to discuss in more detail – the same process that occurred prior to the first round of night shift in Kalinga Park.

31 October 2009 – Community Notice

A formal notification of work was then distributed to approximately 800 residents on 31 October 2009.²⁰⁶ This Community Notice²⁰⁷ of 31 October 2009 stated:

Construction of the Tunnel Boring Machine (TBM) launch box is ongoing in Kalinga Park, day and night in preparation for the arrival of the TBMs in early 2010.

From Saturday 7 November 2009, operations that are currently undertaken at night in Kalinga Park (Monday to Friday) will continue on Saturday and Sunday nights as well as on Sundays during the day.

Activities at night and on Sundays will continue to support the main dayshift and will be monitored to ensure they are unobtrusive.

This early introduction of 24/7 work in Kalinga Park allows for the overlapping of activities such as constructing the acoustic shed and the TMB launch box, both which need to be completed prior to the arrival of the first TBM and commencement of full 24 hour tunnel production.

The Community Notice advised the community to expect workers on site during the night, spoil haulage except for between 6.30pm Saturday and 6.30am Monday and 'limited construction noise'.

²⁰⁶ Toombul Night Works: Report investigating Compliance with the Coordinator General's Conditions related to Noise and Mitigation, April 2010 prepared by CNI, Appendix 5.

²⁰⁷ Community Notice – 'Toombul/Clayfield – Kalinga Park work activities – update' issued by TJH – Date of Issue 31 October 2009, Ref 0566.

It advised that the work would be managed by:

- limiting night work to activities that generate limited noise
- ongoing environmental monitoring
- installation of 'quacker' type reversing alarms, as opposed to 'beepers'
- ensuring lighting is angled to minimise spill or glare into neighbouring houses
- ongoing staff briefings focusing on community mitigation including noise and lighting impacts
- off-street parking will be provided for workers on night shift and on Sundays
- one-on-one discussions with impacted residents.

7 November 2009 – Community Notice

On 7 November 2009, a further Community Notice²⁰⁸ was issued that provided an extensive update about construction activities. The notice advised members of the community to expect construction noise and 'Night work along Sandgate Road and in Kalinga Park'. It further stated:

Work will generally occur between 6.30am and 6.30pm Monday to Saturday, except in Kalinga Park where the work will continue 24 hours a day on the western side of the railway line and in the locations specified above in relation to roadwork and railway work.

10 November 2009 – CLG Meeting

In the 10 November 2009 Toombul CLG meeting, the following inclusions into the minutes of the meeting of 13 October 2009 were agreed:

CLG member commented that he believed under no circumstances should 7 day-a-week work be undertaken given that CLG members believe it is such a departure from the Coordinator General's conditions and the EIS.

CLG member commented that the community is already frustrated with the approval of night shift, should Sunday work proceed public demonstrations are not far off.²⁰⁹

CLG members read out the following written statement they had prepared together about their objections to 24/7 work in Kalinga Park:

- We (Toombul CLG members) feel the actions of Thiess John Holland (TJH) in its handling of a significant change of work practices to 24/7 general construction are not in the spirit of the Community Liaison Group Terms of Reference and Code of Conduct. The possibility of 24/7 work was flagged 'sounding out' members in general business and unanimously rejected by community representatives at the meeting of 13/10/09. To automatically proceed to weekend work without further consultation or investigation of other options disregards the concerns of CLG members; displays disrespect for the role of members; and threatens open consultation.
- There is clear intent in the Coordinator General's conditions restricting general construction work on Sundays. At no stage in the Queensland Government's EIS consultation process or subsequent community engagement has 24/7 general construction work been openly discussed. The Toombul CLG members again

²⁰⁸ Community Notice – 'Toombul/Clayfield – Construction Update – November' issued by TJH – Date of Issue 7 November 2009, Ref no: 0572.

²⁰⁹ Toombul Community Liaison Group, Minutes of Meeting on 10 November 2009, Item 1, page 1.

unanimously reject 24/7 work and call for a halt of Saturday and Sunday night work and ask that this request is conveyed to the Coordinator General and Minister for Infrastructure.²¹⁰

Discussion took place as to whether TJH is permitted to undertake 24/7 surface work having regard to the imposed conditions. CLG members advised their views on the actions that had been undertaken to introduce 24/7 surface work. The minutes state:²¹¹

- CLG member commented that according to information that was presented to the community in the early days of construction the work hours were 6.30am to 6.30pm Monday to Saturday and little warning was given when these hours expanded. CLG member maintains that expectations got set accordingly and the community feels tricked.
 - CoG representative advised that the conditions allow for 24/7 work to occur. The CoG's office believes TJH have provided sufficient information at this stage and is happy with what's been provided.
- CLG member commented that they are afraid of what's coming next. The community doesn't know what else to expect.
- CLG member reiterated the fact that the CLG members do not accept 24/7 work and asked TJH to review shift patterns as quickly as the shift was introduced.
 - TJH talked through the communication process for 24/7 work. Communications team were internally made aware of the proposal shortly before the October CLG meeting, CNI were advised, in a time not satisfactory to them. CLG were advised at the October meeting and members were informed of the process that TJH needed to go through to advise authorities. Meetings were then held with DERM and CoG. The community was then given 7 days' notice prior to the start of work via a notification (which is not a requirement in the CoG conditions) and then held a number of one-on-one meetings with impacted residents.
- CLG member commented that at the last CLG meeting it was outright rejected by members and it was 'sounded out' as an idea with no start date given.
 - TJH advised that the feedback received from a large section of the community has been that they don't care about Sunday work as long as the project stops parking in local streets.
 - TJH confirmed that no complaints were received on the weekend regarding the 24/7 work.

Representatives of the CG's office advised the meeting that they would go back to CNI and ask if there are any alternative options to 24/7 surface work but that at this point 24/7 surface work will continue as planned.²¹²

Other communication

During the period considered above, there was a further range of public relations activities undertaken by TJH to inform the Kalinga Park community of construction activities in the area.

These included:

²¹⁰ Toombul Community Liaison Group, Minutes of Meeting on 10 November 2009, Item 3, page 1.

²¹¹ Toombul Community Liaison Group, Minutes of Meeting on 10 November 2009, Item 3, pages 2-3.

²¹² Toombul Community Liaison Group, Minutes of Meeting on 10 November 2009, Item 3, page 3.

- a Kalinga Park community information day held on 12 September 2009 to discuss construction activities in Toombul²¹³
- an information session 'Coffee Morning' held in Kalinga Street on Saturday 31 October 2009 for residents in McGregor, Lewis and Kalinga Streets, attended by nine residents who were briefed on the 24/7 work and associated mitigation measures²¹⁴
- door knocking local residents regarding particular issues or activities²¹⁵
- information stands at public events.²¹⁶

7.3.2 Bowen Hills

At the Bowen Hills CLG meetings from the early part of 2009, there were various discussions about night-time work that was occurring and the noise resulting from this. From the context of the discussions, it would seem that the night-time work was special circumstances work.²¹⁷ Tunnelling planned for 24/7 was also discussed as was spoil haulage and some deliveries at night.²¹⁸

There is no reference in the Bowen Hills CLG meeting minutes from 13 September 2008 to 24 November 2009 to ongoing 24/7 surface works or the possibility of such works.

7.3.3 Kedron

From late 2008, there was discussion at the Kedron CLG meetings of work at night but this appears limited to work on roads and other special circumstances work that could not be undertaken during the day.²¹⁹

The minutes for the Kedron CLG meeting of 5 August 2009 state:²²⁰

It's fair to say that night works have broken the spirit of the community. Despite mitigation, can still hear everything. Residents need to know how long they can expect to put up with night works. Need more information from the project so that residents can weigh up their options and make decisions.

There will certainly be further night works and episodes where a lot of work is undertaken at night to open up new areas of work. At the moment the project cannot get approvals to work on Lutwyche Rd during the day, which results in a lot of high impact work having to take place at night.

Action: Provide clearer and more detailed information on what activities are going to be ongoing and for what duration/timeframe.

²¹³ Toombul Night Works: Report investigating Compliance with the Coordinator General's Conditions related to Noise and Mitigation, April 2010 prepared by CNI, page 7.

²¹⁴ Toombul Night Works: Report investigating Compliance with the Coordinator General's Conditions related to Noise and Mitigation, April 2010 prepared by CNI, Appendix 5.

²¹⁵ Examples contained in: Toombul Community Liaison Group, Minutes of Meeting on 12 May 2009 (Item 4), 9 June 2009 (Item 5), 14 July 2009 (Item 4), 11 August 2009 (Item 5), 9 September 2009 (Item 4).

²¹⁶ Examples contained in: Toombul Community Liaison Group, Minutes of Meeting on 9 June 2009 (Item 5), 9 September 2009 (Item 4).

²¹⁷ Example contained in: Bowen Hills Community Liaison Group, Minutes of Meeting on 24 March 2009, Item 3, pages 2-3. See reference to buildings fronting Lutwyche Road being demolished.

²¹⁸ Bowen Hills Community Liaison Group, Minutes of Meeting on 26 May 2009, Item 4, page 3.

²¹⁹ For example: Kedron Community Liaison Group, Minutes of Meeting on 10 December 2008, See Item 3, page 3 about night works on Gympie Road. See also minutes of meeting on 11 March 2009, Item 4, page 3, which discusses night work on Lutwyche Road/Kedron Park Road.

²²⁰ Kedron Community Liaison Group, Minutes of Meeting on 5 August 2009, Item 3, pages 4-5.

There is no reference in the Kedron CLG meeting minutes from 30 August 2008 to 11 November 2009, to ongoing 24/7 surface works or the possibility of such works. The discussions appear limited to those relating to special circumstances works.

7.3.4 Woolloowin

Meetings for the Woolloowin CLG did not commence until nearly six months after 24/5 works started at Kalinga Park.²²¹ Therefore, no representations were made in this forum about 24/7 surface works before night-time surface works started.

7.3.5 Windsor/Lutwyche

The following notation appears in the minutes for the Lutwyche/Windsor CLG meeting of 17 March 2009:²²²

Mid to late April night-works will commence at Truro Street. Night works should not differ greatly from day works. A further update will be provided at next meeting on acoustic covering and sheds. Final acoustic shed completion will be approx early June.

CNI has advised that this was not a reference to night-time surface work but rather was a reference to special circumstances work and 24 hour sub-surface works involving tunnelling.

In the minutes for the meeting of 21 April 2009 in the section titled 'Truro Street Construction Update' the minutes said 'current night works shifting to 24 hour mid-May on completion of acoustic shed'.²²³

CNI advised that this is a reference to 24 hour tunnelling works at the Truro Street tunnel.

During the CLG meeting of 16 June 2009, the minutes stated:²²⁴

Noted that workers have been making noise during night works. TJH will reinforce appropriate worker behaviour at next site toolbox and continue to monitor.

In the minutes for the CLG meeting of 20 October 2009, reference was made to work undertaken at Truro Street during the night shift on 14 October 2009.²²⁵

7.4 Night-time surface work in Project precincts

Night-time surface work has been undertaken to varying extents in each of the Project precincts.

During our investigation, we wrote to TJH and asked for its advice about commencement of night-time surface work at locations other than Kalinga Park.²²⁶ TJH advised that.²²⁷

²²¹ Meetings commenced on 1 December 2009.

²²² Lutwyche/Windsor Community Liaison Group, Minutes of Meeting on 17 March 2009, top page 2.

²²³ Lutwyche/Windsor Community Liaison Group, Minutes of Meeting on 21 April 2009, Item 6, page 2.

²²⁴ Lutwyche/Windsor Community Liaison Group, Minutes of Meeting on 16 June 2009, Item 2, page 1.

²²⁵ Lutwyche/Windsor Community Liaison Group, Minutes of Meeting on 20 October 2009, Item 4, page 2.

²²⁶ Letter from Acting Queensland Ombudsman to Chief Executive Officer, BrisConnections and Project Director, TJH dated 18 October 2010, page 2.

²²⁷ Letter from Acting Project Director, TJH to Acting Queensland Ombudsman dated 19 November 2010. Ref: GR:rvdv:02.32.0220, page 4.

Besides Toombul, our main night work areas/activities are as follows:

- Relocation of essential services by Public Utilities Providers (PUPs),
- Bowen Hills structures.

TJH advised that PUPs work is undertaken project wide and approximately 75% of this work is work for which the design, construction and program of activities is controlled directly by the service provider. The remainder of the work is controlled by TJH. It advised:²²⁸

The bulk of the PUP works generally occurs within existing road corridors which for the majority of the time requires the works to be undertaken through lane closures at night which constitutes 'Special Circumstances'. In all cases where lane closures are permitted by the relevant roads authorities (BCC and the Department of Main Roads) the works have been undertaken during the day.

We also asked the following in relation to the commencement of night-time surface work at locations other than Kalinga Park:²²⁹

- Advice as to the location of other worksites at which night time surface work will be, or is likely to be, commencing during the balance of the project and an indication of the dates of commencement and completion of such work.

TJH did not answer this question in its response to my Office.

7.4.1 Toombul/Kalinga Park

As noted above in this report, 24/5 surface work commenced in the Toombul precinct on 6 August 2009 and 24/7 surface work commenced on 7 November 2009.

DIP officers advised my Office in October 2010 that while 24/7 surface work was being undertaken in Kalinga Park, this has now been scaled back to 24/5.²³⁰

In other areas of the precinct, 24/7 surface works are being undertaken in the form of launch works for the TBM and works on the ventilation station.²³¹ The Toombul CLG meeting was advised on 12 October 2010 that two weeks of night-time surface work was planned on the ventilation station outlet from early November 2010 subject to weather.²³²

7.4.2 Bowen Hills

As previously noted, TJH advised us that, apart from Toombul and PUPs work, the main night-time work areas/activities were at Bowen Hills.²³³

²²⁸ Letter from Acting Project Director, TJH to Acting Queensland Ombudsman dated 19 November 2010. Ref: GR:rvdv:02.32.0220, page 4.

²²⁹ Letter from Acting Queensland Ombudsman to Chief Executive Officer, BrisConnections and Project Director, TJH dated 18 October 2010, page 2.

²³⁰ Interview with Officer E, Director, DIP on 15 October 2010 (Transcript Line: 420).

²³¹ Interview with Officer E, Director, DIP on 15 October 2010 (Transcript Line: 435) and interview with Officer F, Senior Project Officer, DIP on 15 October 2010 (Transcript Line: 498).

²³² Toombul Community Liaison Group, Minutes of Meeting for meeting of 12 October 2010, Item 3, page 4.

²³³ Letter from Acting Project Director, TJH to Acting Queensland Ombudsman dated 19 November 2010. Ref: GR:rvdv:02.32.0220. Page 4.

In relation to Bowen Hills, TJH advised us:²³⁴

... TJH and CNI have continued to review and discuss the relevant information as to our nightworks program and the actions taken to ensure compliance with the conditions for Bowen Hills. The provision of information to the relevant agencies has been ongoing since project commencement. The information provided for Bowen Hills night works activities has included the following:

- Noise Modelling for a variety of work packages
- Site Environmental Plans associated with those work packages
- Community Consultation information
- Community Notifications

We understand that CNI reviews, provides comment and forwards this information to both the Coordinator General and DERM.

In circumstances where work packages were of a longer duration and of a larger scale, more detailed consultation has occurred with CNI, DERM and the Coordinator General. These works included the commencement of 24 hour tunnelling in mid-2009 and the undertaking of the night work on the Ventilation Station Outlet (VSO) in mid-2010.

We also asked TJH the following in relation to the commencement of night-time surface work at locations other than Kalinga Park:²³⁵

- The reasons which were given, and by whom, to any of the agencies for commencing night time surface work and for continuing (if that is the case) at other locations. If none were given please explain why not.

TJH did not answer this question in its response to my Office.

A report was obtained by TJH as to the predicted noise levels within the Bowen Hills area as a result of the following construction works during night periods planned between March 2010 and December 2010:

- tunnelling activities and haulage
- ventilation station construction
- CC102 cut and cover works.²³⁶

It is understood that night-time surface work commenced in the Bowen Hills precinct around March 2010.²³⁷

DIP officers advised my Office in October 2010 that they had been notified of an intention to conduct 24/5 surface works. However, to their knowledge, night-time surface work has generally only been undertaken for the purpose of finishing uncompleted work and this is usually achieved by 9.00pm to 10.00pm at night.²³⁸ DIP advised, however, that TJH has indicated to DIP that TJH may have to intensify night-time surface work.²³⁹

²³⁴ Letter from Acting Project Director, TJH to Forbes Smith, Acting Queensland Ombudsman dated 19 November 2010. Ref: GR:rvdv:02.32.0220. Page 5.

²³⁵ Letter from Forbes Smith, Acting Queensland Ombudsman to Chief Executive Officer, BrisConnections and Project Director, TJH dated 18 October 2010, page 2.

²³⁶ Report titled *TJHJV – Bowen Hills – VSO Night Works, Construction Noise Modelling* dated March 2010 prepared by Air Noise Environment Pty Ltd, page 1.

²³⁷ Record of interview with Officer F, Senior Project Officer, DIP on 15 October 2010 (Transcript Line: 305).

²³⁸ Record of interview with Officer E, Director, DIP on 15 October 2010 (Transcript Line: 425).

²³⁹ Record of interview with Officer E, Director, DIP on 15 October 2010 (Transcript Line: 442).

7.4.3 Kedron

As at October 2010, there was no ongoing night-time surface work in the Kedron precinct; however, considerable special circumstances work was being undertaken.²⁴⁰

7.4.4 Woolloowin

The CLG meeting minutes for Woolloowin do not indicate any significant ongoing night-time surface work being undertaken in that precinct as at early October 2010.²⁴¹

7.4.5 Windsor/Lutwyche

The CLG meeting minutes for Lutwyche/Windsor indicate that as at October 2010, there was some night-time surface work being undertaken in the precinct; however, not on an ongoing basis.²⁴²

7.5 Response to community about 24/7 work

During the inception of the Project in 2006, the State government provided information to the community about night-time surface work in response to concerns raised.

Following the announcement of night-time surface work, the State government, in 2010, provided further information in response to various complaints.

7.5.1 State government's position – 2006

August 2006 – Minister for Transport and Main Roads correspondence

During May 2006, in response to concerns from a constituent, Ms Liddy Clark MP, Member for Clayfield, contacted the then Minister for Transport and Main Roads, the Honourable Paul Lucas MP. Mr Lucas responded to the concerns in his letter to Ms Clark dated 14 August 2006.²⁴³ In his letter, Mr Lucas passed on advice that had been provided by the joint State/Brisbane City Council Airport Link Feasibility project team. Under the heading 'Tunnel proximity to houses in Kalinga Street' he advised:²⁴⁴

... Construction activities at this site and at the surface would only be conducted within specific hours, not 24 hours a day, 7 days a week.

7.5.2 State government's position – 2010

April 2010 – Premier's correspondence

²⁴⁰ Interview with Officer F, Senior Project Officer, DIP on 15 October 2010 (Transcript Line: 501-503) and Kedron Community Liaison Group, Minutes of Meeting on 15 September 2010 mention no ongoing night works but contained discussion about special circumstances night work and its scheduling.

²⁴¹ Woolloowin Community Liaison Group, Minutes of Meeting on 5 October 2010.

²⁴² Lutwyche/Windsor Community Liaison Group, Minutes of Meeting on 19 October 2010.

²⁴³ Letter from the Hon. Paul Lucas MP, Minister for Transport and Main Roads to Ms Liddy Clark MP Member for Clayfield dated 14 August 2006. Ref: MC22669.

²⁴⁴ Page 2.

In February 2010, a member of the community wrote to the Honourable Anna Bligh MP, Premier of Queensland, complaining about the 24/7 surface work at Kalinga Park. The community member referred to the letter dated 14 August 2006 from Mr Lucas to Ms Clark and said:

This statement was, of course, relied upon by the residents of Clayfield and surrounding suburbs. ... At no time has there been any announcement by government ministers to the residents of the affected area that the government policy expressed in the statement had been changed.

The community member referred to the claim by TJH, CNI and DIP that the imposed conditions allow 24/7 operations for the duration of the contract and said:

You might not be surprised that members of the community were shocked when these claims were made. They were contrary to what they had been assured by the government and on which they had relied in good faith.

In her response²⁴⁵ dated 19 April 2010, Ms Bligh said:

Regarding the statements by the Deputy Premier in August 2006 about working hours at the Kalinga Park site, those were correct at the time of writing to the former Member for Clayfield. In 2006, the project was in the feasibility study phase, culminating in the release of the Environmental Impact Statement (EIS) in October 2006. At that time, it was expected that Tunnel Boring Machines (TBM) would be launched near the western end of Brook Road, Kedron (behind Kedron State High School). While some tunnelling was expected to occur in Kalinga Park, the size and extent of the worksite at the Park was expected to have significantly less impact on residents in the area.

May 2010 – Office of Minister for Infrastructure and Planning’s correspondence

A letter dated 4 May 2010 from the office of the Honourable Stirling Hinchliffe MP, Member for Stafford and Minister for Infrastructure and Planning, to a member of the community stated:²⁴⁶

In response to your many questions regarding prior knowledge about commencement of 24/7 works, I can advise that it is not the assertion of the Minister, or the Department, that the community should have known before, or was ever told beforehand, that 24/7 surface construction works in Kalinga Park would begin. Prior to TJH’s proposal to implement these additional shifts, it was the understanding of all parties, including TJH, BrisConnections, CNI, the Department of Infrastructure and Planning and the Minister, that works would be carried out between 6.30am and 6.30pm, Monday to Saturday. As noted above, when TJH first proposed a change to 24/7 activity, the suggestion was rigorously tested against the Project Deed and the CG’s conditions and only commenced after TJH had provided sufficient information to CNI, as State’s representative, indicating that compliance would be maintained.

May 2010 – CG and Director-General DIP’s correspondence

The then CG and Director-General DIP, Mr Colin Jensen, wrote to a member of the community on 10 May 2010²⁴⁷ and advised:

²⁴⁵ Letter to community member from the Premier of Queensland the Hon. Anna Bligh dated 19 April 2010. Ref: EP/SD – TF/10/3801 – DOC/10/28883.

²⁴⁶ Letter from Principal Advisor, Office of the Hon. Stirling Hinchliffe MP, Member for Stafford and Minister for Infrastructure and Planning dated 4 May 2010. Ref: 10/14075.

²⁴⁷ Letter from Mr Colin Jensen, CG and Director-General DIP to member of the community dated 10 May 2010. Ref: 10/13036.

In response to the issue of community notification of possible 24/7 works, I can advise that prior to Thiess John Holland's (TJH) proposal to commence additional shifts, it was the understanding of all delivery partners that 24/7 works were not expected to occur and that construction activities would be conducted between 6.30am and 6.30pm, Monday to Saturday. At the time the Change Report was written, the information that night works were not expected was correct at that time. It is my understanding that following TJH's demonstration of how they would remain compliant with project conditions when undertaking night works, the contractor then distributed a community notification advising of the change to 24/7 works on 2 November 2009 in accordance with project conditions.

7.6 Queensland Ombudsman meeting with agency officers

Information was obtained by my officers during meetings with agency officers about the information the community had been given about the possibility of night-time surface work and their response to TJH's decision to work 24/7.

During July 2010, my officers met with officers from CG, DIP and CNI to discuss the issues of KWRA's complaint. These officers included the Deputy CG, CEO of CNI and a number of Directors of DIP.

As to the July meeting, I note CNI's view that the reliance on the transcript material is inappropriate:

CNI notes that the initial meeting dated 9 July was represented to CNI to be an introductory meeting and all questions were delivered without notice and CNI was not given a copy of the complaint or supporting material. It is noted that, following the meeting, DIP provided (with CNI assistance) a clear and unambiguous written response (dated 27 July 2010) which provided answers to each of the questions posed. In particular it is noted that the questions asked at the initial meeting related to past events where a significant amount of time had elapsed and at the time, CNI made it clear that a formal detailed written submission would be provided once the questions could be reviewed and the appropriate CNI [staff] could be consulted.

I disagree that use of the transcript material is inappropriate. I consider that although the meeting was of an introductory nature, that does not prevent me from taking material from the meeting into account.

Those present were questioned about whether it was intended at the start of the Project that 24/7 surface works would be conducted. DIP officers advised us:

- the government was aware that work could potentially be undertaken 24/7 on the surface but it was a matter of how the Project was going whether that was necessary²⁴⁸
- getting the Project finished on time mitigates impacts on the community²⁴⁹
- DIP did not, at the start of the Project, anticipate the amount of night-time surface work that has been undertaken but there was always the option to allow that work to happen under certain very controlled conditions should the contractor need to do so to meet the objectives of the Project.²⁵⁰

²⁴⁸ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 817).

²⁴⁹ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 846).

²⁵⁰ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 853).

My officers asked those present whether the community was told it was not the intention to work 24/7 but that they could do so if it became necessary.²⁵¹ The response was DIP officers advised that 'at a very localised level it is very difficult to communicate what some of these impacts will be to an affected party until it's actually on the ground'.²⁵²

A DIP officer advised, in indirect response to that same question:²⁵³

But a Coordinator General doesn't as a general rule release a report and then go, and this is actually what it means for the community because, the information is actually presented in the report ...

Then, a CNI officer attempted to explain further:²⁵⁴

The other thing under the project deed is when you change works or change a program, you're required to give them notice and issue community briefings at that time ... my experience in this project is they don't go out and tell you that in two years' time we'll be doing this, or in six months' time, sometimes they just don't know, sometimes they change tack. ... so the idea that it's built into the conditions by the Coordinator General is, that, when you have something happening you inform the community, you've got a, a ... period ... of notice, and that's fluctuated depending on the type of works. So sometimes they get very short periods of notice that makes them very unhappy. Sometimes they get longer periods of notice but the critical element is ... the contractor, TJH and BrisConnections working together give notice for an extensive series and community outlets through the community liaison groups and through other means, through letter drops, door knocks ... and emails that works are happening of this nature and type. But ... you seem to be asking whether or not this happened in 2005 before the project sort of kicked off or in 2006, 2007, 2008 ... we'd have to come back to you on that ...²⁵⁵

By contrast, DIP's submission to my Office, later in July 2010, states clearly:²⁵⁶

The publicly available Airport EIS documentation contains a number of references to the potential for surface work to be conducted out-of-hours across the project corridor.

My officers noted the letter of 4 May 2010 from the Office of the Minister for Infrastructure and Planning stating that it was not the assertion of the Minister or DIP that the community should have known before, or was ever told beforehand, that 24/7 surface works in Kalinga Park would begin and that it was the understanding of all parties that works would be carried out between 6.30am and 6.30pm, Monday to Saturday.²⁵⁷ In response to our request for comment about this, DIP officers advised:

- While TJH did not say at any point during the tender process that they were going to have to do 24/7 work in this area, the government always knew that the imposed conditions allowed it. It was referred to as a 'safety valve' if the contractor needed to 'make up time'.²⁵⁸

²⁵¹ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 869).

²⁵² Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 885).

²⁵³ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 901).

²⁵⁴ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 901).

²⁵⁵ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 933).

²⁵⁶ DIP (July 2010) Submission to the Queensland Ombudsman – Preliminary Inquiries at page 10.

²⁵⁷ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 961).

²⁵⁸ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 986).

- It is likely to be the view of TJH that when it was bidding on the Project, it was not factoring in the amount of night-time surface work that has happened in certain areas as night-time surface work is not cost effective for TJH.²⁵⁹

Comment was also sought about the letter from the CG dated 10 May 2010 which said that it was the understanding of all delivery partners that 24/7 works were not expected to occur and that construction activities would be conducted between 6.30am and 6.30pm Monday to Saturday.²⁶⁰ DIP officers advised:²⁶¹

... there wasn't an expectation that it would be necessary but there was always the ability to do it.

My officers asked about the process before 24/7 surface works commence at a worksite.²⁶² In response, DIP advised that the process is that, before night-time surface works commence, TJH does noise modelling to determine if mitigation is required and undertakes any necessary mitigation. Testing is again done once the activity commences to ensure that the modelling was accurate and identify any need to increase mitigation.²⁶³

CNI indicated that it was aware that some 24/7 work on the vent station at Bowen Hills went through that process.

Officers present also advised my officers that, as part of the process, they obtain an explanation about the need for TJH to do surface work 24/7.²⁶⁴

My officers requested an example of some reasoning for going to 24/7 surface work.²⁶⁵

CNI advised:²⁶⁶

... at the end of the day it's ... fundamentally ... programmed, in terms of ... endeavouring to complete the project on time.

DIP advised:²⁶⁷

... as I said before, it's not in their interest to do night work from a cost perspective. It costs them more money to do it that way ... I guess it's in their programming where they decide where they feel like they need to do this sort of work and then ... I suppose our role is to make sure that they comply with the conditions if they choose to do that, like we can't ... and certainly the advice we give them, we can't say that they can't do it, if they meet certain conditions. ... Yes we'd want as much notice and, you know, reasoning. At the end of the day, their argument is well, it doesn't really matter what our reasoning is ...

Officers present were not able to advise whether BrisConnections or TJH are required to provide CNI/DIP/CG with their reasons for the decision to do surface work

²⁵⁹ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 1010).

²⁶⁰ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 1038).

²⁶¹ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 1053).

²⁶² Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 1722).

²⁶³ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 1736).

²⁶⁴ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 1742).

²⁶⁵ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 1746).

²⁶⁶ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 1748).

²⁶⁷ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 1765).

24/7. They advised that the issue has not arisen because reasons have always been provided.²⁶⁸

In its response to my Office, CNI indicated that its position was accurately stated in the DIP July 2010 submission:

There is no contractual requirement that requires BrisConnections to seek permission to do things in compliance with the conditions. Submissions by BrisConnections regarding 24/7 works are presented to demonstrate that the works can be conducted in compliance with the imposed conditions.

In October 2010, my officers interviewed Officer E, a senior DIP officer.²⁶⁹

During a discussion about what happens before night-time surface work taking place, the officer advised that, in theory, TJH could do night-time surface work without letting DIP know about it first as long as they did not create excessive noise. TJH would, however, generally advise CNI and CNI would advise DIP.²⁷⁰

The officer said that in relation to a proposal by TJH to do night-time surface work, CNI tested the proposal, including the necessity for that type of work to be done.²⁷¹ My officers questioned whether CNI had any say over whether the night-time surface work went ahead. The DIP officer responded:²⁷²

No, no only in the sense that if they think it's a breach they refer it to the CG for the CG to take action. So that questioning is asked, I guess it's part of that relationship they have to have with TJH and they, it's really process of testing it against the conditions I would have thought. But they also apply pressure to say have you done everything you can to meet the conditions of, I think that's the sense.

During October 2010, my officers interviewed Officer F, another DIP officer,²⁷³ who had been involved with the Project since February 2009.²⁷⁴ He was asked when he became aware of the possibility of night-time surface work and he advised 'late July'.²⁷⁵

My officers referred to the meeting of 4 August 2009 between officers of TJH, CNI, DIP/CG and DERM at which the DIP officer was present and asked how the meeting came about and what happened. He responded:²⁷⁶

Well how it happened was that CNI rang us up to say we've got a, we would like to present you a pilot model for night works. ... at Toombul, and that's where we involved the executive director and directors of our section to sit in with us, where TJH were going to present a model for Toombul night works. ... and that's where we advised the directors and executives ... they just wanted to know what's all this about, this night works and they said well under the conditions it appears that they can conduct that sort of work if they don't generate excessive levels of noise, and TJH explained what they were going to do and they said it was going to be low intensive sort of work, so that's, yeah. So that's how it all started, and it happened pretty quickly, all pretty quickly.

²⁶⁸ Meeting between my officers, CNI and DIP on 9 July 2010 (Transcript Line: 1783).

²⁶⁹ Record of interview with Officer E, on 15 October 2010.

²⁷⁰ Record of interview with Officer E, on 15 October 2010 (Transcript Line: 480).

²⁷¹ Record of interview with Officer E, on 15 October 2010 (Transcript Line: 502).

²⁷² Record of interview with Officer E, on 15 October 2010 (Transcript Line: 512).

²⁷³ Record of interview with Officer F, on 15 October 2010.

²⁷⁴ Record of interview with Officer F, on 15 October 2010 (Transcript Line: 762).

²⁷⁵ Record of interview with Officer F, on 15 October 2010 (Transcript Line: 1026).

²⁷⁶ Record of interview with Officer F, on 15 October 2010 (Transcript Line: 1033).

7.7 Analysis

7.7.1 Was the community alive to the possibility of 24/7 work?

KWRA submitted that before being notified in October 2009 that surface work was about to commence 24/7, it was assured that, except for very limited circumstances, 24/7 surface work would never occur. The CG did not receive any submissions addressing the issue of noise at night in response to the October 2006 EIS and the April 2007 Supplementary EIS.²⁷⁷ The absence of submissions is consistent with some community members' state of knowledge as reported by KWRA. I expect that had the community been aware that 24/7 surface work was a real prospect, submissions would have been received addressing that issue.

The agencies submit that the community was, or should have been, alive to the possibility of 24/7 works.

Apart from the words of condition 7(b) (which I will discuss, with the aid of legal advice, in chapter 8), the Project documents and other material discussed in chapters 6 and 7 of this report show that there were some limited indications that general night-time surface work could be undertaken outside the hours of 6.30am to 6.30pm Monday to Saturday. Some examples of this are:

- October 2006 EIS – paragraphs 5.7.1 and 10.2.3 indicate that surface works will be limited to the daytime, except for special circumstances work, but include such terms as 'typically', 'mostly' and 'where reasonable and practicable' relating to the working hours for above ground work. A table in the draft outline EMP in chapter 19 of the EIS contains the same words about noise as used in condition 7(b), although I would not expect a reasonable member of the community reading the EIS to find this reference or understand the import of those words.²⁷⁸
- May 2007 Evaluation report – imposed conditions 7(b) and 9, although I would not expect a reasonable member of the community reading those conditions to understand their import.
- April 2007 Supplementary EIS – indicated that surface works 'generally' would be undertaken between 6.30am and 6.30pm Monday to Saturday.²⁷⁹
- May 2008 Request for Project Change – where it was provided that 'For possible night work to construct the cut and cover tunnels beneath Kedron Brook, effective mitigation measures would likely be required to achieve the environmental objectives and performance criteria specified in the Coordinator-General's Conditions for general construction and for the management of noise and vibration effects of construction.'²⁸⁰
- July 2008 Change report – the restatement of condition 7(b) about the confinement, in ordinary circumstances, of 'excessive noise' to the hours between 6.30am and 6.30pm and condition 9 identifying night-time noise goals²⁸¹ and also where it notes the potential for night works for the cut and cover construction of Gympie Road connection in Kedron Brook.²⁸²

²⁷⁷ Refer to 6.4 of this report.

²⁷⁸ Refer to 6.2.1 of this report.

²⁷⁹ Refer to 6.3.1 of this report.

²⁸⁰ Page 102.

²⁸¹ Refer to 5.5 of this report.

²⁸² At page 32.

- The minutes for the Toombul CLG meeting on 10 February 2009 referred to the acoustic shed assisting during 24 hour activities.²⁸³

None of this information either taken alone, or together, contained sufficient detail on which one could conclude, as I have been urged by the agencies, that the community was, or should have been, aware of the possibility of 24/7 surface work in other than special circumstances. This is especially so given some of the information that has been provided to the community during the Project. For example:

- letter from the then Minister for Transport and Main Roads, the Honourable Paul Lucas MP dated 14 August 2006 stating, in relation to Kalinga Street, that 'Construction activities at this site and at the surface would only be conducted within specific hours, not 24 hours a day, 7 days a week'²⁸⁴
- the minutes of the Toombul CLG meeting of 12 May 2009 discussed concrete pours at Kalinga Park continuing past 6.30pm and CNI advised that activities of this nature are considered non-compliances.²⁸⁵

There is little evidence that until just before night-time surface work commencing, the community was orally advised in clear and unambiguous terms there was a possibility of 24/7 surface works being undertaken during the Project or even that there was a possibility of a lesser amount of night-time surface work other than for special circumstances.

In response to the proposed report, CNI submitted that:

CNI has sought further information from the EIS Team and they indicate that they did orally advise interested community members in relation to the possibility of night time surface works. They confirm that many community members were interested in night works and noise due to their experiences with Airtrain. Please see our comments on the statements made by the EIS Team in relation to the oral discussions they held with the community through the EIS process described above in reference to clause 6.4 of your report.

As the following information from the Toombul CLG demonstrates, the reaction of the CLG members representing the community when they were advised is consistent with the notion that they were unaware of the possibility of such work occurring.

The move to 24/5 surface works was first announced in the Toombul CLG meeting of 14 July 2009 and a community notice was issued on 4 August 2009 stating that 24/5 surface works were to commence on 6 August 2009.

At the Toombul CLG meeting of 11 August 2009 there was discussion around the amount of notice provided to the community about 24/5 surface works with the minutes noting one member's comment that 'the issue was honesty around the night shift and other upcoming work' and the feeling of 'what is next'.

These concerns were further discussed at the Toombul CLG meeting of 9 September 2009 and TJH explained the reasons for the delayed notice and advised that information sessions would be held more regularly in the future to improve the transparency and accessibility of information available to the local community.

²⁸³ Refer to 7.3.1 of this report. It is noted that KWRA consider that the noise goals were included to apply to the noise emanating from the spoil conveyor and underground ventilation system during construction.

²⁸⁴ Refer to 7.5.1 of this report.

²⁸⁵ Refer to 7.3.1 of this report.

The possibility of 24/7 work was raised in the CLG meeting of 13 October 2009 and members present objected strongly. CNI advised that it had not received a formal request yet. A community notice advising of 24/7 works was distributed in the community on 31 October 2009 with 24/7 works to commence on 7 November 2009.

The way in which the commencement of 24/7 work was announced was discussed extensively during the Toombul CLG meeting of 10 November 2009. Members advised their dissatisfaction with the handling of the matter. They noted that it had been presented at the 13 October 2009 meeting as only a 'sounding out' of members and that it had been unanimously rejected. Despite this, 24/7 surface construction works commenced before the 10 November 2009 CLG meeting and therefore without further CLG consultation. Members advised that it was always their understanding that the work hours were 6.30am to 6.30pm Monday to Saturday and they now felt 'tricked'.

According to the minutes of the Toombul CLG meeting of 14 July 2009 in which night-time surface work was announced, a CLG member commented that before construction began night-time surface work was only spoken about as being 'as required'.²⁸⁶ It seems that members of the community interpreted comments such as 'as required' as meaning 'as required because of special circumstances' whereas it is possible that the way such references were meant was 'as required to meet project timelines'.

References in the Project documents to surface works being conducted between 6.30am and 6.30pm Monday to Saturday 'typically', 'mostly' and where 'reasonable and practicable' would also have been interpreted by members of the community as referring to the possibility of special circumstances work outside of those hours. However, as advocated by the agencies, these terms were intended to cover wider circumstances where night-work was considered necessary, including to meet the Project timelines. This is consistent with the comments of agency officers outlined at 7.6 above about the reasons for TJH moving to 24/7 work being related to 'programming' to meet Project timelines.

The CG's advice in his letter dated 10 May 2010²⁸⁷ that all delivery partners understood that construction activities would be conducted between 6.30am and 6.30pm Monday to Saturday adds weight to the proposition that members of the public were led to believe that work outside of these hours would not normally happen.

In summary, some members of the community interpreted all references to night-time surface work in the context of what they had previously been told, that is, that they would not occur except in special circumstances. Furthermore, it was not unreasonable for those members of the community to hold that view.

²⁸⁶ Refer to 7.3.1 of this report.

²⁸⁷ Refer to 7.5.2 of this report.

There is no evidence that the parties involved set out to intentionally mislead the community; however, the communication was not sufficiently clear to adequately convey the possibility of night-time surface work for reasons other than where special circumstances existed. This lack of clear communication, in the context of what members of the public had previously been told resulted in the community not being aware that night-time surface work, other than for special circumstances, was a possibility until it was announced in July 2009 on a 24/5 basis at Kalinga Park.

Opinion 3

There is no evidence that the community was intentionally misled by any party about the possibility of night-time surface work during the Project.

CG/DIP's response

Acknowledged.

CNI's response

CNI did not comment on proposed opinion 3.

DERM's response

DERM agrees with this comment.

My comment

As the parties have either agreed or not objected, I now form Opinion 3 as proposed.

The proposed report contained the following:

Proposed Opinion 4

As a result of communications from the State Government, the CG and DIP to the community leading up to and following the commencement of the Project, but prior to notification of the works commencing, the community reasonably formed the view that:

- (a) 24/7 work was not a possibility; and
- (b) night-time surface work would only occur in special circumstances.

CG/DIP's response

Please consider amending the wording of Proposed Opinion 4.

Communications to the public about night-time work

Based on the Proposed Report, the chain of events was:

August 2006	Letter from Minister for Transport and Main Roads to Liddy Clark MP stating that construction will not be conducted 24/7
October 2006	EIS released for public comment including draft Construction EMP
May 2007	Evaluation report released including condition 7(b)
May 2008	2008 Request for project change refers to possible night works at Kedron Brook
July 2008	2008 Change report including condition 7(b)
November 2008	Construction commences
July 2009	Toombul CLG meeting advised of proposed night-time surface works at Kalinga Park
August 2009	Community notice given advising of 24/5 surface works at Kalinga Park
October 2009	Community notice given advising of 24/7 surface work at Kalinga Park

The Proposed Report also refers to minutes of CLG meetings however these meetings should not be considered “communications by DIP or the CG”.

Representatives of DIP or the CG do not usually attend these meetings and the minutes from the CLG meetings:

- are not prepared by representatives from DIP or the CG;
- are not a verbatim report of what is said at the meeting; and
- are not approved by DIP or the CG prior to being finalised and published nor are they approved at subsequent meetings.

The CLGs are each comprised of between 5 and 11 community members. As such, they represent an element of each community, rather than the whole community.

In section 3.1 of this submission, it is acknowledged how elements of the community could have formed the view that surface construction work would be limited to the daytime, except in special circumstances based on statements in the EIS. Apart from this, there is no evidence of communication by DIP or the CG that has been presented in the Proposed Report that night time works would not occur.

Please consider amending Opinion 4 as follows:

“Prior to the notification of proposed 24/5 surface works at Kalinga Park in July 2009, elements of the community may have reasonably formed a view that night-time surface work would only occur in limited circumstances.”

CNI’s response

CNI did not comment on proposed opinion 4.

However, CNI made numerous comments about the chapter in which the opinion appeared.

In addition to the matters raised by the CG, CNI was concerned that the CLG minutes might incorrectly describe certain works as night-time surface work when they were not.

Also, CNI was concerned that the 9 July 2010 meeting between CNI, DIP and my Office was quoted extensively, despite being represented as an introductory meeting. CNI urges me to acknowledge DIP’s later considered response to the questions asked in that meeting and to prefer that information.

CNI believed KWRA was not incorporated until August 2009, and therefore did not exist early in the Project.

CNI's entire response to sections 7.2, 7.3, 7.4 and 7.7.1 follows:

7.2 TJH Decision to work 24/7

At page 58 you refer to a meeting held on 18/8/09. No minutes were taken for that meeting. It is unclear how this statement assists the investigation.

7.3 Advice to and response from the general community and CLG references more generally throughout the report

While CNI acknowledges the valuable role played by the Community Liaison Groups (CLG), in considering the information contained within the CLG minutes it should be acknowledged that:

1. The CLG minutes are not a verbatim report but form a record of actions and such minutes do not reflect the technical or legal position of the State;
2. CNI does not have an approval role in relation to the CLG minutes, and in most instances, CNI does not see the minutes prior to public release. The minutes of these meetings are not approved or signed off by CNI or the State prior to issue;
3. Discussion held at a CLG does not represent a decision making process under the Project Deed; and
4. By their nature, the minutes do not provide full background or context to the CLG discussion.

As noted in our preliminary observations, throughout this section, and the Proposed Report more generally, references to various night-works are not qualified by indications as to whether they are surface works, special circumstances work, tunneling works or Public Utility Plant (PUP) works. For example, in response to one question by your officers, (paragraph 7.3.5 refers) CNI specifically noted that some of the CLG minutes referred to night works when they were in fact tunneling works.

Each of these types of works may have different enforcement and management mechanisms and different Conditions (PUPs work because we are told by PUPs providers that some of those works are separately authorised by statute). CNI's understanding was that the focus of the KWRA complaint and the investigation within the Proposed Report has been night time surface works. It is necessary to consider the nature of particular works before relying on minutes from a CLG meeting in order to make a finding. By far, the largest number of complaints received by the project have related to special circumstance works like PUP works requiring road closure. As the Proposed Report and your Queen's Counsel opinion affirms, special circumstance work is not conditioned the same as night-time surface works under clause 7(b). It is not reasonable to use references to special circumstances work as evidence to support comments regarding management of night-time surface works.

As the CLG minutes do not clearly differentiate the different types of night time works and responsibility for those works, it is difficult to draw accurate inferences from this material.

7.4 Night time Surface Work

The Proposed Report indicates that you sought advice from TJH as to the location of other work sites at which night time works will be or is likely to be commencing during the balance of the project and the indication of the dates of commencement and completion of such work. According to the Proposed Report, TJH did not answer this question.

Changes to construction schedules are frequently made for reasons outside a project team's control including inclement weather; non availability of outside service providers (eg water utilities or power providers). Some work is subject to permit and there can also be delays in the granting of the required authority. Our experience has been that providing stakeholders with notice in advance of confirmed work schedules can lead to distress or frustration when the schedule is not as previously advised.

The program changes regularly based on the construction activities undertaken, needs of the project, the effects of the environment (eg floods, wet weather), availability of machinery and other construction issues which dictate the works that will be conducted in a particular area.

TJH works to ensure at least 48 hours' notice of out of hours works (this is an internal TJH protocol). Prior to the commencement of such works it is normal practice for local residents and business operators to receive a detailed advisory; be 'door-knocked' by the project's Community Liaison Officers so that they may be personally briefed on work. This is in addition to quarterly and monthly 'look-aheads'; information sessions at the Visitor Information Centre and project run coffee mornings which the project runs in local streets ahead of any major or significant works or changes in correspondence. In addition advertising and media releases are also used where appropriate, particularly if a road closure is planned.

...

Clause 7.7.1 Was the community alive to the possibility of 24/7 works?

The Proposed Report cites that the KWRA submitted that prior to October 2009 they were assured that 24/7 works would never occur. The Proposed Report at section 1.3.9 identifies that the KWRA was incorporated in August 2009. We note that KWRA did not exist at the relevant times when the conditions were imposed in 2008 nor did they exist during the community consultation process for the EIS or the Request for Project Change.

The Draft Outline EMP (Construction) in Chapter 19 of the EIS that contemplated 24/7 surface works was part of the publicly available EIS in 2006 and was replicated in the imposed conditions in May 2007. We submit that the bullet list contained in the clause 7.7.1 identifying some examples of the indicators which were available that 24/7 works were possible should be expanded to include the following critical examples:

- October 2006 EIS - section 19.6 where the Draft Outline EMP (Construction) - General - provides as follows:

"Construction for activities on or above the surface and which generate excessive levels of noise, vibration, dust or traffic movements should only be undertaken between 6:30am and 6:30pm Mondays to Saturdays and at no time on Sundays or Public Holidays except for special circumstances where the above surface works should be conducted outside these days and hours"

- May 2007 Coordinator-General's evaluation report imposed conditions 7(b) and 9;
- May 2008 Request for Project Change in relation to surface works at Kedron Brook where it was provided that "For possible night work to construct the cut and cover tunnels beneath Kedron Brook, effective mitigation measures would likely be required to achieve the environmental objectives and performance criteria specified in the Coordinator-General's Conditions for general construction and for the management of noise and vibration effects of construction" (p102);

- July 2008 Coordinator-General's Change Report where it was provided that "Section 4.1.2 of the Request for Project Change notes that there is potential for night works in accordance with the Coordinator-General's conditions for the cut and cover construction of the Gympie Road connection in Kedron Brook. These works are subject to the noise goals applying to night works in Condition 9(d)."
- July 2008 Coordinator-General's Change Report imposed conditions 7(b) and 9.

The Proposed Report states that there is "no evidence that until just prior to the night time surface works commencing the community was **orally advised** in clear and unambiguous terms there is a possibility of 24/7 surface works being undertaken". CNI has sought further information from the EIS Team and they indicate that they did orally advise interested community members in relation to the possibility of night time surface works. They confirm that many community members were interested in night works and noise due to their experiences with Airtrain. Please see our comments on the statements made by the EIS Team in relation to the oral discussions they held with the community through the EIS process described above in reference to clause 6.4 of your report.

In 6.4 of the Proposed Report, the three submissions received in relation to 24 hour work which is consistent with the advise (sic) that the EIS Team discussed 24/7 work with the community.

We note that the DIP Response to your initial questions also noted the following material put to the community:

- Noise goals were set for both daytime and nighttime works;
- Posters present at the community information sessions with notations about managing noise from night time surface works.

DERM's response

DERM did not comment on proposed opinion 4.

My comment

It appears to me that the essential thrust of the CG/DIP's and CNI's responses is that the proposed opinion is too generalised, where most of the evidence supporting the opinion is CLG minutes, which may not be reliable.

I therefore form the following alternative Opinion 4.

Opinion 4

As a result of correspondence received from the State government leading up to and following the commencement of the Project, but before notification of the works commencing, some members of the community reasonably formed the view that:

- (a) 24/7 work was not a possibility and
- (b) night-time surface work would only occur in special circumstances.

The proposed report contained the following:

Proposed Opinion 5

The reaction of the community as reported through the Toombul CLG minutes to the announcement of 24/5 works and then 24/7 works at Kalinga Park demonstrates that the community was not alive to the possibility of such work occurring during the Project.

CG/DIP's response

DIP and the CG understand that the Toombul CLG is comprised of 11 community members. When this number is compared with the amount of residential premises in proximity to the Toombul worksites, it is submitted that the Toombul CLG only represents an element of this community, rather than the whole community.

Please consider amending Proposed Opinion 5 as follows:

“The reaction of the members of the Toombul CLG reported in the Toombul CLG minutes to the announcement of 24/5 surface works and then 24/7 surface works at Kalinga Park demonstrates that elements of the community were not alive to the possibility of such works occurring during the Project.”

CNI's response

CNI did not comment on proposed opinion 5.

DERM's response

DERM did not comment on proposed opinion 5.

My comment

Taking into account the views of the parties, I form the following slightly modified Opinion 5.

Opinion 5

The reaction of some members of the community as reported through the Toombul CLG minutes to the announcement of 24/5 works and then 24/7 works at Kalinga Park suggests that some members of the community were not alive to the possibility of such work occurring during the Project.

Evidence is that there is likely to be more extensive night-time surface work before the Project is completed. The events outlined above make future communications between the Project parties and the community more difficult. It is therefore important that communication is improved for the duration of the Project.

In section 11.8.3 of this report, I make four recommendations (Recommendations 18-22). It is my intention that the implementation of those recommendations will provide more specific information to the community about the nature and extent of night-time surface works planned for the Project.

7.7.2 Decision to commence night-time surface work

KWRA advised my Office that it was concerned about who gave the 'green light' to TJH to commence 24/7 work, how that occurred, and the consideration of the proposal through the CG, DIP and CNI.

Who gave the 'green light' to TJH to commence 24/7 work?

The letter from BrisConnections to CNI of 24 July 2009 stated 'We trust the contents of TJH's letter and this supplementary information is sufficient to enable CNI to authorise the night work activities at Kalinga Park'. The letter from BrisConnections to CNI of 28 July 2009 clarified that the information was provided for CNI's information only as 'we believe that we do not require CNI's specific approval for such works'.²⁸⁸

Despite this initial confusion, having regard to the correspondence and meetings around the time the decision to work 24/5 was made and the information provided by the agency officers during our interviews with them, it is clear that it was TJH's decision to commence night-time surface work at the Kalinga Park worksite and it was not necessary for permission to be obtained from the CG, DIP or CNI. This was based on an interpretation of the imposed conditions by TJH²⁸⁹ and accepted by the agencies.

Consideration of TJH's decision through the CG's Office, DIP and CNI

The minutes of the Toombul CLG meeting of 14 July 2009 stated:

CNI advised TJH applied to CNI for an approval to undertake night work in Kalinga Park. CNI advised they will set stringent requirements for working at night.²⁹⁰

The minutes of the Toombul CLG meeting of 11 August 2009 stated 'CNI advised the application and approval process for the night shift was a long process'.²⁹¹

In the CLG meeting of 9 September 2009, the process was explained by CNI as follows:

- TJH first raised the night shift proposal with CNI in June 2009 and discussions commenced with the CNI technical team.
- A community notification about the proposal was submitted to CNI for approval on 14 July 2009.
- CNI and the Independent Verifier were unsure if the proposed work would be compliant with the CG's imposed conditions but TJH demonstrated compliance through a number of letters and meetings with CNI and other relevant agencies.
- TJH provided a copy of the Site Environmental Plan based on predictive noise modelling and mitigation plans were presented to CNI.
- It was presented to the Toombul CLG at its 14 July 2009 meeting and the community was notified on 4 August 2009.²⁹²

The letter dated 4 May 2010 from the office of the Honourable Stirling Hinchliffe MP, Minister for Infrastructure and Planning, to a member of the community noted that TJH's proposal to conduct night-time surface work at Kalinga Park was 'rigorously tested against the Project Deed and the CG's conditions and only commenced after TJH had provided sufficient information to CNI, as State's representative, indicating that compliance would be maintained'.²⁹³

²⁸⁸ Refer to 7.2 of this report.

²⁸⁹ Refer to 6.9 of this report.

²⁹⁰ Refer to 7.3.1 of this report.

²⁹¹ Refer to 7.3.1 of this report.

²⁹² Refer to 7.3.1 of this report.

²⁹³ Refer to 7.5.2 of this report.

The information provided to the Toombul CLG on 14 July 2009 by CNI indicated that it was CNI's role to provide approval for night-time surface work. It is likely that, having regard to the correspondence between CNI and BrisConnections before that time, that this was CNI's understanding of its role at that time. As it turned out, this was not the case. As noted above, neither TJH nor BrisConnections required approval for night-time surface works to be conducted.

Information provided to the community noted that the proposal to conduct night-time surface work was 'rigorously tested' before night-work commencing and referred to the setting of 'stringent requirements'. Noting the correspondence and minutes of meetings before the commencement of night-time works, CNI, DIP, the CG and DERM did obtain information from TJH and had discussions with TJH about how it was going to comply with the imposed conditions when night-time surface work commenced.

The impression given was that if CNI, DIP/CG and DERM were not satisfied about the measures being put in place by TJH to ensure compliance with the CG's imposed conditions, they could have prevented the commencement of night-time surface work until they were satisfied. Having regard to the information provided by the agency officers during interviews with my officers, I see no basis for giving this impression. I note in particular the comment by Officer E, that there is really no requirement for BrisConnections to even advise CNI or DIP about the commencement of night-time surface work. In my view, the agencies had no power to prevent night-time surface work commencing, but if night-time surface work commenced and did not comply with the imposed conditions, enforcement action could then be taken. My reasons for this view are outlined in chapters 8 and 10.

Opinion 6

TJH and BrisConnections were not required to obtain approval to conduct night-time surface work from the CG, DIP or CNI.

CG/DIP's response

Acknowledged.

CNI's response

CNI did not comment on proposed opinion 6.

DERM's response

DERM did not comment on proposed opinion 6.

My comment

As the parties have not objected, I form Opinion 6 as proposed.

Reasons for night-time surface work

The reason provided to the community by TJH during the Toombul CLG meeting of 14 July 2009 for the introduction of a night shift at the Kalinga Park worksite was to ensure that civil engineering work, including the TBM launch box, would be completed before the arrival of the TBM and start of tunnelling.²⁹⁴

Evidence obtained during my officers' meeting with CG, DIP and CNI officers shows that they usually obtain an explanation from TJH about the need to conduct night-time surface work. The agency officers were not able to point to a head of power that would require TJH to provide this information but observed that TJH had always been cooperative in providing this information.²⁹⁵

While the reasons may be obtained from TJH they are not relevant in considering whether the night-time surface work can proceed. The imposed conditions do not specify a range of reasons for which night-time surface work may be undertaken and, therefore, it is at the absolute discretion of TJH whether night-time surface work will be done. This is on the premise that, in doing so, TJH will comply with the imposed conditions about noise.

Consideration needs to be given to the desirability of allowing night-time surface work for any reason and whether the CG should place parameters around the conduct of night-time surface work during significant projects.

The proposed report contained the following:

Proposed Opinion 7

CNI, DIP, CG and DERM took some steps to satisfy themselves that TJH would be able to achieve compliance with the CG's imposed conditions upon commencement of night-time surface work at Kalinga Park.

CG/DIP's response

Information in the Proposed Report (pages 54-57) shows that DIP and the CG obtained information from TJH and had meetings with TJH about how it intended to comply with the imposed conditions when night-time surface work commenced before any night-time surface work was undertaken. In these communications, noise modelling, noise monitoring, mitigation strategies and the community consultation plan for Kalinga Park were discussed. TJH also outlined the process it took to determine compliance with the CG's noise goals.

It is requested that the word "some" be removed from Proposed Opinion 7.

CNI's response

CNI did not comment on proposed opinion 7.

²⁹⁴ Refer to 7.3.1 of this report.

²⁹⁵ Refer to 7.6 of this report.

DERM's response

DERM requests the removal of the word 'some' from this Opinion. DERM took reasonable steps to ensure that TJH were in compliance.

My comment

Taking into account the views of the parties, I form Opinion 7, which is slightly modified from that proposed.

Opinion 7

CNI, DIP, CG and DERM took steps to satisfy themselves that TJH would be able to achieve compliance with the CG's imposed conditions upon commencement of night-time surface work at Kalinga Park.

However, as I discuss in section 11.8.3 of this report, statutory enforcement notices such as the s.451 notice under the EP Act may be used to gather information about the level of compliance with imposed conditions. That information may in turn be utilised to initiate other compliance action.

The proposed report contained the following:

Proposed Opinion 8

TJH and BrisConnections were not required to give reasons for their decision to conduct night-time surface work to the CG, DIP or CNI.

CG/DIP's response

DIP and the CG acknowledge Proposed Opinion 8 but ask that it be removed as it may have unintended consequences if the Ombudsman releases a public report of this investigation.

TJH and BrisConnections have previously cooperated in providing reasons for their decision to conduct night-time surface works. However, Proposed Opinion 8 has the potential to result in TJH forming a view that it does not have to provide reasons before conducting night-time surface works or other types of works. This could lead to poor performance in relation to the conduct of the Project.

CNI's response

It is incorrect to say that TJH and BrisConnections were not required to give reasons for their decision to conduct night-time surface works. Under the Project Deed, clause 38.5 allows the State to ask for such information relating to the Projects that it may reasonably require from time to time. As the State representative had asked for a response to questions regarding TJH and BrisConnections' reasons for conducting night time works, they needed to respond.

Perhaps it would be more accurate to rephrase this opinion to state, "TJH and BrisConnections were not required to seek permission from the State or CNI for works that were permitted by the project conditions."

Despite this, CNI sought information from BrisConnections and TJH regarding compliance by proposed works with the Project Deed and the Coordinator-General's Imposed Conditions.

CNI is concerned that Proposed Opinion 8 may serve to undermine the good administration of the Project by adversely impacting on the flow of information that is presently provided to CNI.

My comment

BrisConnections is required to provide information to CNI if asked. Therefore, I do not believe there is any real risk of significantly impeding the flow of information to CNI.

It is necessary for me to form this opinion to respond to one of KWRA's concerns.

I form a slightly modified opinion, to take into account the matters raised by the parties and include an opinion to reflect the State's ability to request reasons under clause 38.5 of the Project Deed.

Opinion 8

TJH is not required to give reasons for its decision to conduct night-time surface work to the CG, DIP or CNI.

Opinion 9

BrisConnections is required, if asked under clause 38.5 of the Project Deed, to give reasons for the decision to conduct night-time surface work to the CG, DIP or CNI.

Chapter 8: Is surface construction work permitted at night?

8.1 Overview

This chapter examines whether the imposed conditions for the Project permitted night-time surface work.²⁹⁶ In respect of this question I have considered legal advice obtained by KWRA, DIP and CNI and by my Office from Mr Wensley QC, who was briefed with relevant advices obtained by those parties and which were provided to my Office for my investigation.

Central to this question is the interpretation of imposed condition 7(b) of the change report.²⁹⁷

8.2 Opinion of Senior Counsel for KWRA

KWRA obtained a legal opinion from Senior Counsel²⁹⁸ dated 23 April 2010 as to the interpretation of the imposed conditions. This opinion has been made available to relevant agencies, CNI and my Office.

In Senior Counsel's opinion:

... the construction of condition 7 of the Change Report is quite straightforward. 'Construction activities' which are both:

1. For works on or above the surface; and
2. Which generate excessive levels of noise, vibration, dust or construction traffic movements

cannot be undertaken between 6.30pm and 6.30am on each Monday to Saturday and at no time on Sundays or public holidays.

In determining what is 'excessive' one has regard to the impact upon the amenities of the local residents.

The prohibition does not apply in 'special circumstances'.

8.3 DIP and CNI legal advice

DIP and CNI have also sought and obtained legal advice, which has been provided to my Office for my investigation.

The legal advice obtained by DIP is from internal and external legal advisers. Internal legal advice was requested in late November 2009 and provided on 23 December 2009.²⁹⁹ External advice was obtained on 23 April 2010 relating to noise at a specific

²⁹⁶ Section 2.4 of this report outlines the issues for investigation and section 2.5 outlines the issues for this report. This chapter addresses the issue in point 2.5.2.

²⁹⁷ Section 5.5.1 of this report outlines condition 7(b).

²⁹⁸ Mr Peter Davis SC.

²⁹⁹ Legal advice from Principal Legal Officer to Project Manager Significant Projects Coordination and Executive Director Significant Projects Coordination.

location and touched on the issue of the interpretation of the imposed condition and its enforcement.³⁰⁰

CNI obtained legal advice from an external provider dated 5 July 2010,³⁰¹ which was provided to DIP under cover of a letter dated 15 July 2010.

In its submission to my Office in July 2010, DIP stated:

The Department has held the consistent view that the Coordinator General's conditions do not preclude surface works outside the hours of 6.30am to 6.30pm where the construction activities do not generate excessive noise, dust, vibration or construction traffic movements. ...

CNI have sought independent legal advice about KWRA's claims about the excessive noise components of the Coordinator General's conditions. ... CNI's legal advice has been provided to the Department under cover of letter which protects confidentiality and limits use of the referred legal advice.

Both DIP and CNI proceeded on the basis that condition 7 and condition 9 are relevant to the question of noise generation.

8.4 Queen's Counsel's opinion

I have sought and obtained the opinion of Mr Robert Wensley QC about the interpretation of the imposed conditions in the CG's change report. I asked Mr Wensley:

Does condition 7(b) of the Coordinator-General's Change Report permit the contractor to carry out surface construction work 24 hours per day seven days per week?

After discussing the material briefed to him, Queen's Counsel said:

The literal answer to the question posed for my consideration is 'yes', but the answer has a number of sub-layers.

Firstly, Condition 7(b) deals with the particular work activity involving collection, unloading and haulage of spoil from construction sites. Obviously there are many surface construction work activities other than this particular one.

As to this particular one, it is clear that it may be conducted at any time of the day or night between 6.30 am on Monday and thereafter up to and including 6.30 pm on the following Saturday, excluding any public holidays in that period and, importantly, with no such haulage at all to be performed on any Sunday. In my view, that is the unambiguous interpretation of the first sentence of Condition 7(b). It means that the contractor cannot conduct spoil haulage activities 24/7. It is limited to the stipulated periods.

In passing, it seems that this part of the Condition meets the apparent intentions of the original EIS and subsequent iterations leading to the Change Report Conditions.

Secondly, the second sentence of subparagraph (b) begins with the word 'Otherwise'. That indicates clearly that the subject matter of that sentence relates to construction activities for works on or above the surface other than spoil haulage activities - potentially covering a variety of matters and activities, such as, for instance, pouring

³⁰⁰ Legal advice from Clayton Utz to the Executive Director Legal and Contract Services.

³⁰¹ Legal advice from Clayton Utz to In-house Counsel and Legal Manager.

concrete slabs, unloading reinforcement steel from trucks, movement of workers' cars to and from the relevant site, and so on.

The first part of the sentence is permissive, in that it mandates that construction activities for works on or above the surface, other than haulage activities, which works generate excessive levels of noise, vibration, dust or construction traffic movements can be undertaken only between 6.30 am to 6.30 pm Mondays to Saturdays, and at no time on Sundays or public holidays. The plain meaning of that part of the Condition is that construction activities for works on or above the surface, which generate excessive levels of noise etcetera, can be undertaken in the stipulated periods, but otherwise i.e. any other times, must not be undertaken. Thus, for example, construction activities for works on or above the surface, generating excessive levels of noise, cannot except in special circumstances be undertaken at any time on a Sunday.

The corollary to this interpretation is that construction activities for works on or above the surface which do not generate excessive levels of noise, may be undertaken in periods outside of 6.30 am to 6.30 pm Mondays to Saturdays and, indeed, on Sundays and public holidays. Put another way, this part of the Condition allows the contractor to undertake construction activities for works on or above the surface at any time, including Sundays and public holidays, provided that excessive levels of noise are not generated.

I must say that this conclusion seems to be at odds with the apparent intent expressed in the original EIS, as well as in the Coordinator-General's report of May 2007 and in the Airport Link Request for Project Change Response to Submissions of 21 July 2008. Maybe an evolutionary series of draftings, resulting in a final Condition which reverses an earlier expressed intention, leading to this result, is the explanation. Alternatively, perhaps there was a considered policy shift. Certainly, it seems to me that the clear tenor of earlier documents, from the original EIS onwards, was that (absent exceptional circumstances) there would never be surface work on Sundays. Now there can be, provided it does not involve spoil haulage or the generation of 'excessive' noise, dust or vibrations.

That said, Condition 7(b) is the Condition which governs the situation and it must be construed accordingly. ...The contractor can conduct non-spoil haulage construction activities for works on or above the surface at any time of day or night, provided that relevant levels of noise etcetera are not exceeded. While I suspect that some of the drafters of, e.g. the original EIS might be surprised at this result, it is the way that a decision maker, such as a Court, will interpret the Condition, applying the normal canons of construction, in my view.

The Queen's Counsel summarised his opinion as:

Tunnelling is permitted 24/7.

Special circumstances work is permitted 24/7.

Surface works, other than spoil haulage works, which do not generate 'excessive' levels of noise, dust, vibrations or traffic are permitted 24/7.

Spoil haulage works are in a category of their own. They can only be carried out, and regardless of the noise, dust etc. they generate, between 6.30am Mondays to 6.30pm Saturdays, but never on a public holiday and never on a Sunday.

Surface works, other than spoil haulage works, which do generate excessive levels of noise, dust, vibration and traffic, may only be performed between 6.30am and 6.30pm on Mondays to Saturdays, and never on a Sunday or on a public holiday.

8.5 Is surface construction work permitted at night?

Having considered the material before me, and Mr Wensley's advice obtained by my Office, I consider that imposed condition 7(b) permits surface work to be carried out between 6.30pm and 6.30am on Monday to Saturday (and on Sunday and public holidays) as long as those works do not generate excessive noise, vibration, dust and traffic.

I am of the view that the KWRA's advice is consistent with this view. I respectfully disagree with KWRA's view that its own advice contends differently. The point of difference between the parties concerns the meaning of the term 'excessive noise'. I will explore the meaning of the term and its implications in chapter 9.

Opinion 10

Condition 7(b) allows surface work to be carried out between 6.30pm and 6.30am Monday to Saturday and on Sunday and public holidays as long as those works do not generate excessive noise, vibration, dust and traffic.

CG/DIP's response

Acknowledged.

CNI's response

CNI did not comment on proposed opinion 9 (Opinion 10).

DERM's response

DERM agrees with the Ombudsman's opinion that condition 7(b) allows surface work to be undertaken during those hours as long as it doesn't create excessive noise, dust, vibration or construction traffic movements or it is special circumstance as described in the condition. DERM recommends that the wording of the Opinion should be changed to reflect that used in the actual condition which reads *construction activities for works on or above the surface and which generate excessive levels of noise, vibration, dust or construction traffic movements, must only be undertaken between 6:30am to 6:30pm Mondays to Saturdays and at no time on Sundays or public holidays, except for special circumstances.*

My comment

I am not persuaded by DERM's suggestion.

I form Opinion 10 (proposed opinion 9) as proposed.

Chapter 9: Excessive noise under imposed condition 7(b)

9.1 Overview

Under ss.440(1) and (2) of the EP Act, a person must not unlawfully cause an environmental nuisance.

The offence for causing environmental nuisance (under the EP Act) does not apply if an imposed condition (such as condition 7(b)) under an approval granted by the CG under the SDPWO Act authorises the nuisance.³⁰² Therefore, it is critical that the terms of imposed conditions clearly state the extent to which nuisance, such as noise, is permitted.

As discussed in chapter 8, under imposed condition 7(b), surface work can be conducted outside the hours of 6.30am to 6.30pm Monday to Saturday only if it does not generate excessive levels of noise (excessive noise).

This chapter examines what is meant by the term 'excessive noise' having regard to the views of the CG, DIP, DERM, CNI, KWRA, and advice obtained by my Office from Mr Wensley QC and Dr Rob Bullen from WM. I have also considered a submission from TJH.

Also, this chapter looks at how the noise goals in condition 9 relate to the meaning of 'excessive noise' in imposed condition 7(b). A number of issues relating to the noise goals are examined, including, for example, how noise from night-time surface work should be assessed having regard to relevant residential categories under NIAPSP, whether noise is steady state (long term or temporary) and whether it is reasonable to make assessments against the noise criterion on the basis that windows and doors of residences are closed.

For the purpose of assessing whether there has been excessive noise from night-time surface work, a number of key reports are referred to in this chapter. They are:

- Airport Link monthly environmental monitoring reports, August 2009 to August 2010 ('the Airport Link monitoring reports')
- Air Noise and Environment report *Noise Complaint Investigation* – [de-identified] *Mabel Street, Clayfield* dated 17 September 2009 ('the ANE Clayfield report')
- Air Noise and Environment report *Toombul – Night Time noise monitoring* dated 9 February 2010 ('the ANE Toombul Report')
- ASK Consulting Engineers report *Airport Link Project – Compliance Noise Monitoring*, [de-identified] *McGregor Street, Clayfield* dated 26 March 2010 ('the ASK report')
- Heggies report *Airport Link Project: Kalinga Park Construction Site: Construction Noise Monitoring Report* dated 21 May 2010 ('the Heggies report')
- *Toombul Night Works: Report Investigating Compliance with the Coordinator General's Conditions Related to Noise and Mitigation* April 2010 ('the CNI report').

³⁰² Section 440(3) and schedule 1, s.3 EP Act.

Based on an assessment of the above reports and other material available to my Office, I express a proposed opinion relating to exceedences of the noise goals by night-time surface work at Kalinga Park.

9.2 Guide to noise terms

Most environments are affected by environmental noise that continuously varies. To describe the overall noise environment, a number of noise descriptors have been developed and these involve statistical and other analyses of the varying noise over sampling periods, typically taken as 15 minutes. These descriptors, which are demonstrated in the graph below, are defined here to aid understanding of this chapter.

Maximum Noise Level (L_{Amax}) – The maximum noise level over a sample period is the maximum level, measured on fast response, during the sample period.

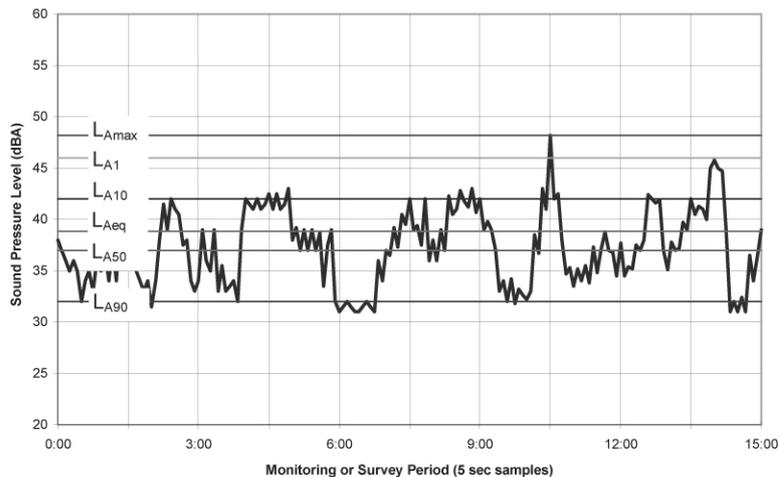
LA1 – The LA1 level is the noise level that is exceeded for 1% of the sample period. During the sample period, the noise level is below the LA1 level for 99% of the time.

LA10 – The LA10 level is the noise level that is exceeded for 10% of the sample period. During the sample period, the noise level is below the LA10 level for 90% of the time. The LA10 is a common noise descriptor for environmental noise and road traffic noise.

LAeq – The equivalent continuous sound level (LAeq) is the energy average of the varying noise over the sample period and is equivalent to the level of a constant noise that contains the same energy as the varying noise environment. This measure is also a common measure of environmental noise and road traffic noise.

LA50 – The LA50 level is the noise level that is exceeded for 50% of the sample period. During the sample period, the noise level is below the LA50 level for 50% of the time.

LA90 – The LA90 level is the noise level that is exceeded for 90% of the sample period. During the sample period, the noise level is below the LA90 level for 10% of the time. This measure is commonly referred to as the background noise level.



9.3 Noise goals

The noise goals stated in the CG's change report are contained in condition 9(d) for night-time noise and condition 9(f) for daytime noise. For residences, they are summarised in Table 1 below. These criteria all apply to noise levels measured internally, that is, within a relevant room of the residence.

Table 1

Internal Residential Noise Criteria from 2008 Change Report

Time Period	Type of Noise	Type of Receiver Area	Criterion and Unit
Night (6.30pm – 6.30am)	"Intermittent"	"R1 – R3"*	45 dBA L_{Amax}
		"R4 – R6"*	50 dBA L_{Amax}
	"Steady, Temporary"	"R1 – R3"*	35 dBA $L_{Aeq,adj(15min)}$
		"R4 – R6"*	40 dBA $L_{Aeq,adj(15min)}$
	"Steady, Long-term"	"R1 – R3"*	30 dBA $L_{Aeq,adj(15min)}$
		"R4 – R6"*	35 dBA $L_{Aeq,adj(15min)}$
Day (presumably 6.30am – 6.30pm)	"Steady"	"Near major roads"	45 dBA $L_{Aeq,(15min)}$
		"Near minor roads"	40 dBA $L_{Aeq,(15min)}$
	"Non-steady"	"Near major roads"	55 dBA $L_{A10(15min)}$
		"Near minor roads"	50 dBA $L_{A10(15min)}$

* as defined in NIAPSP

A number of important considerations apply in assessing construction noise against the noise goals.

These include whether the noise generated by the construction activities is:

- in the night-time or daytime
- steady or intermittent
- temporary or long term
- if daytime noise, received in a receptor property near a minor or major road
- if night-time noise, received in a receptor property having a particular residential category described in NIAPSP
- to be measured internally within a residence, or capable of measurement by an external façade reduction approach.

I have also considered whether the criteria for excessive noise should apply with windows (and doors) open or closed. This is a pivotal question and is considered in section 9.8.7.

These questions are important for the modelling and monitoring programs required for the Project, including to determine the background noise level or correct goal against which noise is to be measured and the approach to be taken to noise measurement. They are addressed at 9.8 of this chapter.

9.4 What construction work is subject to the noise goals?

9.4.1 Work ancillary to and necessarily associated with construction activities

Much of the concern expressed by KWRA has been to do with activities that are ancillary to and necessarily associated with the Project's construction work. Mr Wensley QC advised that although 'construction activities' is not defined, the phrase would be given a wide interpretation.

By way of example, if particular construction work involved the placement of reinforcement steel in formwork and pouring concrete into the formwork, Mr Wensley was of the opinion the activities of delivering the reinforcing steel and concrete to the site would be 'construction activities' referred to in condition 7(b). If the placement and pouring activities did not generate excessive noise, but the delivery activities did, then the same consequences would result, that is, a breach of the condition.

9.4.2 Special circumstances work

The third limb of condition 7(b) refers to special circumstances work. In Mr Wensley's opinion, construction activities for work, on or above the surface, other than spoil haulage, may occur at any time in special circumstances, regardless of whether those activities generate excessive noise, vibration, dust or construction traffic movement.

9.5 What is excessive noise?

A key issue is what is meant by 'excessive noise' because the term is not defined under the imposed conditions. This part examines the parties' views and considers the CG's clarification of its meaning.

9.5.1 The CG's and DIP's views

The CG issued a statement of clarification of the meaning of excessive noise in April 2010.³⁰³

My Office requested an explanation of the events leading to the CG's clarification. Mr Newton replied by letter dated 8 October 2010. In his response, Mr Newton stated that in January 2010 the CG wrote to the Chief Executive of BrisConnections and the Project Director of TJH, advising:

- of the receipt of a number of complaints about the operations of the Kalinga Park worksite
- that additional noise monitoring would be undertaken
- the parties of the obligation to comply with the conditions set by the CG.

TJH responded in early February 2010 advising of its approach to site noise management, results of noise monitoring by TJH environmental staff, as well as the results of noise monitoring by an independent consultant undertaken on 27 January 2010.

³⁰³ At <http://www.dip.qld.gov.au/projects/transport/tunnels-and-bridges/airport-link-tunnel-project.html> as at 21 December 2010.

TJH indicated that its own monitoring at five locations in Mabel Street, Lewis Street and Elliott Street from 10 January to 25 January 2010 provided:

... substantive feedback that the noise goals (LAeq 40 dBA and LA 50 dBA) are not being regularly or significantly exceeded and subjectively indicate that noise from 'out of hours' work is not excessive.

In respect of the independent monitoring undertaken on 27 January 2010, TJH stated:

The report highlights that with windows closed all internal monitoring locations with the exception of (one receptor) were under the 40 dBA LAeq goal stated in the project conditions. It was also noted that the elevated level at (the receptor) was likely to be related to increased residential noise.

The external monitoring locations were selected to include those residential locations that were the subject of significant levels of complaint and that were previously determined to be outside the predicted impact zone (excluding one receptor). The monitoring results at all locations (except one receptor) indicate that, based on industry guidelines, the internal goal of LAeq 40 dBA is likely to be met.

On 9 April 2010, CNI provided DIP with a copy of the DLCS report (the independent auditor) for February 2010. The report stated that DLCS agreed with TJH's view that the term 'excessive noise' was not defined (see 9.5.5 below).

The CG requested that the definition of 'excessive noise' be discussed urgently.³⁰⁴ A departmental brief was prepared and a letter was sent to TJH on 28 April 2010 setting out the CG's view about the meaning of the term for imposed condition 7(b). On 4 May 2010, in a meeting between the CG and departmental officers, the CG requested that open letters be sent to the CLGs about his clarification and that his view be published on the website.

DIP wrote³⁰⁵ to the Toombul, Kedron and Lutwyche CLGs to inform them of the CG's clarification and reinforcement of the term 'excessive noise'. The letters provided, in part:

The Coordinator-General has taken the view that the generation of excessive noise, as stated in Condition 7, occurs when noise measured at a sensitive place (for example inside a mitigated bedroom of a home nearby) exceeds the noise goals stated in Condition 9, or the background noise (Whichever is greater).

The internal noise goals (sleeping areas) to avoid sleep disturbance during night hours (i.e. 6.30 pm to 6.30 am) that have been set for the project, which are detailed in Condition 9(d)(i) and (ii), have been based on existing national standards regarding sleep disturbance.

These extracts indicate that the meaning of 'excessive noise' for the purposes of the imposed conditions was intended to be understood, in part, by reference to the goals in condition 9.

³⁰⁴ CG's notes included as Attachment 3 to 8 October 2010 letter to my Office.

³⁰⁵ Letters dated 7 May 2010 from DIP, Director of Infrastructure Projects.

The full statement on the website is expressed as follows:³⁰⁶

Coordinator-General's clarification and reinforcement of the term 'excessive noise'

The Coordinator-General has clarified and reinforced the term 'excessive noise' with reference to the *Coordinator-General's Change Report on the Environmental Impact Statement for the Airport Link Project, July 2008*.

The Coordinator-General has taken the view that the generation of excessive noise, as stated in condition 7, occurs when noise measured at a sensitive place (for example inside a bedroom of a home nearby which has had mitigation measures applied) exceeds the noise goals stated in the Coordinator-General's Report, appendix 1, schedule 3, condition 9, or the background noise (whichever is greater).

Internal noise goals for sleeping areas have been set for the project during night hours (from 6.30 pm to 6.30 am). These noise goals are based on existing national standards for sleep disturbance. The goals are detailed at appendix 1, schedule 3, condition 9 (d) (i) and (ii).

It is important to note that noise goals set for the project are based on noise measured in sleeping areas after all reasonable and practicable mitigation and management measures have been applied. They are not measured at the source of the noise. In most circumstances, the best mitigation techniques include:

- site-specific enclosures
- external noise barriers
- closed and double glazed windows
- air-conditioning
- other mitigation measures applied to the sleeping area of an affected property.

Thiess John Holland has advised the Coordinator-General of difficulty in measuring noise inside homes for which noise complaints have been made. It is understandable that residents are reluctant to allow strangers in their homes during the night.

The Coordinator-General has advised Thiess John Holland that a suitable alternative method is to measure the noise levels externally (at the boundary of the property) and deduct an amount of 10 dB ('A' weighted scale) to obtain an approximate internal value. These measurements should be conducted in accordance with the Department of Environment and Resource Management *Noise Monitoring Manual*.

A single exceedence of the noise goals does not necessarily constitute a breach of the Coordinator-General's conditions however it will trigger investigation into why the noise exceedence occurred, what work activities were occurring at the time, what consultation has occurred and what mitigation and management measures have been applied.

9.5.2 DERM's view

DERM's view is that night-time surface work can be carried out. However, before the CG's clarification, DERM's position was that any noise generated by construction activity that exceeds the background noise level is excessive.³⁰⁷

³⁰⁶ CG (2010) Projects, Airport Link, Coordinator-General's clarification and reinforcement of the term 'excessive noise' [accessed at <http://www.dip.qld.gov.au/projects/transport/tunnels-and-bridges/airport-link-tunnel-project.html> on 9 December 2010].

³⁰⁷ Item 2.2 meeting 4 August 2009 between TJH, CNI, DIP and DERM.

9.5.3 CNI's view

CNI's position is that night-time surface work can occur, provided the noise goals in condition 9(d) are met, and provided the works do not otherwise cause excessive noise, vibration, dust or construction traffic movements.

In the CNI report, CNI stated it 'asserts that noise measurements showing levels above the noise goal is not necessarily a breach of the Coordinator-General's conditions' but 'failure to apply and implement requirements in connecting conditions [for example, condition 9(d)] would be'.³⁰⁸ CNI continued: 'The number of exceedences above the noise goals, may however be determined to be 'excessive' by the Coordinator-General'.³⁰⁹

9.5.4 TJH's view

TJH contended that the term 'excessive noise' has not been defined and therefore it is not possible to determine whether the activity on the worksites is generating excessive noise.³¹⁰

In its submission to my Office, TJH stated:³¹¹

The meaning of excessive noise is not defined in the Conditions. The Conditions are considered a statutory instrument and as such it is not our position to define such conditions.

Prior to the Coordinator-General's letter dated 28 April 2010 that defines a process for determining what is excessive noise, we believed that the application of the iterative process inherent in the Conditions for goals, modelling, monitoring and the adoption of reasonable and practical mitigation (both at the receptor and source) represented compliance with these conditions.

9.5.5 The independent auditor's view

DLCS was appointed by TJH to conduct an audit of TJH's compliance with the imposed conditions. DLCS stated in its March 2010 report:³¹²

These conditions are those set out in Appendix 1, Schedule 3, Conditions 1 – 15 (Construction) of the certified copy of the Airport Link Change Report dated 29 July 2008. These conditions relate to the construction work which commenced in mid-2008.

The audit focus was stated to be on the agreed major risk issues of noise, dust, traffic, hazard and risk management, while not ignoring other risks.³¹³ DLCS found that non-achievement of specified noise goals was not being reported through the non-conformance process even though the noise goal excesses were being reported in the Airport Link monitoring reports.³¹⁴

DLCS also noted³¹⁵ that construction work that was not 'special circumstances' was being conducted outside of the specified times.

³⁰⁸ CNI Report, Page 6, second paragraph.

³⁰⁹ CNI Report, Page 6, second paragraph.

³¹⁰ A view reported in the DLCS report for February 2010.

³¹¹ TJH letter dated 19 November 2010, page 4.

³¹² Davis Langdon Compliance Report 12 March 2010, page 4.

³¹³ Davis Langdon Compliance Report 12 March 2010, page 4.

³¹⁴ Davis Langdon Compliance Report 12 March 2010, page 8.

³¹⁵ Davis Langdon Compliance Report 12 March 2010, page 10.

The DLCS March 2010 report assumed that because complaints had been received about noise from night-time surface work, that noise was therefore excessive. This was disputed by TJH. TJH contended³¹⁶ that the work was not excessively noisy and that in any event 'excessive' had not been defined. TJH further stated that where the noise goals had been exceeded during night-time work, mitigation had been put in place.

DLCS agreed that 'excessive' is a subjective term and that until that term had been clearly defined, it would not be possible to determine whether noise about which a complaint had been made was excessive.

9.5.6 KWRA's view

KWRA stated in the BTR:³¹⁷

It is important to note and acknowledge that there is no pejorative meaning attached to the word 'excessive'. There is no suggestion that excessive noise is, as such, not allowed or illegal. It is merely stating the obvious: that a massive construction site, located in a park in the middle of a residential area, cannot be permitted to operate out of daytime hours. To allow it to do so is a completely unreasonable imposition on those residents who live in the vicinity of the project and have already had their lives dislocated for the good of the broader community. The fact that this project will be under construction for at least four years makes this even more evident. Common sense would dictate that any surface construction noise in a residential suburb that occurs after 6.30pm, Monday to Saturday and any time on Sunday is excessive.

KWRA says this reading is supported by the Project documents (outlined in chapter 6 of this report).³¹⁸

Much of the concern expressed by KWRA is about noise generated by construction activities that are ancillary to and necessarily associated with the Project's construction work.

KWRA sought Senior Counsel's opinion³¹⁹ on what excessive means in the context of the imposed conditions. Senior Counsel opined:³²⁰

The term 'excessive' is defined as:

'exceeding the usual or proper degree; characterised by excess...'

The term excessive can be seen then to be a relative one. Excessive compared to what? There seem to me to be two possibilities. The first is that the levels of noise must not be excessive having regard to the nature of the occupation of persons of the area i.e. for residential purposes and having regard to the amenities of those persons. The second alternative is that the noise must not be 'excessive' having regard to the type of 'construction work'. This would lead to the conclusion that any construction work could be conducted at any time provided that it was not being conducted in a way that generated more noise than would usually be generated by such construction work.

³¹⁶ Davis Langdon Compliance Report 12 March 2010, page 10.

³¹⁷ BTR, pages 17 and 18.

³¹⁸ Refer to point 2 at 2.1 of this report.

³¹⁹ Mr Peter Davis SC.

³²⁰ Opinion of Peter Davis SC, 23 April 2010, page 6.

It is difficult to find any decided cases which assist in the interpretation of the term 'excessive' in this context. The Change Report is based on an environmental impact study.

The Change Report itself deals with the environmental impact of the works. Chapter 4.5 deals with noise and vibration. A central theme of that chapter is the impact on the amenity of the residents of the affected area. It seems pretty clear to me that the term excessive means 'excessive having regard to the amenities of the local residents'.

9.5.7 Mr Wensley's advice to my Office

Relationship between condition 7(b) and 9(d)

Mr Wensley QC was briefed by my Office with the advices obtained by the parties and asked to advise on the meaning of 'excessive noise'.

Mr Wensley advised that, as a matter of construction, he did not think that a binding reference yardstick for the phrase 'excessive levels' can be found in condition 9(d). In his view, condition 9(d) deals, in some detail, with a particular circumstance framework, built on an initial requirement that predictive modelling is to be performed and thereafter progressing to a relatively detailed goal-based construction based on such modelling.

He did not see anything in condition 7(b), which suggests that the process under condition 9(d), or the results of it, as a matter of construction, determines what is or is not 'excessive' within the meaning of condition 7(b). If I may put this in another way, Mr Wensley did not consider that the condition 9(d) process, of itself, defined the meaning of 'excessive noise' under condition 7(b). In his opinion, the disconnect between condition 7(b) and condition 9(d) is underlined by the fact that condition 7(b) mandates a hard division between what the contractor can and cannot do, while condition 9(d) does not prescribe or proscribe limits, but sets goals and mandates steps that are to be taken if such goals are not met.

However, Mr Wensley indicated that this did not mean the matters referred to in condition 9(d) are irrelevant to the issue of what is 'excessive' within the meaning of condition 7(b). If a particular factual situation has to be assessed, for instance, in an enforcement proceeding, a decision-maker will have to determine what the relevant excessive levels of noise are. Mr Wensley considered that one matter informing that decision-making process, and potentially highly relevant, is the set of criteria established in condition 9(d).

Mr Wensley noted that there would potentially be a range of other material that would need to be considered, including, for example, NIAPSP and AS 2107, in any argument as to whether noise generated by a particular surface construction activity, at a particular place at a particular time, related to the Project, is 'excessive' within the meaning of condition 7(b).

The essential point made by Mr Wensley was that the parameters set out in condition 9(d) will not be determinate of what is 'excessive' within the meaning of condition 7(b), although they may be of considerable relevance in any factual set of circumstances.

In summary, Mr Wensley advised that the interpretation of the word excessive will be a matter of fact in each case, for instance, in a particular enforcement proceeding. There will be, potentially, a variety of evidentiary sources, probably involving expert

evidence, relating to what is excessive in particular circumstances. He recommended that expert advice be sought. My Office engaged WM, whose view is outlined below at 9.5.8.

9.5.8 Wilkinson Murray view

WM was briefed with the Project documents, predictive modelling reports and results of noise monitoring referred to in the chapter overview.³²¹

In relation to the noise goals and CG's statement of clarification about excessive noise WM stated:

The 'noise goals stated in the Coordinator-General's Report, appendix 1, schedule 3, condition 9' are in conditions 9(d) for night-time noise and 9(f) for daytime noise. For residences, they are summarised in Table 1 (see 9.3 above). These criteria all apply to noise levels measured within a relevant room of the residence.

The above clarification (the CG's clarification) indicates that 'excessive noise' is noise that exceeds the criteria in Table 1 or the background noise (whichever is greater). For clarity, I would comment that the term 'background noise' in environmental acoustics means the LA90 value of the ambient noise in the absence of a noise which is to be assessed. In context, it is clear that the clarification refers to the internal background level in a residence, since it is to be compared with an internal noise level from the source. Although internal background noise levels do not appear to have been measured in relevant residences, based on measured external background levels I would be surprised if internal levels exceed the criterion values in condition 9(d), and hence for the remainder of this report the criteria in the CG's clarification will be taken to be those in Table 1.

My Office briefed WM with relevant extracts from Mr Wensley's advice. In accordance with that advice, my Office indicated that the CG's clarification was not necessarily definitive of what is to be considered excessive noise and asked WM for its view.

WM then outlined what it considered was the meaning of 'excessive noise' in the context of the Project. Relevant passages from its advice follow.

General Principles

A literal interpretation of the term 'excessive noise' would imply that it refers to noise that exceeds some (unspecified) criterion. However, a more common-sense interpretation would be that it refers to noise that most people (or a significant percentage of people) would consider unacceptable on account of its level or other acoustic characteristics.

Under the second definition, there are two potential guides to whether noise is 'excessive' – results of research into community reaction to noise, and regulations that are in use in other places. Unfortunately there is little available research into reaction to construction noise in particular, although studies of community reaction to noise in general can provide some guidance. Hence, regulations and standards, particularly from Australian authorities, provide the most direct guidance on the generally-accepted meaning of 'excessive' noise in this country.

³²¹ Refer to 9.1 of this report.

Construction Noise and Permanent Operational Noise

Construction noise is generally considered to be temporary in nature, and weekday daytime construction noise, at least, is often considered to be a necessary by-product of providing a desired outcome in terms of public or private infrastructure. Hence, criteria for construction noise at these times are generally not stringent. Some jurisdictions (e.g. EPA Victoria's 'Environmental Guidelines for Major Construction Sites') provide no numerical criteria for construction noise, but rather require adherence to general noise control principles. Where numerical criteria are applied, for work within 'standard hours' they are typically less stringent than criteria for permanent operation of a noise source such as an industrial facility.

However, where construction occurs over a long period (such as several years, as in the present case), and particularly where it occurs outside what would be called 'standard construction hours', criteria typically revert to those for the operation of a permanent source.

The document 'Interim Construction Noise Guidelines', produced by the NSW Department of the Environment, Climate Change and Water, is to my knowledge the most comprehensive set of guidelines for construction noise in Australia. For noise produced within 'standard hours' (in this case 7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm Saturday) a 'management level' is set at the existing background noise level plus 10 dBA. For works conducted outside those hours the 'management level' is the background level plus 5 dBA, which corresponds to the criterion for a permanent noise source. (For night-time noise, further criteria related to sleep disturbance are relevant, as discussed below.) Where noise levels cannot be reduced to below this criterion, 'the proponent should negotiate with the community'.

Where noise from out-of-hours construction work exceeds criteria that would be applicable to a permanent noise source at those times, I believe it is reasonable to describe that noise as 'excessive'.

In practice, exceedence of a standard criterion may have different consequences for construction noise and for a permanent noise source. For example, negotiation of an agreement with the community and/or regulatory bodies may be possible in the case of construction noise where it would generally not be for a permanent noise source.

Further, it is true that condition 7 of the 2008 Change Report automatically precludes all work that generates 'excessive' noise, whereas under most construction noise guidelines the production of 'excessive' noise would simply trigger a requirement for consultation with the community to find a mutually-acceptable outcome.

However, the 2008 Change Report is itself the product of a period of consultation, during the environmental assessment process, and the requirements of the Report can be treated as representing the outcome of that consultation. Hence, I do not believe this consideration impacts on the reasonable meaning of the term 'excessive' in this context, and guidance on the meaning of the term can generally be taken from criteria that apply to permanent noise sources. (An exception is some aspects of sleep disturbance criteria, which are discussed below).

Criteria for a Permanent Noise Source (Excluding Sleep Disturbance)

In most forms of noise regulation, noise is either assessed against a constant criterion value or is compared with the LA90 background noise level in the absence of the noise being considered (or both). LAeq is generally the preferred measurement unit for the noise under consideration, and its use is supported by research into annoyance reactions to noise. LA10 is an older form of measurement unit, and is generally highly correlated with LAeq for most types of noise (including construction noise).

External background noise levels in potentially-affected areas, in the absence of noise from construction works, are reported in the EIS, and further results are reported in the two ANE modelling reports.³²² These are shown in Table 2 [below]. The values shown for Clayfield are also compatible with the background level of 41 dBA reported at 10pm at a similar location in the ASK report.

Table 2

Relevant Measured L_{A90} Background Noise Levels (External), dBA

Location	Day	Evening	Night
[de-identified] ■ Kalinga St, Clayfield (EIS)	45	48	41
70 Kalinga St, Clayfield (ANE Toombul modelling report)	46	43	40
[de-identified] ■ Earle St, Windsor (EIS)	47	46	42
Federation St, Windsor (ANE Bowen Hills modelling report)	51	48	48
Earle St, Windsor (ANE Bowen Hills modelling report)	47	45	44

Where noise criteria are based on a comparison between background and source noise levels, the usual criterion is that the source noise level (expressed as either LAeq or LA10) should not exceed the background by more than 5 dBA.

Table 3 (below) shows internal noise criteria resulting from the application of this principle, and also fixed criteria shown in various documents. These are all expressed as internal noise levels with windows open, which where necessary are approximated by external noise levels minus 10 dBA. The 'background + 5dB' criteria shown are based on the lowest of the measured background levels in Table 2, and would be appropriate for residences in Kalinga St, Clayfield. In other potentially noise-affected areas the relevant 'background + 5dB' criterion would be higher.

In a number of the documents noted in Table 3, additional criteria in terms of the background sound level should also be met, and hence the criteria discussed may be higher than would be applied in practice.

Comparing Table 3 with Table 1, it is clear that the 2008 Change Report's daytime criteria for 'steady' noise are consistent with criteria in AS 2107, and generally consistent with other criteria for a permanent noise source.

³²² The reports briefed by my Office include the ANE modelling report Bowen Hills – Southern Connection Structures July 2009, Bowen Hills – Stage 2 Construction Noise Modelling, and ANE Toombul Construction Noise advice letter dated 19 November 2008 to TJH.

Table 3**Internal Residential Criteria for a Permanent Noise Source**

Document	Type of Receiver Area	Noise Level Criterion, dBA L _{Aeq,Period}		
		Day ¹	Evening ¹	Night ¹
"Background + 5 dBA"	Kalinga St, Clayfield	40 ¹	38 ¹	35 ¹
Queensland Environmental Protection (Noise) Policy 2008	Dwelling	35	35	30
BCC Noise Impact Assessment Planning Scheme Policy	R2 & R3 as per AS1055.2	40 ¹	35 ¹	30 ¹
BCC Noise Impact Assessment Planning Scheme Policy	R4 as per AS1055.2	45 ¹	40 ¹	35 ¹
NSW Industrial Noise Policy	Residence – Suburban ("acceptable")	45 ¹	35 ¹	30 ¹
Victoria – SEPP N1 Explanatory Notes ²	Mainly residential ("typical noise limit")	40-44 ¹	34-38 ¹	29-33 ¹
AS 2107 ³	Houses and apartments near minor roads ("maximum")	40	40	35
AS 2107 ³	Houses and apartments near major roads ("maximum")	45	45	40

- Notes: 1 Based on external criterion minus 10dBA
2 Complex assessment procedure – values shown are quoted as "typical" results
3 Values for "Living areas" shown under "Day" and "Evening"; "Sleeping areas" shown under "Night"
4 The exact definition of "day", "evening" and "night" differs between documents

The 2008 Change Report's 'non-steady' criteria apply to daytime noise only. They are expressed in terms of LA10, and it is not clear how they are to be applied – in particular whether a measured noise should be classified as 'steady' or 'non-steady' and compared with only one of the criteria, or whether the same noise should be measured in terms of both LAeq and LA10 and both criteria applied. In both the Airport Link monitoring reports and the Heggies report, the second interpretation is applied, presumably under the assumption that the LA10 unit will capture the 'non-steady' component of the noise. In practice, LA10 noise levels from construction noise are a few dB higher than LAeq levels, and it is mathematically impossible for LA10 to be more than 10 dBA higher than LAeq from the same measurement. Hence, at least under this interpretation, the 'non-steady' daytime criteria, which are 10 dBA higher than the 'steady' criteria, can be ignored, since exceedence of the 'non-steady' criterion would always imply exceedence of the 'steady' criterion.

In Table 3, night-time criteria above 35 dBA are shown only for AS 2107 in the case of residences 'near major roads'. This gives some context to the criterion of 40 dBA in Table 1 for 'steady, temporary' noise in R4-R6 areas – it represents the upper limit of possible criteria, and should be used with caution and only under special circumstances.

The values in Table 1 for 'intermittent' noise are expressed in terms of L_{Amax}, and are identified in the 2008 Change Report as related to sleep disturbance, which is discussed in the following section. As for 'steady' and 'non-steady' noise, there is no requirement to categorise a noise as either 'intermittent' or 'steady' – the LAeq measure is designed to capture and represent the 'steady' or quasi-steady aspects of the noise while the L_{Amax} noise level can simultaneously assess the 'intermittent' component.

This interpretation of 'intermittent' noise is assumed in the Airport Link monitoring reports and the Heggies report, but not in the NMA report.³²³ The latter appears to consider only noise from generators and compressors as 'steady', while noise from cranes and concrete pumps is 'intermittent', and hence not to be included in the measured LAeq from the site. I believe that whatever the term used, the LMax descriptor is relevant to sleep disturbance, and its value should be compared with criteria designed to protect against sleep disturbance. Noise from the same source can also cause loss of amenity in other ways, and this impact is captured by the LAeq descriptor. Noise from cranes and concrete pumps causes impacts other than sleep disturbance (e.g. annoyance when a resident is awake), and its level should be assessed against criteria designed to assess those impacts.

Conclusions from this analysis would be that the LAeq-based criteria in the 2008 Change Report generally correspond with typical criteria for a permanent noise source, and hence can be regarded as indicative of 'excessive' noise, provided that care is taken in interpreting the meaning of the highest category, 'temporary' noise in R4-R6 areas. The LA10 daytime criteria are difficult to interpret, but under a reasonable assumption as to their meaning can be ignored.

Sleep Disturbance Criteria

Criteria for sleep disturbance are typically expressed in terms of the maximum noise level from a single event, or LMax. For example, in NSW a 'screening' criterion for sleep disturbance is that the LMax noise level should not exceed the background noise level by more than 15 dBA. Further advice is provided in the NSW document 'Environmental Criteria for Road Traffic Noise':

- 'Maximum internal noise levels below 50–55 dBA are unlikely to cause awakening reactions.
- One or two noise events per night, with maximum internal noise levels of 65–70 dBA, are not likely to affect health and wellbeing significantly.'

The above principles would suggest that the 2008 Change Report LMax criteria of 45 dBA and 50 dBA are conservative for protecting against sleep disturbance.

The above criteria take only minimal account of the number of events occurring in a night. An index previously suggested by the author ('Sleep Disturbance Due to Environmental Noise: A Proposed Assessment Index' – Acoustics Australia 24 (3), 1996) does directly account for the number of events, but is not associated with specific criteria.

An important recent paper from the World Health Organisation ('Night Noise Guidelines for Europe', 2009) suggests that LAeq, night should be adopted as a measure of sleep disturbance rather than LMax, and that an appropriate **external** goal would be 40 dBA, with an 'interim target' of 55 dBA. The internal LAeq goals in the 2008 Change Report are effectively intermediate between these two values.

However, it is important to note that the above criteria are intended for assessment of noise that will continue over a period of many years. In particular the WHO report indicates that LAeq, night should be an average level measured over an entire year, and the criterion value is designed to protect against impacts such as increased incidence of cardiovascular disease that are known to be associated with long-term, chronic sleep disturbance.

No-one, I believe, would suggest that exposure to the levels of construction noise considered here, even over several years, is likely to result in such impacts – the

³²³ See section 9.6.1 of this report referencing the NMA report.

impacts considered here are related to loss of amenity rather than to clinically-significant health effects. In this context I consider the use of the LA_{max} descriptor is justified, provided that the number of events per night is also considered.

The WHO paper also quotes thresholds for certain forms of sleep disturbance, in terms of LA_{max}, notably:

- onset of motility (movement during sleep in response to a noise): 32 dBA LA_{max}, internal;
- changes in duration of sleep stages: 35 dBA LA_{max}, internal; and
- waking up in the night and/or too early in the morning: 42 dBA LA_{max}, internal.

Although these are 'thresholds' for the stated reactions, only a small proportion of events will cause the effects – for example at 50 dBA LA_{max} (internal), the best estimates are that only 2% – 5% of events will cause an awakening for the average person.

Given the lack of an accepted, validated measure of amenity loss due to sleep disturbance, and given the likely time distribution of maximum noise events from construction noise, I believe that the criterion levels of 45 and 50 dBA LA_{max} (internal) in the 2008 Change Report represent a reasonable definition of 'excessive' noise from the point of view of sleep disturbance in this instance – particularly when it is considered that any residences in 'R4-R6' categories are likely to be already exposed to traffic noise events at least as high as those from the construction noise.

Conclusion

I conclude that the numerical criteria in the 2008 Change Report, as presented in Table 1 and interpreted as described above, provide a reasonable definition of 'excessive' noise in the context of out-of hours construction work for the Airport Link project, with the proviso that the night-time criterion of 40 dBA LA_{eq} for 'steady, temporary' noise in R4-R6 areas is at the upper end of relevant criteria and should be applied only with care.

9.5.9 The relevance of background noise levels

WM has indicated that internal background noise levels do not appear to have been measured in relevant residences. However, it would be surprising if internal levels exceed the criterion in condition 9(d).

Background noise levels are relevant for two reasons, being:

- determination of the relevant residential category for properties affected by night-time noise under NIAPSP. NIAPSP draws on AS 1055, which contains indicative background noise levels for the various 'R' categories in 'day', 'evening' and 'night' periods
- determination of whichever is the higher of the background noise or the goals set in condition 9, in accordance with the CG's clarification and reinforcement of the term 'excessive noise'.

I will deal with the first issue later in this chapter.³²⁴

My observations on the second issue are that:

³²⁴ See 9.8.5 of this report.

- Although there are some background noise readings available in the EIS and as part of the predictive modelling reports prepared for TJH by ANE,³²⁵ there has been very little reference made to the relevance of background levels,³²⁶ as contemplated in the CG's clarification of excessive noise, as a yardstick for measurement in the monitoring reports considered in my investigation.
- There is evidence that some of the background readings taken before construction for the Kalinga Park area exceeded the noise goals; therefore, under the CG's clarification, the background levels rather than the goal criteria would apply.
- Unless background noise levels were taken before works commencing at particular sites, then an obvious practical difficulty exists in determining noise levels in locations now bounding worksites. In the circumstance where work has already commenced, a process of estimating the background noise level may be necessary.

WM has indicated that to fully determine the level of exceedence, it would be necessary to estimate:

- for night-time noise, the LA90 background noise level at each residence in the absence of noise from the construction
- for daytime noise, the contribution of noise from a 'major road' to the total LAeq noise level at each residence, in the absence of noise from the construction.

As there has been little reference to background noise levels in the monitoring information reviewed, I am proceeding on the basis that the yardstick for considering excessive noise is the criteria in the noise goals themselves.

9.5.10 Proposed opinions

The failure to define 'excessive noise' (at least up until the CG's clarification) has led to difficulty for TJH, the community, DIP, DERM, CNI and other parties engaged in monitoring and assessing the contractor's compliance with the CG's imposed conditions.

Further, I consider the fact that the CG decided it was necessary to issue the CG's clarification of the term 'excessive noise' suggests the CG's failure to define the term at the outset was unreasonable.

The proposed report contained the following:

Proposed Opinion 10

The CG's failure to define excessive noise in the Project documents constitutes unreasonable administrative action for the purposes of s.49(2)(b) of the Ombudsman Act.

The parties made submissions about proposed opinion 10 (Opinion 11), which are set out as follows:

³²⁵ For example, the early predictive modelling reports for Kalinga Park works – December 2008 and Bowen Hills site in July 2009.

³²⁶ In the ASK report a background noise level was taken as part of the work conducted.

CG/DIP's response

It is asked that the Ombudsman reconsider Proposed Opinion 10 [Opinion 11] for the following reasons.

Introduction of imposed conditions

The ability for the CG to impose a condition like condition 7(b) was introduced into the SDPWO Act on 28 November 2005 by the insertion of Part 4, Division 8 (ss 54A-54G). The Explanatory Notes to the State Development and Public Works Organisation and Other Legislation Amendment Bill 2005 which inserted Part 4, Division 8 indicate:

- it was considered desirable to have a statutory mechanism to enable conditions to be imposed by the CG on a significant project where there is no other approval to which the CG can recommend or state conditions to be attached; and
- the nature of the conditions imposed by the CG for a project may be stated as “objectives to be achieved” in the undertaking of the project or “desired outcomes” which are capable of being achieved by a range of measures, rather than prescriptive conditions with have clearly identifiable parameters.

CLEM7 and identification of issues with “excessive noise”

As identified in the Proposed Report, Condition 7(b) was imposed in the Evaluation Report in May 2007 and was not altered by the Change Report in July 2008.

The CLEM7 road tunnel project was the first project for which there were imposed conditions under Part 4, Division 8.³²⁷ The relevant wording of condition 7(b) about “excessive noise” was taken from imposed condition 5(a) (General Construction) for the CLEM7 project.

It is understood by the CG that there was nothing in the delivery of the CLEM7 project which should have triggered a review of the use of the words “excessive noise” in the CLEM7 condition before the condition was imposed in the Evaluation Report for the Airport Link project.

Woolloowin project change

Following the identification of concerns with the use of “excessive noise” in condition 7(b) on this Project, the CG decided not to use the phrase in the imposed conditions for the Woolloowin change report. Condition 7 (General Construction) in appendix 1, schedule 3 of the Woolloowin change report does not use the term “excessive noise” but rather makes prescriptive requirements for construction noise. These requirements include, among other things, that:

- work is only allowed to be undertaken at the worksite between 6.30 am to 6.30 pm Monday to Saturday, and at no time on Sundays or public holidays, until the acoustic shed is completed;
- work is allowed to be undertaken in the acoustic shed once it is completed at any time, subject to compliance with the Woolloowin conditions; and
- the construction of an acoustic barrier at the perimeter of the worksite prior to commencing any works other than site establishment works.

The CG also considered whether the Woolloowin request for project change provided an ability to amend other conditions generally. ... [The CG was of the view that any] alteration of an imposed condition through the change report process otherwise than as

³²⁷ The conditions originally appeared as recommendations in the CG's Evaluation Report for the North-South Bypass Tunnel (as CLEM7 then was) but were deemed to be imposed conditions by s.178 of the SDPWO Act.

a result of the evaluation of the change would ... be subject to challenge as being beyond the power of the CG.

Legacy Way project

The conditions imposed by the CG in April 2010 for the next road tunnel project in Brisbane, the Legacy Way project (formerly Northern Link Road Tunnel project), also do not use the term “excessive noise”. Condition 18 (General Construction) in appendix 1, schedule 3 of the Coordinator-General’s Report for the Northern Link Road Tunnel Project requires that:

- subject to certain stated exceptions (which have their own further conditions), surface construction works must be undertaken only between 6.30 am to 6.30 pm Monday to Saturday and no time on Sundays and public holidays (“standard construction hours”); and
- except for emergency work to avoid the loss of lives and properties, or to prevent environmental harm, where construction works are proposed to be undertaken for the stated exceptions outside the standard construction hours, details of the works, including copies of any associated approvals, must be provided to the CG and to the nominated entity for the noise and vibration condition at least five business days prior to the works being undertaken.
- The stated exceptions in condition 18 are as follows:
 - the delivery of oversized plant or structures that police or other authorities determine require transport along public roads to be outside of the standard construction hours and for which there is no feasible alternative;
 - operation of the conveyor to transport soil from the tunnel boring machines to the Mt Cootha quarry, provided the relevant noise limits in condition 22 are met;
 - construction works for which relevant authorities (for example road management authorities) require that particular works at particular locations can only be undertaken outside of the standard construction hours; and
 - loading and haulage of spoil may be undertaken at any time between 6.30am Mondays to 6.30pm Saturdays provided the relevant noise limits in condition 22 can be met in relation to the loading and haulage in construction areas. There must be no haulage of construction spoil on Sundays or public holidays.

It therefore can be seen the drafting of the imposed conditions has been an evolutionary process based on policies and standards in force at the relevant time³²⁸ as well as adapting from lessons learned in earlier projects. At the time of drafting condition 7(b) (and condition 9), it was reasonable for the CG (on advice from his technical, legal and environmental advisers) to consider that the condition as drafted would achieve the desired objectives. It was acknowledged at the time that the construction of the Project would have impacts on the community and so the conditions must require the management and mitigation of these impacts, balancing these impacts with the need to minimise the construction period (and the length of time the impacts would continue).

³²⁸ That is, May 2007. It is noted that most of the noise standards and policies referred to in the Proposed Report (5.6 Relevant Noise Standards and Policies) were made after May 2007.

In the above circumstances, it cannot be said that the CG's failure to define "excessive noise" in the Project documents was unreasonable administrative action.

It is requested that Proposed Opinion 10 be removed.

Former CG, Ken Smith's response

I would like to draw your attention to the following factors which, in my view, clearly show that the steps taken by me in evaluating the EIS for the Airport Link Project in relation to noise were reasonable and appropriate.

1. Clear, objective noise conditions were imposed

In arriving at proposed opinion 10, I am concerned that insufficient (or any) weight has been given to the fact that the imposed conditions, namely condition 9, specifically addressed the Proponent's obligations in respect of noise.

Condition 9 required (in summary) that the proponent must:

- prepare and implement a construction noise and vibration EMP sub-plan addressing the environmental objectives and performance criteria for noise and vibration management;
- provide measures to mitigate and manage the adverse environmental impacts from noise and vibration; and
- establish early consultation with the owners and occupants of potentially affected sensitive places.

Imposed condition 9(c) required the sub-plan to include measures for mitigation of predicted impacts on sensitive places.

Imposed condition 9(d) relevantly provides:

"(d)where the predictive modelling predicts that noise goals for sleep disturbance are likely to be exceeded by construction works, then consultation, reasonable and practicable mitigation and management measures, and a monitoring program must be adopted. These measures must be developed in consultation with owners and occupants of potentially-affected premises. The noise goals are: [emphasis added]

- (i) For intermittent construction noise, the internal noise goals (sleeping areas) to avoid sleep disturbance during night hours (i.e. 6.30pm to 6.30am) are:
 - A. 50 dBA L_{Amax} (for residences within R4 – R6 categories³²⁹ as described in NIAPSP), or
 - B. 45 dBA L_{Amax} (for residences within R1 – R3 categories as described in NIAPSP).
- (ii) For steady construction noise, the internal noise goals (sleeping areas) to avoid sleep disturbance during night hours (i.e. 6.30pm to 6.30am) are:
 - A. 40 dBA $LA_{eq,adj}$ (15 minutes) for temporary noise and 35 dBA $LA_{eq,adj}$ (15 minutes) for long-term noise (for residences R4 – R6 categories as described in NIAPSP),³³⁰ or

³²⁹ Section 6.2.2 – Areas with dense to extremely dense transportation or commercial and industrial activities.

³³⁰ NIAPSP, section 6.2.2 – Application of AS2107.

- B. 35 dBA LAeq,adj (15 minutes) for temporary noise and 30 dBA LAeq,adj (15 minutes) for long-term noise (for residences within R1 – R3 categories as described in NIAPSP2).

It should be borne in mind that the conditions imposed were based on *predictive* models of what the noise might be. At the time of conditioning the project (which was conceptual at that stage), there was no way of knowing precisely how much noise would be generated and how much impact it would have on residents. The expert advice available to me, at the time of conditioning the project, was reflected in conditions 7 and 9. As outlined in the evaluation report, the target goals for noise and vibration established by the proponent, City North Infrastructure Pty Ltd (CNI), were set following consultation with the then-Environmental Protection Agency (EPA). I was satisfied, as was the EPA, that the goals were reasonable and achievable. In instances where the goals were likely to be exceeded unavoidably for a period of time, the Proponent had indicated in the EIS that it would implement measures to manage the impact on affected residents and businesses.

Although there was no specific definition of “excessive noise” in condition 7, the goals for the proponent in respect of noise were directly and specifically dealt with in condition 9. It is simply not true that there were no criteria by which a person adversely affected could know what was excessive.

2. The later clarification was consistent

When asked to clarify the meaning of excessive noise, my successor, Colin Jensen, said in a letter to TJH:

“...I understand that “excessive levels of noise” has not been defined and that it is not possible to determine whether the activity on the worksites is generating excessive noise. The term “excessive levels of noise” has been disputed in recent letters to me and my department.

I take the view that the generation of excessive levels of noise, as stated in Condition 7, occurs when noise measured at a sensitive place exceeds the noise goals stated in Appendix 1, Schedule 3, Condition 9 or the background noise (whichever is greater).” [emphasis added]

That interpretation is consistent with my understanding of the meaning of “excessive”, and is also plainly self-evident, bearing in mind that the acoustic environment in which the worksites were to be located already had a degree of ambient noise. You will recall that in my evaluation report I commented that monitoring as part of the EIS had shown that the study corridor was largely dominated by existing road traffic noise at all times of the day, as well as rail noise, aircraft noise and/or mechanical plant noise. One of the construction sites as I recall was surrounded by a number of suburban rail lines, two major arterial roads and was quite close to Brisbane Airport.

3. All submissions were taken into account

The EIS was released for public comment from 11 October 2006 to 8 December 2006. Written submissions about the EIS were received from 297 parties raising more than 2000 individual matters.

The majority of comments from the community related to operational air quality and the effects of operational traffic (as opposed to construction impacts). These were provided to the Proponent, which was requested to prepare a Supplementary Report to address the issues raised in the submissions.

My evaluation report of 23 May 2007 addressed the environmental effects of the project, concluding that the potential adverse environmental impacts could be adequately managed through the implementation of specific conditions and recommendations set out in the report.

The following submissions were received:

Submission From:	No. Received:
Government Advisory Agencies	16
Community Organisations	9
Private individuals or companies	141
Pro-forma letters	131
Total	297

The principal issues raised in submissions in relation to the operational phase were:

- increased traffic on some surface routes (i.e. Stafford Road and East West Arterial)
- increased road traffic noise in some locations (e.g. Gympie Road and Stafford Road)
- diminished air quality in proximity to the ventilation outlets, and potential health risk associations
- visual impact of the infrastructure on urban amenity
- impact on future land uses and regeneration potential around the surface connections; and
- reductions in pedestrian connectivity across major roads adjacent to the Project connections (e.g. Lutwyche Road, Sandgate Road and Campbell Street).

The principal issues raised in submissions in relation to the construction phase were:

- air quality, due to potential dust nuisance
- noise and vibration from tunnelling and surface works
- disruption to local and regional traffic flows due to construction traffic and spoil haulage traffic in particular
- increased traffic hazards and safety concerns adjacent to worksites and some community facilities (e.g. Woolloowin State School, Kedron State High School)
- reduced connectivity due to worksite impacts on pedestrian and cycle routes and open space networks
- loss of locally important places and vegetation (Kalinga Park); and
- duration of construction program, particularly in terms of impact on nearby community facilities and residential communities.

Two types of pro-forma submissions were received (accounting for 131 responses), which related to Project impacts on and around the Kedron State High School which raised these key issues:

- the safety of students and the wider school community during both construction and operation of the Project
- the negative construction impacts arising from dust, noise, loss of grounds and reduced access
- ongoing operational impacts from traffic noise, air pollution and loss of access and amenity
- air quality and impacts on health
- tunnel emission filtration; and
- negative operational impact on traffic congestion.

Issues raised regarding noise

Specific submissions on noise were from the areas of Bowen Hills regarding construction and operational noise, Galway Street Windsor regarding noise barriers for construction noise, and Kedron State High School regarding the effects of construction noise on students and the learning environment. There were also submissions regarding the location of the ventilation station near the end of Alma Road at Kalinga Park and resultant construction noise and operational noise from the ventilation station and traffic.

Issues raised in submissions were responded to in the Supplementary Report to the EIS and satisfactory clarifications were provided. None of these submissions or clarifications altered the mitigation measures to be provided by the project in relation to managing the impact of noise.

As Coordinator-General I operated in an open, transparent way. I welcomed submissions and following that process, I was satisfied that the consultation process adequately engaged with stakeholders, sufficiently communicated the Reference Project concept design, and explained design modifications aimed at mitigating potential Project impacts.

4. A performance based, rather than prescriptive, approach to conditioning

The noise goal provision in condition 9 is a behavioural condition which is designed to drive behaviour of the contractor to mitigate the impact of noise without affecting its ability to construct the Project.

The requirement is to take all reasonable and practical measures to mitigate so that construction can continue. This has the benefit of reducing the time the community is exposed to the impacts arising from the construction period.

Having considered the Reference Project in its entirety, there was no alternative but to acknowledge, as I did in my evaluation report, that negative impacts on the community would result from construction. I considered that there was a need to balance the impacts with the need to minimise the construction period (and hence the duration of the impacts). I considered the most appropriate way to achieve this was through management and mitigation of the impacts, with adequate consultation and monitoring. It was never considered to be reasonable (or practical) to impose prescriptive conditions in the circumstances. Based on the fact that the wording of the conditions had been used without issue on the CLEM7 Project, I consider that it was reasonable for me to adopt them in the present Project.

5. An evolutionary process with a proven track record

The relevant wording of condition 7(b) of the May 2007 Evaluation report, about "excessive noise", was taken from imposed condition 5(a) (General Construction) for the CLEM7 project.

During the assessment of the Airport Link EIS, none of the advisory agencies, legal, technical or environmental advisors raised issues about the delivery of the CLEM7 project which would have triggered a review of the use of the words "excessive noise" in the CLEM7 condition before the condition was imposed in the CG's May 2007 evaluation report for the Airport Link project.

At the time of drafting it was reasonable for me (on advice from my technical, legal and environmental advisers) to consider that the conditions as drafted would achieve the desired objectives. Agencies that provided advice to me for consideration when drafting conditions and recommendations for the evaluation report included the Environmental Protection Agency, the Department of Main Roads, Queensland Transport and

Queensland Health. I accepted that advice in good faith and in the belief that it was accurate and relevant. It was entirely reasonable in my position as Coordinator-General to rely on and adopt that advice.

I request that you remove Proposed Opinion 10 from your report.

Former CG, Colin's Jensen's response

I wish to make clear that the noise condition that you refer to (including such matters as the definitions of 'excessive noise', 'temporary' and 'long term') was not set by me as I was not the Coordinator-General at the time it was imposed. Any issues concerning that condition should be referred to Mr Ken Smith who was the Coordinator-General at the time of its imposition. At no time did I amend or change that condition, nor was it in my power to do so. I did provide some clarification about that condition but that in no way altered its import or effect.

CNI's response

CNI did not comment on Opinion 11 (proposed opinion 10).

DERM's response

DERM did not comment on Opinion 11 (proposed opinion 10).

My comment

The CG/DIP and former CG, Mr Ken Smith, have both defended the undefined term 'excessive noise' on the basis that, at the time the condition was drafted, there was an outcome-based (or in other words performance-based) approach to conditioning.

I consider the phrase 'excessive noise' does not state a specific outcome (in this case in the form of a limit) to be achieved. If the phrase had been defined, it would have been an outcome-based condition (that is, leaving it open for TJH to decide how to achieve the performance outcome, but with some indication of its limits).

Mr Ken Smith was the CG at the time condition 7(b) was settled. I note his comments that in the process of settling condition 7(b), he took into account the expert evidence available to him, considered all public submissions and also believed that DERM considered the goals (in condition 9(d)) were reasonable and achievable.

I have not seen any documentary evidence that indicates at the time condition 7(b) was settled, DERM considered the goals were 'reasonable and achievable'. Certainly later, at a meeting between TJH, CNI, DIP and DERM on 4 August 2009, DERM expressed the view that any activity above background noise at night would be excessive noise.³³¹ I consider that if DERM held that view at the time condition 7(b) was being settled and that view was communicated to the CG, supplementary acoustics expert evidence may have been sought and condition 7(b) may have been drafted differently. However, I do not have sufficient evidence before me to form a conclusion on that point.

In response to Opinion 12 (proposed opinion 11), the CG/DIP says that a reason for the delay in issuing the CG's website clarification of excessive noise until 28 April 2010 was the complexity of the issue. I consider that the complexity of the issue about

³³¹ Item 2.2 meeting 4 August 2009 between TJH, CNI, DIP and DERM.

what constitutes 'excessive noise' arose when the then CG failed to define that term in condition 7(b). I note that the same wording was used in the preceding CLEM7 project. It follows from my view about defining critical terms that the absence of issues in the CLEM7 project is irrelevant.

The CG/DIP have noted that since condition 7(b), the Woolloowin change report and the conditions for the new Legacy Way project have incorporated different approaches to dealing with the level of noise from night-time surface work.

I form an alternative Opinion 11 (proposed opinion 10), flowing from my above comments.

Opinion 11

The CG's failure to define excessive noise in the Project documents led to:

- condition 7(b) being inadequate to allow the effective regulation of noise from night-time surface work
- the interpretation of the meaning of 'excessive noise' in condition 7(b) being unnecessarily complex
- the regulation of noise from night-time surface work being unnecessarily time and cost intensive.

The proposed report included a proposed opinion (proposed opinion 11) substantially the same as the opinion that I now form as Opinion 12.

Opinion 12

The CG's failure to issue the clarification to TJH until 28 April 2010 and to the CLGs until 7 May 2010 was unreasonable in view of:

- night-time work commencing at Kalinga Park in August 2009
- DERM raising concerns just before night-time work commencing at Kalinga Park about enforcing condition 7(b) in the absence of a definition of the term 'excessive noise'
- complaints having been received by DIP that led to the request for legal advice on 25 November 2009
- the legal advice having been received by DIP on 23 December 2009.

The CG's failure constitutes unreasonable administrative action for the purposes of s.49(2)(b) of the Ombudsman Act.

The agencies' responses to proposed opinion 11 (Opinion 12) were:

CG/DIP's response

It is noted that the final dot point should read "DIP" and not "DERM".

The CG acknowledges that it would have been better if this clarification was issued sooner, and, with hindsight, perhaps the clarification could have been issued sooner.

However, it should also be acknowledged that the CG and the officers involved were actively pursuing a resolution to this complex issue, investigating noise complaints and arranging independent monitoring, as well as dealing with a number of other issues that

arose in this time on the Project. It was also appropriate that the proper decision-making processes were followed and proper consideration given to how best to present the CG's view as to what constitutes "excessive noise".

A lot of the work being done by the CG at the time was aimed at mounting a successful enforcement action. The CG's enforcement powers were introduced in 2008 and had not yet been used. It was considered necessary to understand how condition 7(b) could be enforced and how this could be assisted by a statement of clarification.

The CG and DIP will learn from this experience and the Ombudsman's recommendations to achieve a quicker resolution of such issues in the future.

CNI's response

CNI did not comment on Opinion 12 (proposed opinion 11).

DERM's response

DERM did not comment on Opinion 12 (proposed opinion 11).

My comment

I form the opinion as proposed.

Opinion 13

The following paragraphs of the CG's statement clarifying and reinforcing the meaning of excessive noise:

The Coordinator-General has clarified and reinforced the term 'excessive noise' with reference to the *Coordinator-General's Change Report on the Environmental Impact Statement for the Airport Link Project, July 2008*.

The Coordinator-General has taken the view that the generation of excessive noise, as stated in condition 7, occurs when noise measured at a sensitive place (for example inside a bedroom of a home nearby which has had mitigation measures applied) exceeds the noise goals stated in the Coordinator-General's Report, appendix 1, schedule 3, condition 9, or the background noise (whichever is greater).

Internal noise goals for sleeping areas have been set for the project during night hours (from 6.30pm to 6.30am). These noise goals are based on existing national standards for sleep disturbance. The goals are detailed at appendix 1, schedule 3, condition 9 (d) (i) and (ii).

are reasonable in that they accurately reflect the professional and other advice DIP had obtained about the practicalities of measuring the internal noise goals contained in condition 9.

The proposed report contained proposed opinion 12 that, despite the CG's failure to issue his statement of clarification until the above dates, certain paragraphs of the clarification were reasonable in the circumstances. They reflected the legal advice obtained by DIP and advice on the practicalities of measuring the internal noise goals by alternative means such as by using a façade noise reduction approach.

CG/DIP's response

Part of CG/DIP's response was:

The CG acknowledges Proposed Opinion 12 [Opinion 13].

CNI's response

CNI did not comment on Opinion 13 (proposed opinion 12).

DERM's response

DERM did not comment on Opinion 13 (proposed opinion 12).

My comment

As the parties have not objected, I form Opinion 13 (proposed opinion 12) as proposed.

Opinion 14

The numerical criteria in condition 9 provide a reasonable indication of excessive noise in the context of night-time surface work for the Project, with the proviso that the night-time criterion of 40 dBA LAeq for steady, temporary noise in R4-R6 areas is at the upper end of relevant criteria and should be applied only with care.

On the issue of the numerical criteria set out in condition 9 for night-time work, the proposed report contained proposed opinion 13, based on advice from WM, that:

- they generally correspond with typical criteria for a permanent noise source, and hence can be regarded as indicative of excessive noise, provided that care is taken in interpreting the meaning of the highest category, temporary noise in R4-R6 areas
- the LAmax criteria of 45 dBA and 50 dBA are conservative, and appropriate, for protecting against sleep disturbance.

CG/DIP's response

Acknowledged.

CNI's response

CNI did not comment on Opinion 14 (proposed opinion 13).

DERM's response

DERM agrees with this opinion. DERM notes that the reasonableness of this criterion is critically linked to the validity of the 'R' category to which a residence is assigned. The lack of specificity within 'R' category definitions undermines the validity of the application of the noise criterion.

My comment

DERM's response appears to mean that DERM's view is it is unsatisfactory to have subjective R categories in condition 9. This is irrelevant to Opinion 14, which only talks of 'numerical criteria' and 'reasonable indication'.

I form Opinion 14 as proposed.

The proposed report stated an exception to the proposed opinions expressed above, about the reasonableness of opinions formed by the CG/DIP, DERM and CNI about excessive noise based on:

- residents' windows being required to be closed when measuring noise emissions from external sources
- where no receptor mitigation is provided.

My concerns are discussed at 9.8.7 below.

The application of steady state temporary noise criteria and the selection of the R category for residential receptors is also of concern and these are discussed in detail later in this chapter.

9.6 Outline of noise modelling and monitoring reports

In my Office's investigation a number of key sources of information relating to noise modelling and monitoring conducted by or on behalf of TJH, the CG, DERM, CNI or KWRA members have been considered. This part outlines the relevant reports.

The reasons for doing so are to:

- identify the approaches taken by acoustic consultants in modelling and monitoring against threshold questions I identified at 9.3 above about the assessment of construction noise against noise goals
- assist me in forming an opinion about whether there is evidence of excessive noise during night-time surface work on the Project.

9.6.1 ANE predictive modelling reports and other reports

A number of construction noise modelling reports have been produced by ANE for TJH for construction work proposed at worksites along the Project corridor.

These reports are based on projected work to be undertaken at sites and they generally consider scenarios of no mitigation and proposed mitigation. The adopted sound power levels of plant and equipment are considered based on the available data for the equipment proposed to be used. ANE stated that it uses computational software Carna/A, which predicts impacts associated with airborne noise emissions from the plant noise sources anticipated to operate during the Project construction activities on nearby sensitive receptors.³³²

In this part, some of the early work on modelling for the Kalinga Park worksite is discussed in detail to illustrate the types of issues considered. There is also a body of

³³² ANE Kalinga Park, Toombul – Stage 2 Construction Noise Modelling Report, February 2009, page 5.

work that has subsequently been undertaken for a number of other worksites, including for night-time work, which I have not discussed in detail here, but have been considered in my Office's investigation.

A letter from ANE to TJH dated 19 November 2008 is the first document of which my Office is aware concerning modelling of construction noise anticipated from the Kalinga Park worksite. This letter indicates that preconstruction modelling was undertaken at locations in Wongarra Street, Alma Street, and Kalinga Street and that other locations were being monitored. There were some comments in the report about possible night-time surface work unrelated to, or preparatory to, tunnelling operations:

- In relation to the monitoring results for the Wongarra Street site, ANE indicated that the daytime levels were comparable to the daytime noise goals for the Project. However, ANE noted that 'road construction is expected to occur during evening/night periods, hence may be more notable'.³³³
- In relation to Alma Street monitoring ANE noted that '... the LA90 is reduced further during the evening and night periods (6.30pm to 6.30am), and activities occurring during this period will be easily identifiable'.³³⁴
- In relation to various noise sources from works at the site ANE stated 'It is noted that some 24 hour operations are likely to occur at this site and it is likely that significant mitigation would be required in order to provide a suitable environment for uninterrupted sleep'.³³⁵
- In relation to the initial phase of construction ANE stated 'It should be noted that if noise levels during night periods exceed 1.5 minutes in a 15 minute period they would affect the LAeq levels, hence criteria would be significantly exceeded'.³³⁶
- In relation to the use of the gantry crane, ANE strongly suggested the use of an 'electric gantry crane, and avoid using the crane other than during construction hours (6.30am to 6.30pm), as short sharp bangs and clangs will likely cause sleep disturbances (awakenings)...'.³³⁷
- In relation to noise modelling for D-Walling operations ANE noted that 'there are significant impacts on all adjacent receptors and that night-time levels are exceeded under all scenarios'.³³⁸

In relation to barrier options, ANE stated:³³⁹

However, even with inclusion of 11.5m stacking of containers (4 stack of containers) around the majority of the site, significant noise breakout (and over) from the worksite is predicted. It is highly recommended that the option to enclose the worksite is investigated based on the significant exceedences of the noise goals predicted as part of the modelling in this letter.³⁴⁰

It will be noted that in its letter ANE forecast 24 hour works at the Kalinga Park worksite (except tunnelling work). This was over seven months earlier than the advice that was given to the community. There is no evidence in the documentation

³³³ Letter ANE to TJH dated 19 November 2008, page 4.

³³⁴ Letter ANE to TJH dated 19 November 2008, page 5.

³³⁵ Letter ANE to TJH dated 19 November 2008, page 7.

³³⁶ Letter ANE to TJH dated 19 November 2008, page 14.

³³⁷ Letter ANE to TJH dated 19 November 2008, page 23.

³³⁸ Letter ANE to TJH dated 19 November 2008, page 31.

³³⁹ Letter ANE to TJH dated 19 November 2008, page 12.

³⁴⁰ I note that a six metre high continuous noise barrier was erected around the site.

obtained during my investigation that the relevant departments made inquiries of TJH about the extent of the proposed night-time work referred to in the ANE letter. Consideration of TJH's intentions came considerably later.

A December 2008 report for the Kalinga Park, Toombul site was the first report following ANE's letter to TJH. Stage 1 and Stage 2 works followed in subsequent months.

The January 2009 Kalinga Park, Toombul – Stage 1 report indicates that the type of work to be completed included initial earthworks, diaphragm wall construction (including hydrofracture cutting) and various other civil works.³⁴¹ The works to be undertaken in Stage 1 were all described as work during the daytime and noise modelling was based on the daytime noise goals.

Notwithstanding that work was to be daytime work ANE indicated, in relation to the Kalinga Park construction area, that the internal noise goals for the night-time period were as follows:

- properties west of the railway line were classified as R1-R3 with a steady state night-time noise goal of 30 dBA and non-steady state of 45 dBA
- properties east of the railway line were classified as R4-R5 with a steady state night-time noise goal of 35 dBA and non-steady state of 50 dBA.

The selection of the steady state noise goal criteria suggests that ANE considered the CG's night-time 'steady, long-term' noise goal to be relevant to the type of work to be conducted in this area.

In its commentary, ANE stated:³⁴²

Pre-construction noise monitoring undertaken in the Kalinga Park area identified existing background noise levels were generally in excess of the adopted noise goals, although the quietest 15-minute period was lower than the adopted noise goals (externally). For the pre-construction monitoring closer to Sandgate Road, the measured daytime noise levels were noted to be higher than the adopted noise goals for both the average and minimum 15-minute periods. During night time periods however, average levels were noted to remain above the noise goals while the minimum 15-minute noise levels were lower than the adopted noise goals.

Overall the adopted noise goals of R1-R3 to the west of the railway line, and R4-R6 to the east of the railway line (closer to Sandgate Road), are considered to be suitable, based on the pre-construction noise monitoring.

It should be noted that the day time goal applies to internal living areas, whereas the night time goal is applicable only to sleeping areas. It is assumed that the noise level difference between the level outside a residential dwelling, and inside a habitable room is a nominal 10 dBA for older type dwellings that rely predominately on natural ventilation through windows, and 20 dBA for modern residential apartments with close fitting sliding windows that would normally be equipped with air-conditioning. Therefore, to achieve compliance with the goals ..., it is assumed that external noise levels could be 10dB louder ...

In the February 2009 Kalinga Park, Toombul – Stage 2 report a number of modelled scenarios were considered. One of the scenarios was 'civil works pre-tunnelling' and

³⁴¹ ANE Kalinga Park, Toombul – Stage 1 Construction Noise Modelling Report, January 2009, page 7.

³⁴² ANE Kalinga Park, Toombul – Stage 1 Construction Noise Modelling Report, January 2009, page 3.

this work was described as including daytime and night-time 'civils'. The report stated:

Around the time D-walling is nearing completion, night time civil works (construction of structures and the D-walls themselves) will be undertaken during the night periods. Due to the restrictive noise goals during this period, it is proposed that night time activities are minimised for these works, and no large plant items are to be operated at ground level (ie excavator in pit/trench only). The option of operating a single concrete pumping truck during night periods has also been considered.

A number of items of plant were identified for use in night-time pre-tunnelling work.

An ANE report dated 30 June 2009 was given to TJH for initial night-time construction activities at Kalinga Park 'during the coming weeks'.³⁴³ The report states that:³⁴⁴

The initial night time construction works involve manual labour within a 4-5m deep pit along the Lewis/Jackson Street side of the work site.

The night works will involve approximately 10-20 people working within the pit, using a range of tools. Light generators and a silenced 20kVA generator (to power tools) will be operated at ground level, along with a franna and a crawler crane.

In addition to the above works, it is proposed that concrete pouring activities may also (be) occurring during the night works, with 6 concrete trucks, 1 concrete pump, and occasional movements of trucks, likely to occur during the works.

Two scenarios were modelled:³⁴⁵

- Scenario 1 – Surface works, tools operating in pit
- Scenario 2 – As per Scenario 1, with addition of concrete pouring activities.

In the report, ANE identified four receptor groups as follows and assigned the following night-time goals,³⁴⁶ based on an external noise goal assuming a 10dB façade attenuation:

Receptor group	Description	Number of properties	Area classification (noise goals)	Steady state LAeq	Non-steady state LAmax
1	Adjacent to Kalinga Street Houses, and Lewis Street	9	R1-R3	40	50
2	Jackson Street, Lewis Street, and Kalinga Street (other than Group 1)	24	R1-R3	40	50
3	East of railway line	23	R4-R6	45	55
4	North of creek	15	R1-R3	40	50

The report concluded:

³⁴³ ANE Kalinga Park night works, June 2009, page 1.

³⁴⁴ ANE Kalinga Park night works, June 2009, page 1.

³⁴⁵ ANE Kalinga Park night works, June 2009, page 2.

³⁴⁶ My compilation of Table 2 and Table 3 on pages 3 and 5, ANE Kalinga Park night works, June 2009.

Tables 4 and 5 indicate that up to 13 of the modelled sensitive receptors are predicted to exceed the relevant noise goals for scenario 1, and up to 19 with the inclusion of concrete pouring activities. Significant exceedences are predicted for groups 1 and 2 (adjacent houses), with the largest exceedence up to 6 and 8 dBA for scenarios 1 and 2 respectively.

Completion of the acoustic barriers results in a significant reduction in the number of Receptor Group 2 properties predicted to exceed the noise goals, as well as reducing the predicted noise levels by up to 5 dBA for some receptors (along Jackson Street).

Figure 4 presents LAeq noise levels for the area surrounding the proposed works, for the various locations and barrier arrangements considered. The figure highlights the predicted improvement of receptor noise levels following completion of the proposed acoustic barriers.

Figure 5 presents predicted external LAeq noise levels for the area surrounding the proposed works with inclusion of concrete pouring activities. It is noted that some increase in noise levels are predicted based on the addition of these sources. An increase of approximately 2 dBA is predicted for receptors nearest to the proposed works with the addition of the concrete pouring activities.

Review of the partial contributions of each modelled noise source suggests that the crawler crane, 20kVA generator, and concrete pump are the largest contributors. Therefore isolation of these sources from sensitive receptors or the location of these sources adjacent to shielding structures may improve the noise levels at nearby sensitive receptors. Additionally, if plant can be sourced with sound power levels lower than those shown in Table 1, reductions in the predicted noise levels may also be achieved.

Where the proposed mitigation measures are not sufficient, alternatives should be considered as discussed at the end of this letter in accordance with the requirements of the Coordinator General's Report.

As indicated, a number of other reports for particular worksites followed, including, for example, sites at:

- Kalinga Park – initial night construction activities August 2009
- CC210 North (Kedron – north-east side of Gympie Road) November 2009
- Kalinga Park night construction January 2010
- Bowen Hills March 2010
- Sandgate Road/East West arterial intersection April 2010
- CC702 (Kedron) night works April 2010.

As a further example of noise modelling reports, TJH also obtained a report in June 2010 from a firm Noise Mapping Australia (NMA) about the ventilation stack work at the Bowen Hills site.

9.6.2 Airport Link monitoring reports

TJH's monthly environmental monitoring reports are publicly available ('the Airport Link monitoring reports').³⁴⁷ The reports deal with monitoring of noise, dust and vibration from the Project and provide an analysis of complaint data.

³⁴⁷ These reports can be accessed at <http://www.brisconnections.com.au/Environment/EnvironmentReports/>.

Airport Link monthly environmental monitoring reports from May 2009 to August 2010 have been considered in my investigation.

In these reports TJH outlines noise monitoring locations and the results of noise monitoring. As an example of the noise monitoring activities undertaken, the November 2009 report states.³⁴⁸

TJH undertakes regular monitoring of noise levels at a variety of locations across the project to help measure impacts and assist the team plan works and appropriate mitigations if required. The type and timing of monitoring is influenced by the activities being undertaken and relevant Noise Goals (inside buildings and residents living areas where allowed at night and during the day). TJH have also undertaken external monitoring to better understand the pre-construction baseline and acoustic environment during works to assist TJH conduct risk assessments and nominate appropriate mitigation measures.

Monitoring involves 'attended' monitoring (where a member of the TJH environment team is observing noise sources and durations whilst noise measurements are taken) and 'unattended' monitoring (where the sound level meter with a datalogger is installed and collected at a later time).

Noise monitoring priorities are mostly influenced by predictive modelling undertaken for construction activities, responses from members of the community, access to resident's properties, availability of existing knowledge of the acoustic environment, and results of impact assessments undertaken by the TJH environment team and consultants.

Results of predictive modelling and monitoring are compared to Noise Goals nominated by the Coordinator General (Change Report July 2008) for the Airport Link and Northern Busway projects.

The noise monitoring results are reported in a tabular form, generally showing:³⁴⁹

- location of monitoring
- monitoring period
- average LAeq (15 min) (dBA)
- CG Goal LAeq (15 min)(dBA)
- average LA10 (15 min) (dBA)
- CG Goal LA10 (15 min)(dBA)
- LAmax (dBA)
- LAmax Goal (dBA)
- comments – observations relating to such things as whether the noise was attributable to TJH activities or from external noise sources.

A summary is usually provided of compliance with noise goals. As an example, the November 2009 report stated:

Exceedences of the Coordinator General's Noise Goals have been found during this monitoring period at a number of locations, these include:

Kedron

- o 130 Kedron Park Road
- o 673 Lutwyche Road

³⁴⁸ TJH November report, page 6.

³⁴⁹ Observations about the consistency of the information are made at 9.7.3 in this report.

- o 32 Homebush Road
- o 104 Kent Road

Toombul

- o 82 Elliott Street
- o 33 Kalinga Street
- o 70 Kalinga Street
- o 68 Kalinga Street

Construction activities are attributable to some of these exceedences though noise generated by existing traffic and some other localised noise sources have also contributed i.e combined with construction activities. It should also be noted that in some instances the windows and doors were open to the premises at the request of the resident, this greatly affects attenuation of the property when attempting to compare internal noise goals. An investigation into each of these environmental nonconformances has been, or is being undertaken, the results and/or recommendations of which will be forwarded to CNI, and affected property occupier/owner where relevant. An end of month NCR will be raised to cover the above mentioned exceedences of the noise goals where they have been attributed to Airport Link Project works.

I note that the night-time noise goals reported by TJH in the monthly reports as being relevant are, generally, those for 'Intermittent' noise for the R4-R6 category, being 50 dBA, and for 'Steady, Temporary' noise of 40 dBA. My concerns in this regard are outlined in section 9.8 of this report.

An analysis of the noise monitoring reported in the monthly reports is outlined at 9.7.3 below, and by WM at 9.9.2.

9.6.3 ANE Clayfield report and ANE Toombul report

TJH engaged ANE to prepare a report *Noise Complaint Investigation* – [de-identified] *Mabel Street, Clayfield* dated 17 September 2009 ('the ANE Clayfield report') following a complaint by the owner of that property about noise from the Kalinga Park worksite.

Monitoring took place on 9 September 2009. Measurements were assessed against a steady state temporary noise goal of 35 dBA and an intermittent goal of 45 dBA.

The report concluded that with the windows to the main bedroom open the internal noise goals were exceeded by 1 dBA and 10 dBA respectively but full compliance with the internal noise goals was achieved when the windows to the main bedroom were closed.

TJH engaged ANE to prepare a report 'the ANE Toombul Report' dated 9 February 2010 about work at the Kalinga Park worksite. Monitoring was undertaken at 10 locations³⁵⁰ during the period 7.00pm 27 January 2010 to 2.00am 28 January 2010. The relevant noise goals were stated to be for the R4-R6 category, with a steady state, temporary noise criterion of 40 dBA LAeq and intermittent criterion of 50 dBA.³⁵¹ I note that one of the locations was next door to the property at which monitoring occurred in the ANE Clayfield report where an R3 category was applied.

³⁵⁰ Comprising McGregor, Lewis, Jackson, Howie, Elliott, Mabel and Kalinga Streets.

³⁵¹ ANE Toombul report, February 2010, page 1.

Monitoring was undertaken during 'typical construction activities'.³⁵² Some monitoring was undertaken internally with windows open and closed and some measurements taken externally. The temperature was approximately 25-27°C during monitoring.

The report concluded that all internal monitoring positions, with the exception of one location, exceeded the steady state LAeq noise goal with bedroom windows open. With windows closed all internal monitoring positions, with the exception of one location, complied with the steady state LAeq noise goal.

The report did not include results against the LAm_{ax} measure, but contained subjective observations, including noise readings attributed to particular types of construction activities and external sources.³⁵³

9.6.4 ASK report

A member of KWRA engaged ASK Consulting Engineers who prepared a report *Airport Link Project – Compliance Noise Monitoring*, [de-identified] *McGregor Street, Clayfield* dated 26 March 2010 ('the ASK report').

Monitoring was conducted on Friday 26 February 2010 over a three hour period from approximately 8.30pm in the main bedroom of the residence. At the time, work was being carried out on a 24/7 basis at Kalinga Park.

The report concluded that the 30 dBA LAeq night-time noise goal for the R1-R3 residential category was continuously exceeded during the monitoring period (a range of 46dB(A) to 48.6dB(A) was recorded). ASK considered that the noise was continuous and reasonably constant. They therefore applied a steady state long-term goal criteria for the R1-R3 category.

9.6.5 Heggies report

DIP commissioned Heggies to conduct noise monitoring during the construction activities at the Kalinga Park construction site. Heggies produced a report *Airport Link Project: Kalinga Park Construction Site: Construction Noise Monitoring Report* dated 21 May 2010 ('the Heggies report').

As part of this work, Heggies undertook a façade noise reduction test to identify the likely building façade reductions to enable it to establish an outdoor noise goal equivalent to the internal noise goals specified in the noise goals.

Attended monitoring was undertaken at 10 sites between 14 March and 14 April 2010. The monitoring was undertaken at various parts of the sites, such as the rear yard or footpath with the microphone placed at a height of four metres to represent the upper storey window height of residences. The locations were as follows:³⁵⁴

³⁵² Consisting of crane slewing and movement, hammering, excavator movements, light generators and other continuous plant, angle grinding, and dropping of beams and construction materials.

³⁵³ ANE Toombul report, February 2010, page 5.

³⁵⁴ Table 5 from Heggies report, page 7.

Table 5 Description of Noise Monitoring Locations

Location	Address/Position Description
1 [de-identified]	Rear yard of [redacted] Kalinga Street
2 [de-identified]	Footpath in front of [redacted] McGregor Street
3 [de-identified]	Footpath in front of [redacted] Lewis Street
4 [de-identified]	Spare allotment between [redacted] and [redacted] Lewis Street, setback in line with houses
5	North end of Jackson Street next to footbridge
6 [de-identified]	Footpath in front of [redacted] Jackson Street
7 [de-identified]	Footpath next to [redacted] Elliott Street driveway
8 [de-identified]	Footpath in front of [redacted] Hockings Street
9 [de-identified]	Footpath in front of [redacted] Stuckey Street, adjacent to power pole
10 [de-identified]	Footpath in front of apartments at [redacted] Stuckey Road

An assessment was made of the monitoring results against the noise goals adjusted for the expected façade reduction values. Where windows and doors were closed the report stated:

With regard to the expected noise levels inside residences with windows/doors closed, analysis of the monitoring results show that construction noise levels generally complied with the CG's noise goals at most monitoring locations.

Construction noise monitoring at location 1 exceeded the noise goals on three occasions. The excesses tended to be marginal (1 dBA to 3 dBA), however an excess of up to 4 dBA was observed on one occasion. The excesses were associated with steady state noise.

On one occasion at location 3 and Location 5, construction noise marginally exceeded the noise goals.

Compliance with the noise goals was observed at all locations during the concrete pour on Wednesday 14 April 2010.

Where windows and doors were open the report's summary stated:

There were a large number of compliant measurements observed at locations 6 to 10. This is likely to be a result of the increased distance to the construction activities, which tended to be at the western end of the construction site. Excesses tended to be marginal (up to 2 to 3 dBA), with the occasional exceedence of (approximately) 7 to 9 dBA.

There were numerous instances where construction noise exceeded the noise goals at locations 1 to 5 by up to (approximately) 10 dBA.

There were no instances of compliance with the noise goals at locations (sic) 1. Excesses between 10 and 20 dBA were common.

The noise goals were exceeded on one occasion by up to 17 dBA at Location 3.

The noise goals were exceeded on three occasions by 8 to 14 dBA at location 5.

Where observed, non-compliance due to steady state noise was more frequent, as opposed to intermittent noise. The magnitude of excess tended to be greater for steady state noise.

One or both of the CG's night time noise goals were exceeded at almost all locations (except location 8) during the concrete pour on Wednesday 14 April 2010.

9.6.6 CNI report

Background

CNI provided a report titled *Toombul Night Works: Report Investigating Compliance with the Coordinator General's Conditions Related to Noise and Mitigation* in April 2010 ('the CNI report'). A draft was provided to the CG in February 2010 and then in final form on 7 April 2010.³⁵⁵

The report indicates that the CG requested an investigation and report into the construction noise from night-time surface work taking place at the Toombul site, particularly worksite CC410³⁵⁶ from August to December 2010.³⁵⁷ DIP has indicated the CG's request was made in November 2009.³⁵⁸ As part of the investigation CNI.³⁵⁹

- reviewed TJH noise monitoring, on-site mitigation and noise management practices
- engaged Heggies to undertake independent noise monitoring
- reviewed details of mitigation provided to residents
- analysed resident complaints
- reviewed TJH records of training and awareness of environmental and communication issues.

In its report, CNI stated:³⁶⁰

CNI asserts that noise measurements showing levels above the noise goal is not necessarily a breach of the CG's conditions. This is because the noise levels used in Appendix 1, Schedule 3, 9(d) are goals and not limits (unlike the air quality figures in Sch 3, 8c which are limits and not goals). The Conditions do require however that '...an exceedence or non-compliance with a condition, goal or requirement' is reported. If a goal is predicted to or actually exceeds the goal then TJH must apply mitigation management and community engagement conditions. Therefore an exceedence above a goal is not a breach, but failure to apply and implement requirements in connecting conditions would be. The number of exceedences above the noise goals, may however be determined to be 'excessive' by the CG. It is only then these exceedences could form a breach of the Conditions.

CNI concluded, in relation to compliance with condition 7(b), that the condition is generally satisfied, with some room for improvement.³⁶¹ CNI mentioned that difficulty still lies in the interpretation of the term 'excessive noise'. CNI noted that complaints are still occurring and examples of noise levels above the noise goals measured.

³⁵⁵ DIP submission 27 July 2010, page 20.

³⁵⁶ Worksite CC410 is located to the west of the railway line between Kalinga and Lewis Streets.

³⁵⁷ CNI Report, page 4.

³⁵⁸ DIP submission 27 July 2010, page 20.

³⁵⁹ CNI Report, page 4.

³⁶⁰ CNI Report, page 6.

³⁶¹ CNI Report, Summary, page 17.

Despite this, CNI stated that TJH claim they are doing all they can to meet the noise goals and manage mitigation.

Relevantly, the CNI report concluded:

TJH demonstrate that the average LAeq noise goal is met a significant amount of the time when measured in the vacant unmitigated property in Kalinga Street. CNI's examination of the data supports this. It should be noted that precise monitoring against this condition is hard if residents do not allow internal monitoring in sleeping areas at night. The LAmax noise levels are exceeded from time to time.³⁶²

Results (of independent monitoring) also indicate noise goals were met in a majority of the monitoring (with some noise levels marginally above – ie +1dB, +3dB).³⁶³

Analysis

I have considered the analysis provided in the CNI report, particularly, about the noise monitoring undertaken and the number and level of exceedences of the CG's goals.

In the report CNI stated that noise modelling indicated that some locations would experience construction noise above the noise goals.³⁶⁴ The owners of 21 affected properties in Toombul had been offered mitigation as at 4 December 2009, with a range of mitigation types accepted or in the process of being negotiated.³⁶⁵

CNI noted that 25 callers rang CNI's complaint hotline in the period to complain about night-time work. Five complainants represented 76% of all complaints, but only four were concerned with noise, dust, and light. The other complainant was concerned about car parking issues.³⁶⁶

In relation to TJH noise monitoring, CNI's summary of key findings³⁶⁷ were:

- Most TJH internal monitoring has been done in empty, unmitigated and unfurnished properties on Kalinga Street (due to the unavailability of occupied properties for monitoring in the middle of the night).
- Construction noise is often audible internally and has led to complaints, even when the noise goals are being met (as measured by TJH).
- When monitoring, combined sources often contribute to the noise measurements and any exceedences – i.e. air-conditioning (in occupied premises), dogs barking, traffic on road and other local noise sources.
- On a number of occasions it is clearly TJH construction activities that have led to noise levels being recorded above the goals.
- On a number of occasions it is clearly noise sources external to the Project that have led to noise levels being recorded above the goals.
- Without clarification of the phrase 'excessive noise' in the conditions, TJH are monitoring this condition to their night-time noise goals, accepting that on occasion they will exceed these goals and state they are working to achieve goals.

³⁶² CNI Report, Summary, page 17.

³⁶³ CNI Report, Summary, page 17.

³⁶⁴ CNI report, page 6.

³⁶⁵ CNI report, Appendix 6.

³⁶⁶ CNI report, page 7.

³⁶⁷ CNI report, page 11.

- TJH indicate that for a majority of the time they believe their noise goals are met and construction activity typically generates noise levels below the goals stipulated in the imposed conditions. CNI analysis of monitoring supports this.

The report outlines TJH's use of the R4-R6 categories, with a steady state, temporary noise goal of 40 dBA, on which I comment at section 9.8.3 of this report. Some particular results included in an appendix to the report shows 'TJH Noise Monitoring Analysis'.³⁶⁸ Key aspects of the appendix information are that from 7 August 2009 to 7 December 2009, for the LAmax criteria:

- 260 monitoring sessions were conducted, of which 118 (45%) were within the goals and 142 (55%) exceeded the goals
- of the 142 sessions that exceeded the goals, 74 (52%) were attributed to other sources and 68 (48%) TJH attributed to its own activities
- of the total monitoring sessions (260), the number of exceedences (68) attributed to TJH activities represented 26% of the total sessions.

For the same period, for the LAeq measure:

- 260 monitoring sessions were conducted, of which 167 (64%) were within the goals and 93 (36%) exceeded the goals
- of the 93 sessions that exceeded the goals, 53 (57%) were attributed to other sources and 40 (43%) TJH attributed to its own activities
- of the total monitoring sessions (260), the number of exceedences (40) attributed to TJH activities represented 15% of the total sessions.

As I mention below, the CNI report also included a table of CNI's analysis of the Airport Link monitoring reports that CNI qualified as 'indicative only'. However, the CNI report did not contain any detailed analysis of the overall position above, but focused on a month's analysis for the period 7 November to 7 December 2009, for noise monitoring undertaken only on Saturday and Sunday nights, where, for the LAmax:

- 30 monitoring sessions were conducted, of which 21 (70%) were within the goals and nine (30%) exceeded the goals
- of the nine sessions that exceeded the goals, five (56%) were attributed to other sources and four (44%) TJH attributed to its own activities
- of the total monitoring sessions (30), the number of exceedences (4) attributed to TJH represented 13% of the total sessions.

For the same period, for the LAeq measure:

- 30 monitoring sessions were conducted, of which 24 (80%) were within the goals and six (20%) exceeded the goals
- of the six sessions that exceeded the goals, six (100%) were attributed to other sources and zero (0%) TJH attributed to its own activities
- of the total monitoring sessions (30), the number of exceedences (6) represented 20% of the total sessions, but none were attributable to TJH.

CNI also included a table of its analysis of the Airport Link monitoring reports that CNI qualified as 'indicative only' for reasons related to combined noise from TJH and

³⁶⁸ CNI report, Appendix 9.

external sources contributing to exceedences not being able to be determined one way or the other and ‘the annotations and measurement criteria itself make these measurements difficult to report accurately’.³⁶⁹ The analysis indicates that of the total number of monitoring sessions over the period (229):³⁷⁰

- nine exceedences were recorded for the LAeq, with none attributable to construction, five to external sources and four to a combined source (construction and external)
- 30 exceedences were recorded for the LAmax, with four attributable to construction, four to an external source and 22 to a combined source (construction and external).

While I acknowledge that CNI has indicated that on a number of occasions it is clearly TJH construction activities that have led to exceedences, the report, in my view, minimises the impact on the community of the night-time surface work by emphasising the Saturday and Sunday readings over part of the period being assessed. I consider it is concerning that for the entire period, 26% of the total monitoring sessions resulted in exceedences against the LAmax noise goal, and 15% of the LAeq goal were attributable to night-time surface work.

I accept CNI’s view that analysis of the Airport Link monitoring reports is difficult for a number of reasons. In respect of the attribution of exceedences to external sources, I note that the level of attribution is unable to be verified. I have nevertheless undertaken my own analysis within the constraints of the available information and sought the advice of WM, which was briefed with the August 2009 to August 2010 monthly reports. WM’s analysis is at 9.9 and my analysis is outlined at 9.7.3 below.

CNI indicated that it engaged Heggies to undertake noise monitoring as part of the investigation. Noise monitoring was undertaken at four locations on Sunday 8 November, Wednesday 25 and Thursday 26 November and Sunday 29 and Monday 30 November 2009.

CNI stated that two reports were produced that referred to a measurement above the noise goal as being ‘non-compliant’. CNI obtained ‘an Addendum letter clarifying the terminology used in the report. The noise monitoring was only looking at construction noise levels in relation to the noise goals, as an exceedence of a goal does not make the work non-compliant with imposed conditions. Therefore CNI requested the Addendum to prevent further misunderstanding.’³⁷¹

A table summarising the results³⁷² was included:

Date	Goals (with a 10dB façade correction)	Lewis Street*	[de-identified] Jackson Street	[de-identified] Jackson Street	[de-identified] Mabel Street**
Sun 8 Nov 09	Night: 60 dBA Lmax	+4 dBA	Not measured	Not measured	Below goals
	Night: 45 dBA Leq	+8 dBA	Not measured	Not measured	No steady noise to measure

³⁶⁹ CNI report, page 14.

³⁷⁰ The period was August 2009 to January 2010.

³⁷¹ CNI report, page 14.

³⁷² CNI Report; full copies of the noise monitoring reports were included at appendix 8.

Wed 25/Thu 26 Nov 09	Night: 60 dBA Lmax	+3 dBA	+5 dBA	+3 dBA	Below goal
	Night: 45 dBA Leq	+3 dBA	+6 dBA	+1 dBA	Below goal
Sun 29/Mon 30 Nov 09	Night: 60 dBA Lmax	+6 dBA	+7 dBA	Below goal	+6 dBA
	Night: 45 dBA Leq	+7 dBA	+6 dBA	+4 dBA	+4 dBA

*Lewis Street monitoring was undertaken between an empty property and an occupied one directly outside the side boundary

**Mabel Street – facade correction would be more in the region of 20 dBA as mitigation in the form of double glazing and air-conditioning has been applied (when it is used)

Note 1 The margin of error in equipment is about 3 dbA, also a change in noise of 3 dB is barely audible

Note 2 The goals used by Heggies is for long term noise (TJH apply short term noise goals which are 5 dB higher on the Leqs than shown above).

In respect of these results, CNI advised the CG that:

TJH were generally within the noise goals in these locations. Heggies have assumed a 10 dBA façade correction in the table above, however all these properties have been mitigated and are likely to give at least 15-20 dBA mitigation.

CNI's response

CNI made a submission about this section of the proposed report. I have amended some passages to reflect the submission.

9.7 Analysis of Airport Link monitoring reports

In my investigation I have considered the Airport Link monitoring reports prepared by TJH for the Project for the period June 2009 to July 2010. The basis for these monitoring reports may be in the requirement in condition 4(d)(ii) of the change report to report about certain monitoring. WM was briefed with the monthly reports from August 2009 to August 2010.

Before outlining my analysis it is necessary to explain some of the framework guiding the noise monitoring program undertaken by TJH and the range of mitigation measures adopted where exceedences against the noise goals were identified.

9.7.1 Construction Environment Management Plan (Noise Management Procedure)

The imposed conditions require³⁷³ the contractor to prepare and implement a comprehensive Construction Environment Management Plan (EMP). For this purpose TJH has prepared a document entitled Noise Management Procedure³⁷⁴ to carry out predictive modelling and subsequent monitoring of the noise likely to be generated by the construction works. The predictive modelling has largely been carried out by ANE. Subsequent monitoring has been carried out by TJH staff. Relevantly, the document provides details on how noise measurements are to be undertaken:

5. Noise monitoring should always be conducted when activities on site are typical of normal works. Monitoring should not be undertaken during respite periods for

³⁷³ Condition 4 of Schedule 3 of Appendix 1, change report July 2008.

³⁷⁴ Noise Management Procedure, Airport Link/Northern Busway dated 22/07/08.

noisy work or where the measurements are likely to be influenced by noisy short term 'one off' activities that are not usually performed on site.

6. Monitoring should be avoided where measurements are likely to be influenced by the presence of extraneous noises such as leaf blowers, lawn mowers or barking dogs that are not typical of background. Where these noises are short term, their impact on measurement can be minimised by using the [Pause] button on the sound level meter.³⁷⁵

TJH has carried out regular monitoring of noise levels at locations identified by the predictive acoustic modelling and where noise complaints are received. The type and timing of monitoring is influenced by the activities being undertaken and the particular noise goals in condition 9. Noise monitoring is carried out inside buildings and residents' living areas, where permitted, both at night and during the day.

TJH has also undertaken external monitoring to better understand the pre-construction baseline and acoustic environment in proximity to worksites. Monitoring is carried out for the purposes of measuring impacts, to assist in planning works and to provide guidance in designing mitigation.

This monitoring involves 'attended' monitoring where a member of the TJH environment team observes noise sources and durations while noise measurements are taken. Unattended monitoring involves the use of a sound level meter with a data logger to which the readings are downloaded and collected at a later time.

Predictive noise modelling was undertaken by consultants before construction activities commenced. The results of the predictive modelling and monitoring are compared with the noise goals for the Airport Link and Northern Busway components of the Project, the State government for state controlled land relating to the Airport Roundabout Upgrade, and Brisbane Airport Corporation (Major Development Plan) for BAC controlled land.

9.7.2 Overview of noise mitigation measures

The main strategies adopted by TJH to mitigate noise during construction works are first to do noise modelling for sections of works adjacent to sensitive receptors, and then provide reasonable and practical mitigation measures at the source and at the receptor.³⁷⁶

In its submission to my Office, TJH described this process as follows.³⁷⁷

The primary focus of our mitigation measures is to manage noise at the source (on-site). This is often the most effective way to minimise noise generation from particular activities or equipment and provide the greater benefit for nearby residents and stakeholders. These measures or controls are covered broadly in noise models and are provided in more detail in the SEPs and EMPs developed for each worksite.

In respect of source mitigation, TJH states:³⁷⁸

³⁷⁵ Noise Management Procedure, Airport Link/Northern Busway, page 5.

³⁷⁶ TJH letter dated 19 November 2010, page 6.

³⁷⁷ TJH letter dated 19 November 2010, page 6.

³⁷⁸ TJH letter dated 19 November 2010, page 6.

a. Source Mitigation:

At all worksites a variety of reasonable and practical mitigation have been employed at the source. These methods can be summarised as follows:

- Installation of physical controls (e.g. temporary and where possible permanent noise barriers).
- Limiting working hours for specific items of plant.
- Implementation of training and the undertaking of daily pre-starts that reiterate to the workforce the importance of minimising noise during construction works.
- Construction plant is fitted with reverse squawkers where possible.
- Where practical the use of mufflers and other insulation to reduce plant engine noise.
- Selection of construction methodology and equipment to limit noise impacts on sensitive receivers.
- Plant idling near residences is minimised or forbidden.
- Formulation of a noise protocol combined with attended noise monitoring at sensitive receivers.

In respect of receptor mitigation, TJH states.³⁷⁹

Receptor Mitigation:

In the event the predictive modelling or monitoring demonstrates that noise impacts cannot be mitigated at the source to adequately meet the goals, we undertake extensive consultation with the owners and occupants of potentially affected properties to implement appropriate mitigation at the receptor (i.e. private residential or commercial properties external to our worksites).

As part of our internal project management process, we have developed a procedure for mitigation work on private property to reduce the impact of construction activities. This procedure is implemented with reference to and compliance with the Coordinator General's conditions and also contemplates circumstances where mitigation may be considered even if we are operating within the conditions.

These considerations recognise that a property may be located immediately adjacent to long term work. The implementation of this procedure involves extensive individual consultation with affected residents on a case by case basis.

Where modelling identifies predicted levels above the noise goals or where individual circumstances warrant mitigation, the following measures are generally applied:

- Acoustic treatments implemented to minimise noise impacts. These are undertaken on a case by case basis in negotiation with the resident and include installation of air conditioning, double glazing of windows, installation of insulation, acoustic treatment/sealing to floors and doors etc,
- Offers of temporary and/or long term relocation,
- Offers of financial assistance to cover additional electricity costs associated with operation of pre-owned air conditioning.

In the great majority of cases residents quickly accept mitigation offers and assist with their timely installation. However, in a very small number of cases residents have either rejected mitigation outright or disputed the effectiveness of the mitigation offered.

Where mitigation offers have been rejected as residents do not believe the level of impact causes adequate disturbance to warrant the treatment to their properties, we

³⁷⁹ TJH letter dated 19 November 2010, page 7.

advise them to contact us later if they change their minds or believe that impacts have increased to a level where they would not [sic] consider mitigation.

Where mitigation offers have been rejected as the residents dispute the effectiveness of the mitigation offered, we undertake further negotiations with the resident and our technical staff and in some cases our external consultants and/or the manufacturer of the mitigation treatment to reassure the resident of the effectiveness of the mitigation offered. Where we are unable to resolve the issue directly, we escalate it to CNI and discuss the most appropriate next steps with CNI and the Coordinator General's office if required.

Where mitigation offers have been rejected yet residents continue to complain or raise concerns regarding construction impacts, repeat offers are made and negotiations undertaken to seek an alternative mitigation solution which addresses the resident's concerns. In this circumstance where we are unable to resolve the issue directly, we escalate it to CNI and discuss the most appropriate next steps with CNI and the Coordinator General's office.

Measures implemented to minimise dust impacts include internal and external house cleaning, installation of blinds, and in some cases cleaning and covers for pools and cars owned by residents in close proximity to major worksites.

Over 490 individual instances of mitigation have been implemented to date, with noise mitigation treatment applied to over 210 properties and mitigation to minimise dust impacts being applied to over 280 properties.

9.7.3 Analysis and observations of Airport Link monitoring reports

My Office analysed the TJH monthly noise monitoring reports from June 2009 to July 2010³⁸⁰ to determine the number of:

- daytime exceedences, as indicated by TJH
- night-time exceedences, as indicated by TJH
- undetermined monitoring periods³⁸¹
- night-time exceedences found that were not clearly indicated as exceedences by TJH
- daytime exceedences found that were not clearly indicated as exceedences by TJH
- night-time exceedences of LAmax.

³⁸⁰ Monthly Airport Link monitoring reports, June 2009 – July 2010, accessed from www.brisconnections.com.au, 15 November 2010.

³⁸¹ The number of undetermined monitoring periods are those periods that are neither labelled as daytime nor night-time and it is too difficult, given the lack of details and of CG goal information, to determine when the monitoring took place.

Results of analysis

The table below illustrates the results of our analysis.

Month	Daytime exceedences indicated by TJH	Night-time exceedences indicated by TJH	Undetermined	Night-time exceedence not indicated by TJH	Day time exceedence not indicated by TJH	Night-time exceedence of LAmax	Total monitoring sessions
Jun-09	16	n/a	39	n/a	n/a	n/a	55
Jul-09	24	0	13	0	0	0	49
Aug-09	24	3	13	0	0	0	63
Sep-09	44	1	1	0	0	0	68
Oct-09	33	3	0	0	0	0	52
Nov-09	13	8	0	8	13	30	158
Dec-09	35	4	21	8	2	7	192
Jan-10	14	2	0	2	13	33 (3 identified by TJH)	179
Feb-10	29	25	0	2	12	48 (19 identified by TJH)	183
Mar-10	16	14	0	6	13	24 (17 identified by TJH)	139
Apr-10	0	0	0	22	38	33	133
May-10	0	0	0	5	12	7	36
Jun-10	4	0	0	4	8	5	42
Jul-10	5	0	0	0	0	2 (2 identified by TJH)	29
Total	257	60	87	57	111	189	1,378

Observations about the reports

There are deficiencies in the reporting of the noise monitoring results against the CG's noise goals and a lack of information to fully explain the results. For example, in the period June 2009 to August 2009:

- There were some instances where the times the noise monitoring was conducted were not given. Dates, locations and monitoring figures were given, but it was difficult to determine the time/s of the exceedences.
- There were occasions where the CG's goals were not stated.³⁸²

There are also inconsistencies in the information about the applicable goals and method of measurement:

- In November 2009, there were two occasions where different CG's goals were used. For example, the usual CG's goals included by TJH for night-time work were either 35 LAeq – 45 LAmax for night-time, short-term R1-R3 or 40 LAeq – 50 LAmax for night-time, short-term R4-R6. At Kalinga Street, Clayfield, the site goals used were 40 LAeq – 45 LAmax.
- In January 2010, at the Bowen Hills site the goals used were 45 LAeq – 50 LA10.

³⁸² We also noted this in the December 2009 report.

TJH has highlighted some, but not all, daytime and night-time exceedences in its reports. Also, TJH does not record an exceedence against the noise goals for the Project where there is a combination of noise sources contributing to the monitoring results.

Opinion 15

The Airport Link monitoring reports do not provide sufficient information to permit the CG, DIP or DERM to make any meaningful analysis of exceedences of the noise goals in condition 9.

CG/DIP's response

Please reconsider the wording of Proposed Opinion 14.

It is recognised that there are some problems with the adequacy of the information contained in the Airport Link monitoring reports. However:

- the deficiencies and lack of information to explain results found in the Ombudsman's analysis of the Airport Link monitoring reports were found in specific instances and not in all reports (page 117 of the Proposed Report)
- despite the problems with the adequacy of information, meaningful analysis may still be made of the Airport Link monitoring reports; and
- WM was able to undertake meaningful analysis of the Airport Link monitoring reports to determine the exceedence of the relevant noise criteria (page 134-136 of the Proposed Report).

It is suggested Proposed Opinion 14 be amended as follows:

"The inadequacy of information contained in the Airport Link monitoring reports makes it difficult for the CG, DIP or DERM to make meaningful analysis of exceedences of the noise goals in condition 9."

CNI's response

CNI did not comment on proposed opinion 14.

DERM's response

DERM agrees with this Opinion.

My comment

I am not persuaded by the CG/DIP's response. I form Opinion 15 (proposed opinion 14) as proposed.

The proposed report contained the following:

Proposed Recommendation 5

The CG and DERM review the information in the Airport Link monitoring reports relating to noise, and request that TJH include the following information, as a minimum, in future Airport Link monthly reports:

- the street address or location where monitoring was undertaken and the location of the noise generating activities
- whether internal or external monitoring was undertaken and whether mitigation has already been applied
- nature of the mitigation applied
- the date, time and duration of monitoring undertaken
- atmospheric conditions prevailing when monitoring undertaken
- names and relevant qualifications of monitoring personnel
- a clear description of the construction activities taking place and the plant and machinery being used
- the relevant R category for the receptor, including whether there has been any change in category and any explanation for the change
- the criterion applied, that is, for steady state noise, temporary or long term and rationale for selection of the criterion for the type of work being conducted at the time of monitoring
- the relevant CG goal for steady state noise
- the relevant CG goal for intermittent noise
- any façade reduction applied
- monitoring results against the relevant CG goals or façade reduction levels
- continue to highlight in red the exceedances by the Project
- where exceedances are claimed to be a combination of Project work and external factors, an assessment to be made by TJH of the dominant noise source and if the dominant source is Project work, record the entry as an exceedance attributable to the Project.

CG/DIP's response

The CG accepts Proposed Recommendation 5.

The CG's powers to make a request of TJH to include such information are limited to the requirements about monitoring and reporting construction noise in the imposed conditions.

CNI's response

CNI did not comment on proposed recommendation 5.

DERM's response

DERM supports this recommendation. DERM suggests that "street address or location where the monitoring was undertaken" should be changed to "detailed location where the monitoring was undertaken, including the height of the microphone".

DERM notes that the impact of implementing this recommendation is restricted by the State's capacity to 'request' rather than 'require' provision of this information. DERM also notes that the value of this information is tempered by the monthly reporting cycle which means that information may be up to one month out of date by the time the report is published and that, due to the dynamic nature of the project, the activity to which the monitoring relates may be finished or being undertaken at an acoustically different location.

My comment

Taking into account the parties' concerns, I make Recommendation 2, which is slightly modified from proposed recommendation 5.

Recommendation 2

The CG and DERM review the information in the Airport Link monitoring reports relating to noise, and request that TJH include the following information, as a minimum, in future Airport Link monthly reports:

- the street address or location where monitoring was undertaken, the location of the noise generating activities and the location and height of the noise meter microphone
- whether internal or external monitoring was undertaken and whether mitigation has already been applied
- nature of the mitigation applied
- the date, time and duration of monitoring undertaken
- atmospheric conditions prevailing when monitoring undertaken
- names and relevant qualifications of monitoring personnel
- a clear description of the construction activities taking place and the plant and machinery being used
- the relevant R category for the receptor, including whether there has been any change in category and any explanation for the change
- the criterion applied, that is, for steady state noise, temporary or long term, and rationale for selection of the criterion for the type of work being conducted at the time of monitoring
- the relevant CG goal for steady state noise
- the relevant CG goal for intermittent noise
- any façade reduction applied
- monitoring results against the relevant CG goals or façade reduction levels
- continue to highlight in red the exceedences by the Project
- where exceedences are claimed to be a combination of Project work and external factors, an assessment to be made by TJH of the dominant noise source and if the dominant source is Project work, record the entry as an exceedence attributable to the Project.

The proposed report contained the following:

Proposed Recommendation 6

DERM monitor and evaluate the information contained in the revised monthly reports to assist it in determining whether TJH are in compliance with the noise goals.

CG/DIP's response

Noted.

CNI's response

CNI did not comment on proposed recommendation 6.

DERM's response

DERM recognises that the revised monthly reports would produce useful information in regards to investigating exceedences.

However, in the first instance it is the responsibility of the operator (TJH) to notify the CG of any non-compliance with or exceedances of any condition or goal (as per condition 4 of the CG imposed conditions).

Any investigation into an exceedance needs to be timely in order to gather necessary information/evidence for any action to be taken.

Therefore, DERM suggest that this recommendation be reworded as follows:

DERM monitor and evaluate the information contained in the revised monthly reports to assist it in investigating exceedances of the noise goals.

My comment

I make Recommendation 3, which is modified slightly to take in account DERM's concern.

Recommendation 3

DERM monitor and evaluate the information contained in the revised monthly reports to assist it in investigating exceedances of the noise goals.

The proposed report contained the following:

Proposed Recommendation 7

In the event the information gained as a result of proposed recommendation 6 indicates noise from night-time surface work may constitute excessive noise for condition 7(b) (also noise nuisance), DERM:

- (a) report its assessment to the CG and
- (b) consider whether its regulatory powers under the EP Act should be exercised.

CG/DIP's response

Noted.

CNI's response

CNI did not comment on proposed recommendation 7.

DERM's response

DERM recognises that the revised monthly reports would produce useful information in regards to investigating exceedances.

However, in the first instance it is the responsibility of the operator (TJH) to notify the CG of any non-compliance with or exceedances of any condition or goal (as per condition 4 of the CG imposed conditions).

Any investigation into an exceedance needs to be timely in order to gather necessary information/evidence for any action to be taken.

Therefore, DERM suggest that this recommendation be reworded as follows:

DERM monitor and evaluate the information contained in the revised monthly reports to assist it in investigating exceedances of the noise goals, which must be reported to the CG by the operator.

My comment

In relation to DERM's response, I note that apart from TJH's obligations under the imposed conditions, DERM has a responsibility to investigate alleged noise nuisance under the EP Act.

The intention of proposed recommendation 7 was to ensure DERM turns its corporate mind to whether a particular instance of noise nuisance may be addressed under the EP Act, including by the use of a s.451 notice under that Act.

I make Recommendation 4, which is modified slightly from that proposed.

Recommendation 4

In the event the information gained as a result of Recommendation 3 indicates noise from night-time surface work may constitute noise nuisance, DERM:

- report its assessment to the CG
- consider whether its regulatory powers under the EP Act should be exercised.

9.8 Assessing noise generated against the goals

As indicated at 9.3 above, there are a number of important considerations when assessing which noise goal criteria is relevant to the type of construction work being conducted. This part examines each of these considerations.

9.8.1 Day or night

The imposed conditions break the work into different periods. Daytime is 6.30am to 6.30pm. Night-time is 6.30pm to 6.30am. Surface work can take place at any time provided it does not generate excessive noise. Spoil haulage cannot be carried out on a Sunday or a public holiday. Whether an activity has occurred at night-time or daytime has not generally raised any difficulties as the time is an objective, readily determined fact.³⁸³

However, as has been indicated, some TJH monitoring against the noise goals reported in Airport Link monitoring reports in the period reviewed do not identify the time of the day or night measurements were taken.³⁸⁴

9.8.2 Steady or intermittent noise

In its submission to my Office, TJH stated that the identification of the noise descriptors, including the steady or intermittent criteria, is clear and adequately described by the relevant standards and policies.³⁸⁵

³⁸³ Although I note discussion in the Toombul CLG meeting on 12 May 2009 about concrete work commencing in daytime, but finishing after 6.30pm.

³⁸⁴ See the analysis at 9.7.3 of this report.

³⁸⁵ TJH letter dated 19 November 2010, page 5.

I have outlined WM's commentary on steady and intermittent noise.³⁸⁶ In short, the values for intermittent noise are expressed in terms of L_{Amax}, and are related to sleep disturbance. WM notes that as for steady and non-steady noise, there is no requirement to categorise a noise as either intermittent or steady – the L_{Aeq} measure is designed to capture and represent the steady or quasi-steady aspects of the noise while the L_{Amax} noise level can simultaneously assess the intermittent component.

There is no decision to be made in assessing this type of noise because the L_{Aeq} level can be taken as describing the steady component of the noise, and the L_{Amax} level the intermittent component. Therefore, the type of noise to be distinguished is adequately covered by the noise goal criterion.

With the exception of the selection of the steady noise criteria component (long term or temporary) the reports made available to my Office indicate that both the steady and non-steady (intermittent) components have generally been considered.³⁸⁷

Opinion 16

The type of noise as intermittent or steady state is adequately distinguished by the noise goal criterion in condition 9.

CG/DIP's response

Acknowledged.

CNI's response

CNI did not comment on Opinion 16 (proposed opinion 15).

DERM's response

DERM agrees with this proposed Opinion.

My comment

As the parties agree or do not object, I form Opinion 16.

Opinion 17

In the noise reports examined by my Office, both the intermittent and steady state components have generally been considered.

CG/DIP's response

Acknowledged.

CNI's response

CNI did not comment on Opinion 17 (proposed opinion 16).

³⁸⁶ See 9.5.8 of this report.

³⁸⁷ An exception being the ANE Toombul report, February 2010, where the L_{Amax} criterion was not reported on.

DERM's response

DERM did not comment on Opinion 17 (proposed opinion 16).

My comment

As the parties have no objection, I form Opinion 17.

9.8.3 Long-term or temporary noise

The imposed conditions specify noise goals for temporary and long-term steady state construction noise for night-time work. The decision about whether noise is temporary or long term determines the level of noise under the goals for night-time work. If a decision is made about noise being temporary, irrespective of the R category of the property, the noise criteria is 5 dBA higher.

In its submission to my Office, TJH stated that the identification of the noise descriptors, including the long-term or temporary criteria, is clear and adequately described by the relevant standards and policies.³⁸⁸

As the following information indicates, there are differences in the reports examined by my Office on the determination of the R category under NIAPSP for various sensitive receptors.

In the Heggies report, Heggies considered the question of long-term as opposed to short-term noise.³⁸⁹ Heggies formed the opinion that a construction activity occurring for longer than four weeks would be considered long term. The report indicated:

The CG's conditions specify noise goals for 'temporary' and for 'long term' steady state construction noise during the night period. It is understood that a construction activity occurring for longer than four weeks would be considered 'long term'.

As the construction program duration is approximately four years at the site which is significant it is considered reasonable to adopt the 'long term' noise goals. This approach is featured in the Construction Noise Assessment methodologies of other Australian states, where residential areas may be exposed to prolonged construction noise.³⁹⁰

In the Heggies report, Heggies assigned the locations monitored in the Kalinga Park worksite area to be in the R4-R6 residential category for night-time noise and used the steady state, long-term criterion. The following table sets out the noise goals that, in Heggies' opinion, were appropriate for the area based on the R category:³⁹¹

Kalinga Park Construction Noise Goals (Internal)			
Steady State		Intermittent	
Day (Living areas) LAeq (15 minutes)	Night (Sleeping areas) LAeq,adj (15 minutes)	Day (Living areas) LA10 (15 minutes)	Night (Sleeping areas) LAmx
40 dBA	35 dBA (long term noise)	50 dBA	50 dBA

³⁸⁸ TJH letter dated 19 November 2010, page 5.

³⁸⁹ Heggies report, 21 May 2010, page 6.

³⁹⁰ Heggies report, 21 May 2010, page 6.

³⁹¹ Heggies report, 21 May 2010, page 6.

In the ASK report, ASK characterised the noise as steady state, long term but differed from Heggies in assessing the R category as R2-R3:

For intermittent construction noise, the internal noise goal is 45 dB_{A LAmax}.
For steady construction noise, the internal noise goals are 35 dB_{A LAeq,adj (15 minutes)} for temporary noise and 30 dB_{A LAeq,adj (15 minutes)} for long-term noise.

In this instance the correct noise goal would be that related to long-term noise.

As a result the relevant internal noise goals for the area near the intersection of McGregor Street and Kalinga Street would be:

- (i) 45 dB_{A LAmax} for intermittent construction noise; and
- (ii) 30 dB_{A LAeq,adj (15 minutes)} for steady construction noise.

As indicated at 9.6.1, ANE in its early modelling reports for the Kalinga Park worksite selected the night-time steady, long-term noise goal to be relevant to the type of work to be conducted.

In a later report, ANE says³⁹² in order to define whether the proposed works are long term or short term, reference has been made to the NSW Interim Construction Noise Guideline (July 2009). This document defines short-term works as works that are not likely to affect an individual or sensitive land use for more than three weeks in total. Given that the CC702 (Kalinga Park) night-time surface work was to occur for approximately two months, the long-term noise criteria were adopted.

NMA, which was retained by TJH for predictive modelling of work on the ventilation stack at the Bowen Hills site, indicated:

Whilst the minimum duration of 'long term' is not defined in the CG documents it is recommended that 'continuous long term' noise goal be adopted as the design criterion for any noise source of a continuous nature. In this way the argument as to whether the source is long-term or not is avoided. Under AS 1055.1 long term is defined as a period of 8 hours or longer.³⁹³

TJH does not accept that the night-time surface work it is carrying out generates long-term noise and has applied the temporary noise goal for its monitoring work.³⁹⁴ This is evidenced in a number of ways.

Firstly, the TJH Airport Link monitoring reports show that for night-time works, monitoring is being assessed against a steady state temporary noise goal criteria for the R4-R6 NIAPSP category, that is, 40 dBA LAeq.

Secondly, in the CNI report, CNI indicates that TJH notes that NIAPSP makes no reference to construction noise as a noise source and this supports TJH's use of the temporary noise criteria. CNI supported this approach.³⁹⁵

TJH is correct that NIAPSP makes no reference to construction noise, but nothing turns on that point. NIAPSP is a town planning policy in force in the City of Brisbane local government area. This noise policy deals with sleep disturbance induced by

³⁹² ANE, April 2010 CC702 Night-Works Construction Noise Modelling, page 6.

³⁹³ NMA Report, June 2010, page 6.

³⁹⁴ CNI report, page 11.

³⁹⁵ CNI report, paragraph 4.4.2, page 11.

noise emissions. It is aimed at noise emissions occurring during the evening period for a permanent noise source that has the potential to cause sleep disturbance.

In the proposed report it was posed that CNI reinforced TJH's approach of monitoring against a different goal criteria (steady state, temporary noise) to that outlined in the early ANE predictive modelling reports (steady state, long-term noise). Likewise, the CG in not querying the approach was considered to be acting unreasonably. Support for this view can be found in WM's advice that, for sleep disturbance criteria, the steady, temporary criteria of 40 dBA LAeq in R4-R6 areas is at the upper end of relevant criteria and should be applied only with care.

WM has advised my Office that:

With respect to 'temporary' and 'long-term' noise, these terms are clearly open to a wide range of interpretation. In considering a relevant meaning in a definition of 'excessive' noise, I would take into account the fact that the criterion values for 'temporary' noise are 5dB higher than those for the same 'R' categories in the NIAPSP (for a permanent noise source), and higher than criteria typically used for permanent sources in other jurisdictions. As discussed above, I believe criteria for out-of-hours construction works conducted over a long period (even with temporary breaks) are appropriately set on the basis of criteria that would be applied for a permanent noise source (which may shut down periodically), and therefore I do not believe the 'temporary' classification should be used to describe works such as this construction project.

An appropriate usage of the 'temporary' criteria may be for one-off noisy operations, for example craning of bridge girders, that would last for one night only and would occur no more often than, say, once per month. (I would also recommend that community consultation and notification be undertaken before any such events.)

WM concluded:

We believe in this case the designation 'temporary' should be used only for one-off noisy operations that may form part of the construction works, but that would last for one night only and would occur no more often than, say, once per month.

There is, to my knowledge, no definition of the terms temporary or long term in the context of construction noise in the Project documents, or elsewhere in Queensland statutes or guides to noise measurement. This has contributed to TJH selecting the temporary noise criterion noise goal as reflective of most of the night-time surface work being undertaken, which was accepted by CNI and unchallenged by CG/DIP and DERM.

Opinion 18

CNI's acceptance of TJH's application of the temporary noise goal for monitoring was unreasonable.

CG/DIP's response

Please see comments under Proposed Opinion 18.

Former CG, Ken Smith's response

As I understand it, the events referred to in this opinion were subsequent to my departure from the role of Coordinator-General.

CNI's response

We note proposed opinion 17 [Opinion 18]. CNI did not accept TJH's application of the temporary noise goal and did engage in discussion with TJH regarding this issue (these documents have been provided to you). CNI accepted that TJH had a strong argument for use of the temporary goal as described in the source documents.

CNI notes that the construction sites involve many types of noise sources. Some things – for example an extractor fan on a static shed in a work site will operate continuously 24/7 and will do so for perhaps the entire project. That is a long term noise. Others might relate to a temporary work on the worksite which is happening at night. For example, excavations in a specific location over a specific time period (several weeks). Once that activity or machinery moves to a new location or changes scope within the worksite the noise at the receiver will change and therefore TJH argue that the noise levels provided at any time are temporary and not a continuous or long term noise source. A concrete pour which might occur once a month or only once in a particular area, according to WM's view, is a temporary noise from a one-off event. CNI also would agree that it is reasonable to consider this example as temporary works. CNI may be able to assist your noise consultant obtaining greater clarity of TJH's arguments on this subject if desired.

It is unclear what analysis has been performed by WM to ascertain if its analysis is not consistent with the current application of the temporary and long-term noise goals to the project. CNI does not believe any information was sought regarding this issue by either WM or the Ombudsman's office during the investigation. CNI would be more than happy to assist in gathering the additional information required to inform the views endorsed in this section.

DERM's response

DERM did not comment on Opinion 18 (proposed opinion 17).

My comment

I understand that CNI's argument is that it is necessary to examine each individual construction task, looking particularly at the duration of each, and decide for each task whether that task is temporary or long-term. I do not believe that approach is reasonable and I am supported by WM in this.

As WM indicate, the work conducted at Kalinga Park is consistent with a permanent noise source. In other noise reports examined by my Office a consistent view based on the duration of the work has led to a steady state, long-term approach generally being adopted.

I note that work began 24/5 in Kalinga Park on 6 August 2009 and scaled up to 24/7 work on 7 November 2009. That 24/7 work continued for a period before being scaled back to 24/5 work before 15 October 2010.³⁹⁶

It is clear then, adopting a reasonable approach to deciding whether works are temporary or long-term, that the works conducted in Kalinga Park are more appropriately characterised as steady state, long-term.

I form the opinion as proposed.

³⁹⁶ Record of interview with Director, DIP on 15 October 2010 (Transcript Line: 420).

The proposed report contained the following:

Proposed Opinion 18

The CG's/DIP's failure to question TJH's application of the temporary noise goal for monitoring was administrative action that was unreasonable and/or wrong for the purposes of s.49(2)(b) and s.49(2)(g) of the Ombudsman Act.

CG/DIP's response

It is asked that the Ombudsman consider removing Proposed Opinion 18 for the following reasons.

The application of the term "temporary" or "long term" to construction noise is the subject of independent noise expert opinion, based on an assessment of the construction activities being conducted at a point in time. For example, for a work activity requiring the use of fixed plant and mobile/intermittent activities, the use of "temporary" or "long term" noise criterion needs to be considered in the context of the activities being undertaken and the equipment being used.

DIP and the CG did not fail to question TJH's application of the temporary noise goal. The CG actively considered the matter and concluded it was not unreasonable for TJH to apply the temporary noise goal. **It was open to the CG to accept TJH's argument because CNI reported in the CNI Report that based on the CG's conditions, it accepted TJH's change in noise goal use and that construction was temporary noise, but that this remained subjective.**³⁹⁷ [emphasis added]

The CG's conclusion is supported by the following:

- WM's opinion (in section 2.4 of the WM report and extracted in page 122 of the Proposed Report) is that the terms "temporary" and "long term" noise are open to a wide range of interpretation;
- to the Ombudsman's knowledge, there is no definition of the terms temporary or long term in the context of construction noise in Queensland statutes or guides to noise measurement (page 122 of the Proposed Report).

Former CG, Ken Smith's response

Although I have read and support the DIP submission in respect of this opinion, I am unable to personally comment. As I understand it, the change [in] the noise criteria by TJH was made in September 2009, which was approximately two years after I ceased as Coordinator-General. Colin Jensen was in the role at the time.

Former CG, Colin Jensen's response

I have not responded to the various assertions made in your report around technical matters as that should be for the Coordinator-General. Further, I am not in a position to do so, as it appears you have not provided me access to all the relevant sections of your draft report and neither do I have access to the information held by the office of the Coordinator-General.

³⁹⁷ CNI Report, page 12.

CNI's response

CNI did not comment on proposed opinion 18.

DERM's response

DERM did not comment on proposed opinion 18.

My comment

I draw from the CG/DIP's response (particularly the part emphasised) that the CG/DIP did not independently consider CNI's conclusions set out in the CNI report about this matter. Instead, it adopted CNI's acceptance of TJH's change to the temporary noise goal.

As I discuss in section 11.5, the CG or DIP cannot simply accept the accuracy of information and opinion from CNI, as CNI's main purpose conflicts with the aim of achieving compliance with the imposed conditions.

I consider Mr Jensen was provided with the parts of the proposed report that were relevant to respond to this opinion.

I form Opinion 19, which is slightly modified from that proposed (as proposed opinion 18).

Opinion 19

The CG's/DIP's acceptance of CNI's conclusion about TJH's application of the temporary noise goal for monitoring was administrative action that was unreasonable and/or wrong for the purposes of s.49(2)(b) of the Ombudsman Act.

The proposed report contained the following:

Proposed Opinion 19

The CG's failure to define the terms 'temporary' and 'long term' in the context of noise from construction work in the Project documents constitutes unreasonable administrative action for the purposes of s.49(2)(b) of the Ombudsman Act.

CG/DIP's response

Please consider removing Proposed Opinion 19 [Opinion 20] in light of the following.

Introduction of imposed conditions

The ability for the CG to impose a condition like condition 9(d) was introduced into the SDPWO Act on 28 November 2005 by the insertion of Part 4, Division 8 (ss 54A-54G). The Ombudsman is referred to the comments made under Proposed Opinion 10 about the legislative intention behind these amendments.

Condition 9(d) was imposed in the Evaluation Report in May 2007 and was not altered by the Change Report in July 2008.

CLEM7 and identification of issues with "long term" and "temporary"

The noise goals in condition 9(d) and the use of the terms “long term” and “temporary” noise were taken from imposed condition 7(d) (Noise and Vibration) for the CLEM7 project.

It is understood by the CG that there was nothing in the delivery of the CLEM7 project which would have triggered a review of the use of the words “long term” and “temporary” in the CLEM7 condition before the condition was incorporated into the Airport Link road tunnel project.

It is also understood by the CG that no significant issues arose with respect to the use of the words “long term” and “temporary” in condition 9(d) in the delivery of the Airport Link project until night-time surface work was first proposed to be conducted at Kalinga Park in July 2009.

It is appreciated that subsequent noise expert reports available to the CG since that time have shown that there is room for different interpretations of these terms. However, it is appropriate that the classification of works as temporary or long term be undertaken on a case by case basis by a noise expert. In the circumstances outlined above, it cannot be said that the CG’s action in not defining the terms was unreasonable. The position may be different if the CG was alerted to an issue with them prior to setting the conditions and did not do anything about it in his imposed conditions, but that is not the case.

CNI’s response

CNI did not comment on proposed opinion 19 (Opinion 20).

Former CG, Ken Smith’s response

In relation to this opinion, I adopt the comments of DIP in its submission to you. I also repeat my comments above [see proposed opinion 10] in relation to the reasonableness of adopting previously used conditions with which no issue had arisen. As I understand that no significant issues arose in relation to the definitions of these terms until well after my departure from the role of Coordinator-General, it is impossible for me to comment on what occurred, or put the events in context.

Former CG, Colin Jensen’s response

I wish to make it clear that the noise condition that you refer to (including such matters as the definitions of ‘excessive noise’, ‘temporary’ and ‘long term’) was not set by me as I was not the Coordinator-General at the time it was imposed. Any issues concerning that condition should be referred to Mr Ken Smith who was the Coordinator-General at the time of its imposition.

DERM’s response

DERM did not comment on this response.

My comment

I note the CG understands that no significant issues arose about the use of the words ‘long term’ and ‘temporary’ in condition 9(d) until night-time surface work was first proposed in July 2009. I agree.

I also note that after that time, it became clear that the noise goals in condition 9(d) were subjective and therefore inadequate for DERM (as the nominated regulator for condition 9(d)) to easily determine whether there had been exceedences of the noise

goals. Particularly, the interpretation of the meaning of the terms 'temporary' and 'long term' in condition 9(d) is unnecessarily complex. This led to the regulation of the application of mitigation measures and noise monitoring being unnecessarily time and cost intensive.

I have formed my Opinion 19 that the CG's/DIP's acceptance (shortly after April 2010) of CNI's conclusion (in the CNI report) about TJH's application of the temporary noise goal for monitoring was unreasonable and/or wrong. I consider that if the CG had critically examined the interpretations of 'temporary' and 'long term' at the time he was considering the CNI report, supplementary acoustics expert evidence may have been sought and the CG may have placed a clarification, similar to the clarification about 'excessive noise', on DIP's website in mid 2010.

Further, in my proposed opinion 13, I expressed a view that the numerical criteria in condition 9 of the change report provided a reasonable indication of excessive noise in the context of out-of-hours construction work for the Project, with the proviso that the night-time criterion of 40 dBA LAeq for steady, temporary noise in R4-R6 areas is at the upper end of relevant criteria and should be applied only with care.

It is clear, at this stage, that this criterion is the predominant criterion being applied by TJH to many of the properties affected by night-time surface work under the Project.

In my opinion, the surface work being conducted under the Project at various worksites is inconsistent with the view that it is temporary in nature because of the type of work, its constancy both day and night, and the duration. For example, in my view, the work conducted at Kalinga Park 24/5 from August 2009 and shortly after for 24/7 until approximately April 2010 generated generally steady state, long-term noise.

On that point, the ASK report, Heggies report, ANE and NMA modelling reports and my Office's advice from WM, as outlined in the discussion above, supports my view.

The designation of noise as temporary rather than long term means that there will have been fewer reported exceedences against the noise goals in the Airport Link monitoring reports and NCRs.

These consequences flow from the terms not being defined.

The CG/DIP and former CG, Mr Ken Smith, have both defended the undefined terms 'temporary' and 'long-term' on the basis that they were not defined in the preceding Clem7 project documentation.

In my view, it is irrelevant that there were no issues in the delivery of the Clem7 project to trigger any review.

I form an alternative Opinion 20 (proposed opinion 19), flowing from my above comments.

Opinion 20

The CG's failure to define the terms 'temporary' and 'long term' in the context of noise from construction work in the Project documents led to:

- the noise goals in condition 9(d) being subjective and therefore inadequate for DERM and the CG to easily determine whether there had been exceedences of the noise goals
- the interpretation of the meaning of the terms ‘temporary’ and ‘long term’ in condition 9(d) being unnecessarily complex
- the regulation of the application of mitigation measures and noise monitoring being unnecessarily time and cost intensive.

The proposed report contained the following:

Proposed Recommendation 9

Where appropriate, the CG provide guidance and/or instruction to DERM and TJH on the appropriate classification of work as temporary or long term and the relevant noise criteria for modelling and monitoring work.

CG/DIP’s response

The CG accepts the intent of Proposed Recommendation 9, in the context of the response provided to Proposed Recommendation 8.

CNI’s response

CNI did not comment on proposed recommendation 9.

DERM’s response

DERM agrees with this proposed Recommendation.

My comment

I have decided that the most efficient way to achieve the intent of proposed recommendation 9 is for the CG to place a clarifying statement on DIP’s website, as has been done for the term ‘excessive noise’.

I make Recommendation 5 as follows.

Recommendation 5

The CG publish on DIP’s website, a statement clarifying the meaning of the terms ‘temporary’ and ‘long term’ for steady construction noise under condition 9(d).

9.8.4 Major or minor road

Noise generated by daytime construction work is differentiated by whether the sensitive receptor is near a major or a minor road. No guidance is given in the imposed conditions as to what constitutes a major or minor road, or to the meaning of ‘near’.

For example, if the sensitive residential receptor is near a major road, the goals are:

- 55 dBA LA10 (15 minutes) for non-steady noise
- 45 dBA LAeq (15 minutes) for steady noise.

If the sensitive residential receptor is near a minor road, the goals are:

- 50 dBA_{LA10 (15 minutes)} for non-steady noise
- 40 dBA_{LAeq (15 minutes)} for steady noise.

All predictive modelling undertaken by ANE for the Kalinga Park area of the Project showed residential properties as being near a minor road.

I note that there has been an increase in the noise classification of properties during the Project. For example, in monthly monitoring reports of TJH, the house at 70 Kalinga Street was categorised on 25 August 2009 as having noise goals of 40 dBA_{LAeq (15 minutes)} and 50 dBA_{LA10 (15 minutes)}. On 26 October 2009, the goals were raised to 45 dBA_{LAeq (15 minutes)} and 55 dBA_{LA10 (15 minutes)}.

Kalinga Street is a minor suburban street in the opinion of ANE, which undertook the predictive modelling for TJH. There is no explanation in the Airport Link monitoring reports for this change in noise goals based on the road's status.

As my report focuses on night-time noise, it is unnecessary for me to closely examine actions relating to daytime monitoring and compliance with the CG's imposed conditions. However, it would be appropriate for the CG to provide guidance on the meaning of major or minor road.

The proposed report contained the following:

Proposed Recommendation 10

Where appropriate, the CG provide guidance and/or instruction on the meaning of 'major' or 'minor' road.

CG/DIP's response

The CG accepts Proposed Recommendation 10.

The CG will provide guidance on the meaning of 'major' and 'minor' road with reference to the BCC City Plan 2000 for this Project or the relevant local government road hierarchy for other projects. The CG notes that while these terms were taken directly from the Australian Standard AS/NZS2107, they are not defined in the standard.

CNI's response

CNI did not comment on proposed recommendation 10.

DERM's response

DERM agrees with this proposed recommendation.

My comment

I have decided that the most efficient way to achieve the intent of proposed recommendation 10 is for the CG to place a clarifying statement on DIP's website, as has been done for the term 'excessive noise'.

I make Recommendation 6 as follows.

Recommendation 6

The CG publish on DIP's website, a statement clarifying the meaning of the terms 'major road' and 'minor road' under condition 9(f).

9.8.5 The residential category (R category)

The CG's noise goals for night-time work contained in condition 9 provide as follows:

- For intermittent noise in an R1-R3 category area, the goal is 45 dBA L_{Amax} . If the NIAPSP category is R4-R6 then the goal becomes 50 dBA L_{Amax} .
- If the noise is continuous long-term noise, the R1-R3 goal is 30 dBA L_{Aeq} (15 minutes) and 35 dBA L_{Aeq} (15 minutes) for continuous short-term noise. Where the receptor is in the R4-R6 category the goals respectively become 35 dBA L_{Aeq} (15 minutes) and 40 dBA L_{Aeq} .

NIAPSP sets out the various residential categories and the criteria by which residential properties are placed into those categories, as follows:

R1	Area with negligible transportation (local access roads)
R2	Areas with low density transportation (neighbourhood access roads)
R3	Area with medium density transportation or some commerce or industry (district access roads)
R4	Area with dense transportation or some commerce or industry (suburban routes)
R5	Areas with very dense transportation or in commercial districts or bordering industrial districts (motorways and arterial routes)
R6	Area with extremely dense transportation or within predominantly industrial districts

The BCC introduced these noise goals into its Town Planning Scheme. They are specific to sleeping areas so as to avoid sleep disturbance.

In the NIAPSP document,³⁹⁸ the following is stated about the R categories. For residential buildings AS/NZ 2107 includes maximum recommended design sound levels for both rural and outer suburbs and inner suburbs: Noise area categories R1-R3, as defined in AS 1055.2 are taken to be rural and outer, while R4-R6 are taken to be inner suburbs.

Where it is not possible to make a clear delineation between R categories it is necessary to take noise level measurements to determine the average background noise levels during the periods defined in AS 1055.2 (that is, 0700-1800, 1800-2200, and 2200-0700). Where the average background noise levels exceed those for R3, the area is deemed to be an inner suburb.

In February 2009, as part of the Kalinga Park area predictive modelling, ANE identified³⁹⁹ background noise levels in excess of the noise goals. ANE found the

³⁹⁸ NIAPSP, section 6.2.2.

³⁹⁹ ANE Predictive modelling report, February 2009, page 3.

night-time average levels higher than the noise goals while the minimum LA10 (15 minutes) noise levels were lower than the adopted noise goals.

ANE stated:⁴⁰⁰

Overall the adopted noise goals of R1-R3 to the west of the railway line, and R4-R6 to the east of the railway line (closer to Sandgate Road) are considered to be suitable, based on the pre-construction noise monitoring.

Later in September 2009, the ANE Clayfield report showed⁴⁰¹ much of the area around the Kalinga Park construction site as being in the R3 category.

The R1-R3 noise goal was applied to properties west of the railway (Kalinga Street and adjacent roads) and the R4-R6 category to properties east of the railway (Mabel Street and adjoining roads). ANE prepared a summary of the internal noise goals for the nearby receptors and included them in its October 2009 report.⁴⁰² These are presented in tabular form below:

Receptor Group	Noise Area Category	Daytime	Night-time
		Steady State (LAeq,adj,15-min)	Steady State (LAeq,adj,15-min)
1	R1 - R3	40	30
2	R1 - R3	40	30
3	R4 - R6 (Daytime) R1 - R3 (Night)	45	30
4	R1 - R3	40	30

After October 2009, TJH re-categorised the receptors and applied the R4-R6 category to all properties in the Toombul (Kalinga Park) area 'due to its proximity to transport infrastructure (main line railway and traffic noise from Sandgate Road)'.⁴⁰³ The January 2010 ANE modelling report for night-time surface work at Kalinga Park reflected that change.⁴⁰⁴

In the ASK report⁴⁰⁵ on noise generated by construction activities at the Kalinga Park worksite, ASK made particular reference to the noise goals during the night-time. ASK said:⁴⁰⁶

The noise goals during these times are specific to sleeping areas to 'avoid sleep disturbance'. They are dependent on whether residences are located within R1-R3 categories or R4-R6 categories, as described in NIAPSP, Council's Noise Impact Assessment Planning Scheme Policy.

ASK was of the opinion that:⁴⁰⁷

For residential buildings AS 2107 includes maximum recommended design sound levels for both 'rural and outer suburbs' and 'inner suburbs': Noise area categories R1-R3, as defined in AS 1055.2 are taken to be rural and outer, while R4-R6 are taken to

⁴⁰⁰ ANE Predictive modelling report, February 2009, page 3.

⁴⁰¹ ANE report, September 2009, page 7.

⁴⁰² ANE Predictive modelling report, October 2009.

⁴⁰³ CNI report, page 11.

⁴⁰⁴ ANE Predictive modelling report, January 2010, page 2.

⁴⁰⁵ ASK report, page 1.

⁴⁰⁶ ASK report, page 1.

⁴⁰⁷ ASK report, page 1.

be inner suburbs. In cases where no clear delineation between R categories is possible, take noise level measurements to determine the average background noise levels during the periods defined in AS 1055.2 (i.e. 0700-1800, 1800-2200, and 2200-0700). Where the average background noise levels exceed those for R3, the area shall be deemed to be an 'inner suburb'.

Due to the noise being generated by construction activities, ASK was of the opinion.⁴⁰⁸

In terms of R categories, it is not currently possible to determine the area category of the area near the corner of McGregor Street and Kalinga Street, due to the construction activities.

ASK noted that these residences are approximately 250m from the nearest train line and more than 500m to the nearest major road, Sandgate Road. ASK then opined:⁴⁰⁹

It would seem evident that the background noise levels are not significantly affected by either transport corridor, due to the relatively large distances involved.

In support of this view ASK then chose a location in Fitzroy Street that is a similar distance from the train line as the location in McGregor Street where monitoring occurred but only slightly affected by night-time surface work noise. Background noise levels were taken just before 10.00pm. The readings indicated a level of 41 dBA, with the noise from night-time surface work just audible. Based on Appendix A of AS 1055.2, ASK considered the noise area category would be R2-R3, which is described as:

Areas with low density transportation and Areas with medium transportation or some commerce or industry.

Based on this reasoning, ASK was of the opinion:

As a result the relevant internal noise goals for the area near the intersection of McGregor Street and Kalinga Street would be:

- (i) 45 dBA L_{Amax} for intermittent construction noise; and
- (ii) 30 dBA $L_{Aeq;adj}$ (15 minutes) for steady construction noise.

In its submission to my Office, TJH stated that the identification of the relevant noise categories (for example, R4-R6) is clear and adequately described by the relevant standards and policies.⁴¹⁰

In its advice to my Office about the R1-R3 versus R4-R6 issue, WM stated:

In AS 1055, 'R3' areas are described as 'areas with medium density transportation or some commerce or industry', while 'R4' areas are described as 'areas with dense transportation or some commerce or industry'. The 'long term' night-time criterion for 'R4-R6' areas is 35 dBA – higher than typical criteria for permanent sources, but equivalent to the AS 2107 criterion for residences 'near minor roads'.

AS1055 also provides estimated external background noise levels for the various areas – for example night-time background noise levels are estimated at 40 dBA for R3 areas

⁴⁰⁸ ASK report, page 2.

⁴⁰⁹ ASK report, page 2.

⁴¹⁰ TJH letter dated 19 November 2010, page 5.

and 45 dBA for R4. This gives an objective way to determine the appropriate area classification.

Making use of the measured background noise levels shown in Table 2,⁴¹¹ the pre-construction environment residences in Kalinga Street would correspond to an 'R3' rather than an 'R4' area under AS 1055. At residences in Windsor, there is significant variation in monitored night-time levels, but some indication that an 'R4' classification would be more appropriate for night-time noise. This is also likely to be true for some other potentially-affected areas.

To come to a conclusion about the correct R category to apply, it is necessary to review background noise levels at all potentially affected residences to accurately determine their classification in accordance with AS 1055. Where background noise readings were not taken before construction, WM stated:

Measurements would need to be performed either in the absence of construction noise or at similar locations that are unaffected by the construction noise. Background noise should be determined for the period 10.00pm to 7.00am, for direct comparison with the values in AS1055. Consistent with standard definitions, background noise should be considered as the 'minimum repeatable' value of LA90 through that period, or a statistical parameter representing this.

My Office referred WM to pre-construction (background) noise monitoring for streets bounding the Kalinga Park worksite and the Bowen Hills worksite. TJH had changed the R category to R4-R6 for these locations after initial modelling by ANE had indicated R3 categories applied.

In respect of Kalinga Street, Clayfield, WM stated:

The resulting criterion appears to be clearly too high in some important cases, such as residences in Kalinga Street Clayfield.

In respect of the Bowen Hills streets, WM advised:

AS 1055 shows indicative background noise levels for the various 'R' categories in 'day', 'evening' and 'night' periods. In principle, an area could be classified as 'R3' in one time period and 'R4' in another.

Based on measured background noise levels in Tables 2.5, 2.6 and 2.7 of the first modelling report (ANE Report Stage 2 works Bowen Hills), the monitoring locations would be best assessed as 'R3' in the day and evening, and 'R4' at night. However, the monitoring results look quite unusual - I would normally expect night-time background noise levels in areas such as this to be significantly below evening levels, whereas in these results they are sometimes even higher.

One complication is that in the change report 'night' means 6.30pm-6.30am, which covers both 'evening' and 'night' periods in AS 1055. This could mean that for out-of-hours operations in the AS 1055 evening, the residences would be classified as 'R3', but in the AS 1055 night they would be 'R4'. From a common-sense point of view this would be a perverse outcome - the Change Report criteria are clearly intended to protect against sleep disturbance, so it makes little sense to have a more stringent criterion for works at 8pm than at 3am.

Given that the reported background levels are reliable - an important qualification - I believe the relevant residences, and any others that can be assumed to have similar

⁴¹¹ See 9.5.8 of this report.

pre-construction noise levels, should be considered to be R4 for the purposes of applying the Change Report's night-time criteria.

I do not have access to and am therefore unable to review the reasons for the change in R category applied by TJH to sensitive property receptors in the various streets bounding the worksites. While I acknowledge the concerns of residents affected by night-time surface work that a change has been determined by TJH, thereby potentially increasing the noise goal criteria by 5 dBA, such an exercise would be time consuming and beyond the resources of my Office. In the reports and other materials made available to my Office before the release of the proposed report, it was considered neither the CG nor CNI questioned either the R categories or the numerical noise goals adopted by TJH.

The CNI report mentioned TJH's redesignation of certain sensitive receptor properties to the R category that attracts higher numerical noise goals. It was posed that neither the CG nor CNI questioned TJH's redesignation in any significant way as a result of that report.

It was considered the redesignation ought to have raised a reasonable suspicion on the part of the CG as to whether:

- the redesignation flowed from TJH's inability or unwillingness to meet the previous lower noise goals
- reasonable and practicable mitigation has been provided to the affected sensitive receptor properties in compliance with condition 9(d).

It was posed the CG ought to have coordinated inquiries by the DIP Compliance Unit and/or DERM with a view to determining whether there had been a breach of condition 9(d).

The proposed report contained the following:

Proposed Opinion 20

The CG and CNI's failure to question TJH's adoption of the R categories or the numerical noise goals in assessing whether noise generated by the Project works exceeded those noise goals in condition 9 constitutes unreasonable administrative action for the purposes of s.49(2)(b) of the Ombudsman Act.

CG/DIP's response

Please consider removing Proposed Opinion 20 in light of the following.

Relevant views

The ANE reports (extracted in the Proposed Report at page 125) state:

- [in the Kalinga Park area] overall the adopted noise goals of R1 to R3 to the west of the railway line, and R4 to R6 to the east of the railway line were considered to be suitable, based on the pre-construction monitoring (February 2009); and
- much of the area around the Kalinga Park construction site is in the R3 category (September 2009).

However, the Heggies report (page 5) states that, for its assessment, the R4 category was considered applicable to the residences near the Kalinga Park construction site for

setting the night-time noise goals, as train noise is a significant contributor to the ambient noise environment in this community.

Response to ASK report

In response to the ASK report submitted by [a member of KWRA], the CG considered the issue of TJH's adoption of the R categories (and the corresponding numerical noise goals) in assessing whether noise generated by the Project works exceeded the noise goals in condition 9.

A comprehensive briefing note (reference 10/14312)⁴¹² was prepared for the CG which provided an assessment of the ASK report and Heggies report and comments from the DIP Compliance Unit and CNI.

The CG's letter of response to [a member of KWRA] dated 22 June 2010 said:

"I am advised that the application of a relevant R category is, by its nature, a subjective judgement based on levels of transport and industry in the subject area and associated pre-construction background noise levels ... in their most recent report the noise engineer [Heggies] has clearly stated that the [Kalinga Park] area is considered to be an R4 category area.

While I acknowledge that your consultant [ASK] considered the area to be R3, the subjective nature of the category assessment does not justify the Coordinator-General disputing the category used by TJH in their assessments, which is essentially a professional judgement of the experienced noise consultant, based on the circumstances as determined by that consultant at the time."

In conclusion, the CG considered the issue, drew on his own noise expert's advice, and came to a conclusion that was reasonable. The CG did not fail to question the TJH's adoption of the R categories (and the corresponding noise goals).

Former CG, Colin Jensen's response

I have not responded to the various assertions made in your report around technical matters as that should be for the Coordinator-General. Further, I am not in a position to do so, as it appears you have not provided me access to all the relevant sections of your draft report and neither do I have access to the information held by the office of the Coordinator-General.

CNI's response

This section contains an error of fact.

CNI was not specifically requested to supply information regarding CNI questioning the R Category adopted by TJH. ***The statement that CNI failed to question TJH's adoption of the R categories or the numerical noise goals is incorrect.***

We **enclose in Annexure 4** two (2) responses to [a member] of KWRA regarding responses given to her about the adoption of the R4-6 category by TJH. These responses clearly show that CNI had turned their minds to the adoption of the R4-6 category by TJH. Further, CNI notes that Heggies, who provided CNI with professional noise consultancy work, adopted R4 as the appropriate category for noise monitoring at Kalinga Park in their report. CNI can provide more information regarding its analysis of the TJH argument for the adoption of R4-6 if required.

⁴¹² See Supporting Material.

DERM's response

DERM did not comment on proposed opinion 20.

My comment

Complaints about noise from night-time surface work in Kalinga Park began shortly after 24/7 works began there in August 2009. The CG and CNI eventually did undertake some consideration of the R categories for the Kalinga Park area, but not until [a member of KWRA] presented each with a copy of her ASK report (March 2010) in support of her complaint that the R4 category was allegedly inappropriate for residences adjacent to Kalinga Park. The responses to [a member of KWRA] in June, July and August 2010 stated primarily that the setting of R categories is subjective and that the CG's Heggies report (May 2010) had confirmed that, in Heggies' opinion, the designation of the Kalinga Park area in the R4 category was appropriate.

In summary, the CG did not consider TJH's adoption of the R categories until mid 2010, many months after 24/7 work started in Kalinga Park. My Office's analysis of the ANE predictive modelling report for October 2009, subsequent TJH monthly environmental reports and the CNI report indicate the issue was detectable much earlier than the complaint raised by the KWRA member.

Further, when the CG did consider the issue, consideration was limited to an adoption of the opinion in the Heggies report. I consider it would have been appropriate for the CG to weigh expert evidence on this issue. This was apparently not done.

I form Opinion 21, which is different from proposed opinion 20 in that it:

- is limited to the conduct of the CG (in recognition that CNI's main purpose is procurement of the Project and ought not ordinarily be involved in assessing compliance with the imposed conditions)
- relates to the failure to detect and promptly and thoroughly consider TJH's adoption of the R categories.

Opinion 21

The CG's failure to detect and promptly and thoroughly consider TJH's adoption of the R categories or the numerical noise goals in assessing whether noise generated by the Project works exceeded those noise goals in condition 9 was unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

It is apparent that decision-making around the correct classification needs to be improved in the future should night-time surface work be subject to noise goals like those contained in condition 9. I also consider there is a need to review any change proposed by TJH for the remaining stages of the Project, or where regulatory action is being considered.

The proposed report contained the following:

Proposed Recommendation 11

As AS1055 shows indicative background noise levels for the various R categories in day, evening and night periods, the CG ensure that, for future projects where NIAPSP

applies, provision is made for background noise readings to be taken pre-construction for the period 10.00pm to 7.00am as the basis for determining the night-time R category.

CG/DIP's response

The CG accepts Proposed Recommendation 11.

It is suggested that Proposed Recommendation 11 be amended as follows:

“As AS1055 shows indicative background noise levels for the various R categories in day, evening and night periods, the CG ensure that, for future projects where NIAPSP applies, provision is made for background noise readings to be taken pre-construction for the period 10.00pm to 7.00am, which, together with detailed consideration of the receiving environment and other relevant matters, will form the basis for determining the night-time R category.”

CNI's response

CNI did not comment on proposed recommendation 11.

DERM's response

DERM agrees with this proposed Recommendation.

My comment

The CG/DIP's suggestion does not alter the intent of proposed recommendation 11.

I make Recommendation 7, modified as proposed by the CG/DIP.

Recommendation 7

As AS 1055 shows indicative background noise levels for the various R categories in day, evening and night periods, the CG ensure that, for future projects where NIAPSP applies, provision is made for background noise readings to be taken pre-construction for the period 10.00pm to 7.00am which, together with detailed consideration of the receiving environment and other relevant matters, will form the basis for determining the night-time R category.

The proposed report contained the following:

Proposed Recommendation 12

In any future significant project, where:

- night-time goals rely on a determination of the R category under NIAPSP and
- the contractor has changed the classification of any sensitive receptor property identified in predictive modelling as R1-R3 to R4-R6

the CG have in place a system by which the owner of that sensitive receptor property may complain directly to the CG, and the CG will coordinate an evaluation of the change and make a decision about the change.

CG/DIP's response

The CG accepts Proposed Recommendation 12.

CNI's response

CNI did not comment on proposed recommendation 12.

DERM's response

DERM suggests rewording the last section of the proposed Recommendation to read:

the CG have in place a system by which the owner of the sensitive receptor property may complain directly to the CG, and the CG will coordinate an evaluation of the change *in consultation with the authority that holds jurisdiction of any condition that may be affected by the change and make a decision about the change.*

My comment

DERM's suggestion does not alter the intent of proposed recommendation 12.

I make Recommendation 8, modified as proposed by DERM.

Recommendation 8

In any future significant project where:

- night-time goals rely on a determination of the R category under NIAPSP
- the contractor has changed the classification of any sensitive receptor property identified in predictive modelling as R1-R3 to R4-R6

the CG have in place a system by which the owner of the sensitive receptor property may complain directly to the CG and the CG will coordinate an evaluation of the change in consultation with the authority that holds jurisdiction of any condition that may be affected by the change and make a decision about the change.

The proposed report contained the following:

Proposed Recommendation 13

For the remaining stages of the Project, the CG:

- (a) evaluate any proposed change by TJH of the R category to R4-R6 where predictive modelling reports previously identified that an R1-R3 category applied to particular noise sensitive receptors
- (b) make a decision about the change
- (c) advise TJH of the decision.

CG/DIP's response

The CG accepts Proposed Recommendation 13.

CNI's response

CNI did not comment on proposed recommendation 13.

DERM's response

DERM agrees with this recommendation. DERM suggests rewording point (c) to include advising DERM of the decision.

My comment

DERM's suggestion does not alter the intent of proposed recommendation 13.

I make Recommendation 9, modified as proposed by DERM.

Recommendation 9

For the remaining stages of the Project, the CG:

- evaluate any proposed change by TJH of the R category to R4-R6 where predictive modelling reports previously identified that an R1-R3 category applied to particular noise sensitive receptors
- make a decision about the change
- advise DERM and TJH of the decision.

The proposed report contained the following:

Proposed Recommendation 14

In determining the R category to be applied to a certain sensitive receptor, the CG and DERM take into account available background noise readings and, if unavailable, obtain:

- for night-time noise, the LA90 background noise level at each residence in the absence of noise from the Project; and
- for daytime noise, the contribution of noise from a minor or major road to the total LAeq noise level at each residence, in the absence of noise from the Project.

CG/DIP's response

The CG understands that Proposed Recommendation 14 relates to a proposed change by TJH to the R category for the remaining stages of the Project referred to in Proposed Recommendation 13.

The CG accepts the intention of Proposed Recommendation 14 but asks it be amended to take account of the reasonableness and practicality of obtaining background noise readings "*at each residence*" in the event that no background noise readings are available.

WM recommends in its report (at section 2.5) that more detailed studies of background noise levels be performed at potentially-affected residences to accurately determine their classification, based on the background noise level classifications in AS 1055. WM's report goes on to say:

"Measurements would need to be performed either in the absence of construction noise or at similar locations that are unaffected by the construction noise." [emphasis added]

It is considered unreasonable to request that background noise levels be taken at "*at each residence*" in the absence of noise from the Project as this approach was not

undertaken in the predictive modelling. It may also be impractical. As noted in the CG's clarification and reinforcement of the term "excessive noise" of May 2010, TJH advised of the difficulty of obtaining noise measurements at night.

It is requested that Proposed Recommendation 14 be amended as follows:

"For the purposes of Proposed Recommendation 13, in determining the R category to be applied to a certain sensitive receptor, the CG and DERM take into account available background noise readings and, if unavailable, obtain:

- for night-time noise, the LA90 background noise level for the sensitive receptor in the absence of noise from the Project or at a similar location that is unaffected by construction noise from the Project; and
- for daytime noise, the contribution of noise from a minor or major road to the total LAeq noise level for the sensitive receptor, in the absence of noise from the Project."

CNI's response

CNI did not comment on proposed recommendation 14.

DERM's response

DERM acknowledges the intent of this Recommendation but notes this may result in a number of total project shut downs during noise measurement events at representative locations and this may have practical implications. There are no other practical or reasonable ways to obtain these noise levels "in the absence of noise from the project", since the project is well progressed and is expected to continue until completion. It should also be noted that measured background noise, even if established, would have no legal implications on determining 'R' zoning whilst the original CG's report has not provided a definition for the zones.

My comment

Taking into account the CG/DIP's response and DERM's response, I have replaced the words 'at each residence' with 'in each acoustically similar locality'. The background noise readings in pre-construction reports prepared by Heggies and ANE could be used to implement Recommendation 10.

Recommendation 10

In determining the R category to be applied to a certain sensitive receptor, the CG and DERM take into account available background noise readings and, if unavailable, obtain:

- for night-time noise, the LA90 background noise level in each acoustically similar locality, in the absence of noise from the Project
- for daytime noise, the contribution of noise from a minor or major road to the total LAeq noise level in each acoustically similar locality, in the absence of noise from the Project.

9.8.6 Façade reduction testing

TJH stated that it has been difficult to gain access to the interior of residences affected by noise from the construction works. In its submission to my Office, TJH stated:⁴¹³

Of concern to the project is the ability to monitor and accurately determine noise against the goal criteria. The measurement of noise impacts are described, and rightly so, by the conditions, as internal noise levels. In order to obtain internal noise levels we require a willingness by the resident to allow internal access for monitoring. To date we have experienced considerable difficulty in obtaining such access despite repeated requests prior to and during work or whilst undertaking our complaint management process.

Despite this lack of access we, in consultation with the relevant agencies have implemented an external monitoring program and protocol to assist in the management of our works. This involves a number of site personnel such as the site manager, the community relations officer and the environmental officer who undertake external, and where permitted internal, noise monitoring during nightworks.

During the course of an evening external monitoring is undertaken outside the relevant receptor. This process provides a reference for noise impacts however it does contain some degree of error. The error is associated with the amount of attenuation a structure provides to noise. This attenuation can range anywhere from 5 dBA to 25 dBA which when taken in the context of assessing impacts by comparison to noise goals presents concerns with accuracy.

Notwithstanding this we continue to undertake external monitoring as a broad management tool assisting us in the management of noise.

TJH says it cannot plan and provide appropriate mitigation unless it can carry out internal noise monitoring in a sensitive area. The CG wrote⁴¹⁴ to BrisConnections and TJH advising them to carry out external noise monitoring and then to allow a 10 dBA reduction for the noise attenuation provided by the façades of the buildings.

In his letter, the CG advised:

To assist TJH in obtaining accurate measurements, where entry is refused, I note that a suitable method is to conduct external measurements at a property from which a complaint has been received and deduct an amount of 10dB (A weighted scale) to approximate the internal value. Measurement should be done as advised in the DERM 'Noise Monitoring Manual'.

This type of façade reduction approach, using a notional dB reduction (here 10 dB ('A' weighted scale)) is generally accepted industry practice (see the comment of WM below). I refer to it as the 'notional façade reduction approach'.

This approach had already been adopted by ANE in its predictive modelling.⁴¹⁵ ANE allowed 10 dB for older style houses and 20 dB for newer residential apartments with close fitting windows and air conditioning.

In the Heggies report, Heggies indicated that noise monitoring was undertaken from 14 March 2010 to 14 April 2010 in respect of the Kalinga Park worksite to determine

⁴¹³ TJH letter dated 19 November 2010, page 5.

⁴¹⁴ CG letter dated 28 April 2010.

⁴¹⁵ ANE Predictive modelling report, February 2009, pages 3 and 4.

the level of compliance of construction noise at residences near to the site with the noise goals. To assist with this assessment, Heggies also conducted noise reduction performance testing of common types of residential façades near to the site.

Construction noise levels were analysed and compared with the CG's noise goals in two scenarios:

- where windows/doors to residential façades are open
- where windows/doors are closed.

Heggies conducted façade noise reduction tests at five residences in the vicinity of the site. The purpose of the tests was to establish the level of noise reduction obtained by the façade as noise passes from outside to inside the residence. The controlling element within the façade, or the dominant noise transfer path, was the windows and doors. Residences were selected to obtain façade reduction values for common façade types and the controlling elements of the façades.

The testing demonstrated the reasonableness of applying a 10 dB façade reduction for the residences affected by the construction noise.

Many of the noise monitoring reports that preceded and followed the Heggies report utilised a similar façade reduction approach.

In advice to my Office, WM stated:

The Heggies report describes the results of façade noise reduction tests conducted on five typical residences in the relevant area. Although the methodology used is not described in detail, the results are generally as expected from other studies – with windows open to a normal extent, external-to-internal noise reductions ranged from 10 to 12 dBA; with doors open they ranged from 7 to 10 dBA; and with all elements closed they ranged from 22 to 25 dBA. This provides justification for my assumption above that with bedroom windows open an external noise criterion is equivalent to an internal criterion 10 dBA lower in decibel terms. I regard the use of external noise measurements to estimate internal noise levels as a valid technique, particularly where, as in the case of the Heggies report, the façade attenuations of the relevant residences have been explicitly measured.

In summary, Heggies used a type of façade reduction approach that calculated the actual dB reduction in noise between the noise measured at the façade and that measured on the inside of the residence. This approach is also accepted industry practice. It is more robust evidence than the notional façade reduction approach.

Opinion 22

The façade reduction method of assessing internal noise levels contained in the CG's statement of clarification of excessive noise is generally accepted industry practice, especially where the façade attenuations of the relevant residences have been explicitly measured.

CG/DIP's response

Acknowledged.

CNI's response

CNI did not comment on proposed opinion 21 (Opinion 22).

DERM's response

DERM accepts this opinion. Provided that this approach is only applied in instances where the residents refuse entry for noise investigation purposes, this can be considered a fair option and DERM has no issue with the implementation of this method. Notwithstanding these comments, DERM notes that data obtained via this method could not be used for compliance purposes.

My comment

The parties either accept or do not object to proposed opinion 21 (Opinion 22).

I form Opinion 22 as proposed.

DERM has not provided reasons for its comment 'DERM notes that data obtained via this method could not be used for compliance purposes'. I know of no reason why the data could not be used for compliance purposes.

Recommendation 11

In any future significant project where internal noise goals for sleep disturbance are utilised, the CG should prescribe, in imposed conditions, a façade reduction approach where:

- entry to sleeping areas for monitoring purposes cannot be achieved
- broader noise testing programs around worksites to determine the likely impact on sleeping areas is required or desirable.

CG/DIP's response

The CG accepts Proposed Recommendation 15 [Recommendation 11].

In future, the CG will also consider conditioning the measurement of noise using external monitoring in accordance with the *DERM Noise Measurement Manual*.

CNI's response

CNI did not comment on proposed recommendation 15 (Recommendation 11).

DERM's response

DERM supports this proposed Recommendation.

My comment

The parties have either accepted or not rejected proposed recommendation 15 (Recommendation 11).

I make Recommendation 11 as proposed.

9.8.7 Previously mitigated residence or unaltered residence?

Introduction

The CG's clarification of the meaning of the term 'excessive noise' includes the following statement:

It is important to note that **noise goals set for the project are based on noise measured in sleeping areas after all reasonable and practicable mitigation and management measures have been applied.** They are not measured at the source of the noise. In most circumstances, the best mitigation techniques include:

- site-specific enclosures
- external noise barriers
- closed and double glazed windows
- air-conditioning
- other mitigation measures applied to the sleeping area of an affected property. [emphasis added]

Condition 9(d) provides:

Where the predictive modelling predicts noise goals [which are quantitative goals set out later in the condition] for sleep disturbance are likely to be exceeded by construction works ... reasonable and practicable mitigation ... measures must be adopted.⁴¹⁶

The proposed report stated:

I also consider that a reasonable approach is one which sets noise goals based on noise measured in living areas before reasonable and practicable mitigation measures have been applied. In my view, the proponents, and those contracted to undertake the Project, should take residences as they find them, and not base noise goals on an artificial position, that is, one in which residences are assumed to have noise mitigation. Not all residents have such things as air-conditioning or double glazed windows, and not all want them even if they are to be paid for by TJH.

Similarly, in my view, it is unreasonable to measure compliance with noise goals in homes with windows closed, particularly in Queensland's climate and having regard to the type of construction of many of the homes in the affected areas.

I note that the Building Code of Australia requires that for occupant health and amenity, occupied areas of houses must be provided with means of ventilation with outdoor air which will maintain adequate air quality.⁴¹⁷ Similar provisions apply to units.⁴¹⁸ If rooms cannot be naturally ventilated, they ought to be mechanically ventilated.

Also, as I have mentioned in section 5.6.4, the WHO point out that, a large proportion of the population prefer to sleep with windows ajar because of the perceived benefits of natural ventilation.

⁴¹⁶CG (July 2008) Coordinator-General's Change Report on the Environmental Impact Statement for the Airport Link Project [accessed at <http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/airport-link-change-report1.pdf> and <http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/appendix-1-change-report-airport-link.pdf> on 2 November 2010]; see also section 6.5.

⁴¹⁷ See F2.4.5 and P2.4.5, BCA.

⁴¹⁸ See F4.5 and F.4.6, BCA.

I am supported in my view by WM which envisages unqualified assessment of noise, meaning that residences ought not be altered in any way before monitoring of noise is carried out.

The proposed report contained the following:

Proposed Opinion 22

The CG's statement that noise goals were set for the project based on noise measured in sleeping areas after all reasonable and practicable mitigation and management measures have been applied constitutes administrative action that was wrong for the purposes of s.49(2)(g) of the Ombudsman Act.

CG/DIP's response

Please reconsider Proposed Opinion 22 in light of the following.

Condition 9(d) requires reasonable and practicable mitigation and management to be adopted where predictive modelling of the potential construction noise predicts that the noise goals for sleep disturbance are likely to be exceeded by construction works. These measures must be developed in consultation with the owners and occupants of potentially-affected premises.

The mitigation measures may be taken at the source of the noise or at the receptor. Source mitigation may include:

- installation of physical controls, such as noise barriers;
- implementation of training in relation to minimising noise during construction works;
- the use of mufflers and other insulation to reduce plant engine noise.

Receptor mitigation may include:

- the installation of acoustic treatments to premises, such as double-glazed windows, insulation and air conditioning;
- offers of financial assistance to cover additional electricity costs associated with operation of pre-owned air-conditioning;
- offers of temporary or long-term accommodation.

The thrust of condition 9(d) is to identify likely impacts through predictive modelling and then take reasonable and practical action to mitigate and manage them, while allowing the Project works to proceed as quickly as practicable to reduce the long term impact of the Project. If the predictive modelling does not show the noise goals for sleep disturbance are likely to be exceeded, then no mitigation measures are required to be taken. It is only when the predictive modelling shows that the noise goals are likely to be exceeded that the requirement to take mitigation measures arises.

The corollary of this is that the measurement of compliance with the noise goals during construction work must be after all reasonable and practicable mitigation and management measures have been applied.

Such an approach is supported by the WM report, which states (at section 2.7) that if a resident agrees to noise mitigation measures being provided by the proponent then noise mitigation can be claimed. This is reinforced in WM's report where it says (at section 2.8) that

“criteria should be compared with noise levels measured with open windows, unless the residence has been specifically treated by the proponent or supplied with means to allow windows to be closed.”

It should be remembered that condition 9(d) is a behavioural condition and performance based and that it imports noise goals, not limits. It is not a prescriptive condition.

An interpretation of condition 9(d) which intends noise to be measured against the noise goals inside a residence before any mitigation measures have been applied to it results in the requirement for reasonable and practical mitigation measures to be adopted being made redundant. The better interpretation is that the object of the measures is to “bring back” the noise level to within the noise goals following the predictive modelling and the noise goals should be measured accordingly.

The Ombudsman has suggested a reasonable approach is to “take residences as you find them” (Proposed Report, page 132). This is true when the predictive modelling required by condition 9 is carried out prior to the commencement of construction work. However, condition 9(d) then requires ongoing monitoring. The obligation is to take certain measures in response to predictive modelling and the CG’s statement is consistent with this view. It is a balancing act between the community impacts and the construction program.

CNI’s response

CNI offers the following observations on proposed opinions 22 and 23 and proposed recommendation 16 of the proposed report:

- the Project is required to be constructed in accordance with the Construction EMP and Construction Noise and Vibration EMP Sub-Plan (imposed condition 9(a));
- the Construction Noise and Vibration EMP Sub-Plan is to be prepared addressing the environmental objectives and performance criteria for noise and vibration management (imposed condition 9(b)). The Construction EMP must adopt and incorporate the environmental objectives and performance criteria set out in the EIS Chapter 19 Draft Outline EMP (Construction) (imposed condition 4(c));
- relevantly, the Draft Outline EMP for Noise and Vibration (Construction) in Chapter 19 of the EIS includes as an environmental objective “Maintain a reasonable acoustic environment for living, in particular for sleeping, and use of properties along the corridor of construction influence during construction works”; and
- the Construction Noise and Vibration EMP sub-Plan must include “measures for mitigation of predicted impacts on sensitive places (e.g. installation of acoustic screen, enclosure of worksites possibly with purpose-built sheds, fitting of mufflers and similar measures to vehicles, plant and equipment) identified in the predictive modelling. Measures may include those contained in the Draft Outline EMP (Construction) in Chapter 19 of the EIS or other measures in accordance with Condition 4(d)(i)” (imposed condition 9(c)(i)).

The mitigation measures in the Draft Outline EMP for Noise and Vibration (Construction) in Chapter 19 of the EIS includes the following:

“For surface construction works beyond standard construction hours, take reasonable and practical measures to minimise potential impacts to achieve the noise goals established in Tables 1 and 2 below for nearby properties”.

Reasonable and practicable measures to achieve the construction noise goals may include, for example:

- Commence advanced notification of works and undertake on-going consultation with potentially affected property owners and occupants.
- Establishing temporary noise barriers between construction worksites and sensitive activities (e.g. residential, schools, community facilities).
- Launching tunnel construction from within an acoustically screened enclosure, except for surface works and cut and cover construction works that are to be mitigated by effective temporary screens.
- Fitting noise-reduction measures to all plant and equipment engaged in above-ground construction works.
- With the consent of owners and occupants of potentially-affected premises, undertake off-site mitigation actions such as temporary modifications to nearby buildings or other measures to achieve reasonable environmental conditions.

Mitigation measures generally are to be designed and implemented to achieve goals for construction noise for acceptable internal living conditions consistent with AS/NZS 2107:2000 and summarised in Table 1 and Table 2.

The purpose of predictive modelling for construction noise is to provide for the development of mitigation measures, where necessary, that when implemented will achieve the construction noise goals. If noise goals set for the project are based on noise measured in sleeping areas before all reasonable and practicable mitigation and management measures have been applied, this would have the effect that:

- a) there would be no purpose in mitigation measures being applied to the project if they could not be considered in the measurement of noise goals;
- b) the noise goals as predicted would not be representative of the true noise levels experienced; and
- c) monitoring noise levels where mitigation measures (which may include measures at the source or boundary of works) were present would be less accurate.

It is also noted that the Proposed Opinions and Proposed Recommendation appear to be inconsistent with the procedure adopted by WM in determining excessive noise, in particular that “criteria should be compared with noise levels measured with open windows, unless the residence has been specifically treated by TJH or supplied with the means to allow windows to be closed.” (Section 9.9, Page 134, Proposed Report).

Accordingly, CNI does not believe the findings of fact on page 132 of the Proposed Report are an accurate reflection of the way the Conditions were drafted and informed by the EIS including the draft outline environmental management plans. The Proposed Report states that, for the purpose of predictive modeling in condition 9(d), the noise must be measured against an unmitigated property. That noise modeling is used to assess what mitigation may be needed in order to reasonably and practically mitigate the noise of works in the area and to consider what works are feasible to carry out within the remit of the Conditions relating to noise and the community. The opinions and recommendations on page 133 of the Proposed Report appear to suggest that excessive noise is to be measured with reference to an unmitigated property.

We note that the Ombudsman’s noise consultant WM (at section 2.7) states, “If the resident agrees to this (mitigation) being supplied by the proponent, then noise mitigation can be claimed.”

DERM’s response

DERM made no comment on proposed opinion 22.

My comment

I have combined my comments for both proposed opinion 22 and proposed opinion 23 below, under proposed opinion 23.

The proposed report also contained the following:

Proposed Opinion 23

Noise goals set for the project are based on noise measured in sleeping areas before all reasonable and practicable mitigation and management measures have been applied.

CG/DIP's response

The CG accepts the Ombudsman's view that natural ventilation is desirable and residents should not be forced to close their windows. However, the CG has great concerns about how Proposed Opinion 23 and Proposed Recommendation 16 can work.

Firstly, Proposed Opinion 23 and Proposed Recommendation 16 do not distinguish between mitigation measures applied at the source of the noise and mitigation measures applied at the receptor or between the types of mitigation. However, it is assumed that it is only mitigation in the sleeping area that is to be disregarded (such as double glazing and air conditioning).

Secondly, Proposed Opinion 23 and Proposed Recommendation 16 also do not appear to be consistent with WM's conclusion at sections 2.7 and 2.8 of their report that where noise mitigation is accepted by a resident, it can be claimed for the purposes of monitoring against the noise goals.

The CG is also concerned that Proposed Opinion 23 and Proposed Recommendation 16 will be very hard to implement in practice. There are a number of reasons for this.

If a residence has mitigation such as double glazing and air conditioning and monitoring is undertaken in the sleeping area in the residence, can the mitigation be claimed or does the proposed recommendation mean that an allowance for the mitigation is to be added back on to the noise reading?

If the premises are not mitigated and monitoring shows the noise goals have not been met, mitigation at the source must be undertaken and mitigation at the receptor must be offered. The difficulty arises where the resident does not accept mitigation. The Ombudsman's view is that it is an exceedance of the noise goals if the noise measured in the sleeping area (with the windows open) exceeds the noise goals and this is a breach of condition 7(b). If the CG was able to successfully argue this is in an enforcement action, the enforcement action would most likely result in an order that TJH stop the night work causing the noise.

To put this into perspective 84 residences were offered mitigation measures by TJH in the Toombul precinct. 79 residences have had mitigation measures put in place, and 5 residences have refused the mitigation offered. The CG has sympathy for these residents that do not want or like air conditioning and want to continue to sleep with their windows open. The difficulty for the CG is that these conditions were included to allow the Project to proceed with impacts minimised and managed in consultation with the community. It was recognised that limits on working hours would mean the Project would take longer to build, increasing the impact on the community in other ways.

The CG is concerned that Proposed Recommendation 16, if it can be enforced, will result in delays to the construction of the Project with the resulting impacts on the wider

community because a small number of residents have not accepted the reasonable mitigation measures offered.

It is discussed a number of times in this submission the intent of the CG's imposed conditions. A good summary is provided by Mr Wensley QC in his advice dated 8 October 2010 (page 13-14):

"There is a public interest, presumably, in constructing the project for the greater good of the community. If the efficient and economic achievement of that means that, for a short, or even longer, time, some individual citizens will be discommoded, then that may be a matter to be weighed in the balance in deciding what is 'excessive' in a particular factual situation."

Another concern is that the adoption of the proposed recommendation will be a disincentive to TJH to offer reasonable mitigation measures even though they are required by condition 9(d). The CG has had much more success in achieving "good behaviour" using the performance based conditions and by working with TJH on the ground. Results are achieved much more quickly this way rather than using the statutory enforcement powers.⁴¹⁹

CNI's response

See CNI's response to proposed opinion 22.

DERM's response

DERM disagrees with the wording of this comment. The noise goals are set in relation to the protection of sleep amenity which is a value independent of whether mitigation has or has not been applied.

My comment

Relevant provisions

Condition 9(d) states:

Where the predictive modelling predicts that noise goals for sleep disturbance are likely to be exceeded by construction works, then consultation, reasonable and practicable mitigation and management measures, and a monitoring program must be adopted.

As to the meaning of 'mitigation', conditions 9(a) and 9(c) state:

- (a) Construct the Project in accordance with the Construction EMP and the Construction Noise and Vibration EMP Sub-Plan.
- (c) The Construction Noise and Vibration EMP Sub-Plan must include:
 - (ii) measures for mitigation of predicted impacts on sensitive places (eg installation of acoustic screens, enclosure of worksites possibly with purpose-built sheds, fitting of mufflers and similar measures to vehicles, plant and equipment) identified in the predictive modelling. **Measures may include those contained in the Draft Outline EMP (Construction) in Chapter 19 of the EIS or other measures in accordance with Condition 4(d)(i) ... [emphasis added]**

⁴¹⁹ Statutory enforcement powers have been used by the CG for other breaches as a last resort.

Condition 4(d)(i) states:

- (d) The Construction EMP and EMP Sub-Plans must be based on predictive studies which have regard to the scale, intensity, extent, location and duration of construction works. Properties which would be adversely affected should be identified.
- (i) **Design of mitigation measures** – Mitigation measures must be designed in response to the predicted impacts, with detailed design measures to address localised impacts where necessary. Mitigation measures may include a wide range of measures such as, but not limited to, changes in work procedures and practices, physical interventions to separate or buffer places from predicted construction impacts or physical relocation of affected parties for agreed periods of time. Such measures must be directed to achieving the environmental objectives and performance criteria set out in the EIS Chapter 19 Draft Outline EMP (Construction), the statutory requirements, and must be consistent with these Conditions. They may include the mitigation measures contained in the Draft Outline EMP (Construction) in Chapter 19 of the EIS or may include other measures, provided those other measures achieve the environmental objectives and performance criteria, the statutory requirements and these Conditions.
- (ii) **Monitoring** – On-going monitoring must be conducted to identify the effectiveness of the mitigation measures, having regard for the environmental requirements established in the Construction EMP. Monitoring must include a range of activities such as but not limited to scientifically-conducted measurements of specified parameters, visual inspections, recordings of events, and communications with affected property owners and occupants. Monitoring results must be reported in the form required by the Construction EMP.

The Draft Outline EMP (Construction) in chapter 19 of the EIS states about 'mitigation':

- Reasonable and practicable measures to achieve the construction noise goals may include, for example:
 - Commence advanced notification of works and undertake on-going consultation with potentially affected property owners and occupants.
 - Establishing temporary noise barriers between construction worksites and sensitive activities (e.g. residential, schools, community facilities).
 - Launching tunnel construction from within an acoustically screened enclosure, except for surface works and cut and cover construction works that are to be mitigated by effective temporary screens.
 - Fitting noise-reduction measures to all plant and equipment engaged in above-ground construction works.
 - With the consent of owners and occupants of potentially-affected premises, undertake off-site mitigation actions such as temporary modifications to nearby buildings or other measures to achieve reasonable environmental conditions.

Effect of provisions

Based on the responses of the parties, and my re-examination of the relevant provisions, I am of the view that the intention of the provisions is that:

- predictive modelling is undertaken in advance of construction works

- if that modelling predicts noise goals are likely to be exceeded,⁴²⁰ then reasonable and practical mitigation measures should be applied
- 'mitigation' has a broad meaning such that mitigation measures could be limiting work hours, installing acoustic screens at the worksite or installing mitigation measures (for example, double glazing or air conditioning) in the sleeping areas of a residence
- relevantly for this discussion, monitoring of the effectiveness of mitigation measures should take place both in the sleeping areas of:
 - a residence with installed mitigation measures
 - a residence with no installed mitigation measures, so long as other mitigation measures have been put in place.

Therefore, noise monitoring may be carried out in the sleeping areas of both residences with installed mitigation measures and residences with no installed mitigation measures.

This being established, I consider that residences with no installed mitigation measures ought to be monitored in the state in which they are normally occupied (including with windows open if that is the normal state of occupation). Conversely, where mitigation has been provided to residences, monitoring is conducted with the mitigation active.

Goals based on noise after mitigation

The statement on the CG's website provides 'Noise goals were set for the project based on noise measured in sleeping areas after all reasonable and practicable mitigation and management measures have been applied'. In light of my above comments, I consider this statement is unreasonable because it fails to reflect the obligation by TJH to monitor the effectiveness of mitigation in the internal sleeping areas of unmitigated residences, in their normal state of occupation. It follows that the noise goals were also set for the Project for the purpose of monitoring in residences with no installed mitigation.

I form the following opinions.

Opinion 23

Unless a façade reduction approach is adopted, noise monitoring may be carried out in the sleeping areas of:

- residences with installed mitigation measures
- residences with no installed mitigation measures.

⁴²⁰ In the sleeping area of a residence.

Opinion 24

The CG's statement of clarification that 'Noise goals were set for the project based on noise measured in sleeping areas after all reasonable and practicable mitigation and management measures have been applied' constitutes administrative action that was unreasonable and/or wrong for the purposes of s.49(2)(b) and s.49(2)(g) of the Ombudsman Act, in that it omits to also state that in a residence that has had noise mitigation applied to the sleeping area as a result of predictive modelling, monitoring is to be undertaken with the mitigation active. However, in a residence that has not had noise mitigation applied to the sleeping area, monitoring is to be undertaken with the sleeping area in the state in which it is normally occupied.

The proposed report contained the following:

Proposed Recommendation 16

The CG remove the statement 'noise goals set for the project are based on noise measured in sleeping areas after all reasonable and practicable mitigation and management measures have been applied' from the DIP website and replace it with a statement to the effect that noise is to be measured against the noise goals inside a residence in the absence of the effect of any mitigation measures.

To remove any doubt, this means that windows ought to be open to the extent they normally would be if the residence was occupied.

CG/DIP's response

The CG's concerns about Proposed Recommendation 16 are set out under Proposed Opinions 22 and 23.

The CG requests Proposed Recommendation 16 be removed.

CNI's response

See CNI response to proposed opinion 22.

DERM's response

DERM disagrees with the proposed replacement wording on DIP's website. In principle, noise limits and goals should be drafted to protect sleep amenity. The presence, or indeed the absence of mitigation measures is irrelevant to the setting of noise limits and goals.

Further, in DERM's view, noise measurements should be taken in a variety of situations including when mitigation has been applied and also in the absence of mitigation. The measurements can then be objectively analysed in reference to particular circumstances.

My comment

I rely on my comment about proposed opinion 22 and proposed opinion 23 (which appears directly before Opinion 24).

I make Recommendation 12.

Recommendation 12

The CG remove the statement 'Noise goals were set for the project based on noise measured in sleeping areas after all reasonable and practicable mitigation and management measures have been applied' from the DIP website and replace it with a statement to the effect that 'In a residence that has had noise mitigation applied to the sleeping area as a result of predictive modelling, monitoring is to be undertaken with the mitigation active. However, in a residence that has not had noise mitigation applied to the sleeping area, monitoring is to be undertaken with the sleeping area in the state in which it is normally occupied'.

9.9 Analysis of noise reports by WM

The following analysis of the various noise reports outlined in this chapter has been undertaken by WM.

WM proceeded on the basis that in determining excessive noise:

- The criteria in condition 9(d) and condition 9(f) can be taken as the basis for the determination.
- 'Long-term' night-time noise criteria can generally be assumed.
- For night-time criteria, 'R4-R6' areas will be assumed.
- For daytime criteria, areas 'near major roads' will be assumed.
- Criteria should be compared with noise levels measured with open windows, unless the residence has been specifically treated by TJH or supplied with the means to allow windows to be closed. In available monitoring reports it is not generally indicated that such mitigation has been supplied, and it will be assumed that it has not.

I consider these assumptions are a reasonable basis for WM's assessment of the noise reports because:

- In my opinion, the surface work being conducted on the Project at various worksites is inconsistent with the view that it is temporary in nature because of the type of work, its constancy both day and night, and the duration. For example, in my view, the work conducted at Kalinga Park 24/5 from August 2009 and shortly after for 24/7 until approximately April 2010 generated generally steady state, long-term noise.⁴²¹
- Classification of potentially affected residences as 'R4-R6' and as 'near major roads' provides a conservatively high value for the noise criterion.
- Most of the reports briefed to WM were silent as to whether mitigation had been supplied in certain residences. I consider it is reasonable to assume that residences have been unaltered, unless information to the contrary is given in the monitoring report. Effective regulation of noise from night-time surface work requires this information to be stated in the monitoring reports.

⁴²¹ See section 9.5.10 and Opinion 14.

9.9.1 Summary of criteria

Following from the discussion of WM's view on excessive noise set out at 9.5.8 of this report, noise criteria that are assumed to define 'excessive' noise at all residences considered are:

- day (06.30 to 18.30): 45 dBA LAeq,adj(15min)
- night (18.30 to 06.30): 35 dBA LAeq,adj(15min); 50 dBA LAm_{ax}

all measured inside a potentially-affected room, with windows open to a normal extent.

None of the five monitoring reports discussed below specifically notes whether the work being undertaken at the time of the monitoring could be described as 'collection, unloading and haulage of spoil', or as 'special circumstances' under which night-time work would be justified even if noise levels were excessive. The discussion below assumes that none of this type of work is being undertaken, and therefore the work would be allowed only if noise is not excessive.

9.9.2 TJH Airport Link monitoring reports

In terms of monitoring of out-of-hours noise from above-ground sources, the most intensive monitoring was performed at two unoccupied residences – 33 Kalinga Street and 70 Kalinga Street, Clayfield, between February and April 2010. Noise levels from the nearby worksite were monitored almost daily at both residences, and were performed with windows and doors closed and open.

Figure 1 to Figure 4 illustrate the results from the February 2010 report (results for March and April are similar). At both locations, almost every measurement conducted with windows and doors open resulted in an exceedence of the LAeq,15min criterion of 35 dBA. Comments on the reports indicate that the exceedences were definitely due to noise from the site (although the monitoring reports adopt a criterion of 40 dBA LAeq). On the other hand, noise levels with doors and windows closed rarely exceeded the criterion.

Based on the assumptions outlined in the WM report (see section 9.9), results in terms of the LAm_{ax} descriptor show a similar pattern, although in this case the results are not quite as clear because high LAm_{ax} values were sometimes attributed to an extraneous source such as a dog barking. Nevertheless, with windows and doors open there are numerous cases where a measured LAm_{ax} level above the criterion of 50 dBA is attributed to noise from the worksite.

These results clearly demonstrate a consistent pattern of exceedence of the relevant criteria. Similar results were found at other locations that were less extensively monitored.

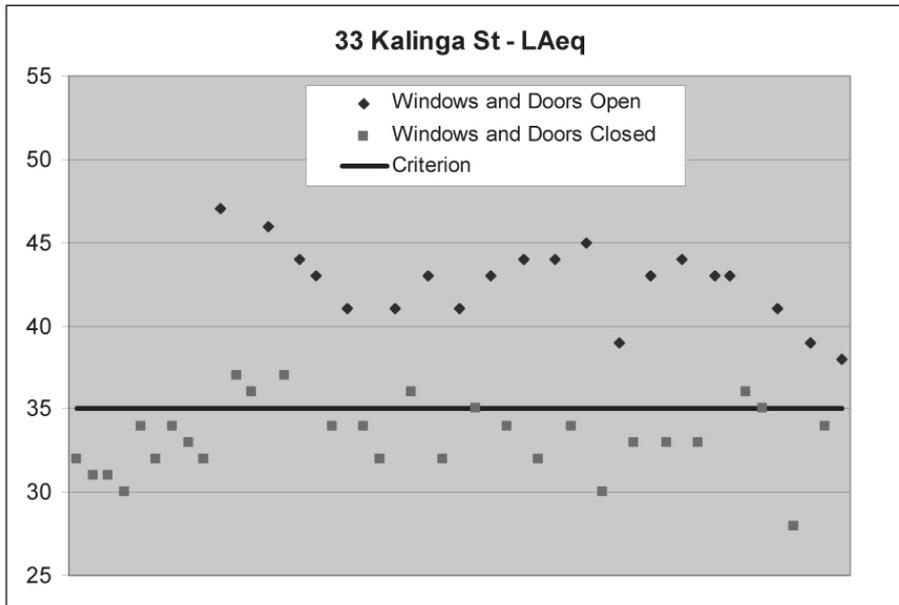
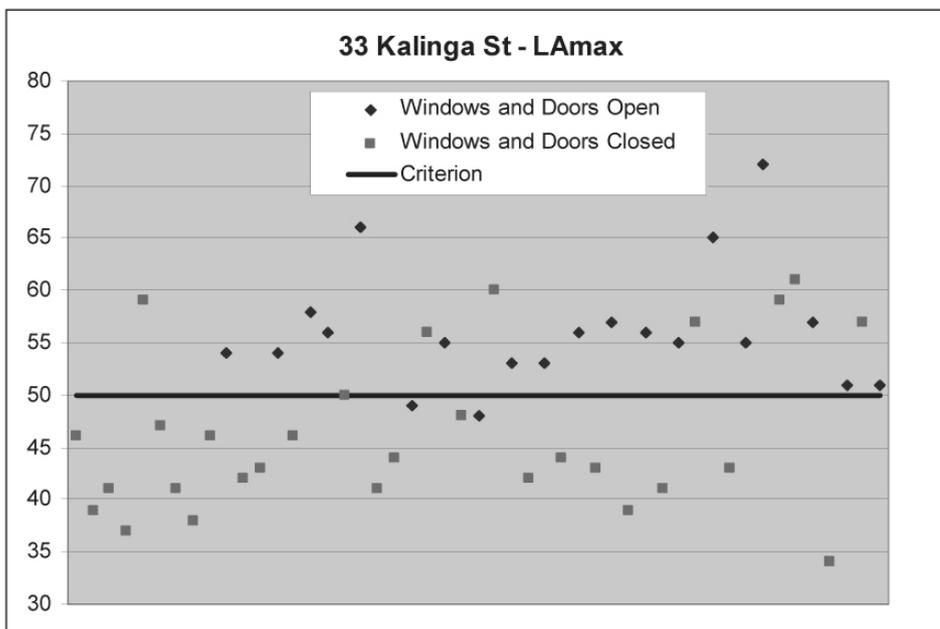
Figure 1**33 Kalinga St - Measured L_{Aeq} Noise Levels, February 2010****Figure 2****33 Kalinga St - Measured L_{Amax} Noise Levels, February 2010**

Figure 3

70 Kalinga St - Measured L_{Aeq} Noise Levels, February 2010

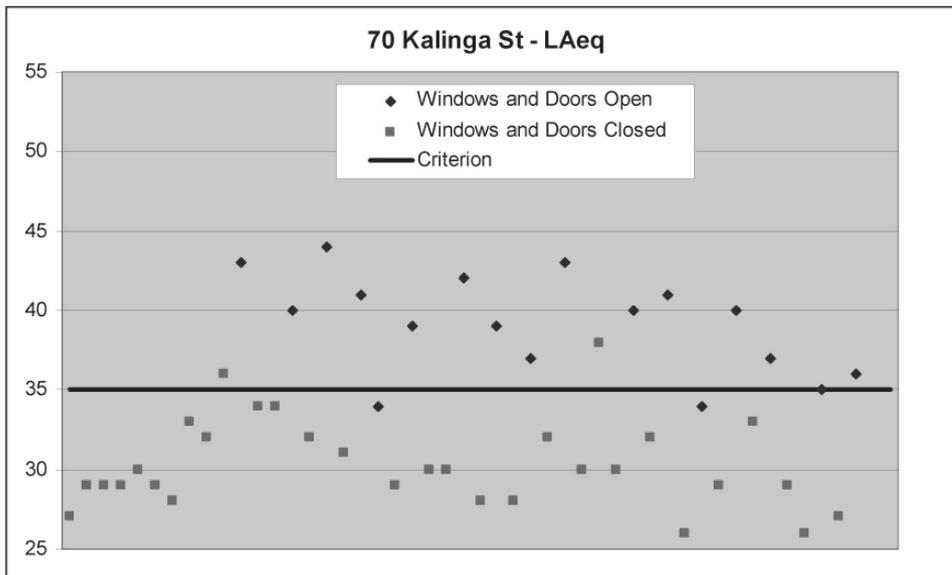
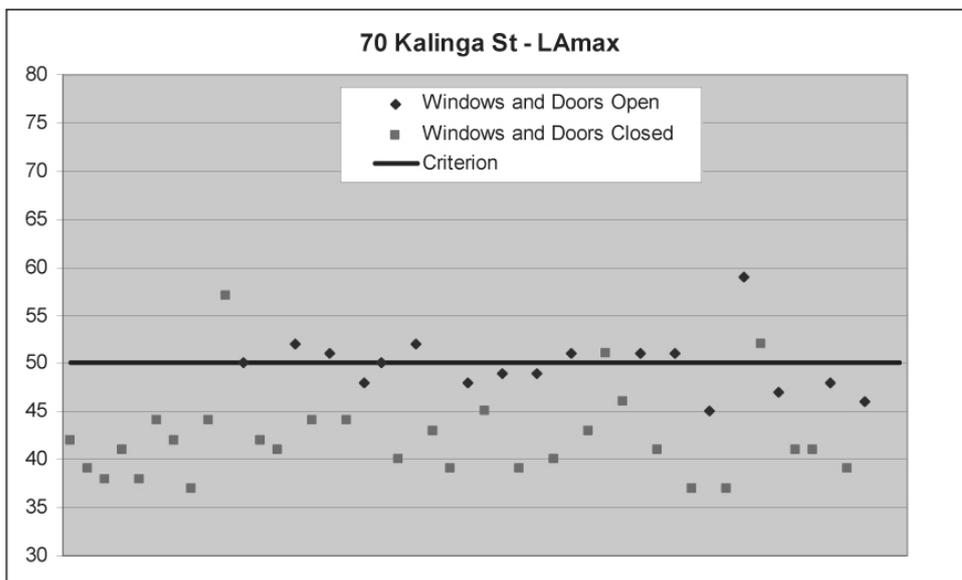


Figure 4

70 Kalinga St - Measured L_{Amax} Noise Levels, February 2010



9.9.3 The ANE Clayfield report and ANE Toombul report

The ANE Clayfield report presents results of noise monitoring at [de-identified] Mabel Street, Clayfield on the night of 9 September 2009. The measured noise levels were corrected by +2 dBA to account for perceived impulsiveness⁴²² in the noise source, and were reported as being due to noise from the worksite. They were:

- windows open: LAeq 36; LAm_{ax} 55
- windows closed: LAeq 29; LAm_{ax} 40.

Once again, there were clear exceedences of relevant criteria (by 5 dBA in the case of LAm_{ax}) with windows open, but compliance with windows closed.

The ANE Toombul report presents monitoring performed on the night of 27 January 2010. Only LAeq noise levels are reported, not LAm_{ax}. Monitoring with windows open was conducted at four residences. Two of these were occupied, and measured noise levels were dominated by internal noise sources. The results are summarised in Table 4.

Table 4

Relevant Measured L_{A90} Background Noise Levels (External), dBA

Location	Day	Evening	Night
[de-identified] ■ Kalinga St, Clayfield (EIS)	45	48	41
70 Kalinga St, Clayfield (ANE Toombul modelling report)	46	43	40
[de-identified] ■ Earle St, Windsor (EIS)	47	46	42
Federation St, Windsor (ANE Bowen Hills modelling report)	51	48	48
Earle St, Windsor (ANE Bowen Hills modelling report)	47	45	44

The noise levels measured in Kalinga Street with windows open are comparable to those reported above, and significantly in excess of the criterion of 35 dBA. Measured levels at 33 and 70 Kalinga Street with windows closed are higher than expected, and the reason for this is not clear, but this is not relevant to determining compliance with the criterion.

⁴²² ANE stated at page 4 of its report that AS 1055 specifies that a +2 dBA correction is to be applied to the LAm_{ax} monitoring results to account for the impulsive nature of the noise sources (that is, frequent hammering and dropping of materials).

9.9.4 ASK report

This report presents results of noise monitoring at [de-identified] McGregor Street, Clayfield on the night of 26 February 2010, over eleven 15-minute periods. The window of the room in which measurements were made was open at all times. Only LAeq was measured – apparently not LMax. No correction was made for impulsiveness or tonality, and the measured noise was identified as arising from the worksite.

Measured LAeq levels ranged from 46 to 49 dBA, higher than most measurements reported in the Airport Link reports at 33 and 70 Kalinga Street, which are nearby.

9.9.5 Heggies report

This report gives results of testing conducted between 15 March and 15 April 2010 at 10 locations. Noise monitoring was conducted outside the buildings, but façade noise reduction testing allowed the internal noise to be estimated, both with open and with closed windows, for residences close to the measurement position.

Measurements included both night-time work and Sunday daytime and night-time work (which is also out-of-hours work). Heggies added corrections for intermittency and tonality to the measured noise levels as considered necessary.

The table below summarises the results in terms of the range of exceedence of the criteria above. In general, the range reflects the range of measured noise levels on several different days.

The results in the table are consistent with the results of all other monitoring reported above. Very high exceedences of night-time criteria are found for the open-window case – particularly the LAeq criterion where exceedences up to 16 dBA were measured. The LMax criterion and the daytime LAeq criterion were also regularly found to be exceeded by up to 12 dBA.

On the other hand, with windows closed, only very small exceedences were found and only on a small number of occasions.

Table 5

Exceedances of Relevant Noise Criteria – From Heggies Report, dBA

Representative Receiver	L _{Aeq} (night)		L _{Amax}		L _{Aeq} (day)	
	Open	Closed	Open	Closed	Open	Closed
█ Kalinga Street [de-identified]	4 - 16	0 - 3	3 - 10	-	5 - 8	-
█ McGregor Street [de-identified]	2 - 6	-	-	-	0 - 1	-
█ Lewis Street [de-identified]	3 - 12	-	0 - 8	-	0 - 12	-
█ Lewis Street [de-identified]	2 - 13	-	0 - 12	-	0 - 8	-
Jackson Street, N end	0 - 14	-	0 - 6	-	3 - 6	-
█ Jackson Street [de-identified]	0 - 7	-	-	-	-	-
█ Elliot Street [de-identified]	1 - 9	-	0 - 5	-	-	-
█ Hockings Street [de-identified]	-	-	-	-	-	-
█ Stuckey Street [de-identified]	0 - 8	-	0 - 3	-	-	-
█ Stuckey Road [de-identified]	0 - 4	-	-	-	-	-

9.10 Summary

All five monitoring reports concluded that with windows open (and in some cases with windows and doors open), noise levels at the most affected residences were excessive.

Exceedences of criteria for steady, long-term noise of up to 16 dBA were recorded, and exceedences of 5 to 10 dBA occurred regularly. On the other hand, with windows and doors of relevant rooms closed, few exceedences were measured, and any exceedences were minor.

I asked WM ‘do any of the night-time exceedences reported in the Airport Link monitoring reports constitute “excessive noise” and if so, on what basis?’ WM answered.⁴²³

Yes. The criteria in the 2008 Change Report represent an appropriate definition of ‘excessive noise’ in this case, assuming noise levels are measured with windows open. The monitoring reports indicate significant and sustained exceedences of those criteria under these conditions.

I asked WM ‘do any of the exceedences in the other reports considered constitute “excessive noise”, and if so on what basis is that view formed?’ WM answered.⁴²⁴

Yes, on the same basis as above.

The proposed report contained the following:

⁴²³ WM report in section 4.

⁴²⁴ WM report in section 4.

Proposed Opinion 24

In respect of nearby residences with windows open there is evidence of regular and considerable 'excessive noise' within the meaning of condition 7(b) from night-time surface work at the Kalinga Park worksite since such work commenced in August 2009.

CG/DIP's response

The CG and DIP acknowledge Proposed Opinion 24.

However, it is noted that the Ombudsman is only able to form Proposed Opinion 24 is (sic) if it is accepted that for the purposes of condition 7(b), the measurement of the noise goals in condition 9(d) is required to be taken in the absence of the application of reasonable and practicable mitigation and management measures being applied at the receptor. This is not consistent with the CG's clarification of the meaning of "excessive noise". It also has the result that it is possible to comply with condition 9(d) (as mitigation measures may have been offered to the resident but rejected), but at the same time not comply with condition 7(b).

CNI's response

Please see our comments in response to 9.6.6 above.

It is not clear to CNI the technical basis of the Ombudsman's finding that 'regular' and 'considerable' excessive noise has occurred at nearby residences. CNI would appreciate access to this technical analysis as it may assist in future assessments of noise in this area. We note the summary table in section 9.7.3 of the Proposed Report, but note that in drawing conclusions based on the noise monitoring in the BrisConnections Monthly Reports, consideration needs to be given to mitigation measures, the source of the noise and the particular works being undertaken.

DERM's response

DERM agrees with this Opinion.

My comment

The CG/DIP and CNI both raised concerns about the evidentiary basis of proposed opinion 24.

To summarise my earlier comments, WM proceeded on the basis that in determining excessive noise, monitoring results should be compared with noise levels measured with open windows, unless the residence has been specifically treated by TJH to allow windows to be closed. In available monitoring reports it is not generally indicated that such mitigation has been supplied, and WM and I assumed that it has not.

To achieve any meaningful indication of the gravity of the issue of noise from night-time surface work, I consider it is reasonable and necessary to assume that residences have been unaltered, unless information to the contrary is given in the monitoring report. Effective regulation of noise from night-time surface work required this information to be stated in the monitoring reports.

Opinion 25 is not a determination as to whether there has been excessive noise from night-time surface work in the past. I cannot do that based on the evidence I have and in any event, that is not my role. Opinion 25 is instead my meaningful indication of the gravity of the issue of noise from night-time surface work, based on the assumptions outlined.

Opinion 25

Based on the assumptions identified by Wilkinson Murray, in respect of nearby residences with windows open there is evidence of regular and considerable 'excessive noise' within the meaning of condition 7(b) from night-time surface work at the Kalinga Park worksite since such work commenced in August 2009.

Chapter 10: Investigation and enforcement of imposed condition 7(b)

10.1 Overview

In this chapter I examine the actions taken to date by the CG, DIP, CNI and DERM in relation to the investigation of compliance with condition 7(b).

I also consider whether condition 7(b) is enforceable.

10.2 What is an enforceable condition?

Section 157A of the SDPWO Act sets out the meaning of an 'enforceable condition'. The section states that an enforceable condition is, among other things, an imposed condition.

Imposed condition 7(b) and imposed condition 9(d) are enforceable conditions under the SDPWO Act.

10.3 Relevant statutory provisions

In chapter 5, I have largely addressed the statutory provisions about non-compliance with imposed conditions; however, for convenience, I will repeat those provisions here.

10.3.1 SDPWO Act

There are a number of regulatory tools in the SDPWO Act. The three primary tools are:

- **157B Power to give enforcement notice** – If the CG reasonably believes a person has contravened, or is contravening, an imposed condition, he may give the person a written notice (an **enforcement notice**) requiring the person to comply with the condition; or take stated steps the CG considers are reasonably necessary to ensure compliance with the condition.
- **157I Starting proceeding for enforcement order** – The CG may start a proceeding in the Planning and Environment Court for an enforcement order to remedy or restrain a contravention of an imposed condition.
- **54G(2) Declaration making powers** – The CG and others may bring a proceeding in the Planning and Environment Court for a declaration about whether there has been substantial compliance with an imposed condition for the undertaking of the Project.

10.3.2 EP Act

The primary regulatory tools available under the EP Act are:

- **323 Environmental investigation** – If noise nuisance has been caused or is likely to be caused, DERM may require a person (including a company) to conduct or commission an environmental investigation and submit an environmental evaluation report.

- **358 Environmental protection order (EPO)** – DERM may issue an EPO if after an environmental evaluation, DERM is satisfied that unlawful noise nuisance has been or is likely to be caused.
- **440 Offence of causing noise nuisance** – Causing noise nuisance is an offence for which the offender can be prosecuted. The offence of causing environmental nuisance (under the EP Act) does not apply to the extent that an imposed condition authorises the nuisance.⁴²⁵
- **451 Requiring information** – DERM may issue a written notice to a person requiring certain information be provided relevant to the administration of the EP Act.
- **505 Restraint of noise nuisance** – DERM and others may bring a proceeding in the Planning and Environment Court to restrain a person from committing the offence of causing noise nuisance.

10.4 Powers of the parties

10.4.1 The CG's/DIP's powers

Where there is significant evidence of a breach of condition 7(b) because of excessive noise, the CG may:

- give TJH an enforcement notice requiring it to cease excessive noise from night-time surface work (s.157B, SDPWO Act)
- ask the Planning and Environment Court for an enforcement order restraining TJH from causing excessive noise from night-time surface work (s.157I, SDPWO Act) or ask for an order restraining TJH from committing the offence of causing noise nuisance (s.505 EP Act)⁴²⁶
- ask the Planning and Environment Court for a declaration about whether the noise from night-time surface work has substantially been reasonable (s.54G(2), SDPWO Act).

I will comment on the CG's use of these regulatory tools later in this chapter.

10.4.2 CNI's powers

CNI does not have an enforcement role in relation to the CG's imposed conditions. It represents the State, which is the proponent of the Project.⁴²⁷

However, at the request of the CG, CNI has twice investigated and reported on noise issues. They are:

- an investigation requested by the CG in November 2009 into noise from a Toombul worksite resulting in the preparation of the CNI report. In that report CNI expressed a conclusion that general compliance had been achieved. There were no recommendations for enforcement action but suggestions were made to TJH to improve its performance in a number of areas
- an investigation in February 2010 into a complaint made by a resident to the Minister for Infrastructure and Planning about the removal of a temporary noise barrier (shipping containers) and the failure to take any action to protect the

⁴²⁵ Section 440(3) and schedule 1, s.3, EP Act.

⁴²⁶ Section 54F(2), SDPWO Act.

⁴²⁷ DIP submission to my Office, July 2010.

property from the impact of construction noise. The report concluded that there were non-compliances with the CG's conditions.⁴²⁸ The CG issued a show cause notice to TJH following receipt of that report.⁴²⁹

10.4.3 DERM's powers

Where there is sufficient evidence of a breach of condition 7(b) because of excessive noise, DERM can:

- require TJH to provide information about noise nuisance (s.323 and s.451, EP Act)
- issue an EPO to TJH about noise nuisance (s.358, EP Act)
- prosecute TJH for the offence of causing noise nuisance (s.440, EP Act)
- ask the Planning and Environment Court for an order restraining TJH from committing the offence of causing noise nuisance (s.505 EP Act).

I will comment on DERM's use of these regulatory tools later in this chapter.

10.5 Steps taken and view formed by CG and DIP

There have been two reports about the level of compliance with condition 7(b). The first is the CNI report and the second is the Heggies report. The CG's views following consideration of the Heggies report were communicated to BrisConnections and TJH on 22 June 2010.

10.5.1 The CNI report

Background

In November 2009, the CG asked CNI to investigate noise from the Kalinga Park worksite. The CNI report was first produced in draft form to the CG in February 2010 and finalised in April 2010.

A briefing note was provided to the Minister for Infrastructure and Planning from CNI on 3 March 2010 about TJH's improvements to noise management issues during night-time surface work at Toombul. The note referred to CNI's investigation as requested by the CG and to CNI's correspondence to BrisConnections on 18 February 2010, which stated:

CNI did not identify any direct non-compliances with the Coordinator General's conditions, however CNI has made a number of observations and identified potential improvements regarding resident complaints to the night works. In writing to you, we hope that these observations and potential improvements may assist you in reducing the overall level of complaint arising due to the night works.

The improvements suggested by CNI fell under three main categories – noise monitoring, incident reporting and site culture. In relation to improved noise monitoring, TJH agreed to undertake additional nightly external noise monitoring in a number of adjacent streets and to install a permanent internal noise logger at 33

⁴²⁸ Report – Noise Mitigation Erskine Avenue (April 2010 update) CNI, page 5.

⁴²⁹ CG letter to BrisConnections and TJH dated 9 April 2010.

Kalinga Street. In respect of the suggestion for the noise logger, CNI told BrisConnections that:⁴³⁰

Insufficient monitoring data means that often BrisConnections cannot demonstrate that noise levels were below the goals when a complaint occurred thus increasing risks of action being taken by the regulators. If BrisConnections can demonstrate through improved monitoring that exceedences do not occur routinely as suggested by complainants, then this assists in showing compliance with conditions.

CG action

Following receipt of the CNI report, the CG wrote to CNI on 14 May 2010. In that letter the CG:

- noted that TJH was substantially compliant but there were inadequacies in its performance
- referred to the recommendations made by CNI in the report to improve TJH's performance and sought information about their implementation
- raised issues about the updating of Site Environmental Plans (SEPs) and mitigation measures
- recommended that since night-time surface work had been extended at Bowen Hills any advances in complaint management developed at Kalinga Park should be implemented for the Bowen Hills site or other sites within the project area. The most important aspect is considered to be the identification and removal of work practices that generate noise from night-time surface work.

10.5.2 Heggies report

Background

DIP obtained internal legal advice in December 2009 relating to the meaning of 'excessive noise'.

DIP legal officers met with a representative of Clayton Utz (who assisted CNI in its discussions about the CG's draft conditions for the Project) on 15 January 2010.⁴³¹

DIP has indicated that Clayton Utz recommended DIP retain its own noise expert to conduct independent monitoring, which was later acted upon by the appointment of Heggies.⁴³²

On 18 January 2010, the CG wrote to TJH and BrisConnections about noise complaints received by DIP about the Kalinga Park worksite. The CG stated:

I note that independent noise monitoring has been conducted and this has indicated noise levels in excess of the night time goals in several locations. My Department is now commissioning additional noise monitoring to obtain further data to assist my determination of whether out-of-hours work is producing excessive noise.

I would like to remind you of the obligations on BrisConnections and TJH, as entities undertaking the project, to comply with the conditions imposed in my evaluation report for the project. As you may be aware, if a person contravenes an imposed condition,

⁴³⁰ CNI letter to BrisConnections 18 February 2010, page 2.

⁴³¹ CG letter to my Office 8 October 2010, page 2.

⁴³² CG letter to my Office 8 October 2010, page 2.

the Coordinator General may take enforcement action against the person contravening the condition. If the monitoring conducted by my Department provides evidence of a breach of the conditions, I will be considering enforcement action.

TJH responded to the CG by letter dated 8 February 2010 in which it outlined the approach it was taking to night-time surface work, mitigation at source and at sensitive receptors, assessment of complaints, and the results of its own noise monitoring and independent monitoring. In respect of its own monitoring, TJH concluded:⁴³³

The results provide substantive feedback that the noise goals (LAeq 40 dBA and LAmax 50 dBA) are not being regularly or significantly exceeded and subjectively indicate that noise from the 'out of hours' work is not excessive.

In relation to the independent monitoring, TJH stated:

The report highlights that with windows closed all internal monitoring locations with the exception of (one receptor) were under the 40 dBA LAeq goal stated in the project conditions.

...

The external monitoring locations were selected to include those residential locations that were the subject of significant levels of complaint and that were previously determined to be outside the predicted impact zone (excluding one receptor). The monitoring results at all locations (again except for one receptor) indicate that, based on industry guidelines, the internal goal of 40 dBA LAeq is likely to be met.

In a subsequent briefing note to the CG,⁴³⁴ DIP recommended that a letter be sent to TJH setting out the meaning of 'excessive noise'.

The following was stated in the note:

- This letter may provide assistance in future enforcement proceedings for a breach of approval conditions. To date the evidence obtained has not been sufficient to initiate enforcement action.
- TJH has demonstrated that the site noise can be addressed by taking sufficient mitigation measures.
- There are indications that TJH is considering 24/7 operation at the Bowen Hills site. Having a definition of excessive levels of noise may assist with control of the noise issue in this work area during after hours work.

On 28 April 2010, the CG wrote to TJH outlining the meaning of 'excessive noise'. The CG also advised:

However the results of independent monitoring identified many instances of individual noise activities causing exceedence of noise goals. I am also aware of claims by property owners that they have experienced sleep disturbance due to noise generated by out of hours works. The activities which cause individual noise exceedences during out of hours work should be discontinued and further effort put into reducing noise generation. Many of these instances were identified as behavioural activities that should be eliminated, such as steel banging. If control of this noise is not possible, that activity is required to be removed from the out of hours work schedule.

⁴³³ TJH letter to CG dated 8 February 2010.

⁴³⁴ Reference No. 10/5385.

The Heggies report was subsequently received by the CG, dated 21 May 2010.

CG action

The CG wrote to BrisConnections and TJH on 22 June 2010 referring to his 18 January 2010 letter and receipt of the Heggies report. The CG stated:

... the results ... generally indicate compliance in mitigated circumstances. There was however, a limited number of noise goal exceedences recorded at properties adjacent to the Kalinga Park worksite. In my view, if left without consideration, this pattern of exceedence has the potential to result in a course of conduct in which excessive noise outside regular working hours becomes established.

Should this be the case, I will take action to enforce compliance with my conditions, including consideration of my statutory enforcement options. Your responsiveness to this issue, should this pattern of exceedence continue, will be a decisive factor in determining what type of action I consider is required to bring about a culture and practice of compliance.

At my direction, Compliance Unit Officers from the Department will increase monitoring of this issue and will coordinate with officers of the Department of Environment and Resource Management (DERM), as responsible entity for the noise and vibration conditions, to ensure that all project requirements relating to noise are being met.

As part of this process, I have provided a copy of the latest Heggies report to DERM for their consideration and determination regarding the most appropriate course of action to address the recorded exceedences at Kalinga Park during the March-April 2010 monitoring period. A copy of this report has been provided here as an attachment for your reference and necessary action. This document has also been added to my Departmental Right to Information publications list and is available for general public consumption.

I acknowledge that heavy civil works at Kalinga Park have now ceased on a 24 hour/7 day a week basis, however, I note that a similar work schedule is currently in place at the Bowen Hills worksite and I expect that lessons learnt from the Kalinga Park operation will be transferred into management practices for all other worksites which are, or will be the subject, of continuous construction activity.

I take this opportunity to once again remind BrisConnections and Thiess John Holland of your obligations, as the construction entities of this landmark project, to ensure compliance with the conditions that have been imposed.

10.5.3 Evidence of Officer E

At the time he was interviewed on 15 October 2010, Officer E had only been in the position of Acting Director of the Compliance Unit at DIP since April 2010. This role oversees all significant projects, not only the Airport Link project.

Officer E was aware noise generated by the night-time surface work was an issue in the community. He said:⁴³⁵

... I understand there was a lot of angst by the community about the level of noise, the type of noise as well (as) the banging and that sort of thing. I understand TJH took steps to try and address that. The CG, my understanding is the CG never had any evidence that they were in breach of the conditions or it would have done something

⁴³⁵ Record of interview, lines 1008/1014.

about it. There's a lot of pressure from, well particularly when I started there was a lot of pressure from DCG, ... to take action if we could, the CG was certainly interested in taking action.

In response to the question 'so what evidence would they have needed', Officer E replied:⁴³⁶

We would have needed internal noise monitoring evidence that it was above the goal or background, and that it, that TJH in some way were refusing to provide reasonable and practical mitigation.

Officer E expanded on this point:⁴³⁷

Where you know there's an exceedance that's recorded, the obligation on them is to mitigate, so it's not necessarily a breach. If they're refusing to mitigate and there's exceedances, that would be a breach.

Officer E explained the process employed by DIP in seeking to ensure compliance with the CG's imposed conditions:⁴³⁸

Under our Act a show cause notice isn't a statutory thing, it's a natural justice thing, so there's an informal thing and that's as far as we have ever gone at this stage. Stepping over into the statutory things, you probably get an enforcement notice would be the first step or it would depend on the nature of the breach as well.

10.5.4 Analysis of CG's and DIP's actions

It is clear from the material that the CG and DIP have responded to the complaints made about the noise from night-time surface work at Kalinga Park and sought advice from their lawyers (including externally), from CNI and from independent noise professionals such as Heggies.

The CG and DIP have come to the conclusion that the results show general compliance in mitigated circumstances,⁴³⁹ although I note in reference to the term 'mitigated circumstances' there is:

- no information in the Heggies report about the properties where monitoring was conducted having been provided with mitigation
- limited information in the CNI report about the type of mitigation installed at the properties monitored.⁴⁴⁰

10.6 Steps taken and view formed by DERM

10.6.1 Early concerns about enforceability of imposed conditions

Before 24 hour work commenced at the Kalinga Park worksite DERM officers expressed reservations about the practical difficulties in enforcing the imposed conditions. This is evidenced in a number of ways.

⁴³⁶ Record of interview, lines 1019/1021.

⁴³⁷ Record of interview, lines 1030/1033.

⁴³⁸ Record of interview, lines 1179/1184.

⁴³⁹ CG's letter to TJH, 22 June 2010.

⁴⁴⁰ [de-identified] Mabel Street had been provided with airconditioning and double glazing to the front bedroom – Appendix 6 CNI report.

A briefing note to the Associate Director-General⁴⁴¹ states:

- Conditions of the CG's change report in relation to noise and water, for which DERM has jurisdiction, are not readily enforceable (see background).

...

- I am awaiting advice as to our range of powers in relation to this project ...

...

3. BACKGROUND

...

DERM is responsible for enforcing conditions in relation to ... noise ... Noise conditions set goals (rather than limits) only ...

Of the voluminous documents I have received, the information contained in the briefing note is the only evidence of DERM considering whether and how it could regulate noise from night-time surface work. There is no evidence before the proposed report that DERM obtained any legal advice about its powers in relation to the Project or whether and how it could regulate noise from night-time surface work.⁴⁴²

At a meeting of DIP and DERM officers on 14 May 2009, reservations were expressed about how the CG's imposed conditions relating to environmental matters were to be enforced. The agenda⁴⁴³ for the meeting reflected DERM's concerns about:

- complaints handling and community consultation
- information being passed to the community by TJH about monitoring results
- exceedences of dust and noise conditions
- the validity of monitoring being performed by TJH
- reporting by TJH of exceedences
- documentation provided about works being undertaken at sites and the timing of its provision.

In relation to reporting and enforcement of conditions, the agenda stated:

Airport Link - Issues for meeting

3. Reporting

- Insufficiencies identified in the monthly exceedence reporting.
- Noise – lack of timely action to investigate and rectify exceedence. For monitoring they are using difficulty in 'gaining access' as reasons for not doing. Unclear if they have list of consent or not? Who have they tried?
- Exceedence – insufficient information, comments are too general, 'exceedence can not be verified', inactions, unattended as excuse for inaction.
- Noise reports lack sufficient information (ie. Aug-Feb lack detail if internal/external). Lack of detail of source, so unclear which goal to use, monitoring period unclear, comments column are insufficient.

5. Conditions

1. **Lack of enforceability – noise 'goals'**, [emphasis added]

⁴⁴¹ Briefing note dated 1 May 2009.

⁴⁴² My investigation revealed a DERM legal advice about reasonable and practicable mitigation but no legal advice about the above topics.

⁴⁴³ Briefing note to Assistant Director-General 1 May 2009.

2. Lack of mitigation for sites that don't require predictive modelling (ie. less than 2 weeks duration).
3. Suitability of conditions relating to dust.

DERM expressed concern about the environmental impacts the Project would have. In particular, noise and water management was based on reactive responses and short-term construction outcomes. DERM also expressed concern about a perceived difficulty in enforcing the imposed conditions:⁴⁴⁴

- The project, as approved by the Co-ordinator General (CG), will have impacts on local communities and the environment beyond that which DERM would normally approve. This is apparent not only in the setting of conditions but also in the limited amount of land acquired to mitigate the environmental impacts of the project.
- Conditions of the CG's change report in relation to noise and water, for which DERM has jurisdiction, **are not readily enforceable**. [emphasis added]
- Overall environmental management of the project to date, particularly in relation to noise and water management, has been typified by reactive responses and short term thinking focusing on achieving construction outcomes rather than strategic planning and impact management.

10.6.2 Evidence of officers

General view – unenforceable

In the interviews conducted with the DERM officers principally involved with the Project, they reiterated the above concerns about the enforceability of the imposed conditions.

In a recorded interview with Officer A, she confirmed⁴⁴⁵ she had not been involved in drafting the conditions but she was the officer who managed the area responsible for dealing with environmental issues from the Project. She said condition 7 and condition 9, for which DERM is the nominated entity, are difficult to enforce. In this respect, Officer A expressed the opinion:⁴⁴⁶

The holes in the wording from a strict compliance point of view are fairly large.

Officer B is responsible for dealing with the environmental issues arising from the Project. He confirmed the noise issues were very much harder to enforce than, for example, water issues.⁴⁴⁷

For enforcement purposes, Officer B preferred to have clearly written and understood conditions. He said:⁴⁴⁸

So because these are not very clear, it makes, it adds an element of confusion to everybody, where everyone says it's different. Whereas if you've got conditions that are black and white, they're black and white and everybody knows that this is the rules and therefore for instance when TJH or other contractors are bidding on a job, they bid on these conditions and what they think they can get away with and what they can't get away with.

⁴⁴⁴ DIP and DERM meeting on 14 May 2009.

⁴⁴⁵ Record of interview, line 275, 12 October 2010.

⁴⁴⁶ Record of interview, line 556, 12 October 2010.

⁴⁴⁷ Record of interview, line 1035, 13 October 2010.

⁴⁴⁸ Record of interview, line 1053, 13 October 2010.

Comparison – Woolloowin condition enforceable

As we understand the evidence of the officers, the imposed conditions relating to the Woolloowin worksite could be enforced because of a clear condition that noise goals must not be exceeded at night. The term ‘excessive noise’ was not used in relation to this worksite.

An example was provided by officers where noise was being generated by a ventilation fan on the acoustic shed. The noise was continuous, which made it easier for DERM to respond and take noise measurements.

Officer A referred to the differently worded conditions in the Woolloowin change report and illustrated the ease of enforcement in relation to a ventilation fan on the acoustic shed enclosing the site that was causing a noise nuisance.

DERM was able to enforce the condition of the Woolloowin change report in terms of night exceedence because it was clear and we could and did action that.⁴⁴⁹

In the words of Officer A:⁴⁵⁰

We go out, we do the attended monitoring, so bear in mind this is a continuous noise source, it was actually the fan so the perfect type (of) noise for us to have the capacity to investigate.

The attended monitoring was analysed and presented to TJH. A verbal request, confirmed by email, was made to TJH environmental staff to address the fan noise. On being presented with the evidence of the exceedence, TJH immediately turned off the offending fan until it could be replaced with one that did not produce the same sound levels and tonal qualities.

Officer B referred to the success in identifying the noise source from the ventilation fan:⁴⁵¹

... with the Woolloowin project they weren't monitoring for tonality, it's something that we found and we were able to hit them with. But that's not something that they monitored for.

DERM officers were successful in this instance in obtaining redress for residents affected by the noisy ventilation fan. The conditions in the Woolloowin change report, and the fact that the noise from the ventilation fan was a continuous ongoing noise that DERM officers were able to monitor and record, assisted in no small measure with this enforcement action.

10.6.3 Section 451 notices issued by DERM

I have referred to DERM's powers to request information under s.451 of the EP Act in 10.3.2 of this report.

DERM has issued a number of notices about worksites at Kedron, Bowen Hills and Toombul (Kalinga Park). In respect of Kalinga Park, the notice,⁴⁵² dated 11 August

⁴⁴⁹ Record of interview, lines 563/564.

⁴⁵⁰ Record of interview, lines 1006/1008.

⁴⁵¹ Record of interview, line 1149, 13 October 2010.

⁴⁵² BNE132.

2009, required information to be provided by 19 August 2009 and stated that its purpose was:

To establish how compliance with the Coordinator General's conditions, for which DERM are identified as the entity with jurisdiction under Schedule 4 of the Coordinator General's change report July 2008, will be achieved.

Specific information was sought about:

- predictive modelling undertaken before the commencement of night-time surface work
- consultation, reasonable and practical mitigation and management measures, and ongoing monitoring program, for noise and other impacts for night-time surface work
- operational techniques to be employed during night-time surface work
- details of how TJH would respond to noise non-conformance, non-compliance or incidents that may occur during night-time surface work
- details of any complaints received about night-time surface work.

Each time TJH responded to DERM's requests with full and detailed information.⁴⁵³

There is an undated and unsigned electronic document⁴⁵⁴ provided to my Office by DERM. This document analyses the material provided by TJH about the notices. It makes a number of recommendations. Relevantly it provides in relation to the Kalinga Park worksite:

Recommendation

A follow up letter, from DERM, informing TJH that they have adequately responded to the aforementioned notice. No further action from DERM.

No document has been provided evidencing DERM's endorsement of the officer's recommendation. It is of concern that leading into the commencement of night-time surface work at Kalinga Park, DERM did not endorse the recommendation of its officer following its assessment of the TJH response.

In correspondence to my Office,⁴⁵⁵ TJH advised that it received no response from DERM to its s.451 answers. In the absence of a response from DERM, TJH told my Office that it assumed the answers satisfied DERM's notices.

My Office requested clarification about this from DERM. DERM advised that replies were not given to s.451 notices:⁴⁵⁶

If we were happy with the response from a S451 we would not usually reply (there is nothing in the Act to determine whether we should), we traditionally would only reply if we needed more information or were not satisfied with the answer when the response was compared against the CoG conditions, SEP's or EP Act.

I am satisfied DERM did not advise TJH that the s.451 notices had been adequately answered.

⁴⁵³ TJH answers to s.451 requests dated 17 August, 19 October and 23 October 2009.

⁴⁵⁴ Properties show document was created by DERM officer on 2 December 2009.

⁴⁵⁵ TJH letter to my Office dated 19 November 2010.

⁴⁵⁶ Email from DERM Officer B dated 29 November 2010.

Opinion 26

DERM did not advise TJH that the s.451 notices had been adequately answered.

CG/DIP's response

Noted.

CNI's response

CNI did not comment on proposed opinion 25 (Opinion 26).

DERM's response

DERM agrees with this Opinion. DERM accepts that while there is no requirement in the Environmental Protection Act 1994 to acknowledge s.451 notices, it is good practice to do so. If responses had not satisfied the requirements of the notice DERM would have taken appropriate action.

My comment

I make Opinion 26 (proposed opinion 25) as proposed.

Although there may be no statutory requirement to respond to providers of responses to s.451 notices, I consider it is good administrative practice for DERM to do so because TJH may.⁴⁵⁷

- form a view that DERM is unresponsive
- complain about DERM's perceived lack of response
- become suspicious of DERM's motives (which would be counter productive to effective regulation).

Recommendation 13

DERM ensure that all responses to statutory notices issued under the EP Act are received, assessed and replied to.

CG/DIP's response

Noted.

CNI's response

CNI did not comment on proposed recommendation 18 (Recommendation 14).

DERM's response

DERM accepts this proposed Recommendation and agrees that this is good administrative practice. DERM notes that while there has not been any formal response

⁴⁵⁷ See section 7.2 of my Office's Tips and Traps for Regulators at http://www.ombudsman.qld.gov.au/Portals/0/docs/Publications/Inv_reports/Tips%20and%20Traps%20for%20Regulators_FINAL_for_web.pdf as at 21 December 2010.

to these Notices, these matters have been discussed freely in meetings, phone calls and site inspections with departmental officers. It does not appear that TJH were in any doubt as to DERM's acceptance of this response. DERM has and will continue to ensure that TJH is advised in advance of any enforcement action.

My comment

I make Recommendation 14 (proposed recommendation 18) as proposed.

10.6.4 DERM's action following Heggies report

On 22 June 2010, the CG wrote to BrisConnections and TJH and advised:

At my direction, Compliance Unit officers from the Department will increase monitoring of this issue and will coordinate with officers from the Department of Environment and Resource Management (DERM) as responsible entity for noise and vibration conditions, to ensure that all project requirements relating to noise are being met.

As part of this process, I have provided a copy of the latest Heggies Report (*Airport Link Project Kalinga Park Construction Site Construction Noise Monitoring Report, 21 May 2010*) to DERM for their consideration and determination regarding the most appropriate course of action to address the recorded exceedances at Kalinga Park during the March – April 2010 monitoring period.

I am aware from the documents provided to my Office that DERM is in possession of the Heggies report. However, I have seen no evidence of DERM giving any consideration to, or taking action in respect of, the findings contained in that report.

The proposed report contained the following:

Proposed Opinion 26

DERM's failure to consider, or take action in respect of, the findings contained in the Heggies report constitutes administrative action that was unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

CG/DIP's response

While Proposed Opinion 26 is directed at DERM, the CG notes that the Heggies report states (at page 22) that the Project was compliant in nearly all respects when windows and doors were closed. Proposed Opinion 26 can therefore only be formed if it (sic) accepted that the measurement of noise should ignore mitigation measures provided or offered at the sensitive receiver. As discussed in this submission, this is not a clear cut issue.

CNI's response

CNI did not comment on proposed opinion 26.

DERM's response

DERM disagrees with this Opinion. Although DERM did not document a formal record of the consideration of the Heggies report, DERM did review, consider and discuss the Heggies report. It would be factually incorrect for the Proposed Opinion to indicate DERM did not consider the report and act accordingly.

DERM's noise expert concluded that whilst the Heggies report provided valuable information on a number of issues, it did not provide a sufficient basis to take any compliance action due to a lack of clarity in defining the 'R' categories.

As a result of DERM's review of the Heggies report and the ASK report, DERM determined that it would be appropriate to undertake a monitoring program. Accordingly, DERM initiated the monitoring program described in Opinion 34.

My comment

There is no documentary evidence of DERM's consideration of the Heggies report. However, I accept its submission that the department considered the report, but disagree with the actions outlined in its response to proposed opinion 34 were initiated following its consideration of the Heggies report.

Taking into account DERM's concerns, I have formed Opinion 27, substantially as it was proposed.

Opinion 27

DERM's admitted failure to take action in respect of the findings contained in the Heggies report constitutes administrative action that was unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

10.7 Is imposed condition 7(b) enforceable?

10.7.1 Queen's Counsel's advice

Mr Wensley QC advised me:⁴⁵⁸

The [WM] opinion is, of course, just that – an opinion. But it provides, it seems to me, a solid basis for a decision maker – for instance, a Court – to find that, within the terms of Condition 7(b), construction activities for works on or above the surface were generating excessive levels of noise at relevant times, particularly at night, so that they were prohibited from being undertaken between 6:30am to 6:30pm Mondays to Saturdays, but also prohibited from being undertaken at any time on Sundays and public holidays, subject to the special circumstances exception mentioned in my earlier advice. That is, there is a solid evidentiary basis for asserting, if not concluding that, as a matter of fact, there have been² breaches of Condition 7(b) in respect of the relevant works.

The question is, then – what flows from this?

My instructor points to two possible bases of jurisdiction responding to breaches of Condition 7. The first relates to the responsibility of the Coordinator-General for the regulation of noise from night-time surface work with respect to the application of Condition 7(b). I agree with my instructor's view that, having considered the *State Development and Public Works Organisation Act 1971* ('SDPWO Act'), the Coordinator-General has a number of enforcement options, including acting under s.157B, s.157I and s.54G(2) of the SDPWO Act, and s.505 of the *Environmental Protection Act 1994*.

⁴⁵⁸ Advice of Mr Wensley, QC, dated 20 December 2010 at pages 2 and 3.

As well I note and agree with my instructor's view that the imposed conditions may be treated as conditions of a development approval under the *Sustainable Planning Act 2009*, with consequent results.

Further, I note my instructor's view that, on the basis of the table in Schedule 4, Appendix 1, of the Change Report, the Environmental Protection Agency has jurisdiction with respect to Condition 9. This raises the possibility that the Department of Environment and Resource Management has jurisdiction to regulate noise nuisance, which was not approved under the imposed conditions and, further, that the Department of Environment and Resource Management has jurisdiction to regulate "excessive" noise from night-time surface works, being noise nuisance under the *Environmental Protection Act*.

There seems to me to be substance in my instructor's view that DERM has the powers referred to in s.4.2 of my instructions.

² And, subject to further evidence gathering, may be continuing.

The powers that I referred to in s.4.2 of my instructions to Mr Wensley were:

- require TJH to provide information about noise nuisance (s.323 and s.451, EP Act)
- issue an EPO to TJH about noise nuisance (s.358, EP Act)
- prosecute TJH for the offence of causing noise nuisance (s.440, EP Act)
- ask the Planning and Environment Court for an order restraining TJH from committing the offence of causing noise nuisance (s.505, EP Act)
- ask the Planning and Environment Court for a declaration about whether the noise from night-time surface work has substantially been reasonable (s.54G(2), SDPWO Act).

10.7.2 Opinion

The CG, DIP and DERM have significant responsibilities in ensuring compliance with condition 7(b). I accept that there are some challenges in enforcing the conditions because of their lack of clarity, the technical complexity of the issues, and the resources necessary to enforce compliance.

The evidence needed to enforce the CG's imposed conditions would include:

- technical evidence that the noise goals have been exceeded at a specific time and place
- reliable and relevant noise monitoring results supported by a technical report from a suitably qualified noise consultant. The noise consultant would need to explain the noise monitoring results and whether the sound pressure level readings that exceed the noise goals had been generated by the Project's works
- statements from persons affected by the noise. Statements would need to at least include information as to dates, times and duration of noise and any characteristics of the noise (tonal or impulsive). They would also include whether there was any consultation about noise mitigation associated with the Project. If there had been consultation, then details of that consultation should include timeframes, form, purpose and outcome of the consultation, what mitigation measures were offered and, if so, if they were carried out.

There are difficulties in conducting a noise monitoring program because of the number of worksites across the Project corridor. Different types of work are being undertaken at different times, and that work changes on a regular, if not daily, basis. There are many documents that evidence what is happening at particular times. The review of these documents is necessary as a form of verification of any possible exceedence against the work being conducted, by whom, and the equipment being utilised at the time of the exceedence.

A further difficulty in the monitoring of noise is that noises that cause the most complaints are intermittent (measured by LA_{max}), for example, dropping a heavy metal object. Unless a noise meter has been set up and is already running, the noise will have passed and the opportunity lost to record the sound pressure levels.

However, I consider that, based on the material before me, including the legal advice obtained by my Office from Mr Wensley QC and the report from WM, the condition is enforceable. This means that with the appropriate evidence, including expert evidence, the CG can utilise the regulatory tools detailed in section 10.4.1 and DERM can utilise the regulatory tools mentioned in section 10.4.3.

The proposed report contained the following:

Proposed Opinion 27

I consider that:

- condition 7(b) is enforceable
- powers are available to the CG, DIP and DERM under the SDPWO Act and EP Act to compel TJH and/or other entities to comply with condition 7(b) (specifically, to ensure that noise from night-time surface works is not excessive).

CG/DIP's response

DIP and the CG accept Proposed Opinion 27, however, make the following observations.

Exercise of powers

The CG is of the view that all of the imposed conditions for the Project are enforceable. However, the issue is whether there has been a breach of a condition in respect of which enforcement action can be brought.

Before the CG can exercise his enforcement powers, the CG must be satisfied:

- that TJH or the other entities are in breach of condition 7(b);
- there is evidence available that would be capable of supporting the allegation of a breach of condition 7(b) *to the relevant standard*, including robust technical evidence that the noise goals have been exceeded and statements from the affected resident (which have proved difficult to obtain in other enforcement actions undertaken by the CG);
- the Strategic Compliance Plan has been complied with; and
- consideration has been given to the two-tiered test for the decision to prosecute in the Director of Public Prosecutions' *Directors Guidelines* of whether there is sufficient evidence and whether it is in the public interest.

As the Ombudsman observes (at page 152 of the Proposed Report), there are challenges in enforcing the conditions due to, amongst other things, the technical complexity of the issues and the resources necessary to enforce compliance. Another

challenge is the length of time it takes from commencement to conclusion of enforcement proceedings generally. For these reasons, the CG favours an approach using non statutory tools such as communication and education which encourages immediate improvement in behaviour on the ground, with enforcement action only taken as a last resort.

CG powers only

The SDPWO Act confers the Part 7A enforcement powers on the CG only⁴⁵⁹ (and not DIP).

CNI's response

CNI did not comment on proposed opinion 27.

DERM's response

Given that DERM is seeking further advice about proposed recommendation 19 in accordance with your direction, DERM cannot, at this stage provide specific comments in relation to proposed opinion 27. DERM does however agree that it has a wide range of powers available under the *Environmental Protection Act 1994*, some of which may assist with enforcement in the event condition 7(b) is not complied with. It must be noted however, that the CG is the entity with jurisdiction with respect to condition 7(b).

It is also worth noting that DERM did actively engage DIP in discussions regarding the use of the enforcement tools available under the *Environmental Protection Act 1994* due to a perceived lack of intermediary enforcement tools available for DIP to utilise on behalf of the CG. Parts of this discussion are identified within statement excerpts on pages 168 and 169 of the Proposed Report. The reason DERM discussed this possibility with DIP was to ensure any future action was not inconsistent with the intent of the CG conditions or any proposed enforcement action to be undertaken by CG.

My comment

I note the CG/DIP's response. DERM's response does not persuade me to alter my view.

I form Opinion 28, which is slightly modified from proposed opinion 27.

Opinion 28

I consider that:

- condition 7(b) is enforceable
- powers are available to the CG under the SDPWO Act and DERM under the EP Act to compel TJH and/or other entities to comply with condition 7(b) (specifically, to ensure that noise from night-time surface work is not excessive).

The proposed report asked the CG and DERM to:

⁴⁵⁹ The entities listed in s.54F(2) of the SDPWO Act have the right to bring proceedings under the SP Act and the EP Act or to seek a declaration under s.54G of the SDPWO Act. These are, for condition 7(b), the CG, BCC, the State and anyone whose interests are significantly adversely affected by the subject matter of the proceeding.

- review the legal advices of Mr Wensley QC and the expert report of WM (Dr Bullen, acoustical consultant) and
- collate and review all reliable and probative evidence relating to noise generated from the Project, including, for example, the Heggies report and the CNI report and
- decide whether the CG and/or DERM should take regulatory action under the SDPWO Act and/or the EP Act including whether to seek a declaration under s.54G(2) in the Planning and Environment Court concerning whether there has been substantial compliance with condition 7(b) in relation to noise from night-time surface work and
- advise me of their decisions.

I have received that advice from both the CG and DERM, and have taken it into account in preparing this report.

I note that the CG has concluded that there is no basis to retrospectively proceed with the use of statutory processes under the SDPWO Act. I was pleased to note a recent example (during the Easter 2011 period) of the CG's move towards a structured, cohesive and integrated approach (as between his Office and DERM) to the regulation of noise from night-time surface work, which I mention in section 11.9.2.

It must be noted that in forming my opinions and making my recommendations, I am not expressing any opinion about the conduct of BrisConnections or TJH or their compliance with condition 7(b).

10.7.3 Remainder of Project

As there is no statutory basis to change the imposed conditions under which the Project is proceeding,⁴⁶⁰ agencies must look to enforcing the current conditions, and gathering the necessary evidence to do so. The agencies must be prepared to take any necessary regulatory action to protect the community from excessive noise.

In chapter 11 of this report, I outline the broad action that I consider should be taken by the agencies to improve their monitoring and compliance work for the remainder of the Project which in turn will, in my view, assist in addressing community concerns.

⁴⁶⁰ Record of interview with Officer E, line 1382.

Chapter 11: Coordination, resourcing and future monitoring

11.1 Overview

This chapter examines agency responsibilities for coordinating, monitoring and enforcing compliance with the conditions, and the resources that were committed to that task. Also, future coordination and regulation of noise from the Project is addressed.

11.2 CG

As mentioned in section 5.5.1 of this report, schedule 4 of appendix 1 of the change report is a table setting out the entities the CG nominates to have responsibility for each imposed condition, namely:⁴⁶¹

Phase/condition reference	Proponent responsibility/tasks	Entity with jurisdiction	Consultative bodies
Schedule 3, condition 7	General Construction	Co-ordinator-General	Brisbane City Council, Environmental Protection Agency, Department of Main Roads, Queensland Transport

Therefore, schedule 4 provides that the CG has responsibility for ensuring compliance with condition 7 and in doing so will consult with, among others, the EPA. With the machinery of government changes on 26 March 2009, the EPA was subsumed into DERM and the functions of the EPA are now carried out by DERM.

The CG has primary responsibility for condition 7 as required by schedule 4.

Opinion 29

Having regard to schedule 4, the CG has primary responsibility for ensuring night-time surface work complies with condition 7(b) and for taking appropriate regulatory action when there is prima facie evidence of non-compliance with the condition.

CG/DIP's response

The CG accepts Proposed Opinion 28 [Opinion 29].

The CG also has the option to confer jurisdiction in relation to condition 7, or any other imposed condition, to another entity at any time by public notification pursuant to section 54B(3)-(6) of the SDPWO Act.

⁴⁶¹ See s.54B(3), SDPWO Act and see for example CG (October 2009) Coordinator-General's Change Report Airport Link Project—Wooloowin Worksite Modification [accessed at <http://www.dip.qld.gov.au/resources/project/airport-link-tunnel/cg-change-report-oct-2009.pdf> on 12 November 2010] at page 37.

CNI's response

CNI did not comment on proposed opinion 28 (Opinion 29).

DERM's response

DERM agrees with this Opinion.

My comment

As the parties have either agreed or not objected, I form Opinion 29 (proposed opinion 28) as proposed.

11.3 DERM's jurisdiction

Schedule 4 relevantly states:

Phase/condition reference	Proponent responsibility/tasks	Entity with jurisdiction	Consultative bodies
Schedule 3, condition 9	Noise and Vibration	Environmental Protection Agency	Department of Main Roads, Brisbane City Council

The effect of schedule 4 is that DERM will determine whether the predictive noise modelling predicts that noise goals will be exceeded, and in that event, will ensure that consultation and reasonable and practicable mitigation and management measures have been adopted.

Under the EP Act, there is an offence of causing an environmental nuisance, including a noise nuisance.⁴⁶² However, that offence does not apply to development carried out under a development approval (which includes CG's imposed conditions)⁴⁶³ 'that authorises the environmental nuisance'.⁴⁶⁴ Consequently, DERM has jurisdiction to investigate environmental nuisance that was not approved under the development approval.

Opinion 30

DERM has jurisdiction under the EP Act to:

- investigate alleged noise nuisance from night-time surface work
- take regulatory action (whether administrative or statutory) against a person who has caused an environmental nuisance, to the extent that the imposed conditions do not authorise the environmental nuisance.

CG/DIP's response

Noted.

⁴⁶² Sections 15 and 440, EP Act.

⁴⁶³ Section 54(D)3, SDPWO Act.

⁴⁶⁴ Schedule 1, clause 3, EP Act.

CNI's response

CNI did not comment on proposed opinion 29 (Opinion 30).

DERM's response

DERM agrees with this Opinion, noting that in order to act accordingly DERM must first establish a contravention of condition within the CG's jurisdiction and would liaise with the CG (as the entity with jurisdiction for condition 7(b)) about an appropriate enforcement response in this regard.

My comment

As the parties have either agreed or not objected, I make Opinion 30 (proposed opinion 29) as proposed.

11.4 Joint regulatory responsibility

It follows that both DERM and DIP have regulatory responsibilities in respect of this Project. Where a group of regulators administer a regulatory scheme, one regulator (the 'lead agency') should take the primary responsibility because, without leadership, the coordination of the administration of the scheme may suffer. Consequently, regulators will incur unnecessary costs (for example, through duplication of effort) and their reputations as effective regulators are likely to be prejudiced.⁴⁶⁵

Recommendation 14

For all future significant projects where there is joint regulatory responsibility between the CG and another agency, the CG have appropriate arrangements in place in accordance with the relevant legislation (supported by a written agreement such as a memorandum of understanding) identifying which agency is the lead agency for specified categories of cases and the responsibilities of the lead agency and partner agencies.

CG/DIP's response

The CG accepts Proposed Recommendation 21 [Recommendation 14].

CNI's response

CNI did not comment on proposed recommendation 21 (Recommendation 14).

DERM's response

DERM supports this recommendation. DERM notes that on a number of occasions DIP and CNI have acted independently of DERM in undertaking actions in relation to noise management. DERM suggests that this proposed Recommendation be expanded to require the development of a similar written agreement between CG, CNI and DERM

⁴⁶⁵ See page 51 of my Office's *Tips and Traps for Regulators* at http://www.ombudsman.qld.gov.au/Portals/0/docs/Publications/Inv_reports/Tips%20and%20Traps%20for%20Regulators_FINAL_for_web.pdf as at 10 December 2010.

which clarifies roles and communication to be put in place for the remainder of this project.

My comment

As the parties have either agreed or not objected, I make Recommendation 14 (proposed recommendation 21) as proposed. I consider that it is unnecessary for my recommendation to apply for the remainder of the Project as DERM suggests.

11.5 CNI's role

11.5.1 DIP's submission

According to an early DIP submission to my Office,⁴⁶⁶ CNI's role is to provide management services on behalf of the State in relation to the agreement between the State and BrisConnections. This includes managing, on behalf of the State, risks, issues or disputes that arise and negotiating and coordinating any modifications to the delivery of the Project.

A fuller response was provided by DIP and is outlined at section 11.5.4 of this report.

11.5.2 CNI website statement

Despite this, CNI added the following statement to its website on or before 18 November 2010:⁴⁶⁷

CNI is the State's representative on the Airport Link, Northern Busway (Windsor to Kedron) and Airport Roundabout Upgrade projects. CNI represents the State's interests in the projects and liaises closely with the project team on the full range of aspects of project delivery including design and construction.

As part of its role, CNI monitors the project's compliance with the Coordinator-General's conditions and tests TJH's activities and proposed activities against the conditions and the Project Deed.

As part of this work, CNI reviews all notifications and materials prior to their distribution to the community. CNI also monitors project works by **conducting ad-hoc independent environmental monitoring, considers possible breaches of conditions**, conducts inquiries into the project's complaint management and undertakes regular site visits. [emphasis added]

11.5.3 Project Management Agreement

The Amended and Restated Project Management Agreement between the State (represented by DIP, Queensland Treasury, (then) Queensland Transport and (then) Department of Main Roads) and CNI dated 30 July 2008 states that CNI agrees to carry out the following services:⁴⁶⁸

- (a) managing the procurement of the Projects, including the following tasks:
 - (i) undertaking overall management responsibility for the effective procurement of the Projects;

⁴⁶⁶ DIP (July 2010) Submission to the Queensland Ombudsman – Preliminary Inquiries at page 2.

⁴⁶⁷ At http://www.citynorthinfrastructure.com.au/community_information/fag2.html as at 10 December 2010.

⁴⁶⁸ Section 2.1 of State of Queensland and CNI (30 July 2008) Amended and Restated Project Management Agreement.

- (ii) coordinating the conduct of the procurement processes for the Projects;
 - (iii) evaluating bid proposals received for the delivery of the Projects;
 - (iv) development, evaluating, negotiating and recommending the project documents for the Projects;
 - (v) providing recommendations to the State regarding the shortlisting of proponents and the awarding of contracts following a competitive bid process for the works to be undertaken in respect of the Projects;
 - (vi) negotiating with affected land owners on acquisition and compensation issues and managing the acquisition, resumption and compensation processes;
 - (vii) acquiring and disposing of any land associated with the Projects as agreed with the State;
 - (viii) assisting with finalising the requirements for the EIS and CDIMP processes and any governmental approvals relating to the Projects; and
 - (ix) doing all other things necessary to bring construction of the Projects to completion and commissioning the commencement of operations;
- (b) providing ongoing management services in relation to the contracts awarded by the State for the Projects;
 - (c) doing all things necessary or incidental to the above tasks as directed by the State; and
 - (d) any other services related to the Projects agreed by the State and CNI to be performed by CNI.⁴⁶⁹

I note that there is no requirement for CNI to monitor compliance with the imposed conditions. I am not aware of any subsequent agreement to do so under paragraph (d), although on two occasions the CG requested CNI to investigate and report on possible breaches of condition 7 and condition 9.

11.5.4 Views of DIP Compliance Unit officers

Officer E, at the time the Director in charge of the DIP Compliance Unit, explained to my officers:⁴⁷⁰

... CNI does investigations, refer the report to us, this is what's happened on a couple of the matters I've been involved in. They refer a report to us, we have a look at it, discuss it with legal and sort of discuss a strategy and the way to go, and then we go and do it. So there's no actual process for how that happens.

My officers asked Officer F, an officer of the DIP Compliance Unit, about whether CNI takes part in all compliance related issues.⁴⁷¹

I believe, how I see it, their role is also if they receive a complaint and TJH haven't satisfactorily, well to the person's, hasn't resolved to the person's satisfaction, I believe, how I see is their role to investigate that to see if TJH has followed correct procedure and they have satisfied the complaint. So I see their role as overseeing what the actual, on the coalface what TJH are doing.

But in accordance with the conditions and their deed or something like that, I'm not sure about the deed, contract arrangement between the State and BrisConnections.

The proposed report contained the following:

⁴⁶⁹ Definition of 'services' in State of Queensland and CNI (30 July 2008) Amended and Restated Project Management Agreement.

⁴⁷⁰ Record of interview, line 196.

⁴⁷¹ Record of interview, line 811.

The views of Officers E and F about CNI being responsible for overseeing TJH's compliance with conditions is of concern and wrong. CNI has no such role under the Project Management Agreement in the absence of any subsequent agreement to that effect. There is none to my knowledge.

The proposed report contained the following:

Proposed Opinion 30

The opinion of the DIP Compliance Unit that CNI should oversee and investigate compliance with the imposed conditions in schedule 3, appendix 1 of the change report on a once off or continuing basis constitutes administrative action that was wrong for the purposes of s.49(2)(g) of the Ombudsman Act.

CG/DIP's response

DIP requests that Proposed Opinion 30 be removed.

The DIP Compliance Unit is well aware that the CG is responsible for compliance with and enforcement of imposed conditions and has not attempted to devolve this responsibility to CNI.

The State is the proponent for the Project. CNI (being a special purpose vehicle company wholly owned by the State) has a role in relation to compliance for the Project because it provides management services for the contracts awarded by the State for the Project. CNI performs these services on behalf of the State. **The CG is entitled to rely on the services carried out by CNI to assist the CG in his compliance role.** [emphasis added]

CNI's functions and responsibilities mean that it is familiar with all aspects of the Project and the operations of the contractor, TJH. Consequently, CNI is usually able to promptly provide or access information (whether factual or technical) in response to a request from the CG.

When assessing whether there has been a breach of a condition in respect of the Project and if so, whether enforcement proceedings should be undertaken, the CG would take detailed consideration of a range of information, available evidence and advice, including reports and information provided by CNI (as well as any submissions by BrisConnections and TJH).

This procedure was followed by the CG:

- prior to issuing enforcement notices in November 2010 pursuant to section 157B of the SDPWO Act, to BrisConnections and TJH in respect of contraventions of a condition requiring the transport of spoil by road using only those haulage routes identified in an applicable EMP; and
- prior to issuing enforcement notices in December 2010 to BrisConnections and TJH in respect of contraventions of a condition concerning night time shotcrete deliveries to the Woolloowin Worksite.

Project Management Agreement

There are two sections in the PMA which make CNI responsible for managing the contractor's compliance with the CG's imposed conditions.

First, part (b) of the definition of "Services" in the PMA provides an ongoing obligation to provide "*management services in relation to the contracts awarded by the State for the Projects*". The Macquarie Dictionary defines management as "*the act or manner of*

managing; handling, direction, or control.” An industry definition of “project management” is:

“Project management is the application of knowledge, skills, tools and techniques to project activities to meet project requirements. Project management is accomplished through the application and integration of the project management processes of initiating, planning, executing, monitoring and controlling, and closing. The project manager is the person responsible for accomplishing the project objectives.”⁴⁷²

Secondly, clause 7.2 of the PMA states:

“Without limiting the scope of the Services, the parties acknowledge that CNI may be required to carry out the following contract management activities for the Projects:

- (a) manage any risks, issues or disputes which arise;*
- (b) monitor and evaluate the delivery of the Projects and the performance of the contractors;*
- (c) review any contractual incentives and performance indicators to ensure they remain appropriate;*
- (d) negotiate and coordinate any modifications, if any, to the delivery of the Projects;*
- (e) appoint any personnel to manage the contracts during the construction and ramp-up phases ...”*

The State, as the proponent of the Project, implements the conditions in the Change Report through a contractual agreement between the State of Queensland and BrisConnections (**Project Deed**).⁴⁷³ BrisConnections, in combination with related entities, has a contractual agreement with TJH (“the Design and Construct Contract”) to design and construct the Project.

Clause 9.2 of the Project Deed (page 93) requires BrisConnections to ensure that TJH (and BrisConnections other associates) comply with the conditions and recommendations contained in the Change Report, in carrying out the Project Activities.

In addition, the CEO of CNI has been appointed as the State’s Representative under the Project Deed and can direct the contractors on behalf of the State (see Clause 6.4 on page 73 of the Project Deed).

Therefore, CNI has a responsibility under the PMA to monitor and evaluate the performance of the contractors under the Project Deed, which includes the obligation on the contractors to comply with the conditions of the Evaluation Report and the Change Report.⁴⁷⁴

Consistent with the above it has always been the view of DIP (at all levels) and the CG that part of CNI’s function is to ensure that the contractor complies with the imposed conditions for the project. [emphasis added] See, for example, the

⁴⁷² Project Management Institute, *A Guide to the Project Management Body of Knowledge* (PMBOK Guide), Third Edition.

⁴⁷³ The Project Deed can be accessed at http://citynorthinfrastructure.com.au/media-and-publications/project_documents.html

⁴⁷⁴ The ongoing role of CNI in the management of the Project was confirmed by the Government when it did not support the recommendation to wind up CNI and transfer CNI’s compliance management responsibilities to the departmental form. In “*Brokering Balance: A Public Interest Map for Queensland Government Bodies – An Independent Review of Queensland Government Boards, Committees and Statutory Authorities Part B Report by the Independent Reviewers: Ms Simone Webbe and Professor Patrick Weller AO March 2009*” the authors noted that “CNI is a wholly State Government owned Special Purpose Vehicle (SPV) company under the Corporations Law to undertake contractual activities and compliance management for the Airport Link, Northern Busway (Windsor to Kedron) and Airport Roundabout Upgrade Projects.” (underlining added). The authors recommended (recommendation 103) that these functions be transferred to a suitable departmental form.

letter from the Deputy CG, a delegate of the CG, to the CEO of CNI dated 24 December 2009 which states:

"I wish to remind you of your obligations to monitor and manage the contractors involved in this project and I consider that this role includes ensuring that all works for the project comply with the conditions imposed in the Coordinator-General's report and change reports for the project."⁴⁷⁵

Additionally, CNI has previously acknowledged that it has this role. Please see the Supporting Material for Proposed Opinion 30 for examples of CNI undertaking investigation of complaints as part of its normal practice.

Statements by DIP officers

DIP would like to clarify the context of the statements made by Officer E in his interview which are relied on by the Ombudsman in the Proposed Report (page 157) to reach Proposed Opinion 30.

The first comment from Officer E (Line 333) was in response to a question from the investigators regarding a statement in the submission provided by DIP on 27 July 2010 in response to the Ombudsman's preliminary inquiries (**DIP Submission**) that CNI has responsibility for risks, issues and incidents. The investigator asked at Line 326 "Can you explain a bit more about the definitions of those things?". This was not a question "about the responsibilities of CNI under the PMA", but rather a request to clarify the DIP Submission. Officer E clearly stated that he wasn't sure what the reference in the DIP Submission was to, but then attempted to provide an answer. It is not stating it fairly to conclude from these comments that this reflects the DIP Compliance Unit's view of CNI's role under the PMA.

The second comment from Officer E (Line 196) was made in the context of an earlier discussion with investigators of whether the Compliance Unit had any manuals or written policies as to how investigations should be conducted. While the discussion is poorly transcribed (Lines 165 to 171), Officer E mentioned to investigators that he had recently attended a Crown Law Update for environmental regulators which advised that regulators should refer to the manual on tips and traps for regulators issued by the Ombudsman, which sets out investigative practices. Officer E confirmed that the Compliance Unit does not have a written policy on investigations (Lines 157, 174 and 191). Officer E had a copy of the Ombudsman's Manual with him in the interview and showed it to the investigators during this discussion and specifically asked at Line 171 "Is that the sort of thing you're talking about?". The investigator's response was "Yeah, yeah, well most regulators will have something in their, in that order." Officer E's response was stating that the Compliance Unit does not do investigations of that nature, by which he meant formal investigations which follow the procedures outlined by the Ombudsman of setting up an investigation plan, conducting interviews and gathering evidence and submitting a formal report for consideration. The comment at Line 196 was an attempt by Officer E to provide further relevant information regarding the investigation process.

CNI's response

CNI did not comment on proposed opinion 30.

DERM's response

DERM did not comment on proposed opinion 30.

⁴⁷⁵ See Supporting Material.

My comment

Further Project Management Agreement provisions

Clause 2.15 of the Project Management Agreement states:

CNI may represent that the Services are undertaken with the authority of the State for the purposes of managing the procurement of the Projects and providing ongoing management services in relation to the contracts awarded for the Projects.

Clause 3(d) provides:

- (d) Following the awarding of the contracts for the delivery of the Projects, the parties acknowledge and agree that CNI will provide ongoing management services in relation to such contracts, including any necessary administration, supervision, inspection and co-ordination activities. Preliminary funding for provision of these Services has been approved by the State, and a further funding application has been made to the State. It is expected there may be an overlap in time between the Services provided for the procurement stage and the delivery stage of the Projects.

Clause 4.1(a)(i) provides that DIP is one of the two sources of funding for CNI.

Clause 11.1 provides that the Director-General of the former Department of Infrastructure and Planning is one of the two recipients of notices under the Project Management Agreement.

Project Deed

The Project Deed dated 7 December 2007 is between the State and BrisConnections. Clause 45.1 provides that the Chief Executive Officer of CNI is the recipient of notices under the Project Deed on behalf of the State. The signatories to the Project Deed on behalf of the State were the then Minister for Main Roads and Local Government, the then Chief Executive of the Department of Main Roads and a delegate of the then Chief Executive of Queensland Transport.

Clause 4.4 states:

... the State will procure the design and construction of the State AL Works in accordance with the Performance Specification and the State Works Deed.

Clause 7.5(a) provides that the State and any person authorised by it may enter the Project areas for the purposes of inspecting or testing any part of the Project works. It goes on to state:

The power to test any part of the Project Works ... includes the power to carry out tests on any part of the Project Works ...

Clause 15.3(a) states:

If a PPP Co, the State Works Contractor or the NB Works Contractor chooses to compress the D&C activities or otherwise accelerate progress:

- (a) The State will not be obliged to assist or take action to assist or enable that PPP Co, the State Works Contractor, or the NB Works Contractor to achieve any particular sequencing or rate of progress of the Project Activities ...

Application for Treasurer's approval to establish a special purpose company

CNI provided my Office with an undated copy of a letter from Mr Ross Rolfe, Coordinator-General and Director-General of the then Department of Infrastructure and Planning to Mr Gerard Bradley, Under Treasurer. The letter states:

As Coordinator-General, I would be responsible to [sic] procuring the Projects on behalf of the Minister for Infrastructure.

It was accompanied by a document, which I assume is the application for the Treasurer's approval under s.44 of the FAA Act to establish a special purpose company under the *Corporations Act 2001*.

Both these documents had previously been released under the *Right to Information Act 2009*, as they bear an 'RTI Release' watermark.

Page 2 of the application states:

Based on discussions to date between the Project team and key government agencies, it is proposed the primary roles and responsibilities of the proposed entity (Project Vehicle) would include:

- overall responsibility for the effective delivery of those two major infrastructure projects;
- coordination of the conduct of the Project procurement processes;
- making recommendations to the State regarding the short listing of bidders and the awarding of contracts following the bid process; and
- potentially, the ongoing oversight and management of contractual arrangements put in place by the State over the long term. Responsibility for this role requires consideration by the Board and relevant key issues are canvassed further in this paper.

The application sets out other options for the structure of the Project vehicle, namely a department of government, a project board under the SDPWO Act, a separate statutory authority and a government owned corporation. In respect of the possibility of the project vehicle being a project board under the SDPWO Act, the application states that structure has:

... less flexibility in terms of making commercial decisions and keeping and maintaining a commercial focus and as regards the provision of flexible terms and conditions for the engagement and retention of key staff.

The application also states:

The Coordinator General's dual role in approving the EIS for the Airport Link and undertaking responsibility on behalf of the Minister for Infrastructure for the procurement of the Projects will be assessed. The Coordinator-General will ensure appropriate delegations and separations of duties are in place for all staff involved in the Projects.

Recommendation to Deputy Premier, Treasurer and Minister for Infrastructure

CNI also provided my Office with a copy of a briefing note from Treasury to the Deputy Premier, Treasurer and Minister for Infrastructure dated 6 December 2006 (also previously released under the Right to Information Act).

Paragraph 5 states:

A proprietary company is proposed on the basis that it will facilitate focus on the procurement process and provide an appropriate governance arrangement under the *Corporations Act 2001*. The risks associated with this approach are that the entity will not be subject to the competitive neutrality provisions of the *Trade Practices Act 1974*.

In my view, it is clear from the provisions of the Project Management Agreement, the Project Deed, Mr Rolfe's application to the Treasurer and the Treasurer's briefing note that the main purpose of CNI was to procure, or in other words, facilitate the completion of the Project.

While clause 7.5(a) allows the State or its representative to inspect and test certain works, it appears that inspection and testing is also for the purpose of procuring the Project.

I accept that under the Project Deed, CNI has a responsibility to monitor whether TJH is complying with the imposed conditions.

However, I have not been presented with any agreement that requires CNI to take action in the event TJH does not comply with the imposed conditions.

I form the following alternative opinions:

Opinion 31

The main purpose of CNI is to facilitate the completion of the Project.

Opinion 32

There is no agreement that requires CNI to oversee and investigate compliance with the imposed conditions in schedule 3, appendix 1 of the change report on a once off or continuing basis.

The CG, in his response to the proposed report, stated 'The CG is entitled to rely on the services carried out by CNI to assist the CG in his compliance role'. Under the Project Management Agreement, CNI's services include 'any other services related to the Projects agreed by the State and CNI to be performed by CNI'. As the main purpose of CNI is to facilitate the completion of the Project, the CG must be mindful of the perception of his independent role in respect of the information he requests and receives from CNI about compliance with the imposed conditions. In particular, the CG must critically analyse all information received from CNI, while taking into account that the main purpose of CNI is to facilitate the completion of the Project.

While the comment of Officer E does suggest a tendency to rely on CNI for compliance information, I have decided that his evidence is insufficient to form proposed opinion 30.

11.6 DIP resources

Officer E told my officers that as at October 2010, three DIP officers were employed to ensure compliance with all development conditions for all significant projects across all of Queensland (Officer E said there were about five or six significant projects). A fourth officer worked on these compliance issues for part of the week. Relevantly, Officer E said:

Officer E At the moment there's myself, [Officer X] who's the project manager or acting project manager, there's [Officer Y] who basically works part-time or half-time on compliance matters. The other half she's working on the Cross River Rail project, and she's a [AO]7 I think, and [Officer F] AO5, so there's four.

There's additional compliance people for [other significant projects], ... they're paid for by the proponents).

And they're specifically looking at documents that are coming in that require, there's a bunch of conditions that require reports and things to be submitted within certain timeframes, and that position's just really managing that [as] well.

...

Interviewer Okay, so the unit has four people in it in total, and that is for all projects?

Officer E Yeah, at the moment.

Interviewer At the moment?

Officer E Yeah, normally it has three.

Interviewer Okay, so normally there's three, at the moment it's got four because [Officer Y] has come across

...

Interviewer Okay, and [Officer Y] is part-time?

Officer E No she's full-time, she's in, working on compliance stuff part-time.

Interviewer Okay.

Officer E And she's working on a project the other half of her time.

Interviewer Sure, okay.

Officer E The Cross River Rail project.

Interviewer So in terms of resourcing, there's three and a half officers ...

Officer E Yep.

Interviewer ... essentially working on all compliance for all of the projects for the department.

Officer E Yes, and there's the answer.

Interviewer How many projects do you think you, the department has running that they'd be responsible for at this time, just a rough estimate.

Officer E Well, it's mainly lodging and impose conditions, so where there's a development approval for a project then there's no imposed conditions. It's, the conditions are set and then they must be included in a development approval and whoever issues that development approval is responsible for compliance. So current projects that I'm working on ... It's about five or six at the moment. ... We also have an involvement with compliance with conditions for material change of use applications in state development areas, and there's a number of state development areas, but we don't have any issues with those.

...

My officers asked Officer E about DIP's capacity to conduct technical noise monitoring and were advised:⁴⁷⁶

⁴⁷⁶ Record of interview, line 613.

- Officer E We have no monitoring equipment or resources or anything like that. When we did, we engaged a consultant, Heggies, to do monitoring for us at one stage, yeah. You've got that.
- Interviewer Yep.
- Officer E That's the only way we could do monitoring, cause we don't have those resources or the skills. Probably [Officer X] has the skills but he's not engaged to do that.
- Interviewer Okay, so when talking about strategic enforcement, has there ever been any suggestion of doing monitoring in the future?
- Officer E There has.
- Interviewer On a continual basis?
- Officer E There has, but we have to engage probably Heggies or someone to do that, or see if DERM could do it for us, something like that.

My investigation revealed that Heggies' noise monitoring cost DIP a significant sum. I have already discussed the usefulness of the Heggies report and the use DIP made of it in chapter 10.

One must question whether the equivalent of around three and half full-time officers is sufficient to adequately supervise compliance on all significant projects across Queensland. I note that the imposed conditions for the Airport Link Project alone are 29 pages long.

On the basis of DIP's present allocation of staff to the Project, there is little capacity to conduct or supervise the conduct of any significant investigation into compliance with the imposed conditions relating to noise. In my view, the adequacy of the resources deployed by DIP needs to be reviewed.

Recommendation 15

The CG/Director-General of DIP:

- assess the capacity of the DIP Compliance Unit to discharge the CG's and DIP's responsibility to coordinate compliance with conditions on significant projects
- if necessary, acquire or engage sufficient human and technical resources to meet their obligations to coordinate compliance with such conditions.

CG/DIP's response

The CG and DIP accept Proposed Recommendation 22 [Recommendation 15].

CNI's response

CNI did not comment on proposed recommendation 22 (Recommendation 15).

DERM's response

DERM did not comment on proposed recommendation 22 (Recommendation 15).

My comment

As the CG/DIP have accepted, I make Recommendation 15 as proposed.

11.7 DERM resources

DERM has primary responsibility for the regulation of noise nuisance in Queensland due to s.440 of the EP Act, which creates an offence of unlawfully causing an environmental nuisance (including noise nuisance). This offence is qualified by s.440(3), which states that the environmental nuisances mentioned in schedule 1 of the EP Act are excepted. While there are a number of exceptions mentioned in schedule 1, the presence of the unqualified offence leads me to consider that DERM is the lead agency for the regulation of environmental nuisance including noise nuisance.

Opinion 33

DERM is the lead agency for the regulation of environmental nuisance in Queensland.

CG/DIP's response

Noted.

CNI's response

CNI did not comment on Opinion 33 (proposed opinion 32).

DERM's response

DERM would like to see this opinion reworded to read "DERM has a key role in the regulation of environmental nuisance in QLD". Local government is responsible for regulating noise nuisance as per the devolution of noise in section 99 of the EP Reg. Section 106 gives the most relevant circumstances where the devolution does not occur. DERM regulates environmental nuisance in regards to state government issued development approvals and issues relating to state and local government, though there are cases where relevant development conditions exist, in the normal course of business DERM would expect authorising entities to enforce conditions they applied and have jurisdiction for.

My comment

DERM is responsible for the administration of the environmental protection legislation.

I form Opinion 33 (proposed opinion 32) as proposed.

Effectiveness

The proposed report indicated that DERM's largely reactive approach to complaints, where some limited monitoring has been undertaken by its own officers, has not to date, and will not in the future, result in sufficient evidence being obtained to establish compliance by TJH with imposed condition 9(d).

DERM's failure to respond to TJH's responses to s.451 notices and to take action in respect of the findings contained in the Heggies report is noted in section 10.6 of this report.

As at October 2010, DERM's Brisbane City North team comprised a full-time complement of 12 officers. Due to staff movements to other positions, only seven were available for the North Brisbane area. Of those seven, only one officer (DERM Officer B) was allocated to the full-time supervision of the noise, dust, vibration and water issues relating to the Project.⁴⁷⁷ However, Officer B confirmed⁴⁷⁸ he had assistance from another officer for about 50% to 75% of the person's time.

I consider that DERM's devotion of less than two full-time equivalent officers to the regulation of environmental nuisance from the Project may be inadequate.

DERM now has only one qualified noise expert who is not assigned to 'on the ground' monitoring work.⁴⁷⁹ Until mid 2010, the Brisbane City North team also had one officer, skilled in noise measurement. DERM has advised that officer holds a certificate of attainment in Noise Assessment and Control from the University of Western Sydney. That team officer has now left.⁴⁸⁰ DERM has advised he is now working in another team on the same floor in the same building and remains a 'regional resource'.

DERM has advised that recently it purchased five new 2260 B&K noise meters for its South East region and that it has some older B&K noise meters.

I consider that one qualified noise expert may be inadequate to discharge DERM's responsibilities about noise regulation in Queensland. DERM may wish to consider whether the number of noise meters available is sufficient to discharge DERM's responsibilities about noise regulation in Queensland.

I consider DERM is presently only able to effectively respond to environmental issues arising from the Project in clear cut cases. For example, DERM was successful in responding to a discharge by TJH of sodium hypochlorite into Kedron Brook, which left an obvious trail of dead fish and other aquatic forms. There have been a number of other successful enforcement actions resulting in the issuing of infringement notices, although none concerned noise. There was a mediated outcome in relation to noise monitoring conducted by DERM officers at the Woolloowin worksite.⁴⁸¹

Opinion 34

DERM has failed to effectively monitor compliance with the noise goals in condition 9 and such failure constitutes administrative action that was unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

CG/DIP's response

Noted.

CNI's response

⁴⁷⁷ DERM appears to believe noise nuisance from the Northern Busway construction is excluded from the s.440 EP Act offence of causing environmental nuisance by schedule 1 of the EP Act. However, DERM says that because it is often difficult to determine whether noise emanates from the Northern Busway construction or other aspects of the Airport Link construction, it investigates all complaints as if they were about the Airport Link Project. Therefore, I do not need to consider the accuracy of DERM's interpretation that the EP Act does not apply to Northern Busway construction noise.

⁴⁷⁸ Record of interview, line 99, 13 October 2010.

⁴⁷⁹ Record of interview, line 206, 13 October 2010.

⁴⁸⁰ Record of interview, line 199, 13 October 2010.

⁴⁸¹ See my discussion about this in chapter 10.

CNI did not comment on Opinion 34 (proposed opinion 33).

DERM's response

It is not apparent from the information contained in section 11.7 of the proposed Report on what basis the Ombudsman proposes to form the Opinion that the actions undertaken by DERM to monitor compliance with noise goals in condition 9 have not been effective.

DERM is of the opinion that it effectively monitored compliance with the noise goals in condition 9 for the following reasons:

- DERM followed the process for addressing noise complaints as developed by the CG;
- DERM liaised (sic) with TJH to improve the reporting process by recommending changes to their complaints management process;
- DERM ensured that the community was informed of the procedure for the escalation of complaints;
- DERM officers attended the project site and observed TJH employees whilst they were carrying out noise monitoring to ensure that TJH were monitoring noise in accordance with relevant standards and procedures;
- DERM conducted meetings with noise experts from Heggies, CNI, DERM and DTMR to discuss technical issues with respect to noise monitoring and resourcing;
- DERM reviewed TJH non-conformance reports with consideration to DERM Enforcement Guidelines;
- DERM was in regular contact with the noise affected community;
- DERM organised for access to specific households to enable TJH to conduct in-house noise monitoring (to assess noise levels and underpin decisions about mitigation);
- DERM instructed TJH to carry out noise monitoring at a site where it reasonably thought[t] that noise goals will be exceeded;
- DERM officers undertook both impromptu and planned site inspections to assess compliance with the noise goals;
- DERM regularly met with TJH to discuss upcoming works and to assess the effectiveness of noise mitigation to be employed;
- DERM conducted targeted inspections of worksites where DERM was concerned that the activities had the potential to produce excessive night-time noise;
- DERM organised and attended meetings with CNI and DIP to discuss issues surrounding monitoring and assessing compliance with noise conditions;
- DERM initiated regular meetings with BCC to discuss noise issues (for example, discussion [of] the possibility of day-time road closures rather than night-time road closures to reduce the incidence of night time noise complaints);
- DERM conducted noise monitoring inside affected households in response to complaints;
- DERM officers accompanied BCC officers on night time noise assessments to assess the work conducted by the Public Utility Providers; and
- DERM officers negotiated changes to the TJH work practices to reduce noise impacts, for example, ongoing changes to the site entry point at Bowen Hills to reflect the changing noise landscape of the construction site.

In addition, DERM officers conducted a “door-knocking” program to talk to residents in the Bowen Hills and Kedron areas about noise issues and other project impacts. The officers then reported back the concerns of the residents and as a result, DERM subsequently issued a section 451 notice to TJH. The notice was issued to ensure that appropriate mitigation was in place prior to the commencement of works at the Kedron Park Hotel carpark site.

DERM officers report that members of the community vary in their assessment of the effectiveness of DERM in ensuring compliance with the noise goals. This is not uncommon given the highly subjective nature of individual's experience of noise and the diversity of individual's circumstances.

DERM has responded appropriately to complaints in accordance with a process established by the CG and by executing the actions described above, has, in the context of available resources and priorities undertaken reasonable actions to effectively monitor compliance with the noise goals in condition 9.

My comment

I note DERM's advice that it has made numerous inquiries related to the issue of noise from night-time surface work. However, my Office did not find any written record of some of those inquiries. Of the inquiries that were recorded, my Office found little in the way of records of the information gained from those inquiries, DERM's thorough consideration of that information and DERM's plans as to what further inquiries to make in response to that information.

Further, while DERM did correspond with the DIP Compliance Unit, my Office did not find any records to indicate that DERM alerted the CG clearly and in detail to the obvious problems with noise from night-time surface work.

The Project is being built across densely populated inner city Brisbane suburbs. Long-term night-time surface works have no doubt impacted many residents. It has been a significant concern that warranted the thorough consideration and action of DERM, as the regulator. DERM's records do not indicate that it gave the issue proper consideration and action.

I form Opinion 34 (proposed opinion 33) as proposed.

Recommendation 16

The Director-General of DERM:

- assess the capacity of DERM to discharge its responsibilities about noise regulation in Queensland, including responsibilities about noise from significant projects under the SDPWO Act
- if necessary, acquire or engage sufficient human and technical resources to meet the obligations to discharge those responsibilities.

CG/DIP's response

Noted.

CNI's response

CNI did not comment on Recommendation 16 (proposed recommendation 23).

DERM's response

DERM agrees with this proposed Recommendation, noting that information presented within the Proposed Report on page 161 is either factually incorrect or may have been taken out of context in the answers provided during staff interviews.

To clarify, it is true the Brisbane City North team has 12 officers, two of whom are primarily working upon the regulation of the Airport Link Project. This team is one of four teams of similar numbers that undertake environmental regulation activities (specifically in relation to the *Environmental Protection Act 1994* responsibilities of DERM) between Brisbane and the New South Wales border. With (sic) these regional teams there are a number of officers who have experience with setting up and analysing noise monitoring equipment. The noise meter supplier to DERM, Bruel and Kjaer (B&K), conducts training sessions for DERM officers on how to set up and use the noise meters purchased.

Analysis of noise data is more technical and this is where specialist expertise is of great value. The 'skilled but unqualified' officer [referred to] on page 161 has completed a certificate of attainment in Noise Assessment and Control from the University of Western Sydney. This training, funded by DERM as a professional development opportunity, was targeted at collection of noise evidence for use in enforcement purposes. This officer has moved from the Brisbane City North team, but only into another of our regional teams based on the same floor in the same building and he remains a regional resource with substantial noise expertise.

Regional officers also have access to substantial expertise and experience within DERM, including the qualified noise expert you mention on page 161. This person is part of a team of technical experts that are available for input into complex matters across the state, but also to ensure expert input into policy development initiatives. It is not a fair statement to consider this single individual as the only DERM officer in the state qualified enough to set up a noise meter, turn it on and collect data in accordance with the DERM Noise Measurement Manual.

In extreme events, and it has been known to occur, where regional officers identify a lack of capability or availability of necessary noise expertise, DERM has been known to outsource such expertise by commissioning an acoustic consultant.

The comment on page 161 that DERM has five noise meters also needs to include context that this figure referred to in the interview with staff, related to the five new 2260 B&K meters recently purchased for South East Region. Similar purchases occurred across other regions. This purchase supplemented pre-existing stocks of 2250 and 2236 B&K noise meters.

My comment

I note the further information provided by DERM about its resources. Despite those points of clarification, as DERM agrees with the proposed recommendation, I make Recommendation 16 (proposed recommendation 23).

11.8 Monitoring

11.8.1 Reactive monitoring

Reactive noise monitoring is noise monitoring carried out in response to a complaint from an affected resident.

TJH

Airport Link monitoring reports

After receiving a complaint, and subject to the permission of the resident, TJH will conduct noise monitoring inside the affected house. TJH publishes noise monitoring

results in the Airport Link monitoring reports (that are available on the BrisConnections Airport Link website).⁴⁸² I have previously commented on the improvements that should be made to these reports.⁴⁸³

NCRs

To fulfil its obligations under the imposed conditions, TJH also emails NCRs to the CG.⁴⁸⁴ My investigation has shown that in the past, TJH has not regarded an exceedence of the noise goals as constituting non-compliance. However, my Office has sighted NCRs about exceedences of noise goals and as far as Officer E and Officer F were aware, TJH was treating those exceedences as non-compliances.⁴⁸⁵

NCR emails are supposed to be provided to the DIP Compliance Unit within two days of the non-compliance occurring. The DIP Compliance Unit forwards them on to DERM Officer B.

This arrangement means that there is a high probability that the noise source will have ceased before DERM is advised. This makes conducting a meaningful investigation very difficult. DERM Officer B referred one of my officers to a particular NCR they had just received from DIP which related to an incident that had occurred a couple of weeks earlier.⁴⁸⁶

Further, Officer F said he understood TJH and the CG agreed that TJH could have one month to provide NCRs about noise exceedences. He said this was because TJH advised it was unable to complete noise monitoring in response to a complaint and then send an NCR within the prescribed two days.

If this is true, it is very unlikely that DERM or DIP could make use of this information to provide relief for residents affected by night-time noise.

For completeness, I mention that Officer F said such TJH reports about noise monitoring were useful for showing noise levels in the same location over a number of months. If noise levels in that location were consistently high, Officer F said that may be an indication that TJH has not put in place reasonable measures to mitigate the noise. To Officer F's mind, no breach of the imposed conditions arises from an exceedence of the noise goals. Instead, he considers a breach of the imposed conditions arises if, after an exceedence is recorded, TJH does not put in place reasonable measures to mitigate the exceedence. I agree that a breach can arise from a failure to put in place reasonable noise mitigation measures. However, I consider a breach can also arise from an exceedence of the noise goals (see chapter 10).

Finally, about NCRs, Officer E told my officers that where TJH undertakes noise monitoring **outside** a residence (because the occupant refused to allow internal monitoring), an NCR is not required. Such an approach may lead to a distorted view about the extent of noise from night-time surface work. Consequently, TJH should be required to produce external monitoring results in the monthly reports.

⁴⁸² See my discussion of these Airport Link monitoring reports in chapter 9.

⁴⁸³ Refer to section 9.7 of this report.

⁴⁸⁴ Record of interview with Officer E, line 268.

⁴⁸⁵ In their interviews, Officer E and Officer F did not raise any issue about TJH failing to report, via NCRs, exceedences of the noise goals.

⁴⁸⁶ During a file inspection by my officer at DERM's office.

The proposed report contained the following:

Proposed Recommendation 24

In addition to the matters identified in my proposed recommendation 5 concerning the information contained in the Airport Link monitoring reports, I consider the CG should require TJH to produce external monitoring results in the monthly reports.

CG/DIP's response

The CG accepts Proposed Recommendation 24 but requests the substitution of the word "request" in place of "require", consistent with Proposed Recommendation 5.

CNI's response

CNI did not comment on proposed recommendation 24.

DERM's response

DERM supports this proposed Recommendation. DERM is of the view that results of monitoring undertaken externally are useful however they will be of limited value from an enforcement point of view.

My comment

Taking into account the parties' concerns, I have made Recommendation 17, which is slightly modified from proposed recommendation 24, by changing the word 'require' to 'request', and to relate it to Recommendation 2.

Recommendation 17

In addition to the matters identified in my Recommendation 2 about the information contained in the Airport Link monitoring reports, I consider the CG should request TJH to produce external monitoring results in the monthly reports.

DERM

Officer B said that when a complaint came to DERM that had not been raised with TJH before, he would contact TJH and ask the environmental manager to investigate the matter and report back to him.

Officer B also explained that rather than DERM conducting reactive monitoring at night, it would loan noise meters to potentially affected residents and instruct them to activate the meter whenever they heard a loud noise from the Project. I discuss this initiative in more detail in section 11.8.2.

My investigation revealed that DERM rarely carries out noise monitoring at a level consistent with monitoring undertaken for the noise reports outlined in this report due to resourcing, although Officer B did tell my officers about one occasion involving the Wooloowin worksite (which I have mentioned in chapter 10).

Opinion 35

DERM has failed to undertake an effective reactive monitoring program in respect of compliance with the noise goals in condition 9. This constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

CG/DIP's response

Noted.

CNI's response

CNI did not comment on Opinion 35 (proposed opinion 34).

DERM's response

DERM disagrees with this Opinion.

Firstly, the CG conditions do not, in DERM's view, require DERM to undertake any form of monitoring program. Secondly, and notwithstanding this, DERM considers that it has undertaken an effective reactive monitoring program as DERM;

1. addressed complaints in accordance with a process established by the CG and considers that the process is appropriate for dealing with noise complaints;
2. responded to and successfully resolved a noise complaint that was escalated to DERM in accordance with the established process; and
3. in addition to the reactive monitoring that was taken following the escalation of complaints, DERM also took steps to monitor noise.

1. Process established by the CG

A monitoring program may be implemented in response to complaints from the community. In the first instance the CG conditions provide that it is the responsibility of the contractor to undertake monitoring for compliance purposes. The CG conditions also establish a process in respect of non-compliances requiring the contractor to report non-compliances. The contractor is also required to prepare and follow a process for receiving and responding to complaints. DERM notes that the conditions imposed by the CG are largely self-regulatory and this approach is generally consistent with the approach DERM takes to conditioning and managing other environmentally relevant activities (ERA) administered by DERM under the *Environmental Protection Act 1994*.

CNI, DIP and DERM agreed to a process of escalation of complaints which required that, in the first instance the complainant contact [the] TJH Hotline. If TJH failed to resolve the complaint satisfactorily, the complainant could escalate the complaint to the CNI Hotline. If the complainant remained dissatisfied, the complainant was then advised to contact DERM or DIP. Upon receiving a complaint, DERM would determine whether monitoring would assist in resolving and/or investigating the complaint.

DERM considered that the above process is appropriate given the volume and often complex nature of noise complaints (for example, the transitory and subjective nature of noise and the differing sources of noise such as idling vehicles, noise associated with Council street sweepers, contract staff talking loudly).

2. Noise complaint example – Woolloowin

DERM notes that the conditions related to the Woolloowin worksite reduced the potential for noise related complaints by ensuring that structural noise mitigation measures were in place prior to commencement of works. In DERM's view, such conditions are important in establishing mitigation measures to prevent complaints in the first instance.

The wording of the conditions relevant to the Woolloowin site also enabled DERM to take effective action in response to complaints. For example, a complaint was escalated to DERM in relation to the Woolloowin site (as detailed in the proposed Report). DERM reviewed the complaint and successfully resolved the complaint by negotiating a prompt and satisfactory environmental outcome. DERM notes that the Woolloowin conditions were drafted with the benefit of experience in regulating noise from the remainder of the project. It may be appropriate for the Ombudsman's report to acknowledge this.

3. General noise compliance measures – other worksites

The proposed Report does not adequately capture DERM's noise monitoring efforts. Following the review of the Heggies report, DERM placed self-activated noise monitors in selected houses. DERM officers also conducted night time surveillance of project work sites that were identified as being possible sources of noise complaints. The surveillance consisted of driving to sites where night time works were proposed and identifying possible sources of noise, assessing potential noise nuisances and determining where it may be appropriate to conduct future noise monitoring. DERM is continuing to undertake noise monitoring in response to complaints escalated by the community and will conduct attended monitoring at a specific residence following a recent noise complaint.

DERM strongly encourages the Ombudsman to more completely reflect this activity within the report.

My comment

DERM gave my Office a folder of printouts that indicate that in the period between January 2009 and July 2010, DERM only recorded, in its Ecotrack electronic case management system, 10 complaints about noise from night-time surface work. This is compared to about 1,039⁴⁸⁷ received by TJH over the shorter period between June 2009 and July 2010. This is partly due to the DIP 'Process for escalation of complaints' (in which DERM is not mentioned) and CNI's 'Complaints process' (in which TJH is mentioned as the primary point of contact for complaints and although DERM is mentioned as the authority for noise, the only contact detail given is its website). The adequacy of the complaints process will be addressed in a future report of my Office.

A brief summary of DERM's response to each of the 10 complaints follows:

Complaint number	Summary
1	First action taken nearly one month after complaint was received. Records ceased about seven and a half weeks after complaint with a note that noise monitoring had identified potential exceedances and DERM will inform the complainant upon their return from holiday.
2	This investigation consisted solely of telephone conversations with the

⁴⁸⁷ Depending upon how TJH categorised complaints about noise from night-time surface works.

	complainant. Records ceased two days after the complaint was received with an assurance from DERM that it was 'assessing report of results, methodology etc.'
3	Records ceased two weeks after the complaint was received with a note that DERM will call the complainant with information about the 'Terms and Conditions of noise and dust mitigation for this development project'.
4	This complaint was made shortly after complaint 3 by the same complainant. This investigation comprises telephone calls, an email and two site inspections. The last record about noise was to the effect that the DERM officer had handed the complainant's number onto his supervisor to give the complainant a call, as the complainant was very upset and frustrated because she had no noise barriers in front of her house and all the residents in the area 'were getting hammered'.
5	Complainant withdrew complaint.
6	The only record is that DERM left a message for the complainant asking him to call if the issue was still current.
7	DERM immediately met the complainant on site at night for a site inspection. That was the last record. There was no record of the information gained about noise at that site inspection and no indication of DERM's planned next steps.
8	The only records for this complaint are two recorded by the Ecoaccess Customer Service Unit about receiving the emailed complaint and referring the complaint to the investigating officers. There are no records about the investigation.
9	DERM investigated part of this complaint and recorded information about the reason for the noise. The complainant then advised that the noisy works had moved on. As to the other part of the complaint, the last record is that the Complaint Form had been received. There are no records about the investigation.
10	DERM arranged unattended noise monitoring and informed the complainant that the noise was within the goals.

I note DERM's success in dealing with a noisy ventilation fan on the Woolloowin acoustic shed. I consider the real measure of an effective reactive monitoring program is not whether DERM 'wins' but whether it has properly investigated and carried it through to a conclusion. In nine out of the ten complaints summarised above, it has not.

I form Opinion 35 (proposed opinion 34) as proposed.

11.8.2 Observation

As I have mentioned, there is an obvious difficulty with reactive monitoring in that the monitoring is carried out after the alleged excessive noise or noise nuisance has already occurred.⁴⁸⁸

I observe that the reactive monitoring of noise from night-time surface work that has been carried out by DERM has been largely ineffective. I will now discuss the proactive monitoring carried out or commissioned by DIP and DERM.

11.8.3 Proactive monitoring

I have defined 'proactive monitoring' in the *Dictionary and abbreviations*. By way of a fuller explanation, proactive monitoring is monitoring undertaken by an agency of its

⁴⁸⁸ See my discussion about this in section 10.7.2.

own accord, possibly prompted by a number of factors including, for example, an evaluation of complaint trends, planned audits of compliance with conditions on a systemic basis, or suspected failure on the part of an entity conducting its own monitoring of a development condition.

DIP

As I have mentioned, DIP commissioned Heggies to conduct noise monitoring during the construction activities at the Kalinga Park construction site. Heggies produced its 'Heggies report' dated 21 May 2010.⁴⁸⁹

Officer F explained why DIP engaged Heggies to do the independent monitoring:⁴⁹⁰

Officer F	And that's why we did our own, we engaged somebody else to Heggies to do our own independent monitoring, separate from the CNI.
Interviewer	Okay, why would that be?
Officer F	From what I recall, I believe [de-identified], who was the then Deputy Coordinator General for infrastructure projects, which is separate from us, but I believe he wanted to do some monitoring, just say that is the Toombul worksite [Officer F points], I think he wanted to do some monitoring further around the site, further...
Interviewer	Further away?
Officer F	Further away from the worksite.
Interviewer	Were CNI doing it too close for...
Officer F	Also I think, because he was wearing two hats at that stage, he was the chairman of the board for the CNI.
Interviewer	Okay.
Officer F	And also he was the Deputy Co-ordinator General, and I think he wanted to be separate from being the chairman. He wanted to be the Deputy Co-ordinator General and where our department wanted to do their own monitoring as separate from CNI. Possibly seeing that, I don't know, I don't know if it's the public view that CNI are arm in arm with TJH, I don't know, that's, but I think that's probably the diligent thing that he had to do, was take, to wear his DCG hat to say we need to do our own, the Department need to do our own independent monitoring. That's nothing against CNI but just to be seen that we're doing our own as well.

I have already discussed the use DIP made of the Heggies report in chapter 10.

My officers asked Officer E whether DIP had or would do any targeted monitoring of night-time noise in respect of forthcoming activities (for example, a concrete pour) to which he replied:⁴⁹¹

Officer E	We don't do monitoring, so we don't do that.
Interviewer	Yes you don't, but you wouldn't consider okay, there's going to be this really, noisy work happening in four days' time at the Bowen Hills site. We want to go out, we want to find out whether they're going to exceed the noise goals in doing that activity. We'll hire someone and send them out. Does that ever happen?
Officer E	It might. I know CNI do some of that. They have, they have the ability to do monitoring themselves and they have done some of that.

⁴⁸⁹ Airport Link Project: Kalinga Park Construction Site: Construction Noise Monitoring Report.

⁴⁹⁰ Record of interview, line 378.

⁴⁹¹ Record of interview, line 1487.

- I know DERM were doing that targeted program, that was targeted at the sort of Kalinga Park, Toombul area.
- Interviewer So when you say it was targeted, it was targeted at an area not a time frame based on, was it based on the construction work that was happening on those particular nights? Did DERM refer [to] that information to your knowledge?
- Officer E No, not to my knowledge, no...

Based on the evidence gathered in my Office's investigation, the CG's role is that of environmental coordination, not environmental regulation (see section 11.9). Therefore, I consider it is appropriate that DIP should ordinarily oversee DERM's proactive monitoring (that is, reviewing and taking action on information about noise from night-time surface work) as well as the standard of DERM's responses to complaints.

As I mention later in this section, I consider DERM can establish an effective proactive monitoring program by issuing statutory notices under s.451 of the EP Act to TJH requiring information about night-time surface work and using the information obtained to decide upon a targeted, rather than random, program of proactive monitoring.

However, I consider that if DERM fails to carry out an effective proactive monitoring program, it is the responsibility of the CG, as the coordinator, to step in and take whatever action he considers necessary to remedy the situation.

Opinion 36

The CG has a coordination role in respect of the monitoring of noise from the Project to ensure compliance with condition 7(b), part of which is to ensure that a proactive monitoring program is in place.

CG/DIP's response

The CG accepts Proposed Opinion 35 (Opinion 36) to the extent that the CG has a coordination role in respect of the monitoring of noise from the Project to ensure compliance with condition 7(b).

However, the CG does not accept Proposed Opinion 35 to the extent that it states that part of the CG's coordination role is to ensure that a proactive noise monitoring program is in place.

Proactive monitoring by the CG is not efficient or effective and is not a good use of limited resources. Some observations about the value of proactive and reactive monitoring follow:

- The Ombudsman has drawn the conclusion that the reactive monitoring conducted by DERM is not effective and the Heggies monitoring organised by DIP was a proactive program. While DERM will comment on their program, the CG is aware of at least one example of DERM successfully reacting to a complaint, monitoring the noise source, and as a result identifying an exceedance of noise goals and enforcing change (ventilation fans on Wooloowin acoustic shed). It does not fairly reflect the situation to draw a conclusion that DERM's reactive noise program was ineffective and therefore a proactive noise monitoring program must be the solution.
- It is acknowledged by the Ombudsman (page 152 of the Proposed Report) that monitoring of construction noise is difficult, particularly as noises which cause the most complaints are intermittent. However, it is unlikely that complaints would be

made for single instances of these noises occurring, and DERM would not conduct monitoring unless repeated intermittent noise was occurring. As such it is correct to say that a single intermittent sound will have already taken place and not be recorded, but if such instances were occurring regularly it is more than likely that a reactive monitoring program would capture further noise occurrences. A more appropriate conclusion to be drawn would be to make recommendations for improvement and resourcing of the reactive noise monitoring program.

- DERM's approach is consistent with the approaches of other State jurisdictions. Other jurisdictions may mandate through licensing or other regulatory arrangements that proponents or constructors conduct proactive monitoring to check noise modelling (as is done in this Project), however, the State regulatory bodies only conduct monitoring after complaints identify issues of concern.
- NSW DECT noise policy section and DECT Newcastle operations office both report that noise control is based on:
 - Construction noise – Interim Construction Noise Guideline <http://www.environment.nsw.gov.au/noise/constructnoise.htm>
 - Construction is licensed with DECT and requires a Construction Noise and Vibration Management Plan as set out in the guideline. Control is based on monitoring and reporting by the proponent and reactive monitoring by DECT if complaints occur.
- Inquiries by DIP with a noise specialist in the NSW Department of Planning confirmed that this was also their approach to approvals, and had been the situation when he was at NSW RTA.
- Based on an examination of guidelines and discussion with NSW officers, proactive monitoring is not a normal part of construction industry monitoring. The transient nature of the work noise from varying activities and using a range of equipment makes monitoring either a very long task or a very low frequency of detection task. Either way this is not an appropriate use of limited resources, particularly when monitoring is already being carried out by the proponent.
- TJH is conditioned through imposed condition 4(a) and the requirements of 4(d)(ii) to conduct ongoing monitoring to check noise modelling and the effectiveness of mitigation. Monitoring must include a range of activities such as but not limited to scientifically conducted measurements of specified parameters, visual inspections, recording of events and communications with affected property owners and occupants. The Construction EMP Sub-Plans which set out how this monitoring is conducted include both proactive and reactive monitoring, including the following requirements:
 - Conduct ongoing noise monitoring at premises identified in the predictive noise modelling where noise levels are predicted to exceed day and night time noise goals. For every monitoring occasion a sample of ambient noise (in the absence of construction work) will be recorded at a suitable pause in the construction activity.
 - Conduct attended noise monitoring, including the personal observations, at sensitive receptors during construction activities which are predicted to exceed noise goals.
- The overview and auditing of TJH's compliance is conducted by DERM, as well as through 6 monthly independent audits by DCLS.
- The CG's coordination role has so far extended to attending stakeholder meetings, assisting DERM and CNI in negotiations with TJH, and funding a monitoring program. Where CNI-funded monitoring by Heggies identified equipment such as the metal rimmed waste loading scaffolding being noisy TJH changed the equipment. This is behaviour change and at source mitigation as a result of reactive monitoring.

- In light of consultation with other jurisdictions and the examples from the Project so far it seems to be a reasonable approach to continue to rely on proponent monitoring and reactive assessment.

It is requested that Proposed Opinion 35 be amended as follows:

“The CG has a coordination role in respect of the monitoring of noise from the Project to ensure compliance with condition 7(b).”

CNI’s response

CNI did not comment on proposed opinion 35 (Opinion 36).

DERM’s response

DERM did not comment on proposed opinion 35 (Opinion 36).

My comment

The CG/DIP has said that ‘proactive monitoring by the CG is not efficient or effective and is not a good use of limited resources’. Proposed opinion 35 states that the CG’s coordination role includes **ensuring** that a proactive monitoring program is in place. It does not opine that the CG should ordinarily undertake proactive monitoring. The effect of the opinion is that the CG should ensure DERM, as the entity with nominated jurisdiction for noise monitoring, is undertaking a program (or in other words, strategy) including targeted proactive monitoring. The CG should ‘ensure’ by:

- regularly asking DERM for details of the methodology and outcomes of its program
- thoroughly assessing the information provided by DERM
- providing DERM with feedback and direction as to how to improve its program
- if DERM does not heed that feedback and direction and does not improve its program, the CG should undertake the inquiries that are lacking from DERM’s program.

There is little, if any, documented evidence supporting the CG taking actions of the type mentioned.

The CG/DIP has said that ‘It does not fairly reflect the situation to draw a conclusion that DERM’s reactive noise program was ineffective and therefore a proactive noise monitoring program must be the solution’. The proposed report did not draw that conclusion.

I note that it is sometimes desirable to use both reactive and proactive strategies, as one expert in regulatory practice explained:

Most regulators understand the limitations of reactive strategies. Indeed, most regulatory agencies have already made significant investments in methods designed to avert or minimize the need for detection, reaction, and enforcement. Having diversified their tool kits, those agencies now seek some rational strategic framework to make sense of their broader repertoire and to help staff understand what each tool is good for and how to use tools in combination.

The temptation regulators face now is to switch from a reactive strategy (whose failings we know) to a preventative strategy (whose failings we have only recently begun to

discover). Both are limiting, because both emphasize one set of tools at the expense of the other.

The strategic focus that regulators need is risk control (or risk reduction). A control strategy embraces all the tools and considers each stage in the chronology of any harm as a potential intervention point.

Thus a control strategy brings no ideological or a priori preference for preventative or reactive tactics. Rather, per the art of problem solving, a control strategy respects the individual characteristics of each problem; seeks to identify its precursors, vital components, and methods of contagion; and from that analysis, picks the right points and moments to intervene.⁴⁹²

I note that in this case, DERM does not have an obligation to undertake proactive monitoring. However, in this case, I consider it is desirable for DERM to undertake proactive monitoring to supplement its reactive work and enhance its effectiveness as a regulator because:

- DERM knows it is only aware of a small percentage of complaints about noise⁴⁹³
- DERM receives NCRs many weeks after the non-compliance actually occurs, which, in the case of transient noise, often makes it futile to investigate by monitoring
- DERM knows that noise from night-time surface work is a 'risk' and ought to be the subject of particular monitoring.⁴⁹⁴

As I discuss later in this section, the most effective way to establish a proactive monitoring program is to forward statutory notices, such as s.451 notices, to TJH requesting details of upcoming night-time surface works and decide upon a program of targeted monitoring based on the information received back from TJH.

The CG/DIP says '... it is unlikely that complaints would be made for single instances of these noises occurring, and DERM would not conduct monitoring unless repeated intermittent noise was occurring. As such, it is correct to say that a single intermittent sound will have already taken place and not be recorded, but if such instances were occurring regularly it is more than likely that a reactive monitoring program would capture further noise occurrences'.

What the CG/DIP describes in this quote is in fact what I consider to be a proactive monitoring program. To be clear, when I refer to 'reactive monitoring', I am referring to monitoring undertaken directly in response to a complaint, namely undertaken within a short timeframe of receiving the complaint in the hope the noise source is still active.

⁴⁹² Sparrow, Malcolm K (2000) *The Regulatory Craft: Controlling Risks, Solving Problems, and Managing Compliance*, Washington DC, Brookings Institution Press at page 191, cited in Queensland Ombudsman (2009) *Tips and Traps for Regulators* (2nd ed) [accessed at <http://www.ombudsman.qld.gov.au/PublicationsandReports/InvestigativeReports/TipsandTrapsforRegulatorsSecondedition.aspx> on 15 April 2011].

⁴⁹³ My Office's investigation revealed that in the period between January 2009 and July 2010, DERM only received 10 complaints about noise from night-time surface work compared to about 1,039 received by TJH (see section 11.8.1 of this report). This is partly due to the DIP 'Process for escalation of complaints' (in which DERM is not even mentioned) and CNI's 'Complaints process' (in which TJH is mentioned as the primary point of contact for complaints and although DERM is mentioned as the authority for noise, the only contact detail given is its website). The adequacy of the complaints process will be addressed in a future report of my Office.

⁴⁹⁴ For example, the email from DERM to DIP dated 17 May 2010 states that DERM is going to 'kick off a government monitoring program' (original emphasis).

The CG/DIP goes on to state 'A more appropriate conclusion to be drawn would be to make recommendations for improvement and resourcing of the reactive noise monitoring program'.

The CG/DIP's reference is what I regard as a proactive monitoring program. If that understanding is accepted, I consider the CG/DIP would agree with Recommendations 18-22 about establishing a proactive monitoring program.

The CG/DIP notes that 'The overview and auditing of TJH's compliance is conducted by DERM, as well as through 6 monthly independent audits by DLCS'. I reiterate that it is still the role of the CG, through his DIP Compliance Unit, to assess the efforts of DERM and DLCS.

I form Opinion 36 (proposed opinion 35) as proposed.

The proposed report contained proposed opinion 36, which I now form as Opinion 37.

Opinion 37

Other than arranging testing through Heggies Pty Ltd in response to complaints, the CG has not established or coordinated a proactive monitoring program to ensure compliance with the imposed conditions. This constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

CG/DIP's response

For the reasons outlined under Proposed Opinion 35 it is requested that Proposed Opinion 36 be removed.

CNI's response

CNI did not comment on proposed opinion 36 (Opinion 37).

DERM's response

DERM did not comment on proposed opinion 36 (Opinion 37).

My comment

For the reasons I have discussed in relation to proposed opinion 35, I make Opinion 37, which maintains the intent of proposed opinion 36 and also describes the method by which the monitoring program is to be established.

DERM

My officers asked Officer B whether DERM undertakes any proactive monitoring. The response provided by Officer B was:⁴⁹⁵

Officer B	A lot of the monitoring that you can actually do with noise is you can do it with your naked ear. You can actually go out and assess, like usually if you go somewhere and it appears loud, it usually is. Now
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⁴⁹⁵ Record of interview, line 781.

the problem we kept encountering was you know we'd find out about something, you know for instance they were cutting concrete in front of a house last night, you know. You go out and have a look or whatever, they've packed up and gone, you know it's quiet construction works, they you know impact at the time, and then 12 hours later, 2 hours later, it's not a problem. So the constant thing, you're always playing catch-up with a lot of these things. And we did actually do a series of where we sort of just went out at night time a few times just to go around certain sites and just sort of listen how things were going and yeah, general overview. And every time we went out there weren't any problems.

As mentioned above, Officer B also explained that DERM decided it would not do reactive monitoring at night. DERM decided that in lieu of reactive noise monitoring at night, it would loan noise meters to potentially affected residents and instruct them to activate the meter whenever they heard a loud noise from the Project:⁴⁹⁶

Officer B	... Now we did consider after [listening with our naked ears at night], okay how can we become aware of these issues so we looked at, we do have an on-call system in DERM, where we have one officer that looks after and gets the whole region for a week. ... So we looked at within our team who actually lived in the area, and there's only probably three or four people that actually live close enough to that area, but then the people that we had could actually go out and respond to that, it boiled down to two people, and it's kind of a little bit unrealistic to expect those two people to be able to respond to something you know at 10 o'clock at night. The other problem that we had is we have a couple of mobile phones associated with the project or with cars etcetera, and we wanted to be, I guess protecting ourselves. I guess in a bit of a way, that we didn't want to be giving those numbers out to the public just willy-nilly, simply because I personally got involved in when the closure of ... happened. My email address got out in the public and I got single-handedly blamed for doing that, which wasn't me at all. So we're just very conscious of you know if you give somebody a personal number, it gets out there, bang you know you're getting all these calls which you just can't deal with. So we looked at that side of things and realised it was just too big for us to handle, we just couldn't, we didn't have the manpower to do that. So that's where we developed the system of if we were looking at houses that we thought may be impacted on and setting up the meter inside the house and getting the complainant to help us, so whether he was to press the button, that's where we came up with that idea after yeah a bit of risk assessments and all that type of stuff.
Interviewer	Okay.
Officer B	To try and manage that.
Interviewer	So that, when the resident of the house presses the button the noise machine, noise metering, measuring machine, it's more as an exercise than having something to go to negotiate with TJH about rather than me exercising and gathering evidence for perhaps taking legal proceedings against TJH?
Officer B	No, it was for our own purposes.
Interviewer	Okay.
Officer B	So our idea of this was to I guess to limit our man hours it would take to be listening to attended monitoring.

⁴⁹⁶ Record of interview, line 797.

Officer B went on to say that this initiative was not very successful, as residents often activated the noise meter for noises unrelated to the Project, such as road noise.

In chapter 6 of *Tips and Traps for Regulators*, the former Ombudsman explained that where a group of regulators administer a regulatory scheme, one regulator should take the primary responsibility because, without leadership, the coordination of the administration of the scheme may suffer. My Office calls that regulator the lead agency. The CG is a regulator, and for the Airport Link, he is the lead agency.

My Office calls the other agencies administering the regulatory scheme the 'partner agencies'. For the Airport Link, DERM is a partner agency.

Opinion 38

DERM has a partner role in respect of monitoring noise from the Project to ensure compliance with the noise goals in condition 9. Part of that role is to ensure that a proactive monitoring program is in place.

CG/DIP's response

The CG notes that Proposed Opinion 37 [Opinion 38] is directed at DERM, but refers the Ombudsman to the above comments regarding proactive noise monitoring.

CNI's response

CNI did not comment on proposed opinion 37 (Opinion 38).

DERM's response

DERM disagrees with this Opinion. DERM agrees that it has a role in relation to ensuring compliance with condition 9. DERM notes that TJH undertakes proactive noise monitoring.

My comment

I have discussed the benefits of a targeted proactive noise monitoring program in relation to proposed opinion 35. DERM has noted that TJH undertakes proactive noise monitoring. However, TJH is the regulated entity. It is DERM's responsibility to independently consider the information it receives from TJH, including information it receives in response to notices under s.451 of the EP Act, to decide whether and which targeted proactive monitoring would be useful to independently test TJH's noise monitoring results.

I make Opinion 38 (proposed opinion 37) as proposed.

The proposed report contained the following:

Proposed Opinion 38

DERM has not established a proactive monitoring program to monitor compliance with the CG's imposed conditions. This constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

CG/DIP's response

The CG notes that Proposed Opinion 38 is directed at DERM, but refers the Ombudsman to the above comments regarding proactive noise monitoring.

CNI's response

CNI did not comment on proposed opinion 38.

DERM's response

DERM disagrees with this opinion. There are no CG conditions that require DERM to establish a proactive monitoring program to monitor compliance with the CG's conditions. It would set a significant precedent with major resourcing consequences for all CG or development approval/environmental authority conditions that require proactive noise monitoring by proponents, to also be interpreted by agencies as requiring second proactive monitoring by regulatory entity.

In order to assert that DERM's actions are unreasonable, the Ombudsman report would need to demonstrate that the CG conditions require proactive monitoring by DERM in addition to proactive monitoring by the proponent under the compliance and enforcement framework implemented by the CG and DERM.

My comment

As I have discussed above, TJH is the regulated entity. It is DERM's responsibility to independently consider the information it receives from TJH, including information it receives in response to notices under s.451 of the EP Act, to decide whether and which targeted proactive monitoring would be useful to independently test TJH's noise monitoring results.

I refer to the passage quoted in response to proposed opinion 35 relating to reactive and proactive strategies to support my views in this area.⁴⁹⁷

I note that in this case, DERM does not have an obligation to undertake proactive monitoring under the CG's conditions. However, in this case, I consider it is desirable for DERM to undertake proactive monitoring to supplement its reactive work and enhance its effectiveness as a regulator because:

- DERM knows it is only aware of a small percentage of complaints about noise⁴⁹⁸
- DERM receives NCRs many weeks after the non-compliance actually occurs, which, in the case of transient noise, often makes it futile to investigate by monitoring

⁴⁹⁷ Sparrow, Malcolm K (2000) *The Regulatory Craft: Controlling Risks, Solving Problems, and Managing Compliance*, Washington DC, Brookings Institution Press at page 191, cited in Queensland Ombudsman (2009) *Tips and Traps for Regulators* (2nd ed) [accessed at <http://www.ombudsman.qld.gov.au/PublicationsandReports/InvestigativeReports/TipsandTrapsforRegulatorsSecondedition.aspx> on 15 April 2011].

⁴⁹⁸ My Office's investigation revealed that in the period between January 2009 and July 2010, DERM only recorded 10 complaints in Ecotrack about noise from night-time surface work compared to about 1,039 received by TJH (see section 11.8.1 of this report). This is partly due to the DIP 'Process for escalation of complaints' (in which DERM is not even mentioned) and CNI's 'Complaints process' (in which TJH is mentioned as the primary point of contact for complaints and although DERM is mentioned as the authority for noise, the only contact detail given is its website). The adequacy of the complaints process will be addressed in a future report of my Office.

- DERM knows that noise from night-time surface work is a 'risk' that ought to be the subject of particular monitoring.⁴⁹⁹

In response to proposed opinion 34, DERM stated:

The proposed Report does not adequately capture DERM's noise monitoring efforts. Following the review of the Heggies report, DERM placed self-activated noise monitors in selected houses. DERM officers also conducted night time surveillance of project work sites that were identified as being possible sources of noise complaints. The surveillance consisted of driving to sites where night time works were proposed and identifying possible sources of noise, assessing potential noise nuisances and determining where it may be appropriate to conduct future noise monitoring. DERM is continuing to undertake noise monitoring in response to complaints escalated by the community and will conduct attended monitoring at a specific residence following a recent noise complaint.

I acknowledge that response. My investigation did not reveal any records evidencing these activities or action taken as a result of those activities. This lack of records supports the proposed opinion 38.

However, DERM's response does indicate that it did attempt to establish a proactive monitoring program, albeit an ineffective program.

As I discuss later in this section, the most effective way to establish a proactive monitoring program is to forward statutory notices, such as notices under s.451 of the EP Act, to TJH requesting details of upcoming night-time surface works and decide upon a program of targeted monitoring based on the information received back from TJH.

I form Opinion 39, which focuses on DERM's failure to establish an 'effective' proactive monitoring program.

Opinion 39

DERM has not established an effective proactive monitoring program to monitor compliance with the CG's imposed conditions. This constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

Delivery of proactive night-time monitoring program

I consider that it is necessary, given the proposed opinions expressed in my report, that the CG and DIP, in conjunction with DERM, develop a program to proactively monitor noise from the Project worksites where night-time surface work is currently being undertaken, or is planned over the duration of the Project. This is consistent with the CG's advice in his 22 June 2010 letter to BrisConnections and TJH that, at his direction, DIP compliance unit officers with officers of DERM would increase monitoring of noise from night-time surface work.

In developing such a program, the proposed report indicated that the CG, DIP and DERM should consider the following factors:

⁴⁹⁹ For example, the email from DERM to DIP dated 17 May 2010 states that DERM is going to 'kick off a government monitoring program' (original emphasis).

- the guidance on compliance with the imposed conditions contained in my report
- the existing and planned program of construction for worksites for the duration of the Project
- the worksites where there is a significant risk of work impacting on the amenity of residents in the evening, particularly in sleeping hours between 10.00pm and 6.30am
- delivering the program in the most cost effective manner including, if necessary, the engagement of acoustic consultants for part or whole of the program
- the objectives of the program to include obtaining information capable of being used to informally resolve issues as quickly as possible, where appropriate, but of a standard capable of being adduced as evidence in regulatory proceedings
- the officers, at a senior level, within DIP and DERM who will be responsible for assessing the information (for example, noise monitoring reports) obtained by the program
- the coordination of that assessment between the CG, DIP and DERM
- how timely decision-making will be made between the CG, DIP and DERM as to the regulatory use to which that information will be put (to be clear, I am also referring to non-statutory regulation, such as the negotiation for stopping the use of a particular item of equipment at night).

The proposed report contained the following:

Proposed Recommendation 25

By 31 January 2011, the CG and DIP, in conjunction with DERM, develop a program to proactively monitor noise from night-time surface work having regard to the following factors:

- the guidance on compliance with the imposed conditions contained in my report
- the existing and planned program of construction for worksites for the duration of the Project
- the worksites where there is a significant risk of work impacting on the amenity of residents in the evening, particularly in sleeping hours between 10pm and 6:30am
- delivering the program in the most cost effective manner including, if necessary, the engagement of acoustic consultants for part or whole of the program
- the objectives of the program to include obtaining information capable of being used to informally resolve issues as quickly as possible, where appropriate, but of a standard capable of being adduced as evidence in regulatory proceedings
- the officers, at a senior level, within DIP and DERM who will be responsible for assessing the information (for example, noise monitoring reports) obtained by the program
- the coordination of that assessment between the CG, DIP and DERM
- how timely decision-making will be made between the CG, DIP and DERM as to the regulatory use to which that information will be put (to be clear, I am also referring to non-statutory regulation, such as the negotiation for stopping the use of a particular item of a particular item of equipment at night).

CG/DIP's response

DIP and the CG do not accept Proposed Recommendation 25 and request it be removed.

The CG refers to the comments made under Proposed Opinion 35 that a proactive noise monitoring program is inconsistent with current practice and is not the most efficient use of resources.

The CG considers a more effective approach to be one coordinated between the CG, CNI and DERM, and which may involve:

- DERM targeting the capability and capacity of the contractors to monitor and manage noise from the project (for example, targeted review of the accreditation of the contractor's environmental officers, calibration of equipment, demonstration or side-by-side analysis of in-the-field noise monitoring and management).
- CNI arranging expert noise monitoring, based on complaint, matters raised by DLCS in its audit report, a request from the CG or DERM, or of its own motion.
- CNI providing expert noise monitoring results and any supporting advice to the regulatory agencies (DERM and CG) for consideration.
- CG and DERM, in consultation, determining the most efficient regulatory tools to use should non-compliance be suspected or detected.

CNI's response

CNI did not comment on proposed recommendation 25.

DERM's response

DERM disagrees with this proposed Recommendation. DERM recommends that:

'By 31 January 2011' be replaced with **'By 14 March 2011'** and,

'to proactively monitor noise from night-time surface work' be replaced with 'to ensure that noise from night-time surface work is appropriately monitored'.

My comment

The essential thrust of the CG/DIP's and DERM's responses is the desire to have the autonomy to decide how to regulate noise from night-time surface work (which is also noise nuisance).

However, my Office's investigation has revealed that noise from night-time surface work has not been regulated satisfactorily in the past. I do not consider effective regulation will flow from more of the same approach, as the CG has effectively put to me.

In the course of my Office's investigation, I received advice with which I generally agree, about a suitable approach to regulation of noise from night-time surface work. Namely, DERM should use its powers under ss.323 and 451 of the EP Act and the CG use his powers under s.157B(3)(c) of the SDPWO Act to require BrisConnections or TJH to investigate and report on the plant and machinery proposed to be used in future night work, the sound power levels of that plant and machinery, the measures that can be taken to muffle or screen those levels including the use of temporary and mobile noise barriers, and any reasons why amelioration measures cannot reasonably or practically be taken. The object of using those powers is to put an onus on those carrying out the work to either modify their work practices or explain why that cannot be done. That will enable a more informed decision to then be made about whether any, and if so what, enforcement proceedings should be taken.

Therefore, I make alternative recommendations that describe the method by which I consider the CG/DIP and DERM should establish an appropriate regulatory program (or in other words, strategy) for noise from night-time surface works.

Recommendation 18

The CG and/or DERM issue a notice, or notices, under s.323 and/or 451 of the EP Act and/or SDPWO Act requiring BrisConnections or TJH to investigate and report on:

- the plant and machinery proposed to be used in future night-time surface work at any worksite along the project corridor until the Project's completion
- the sound power levels of that plant and machinery, and the measures that can be taken to muffle or screen those levels including the use of temporary and mobile noise barriers
- any reasons why amelioration measures cannot reasonably or practically be taken.

Recommendation 19

If the CG and/or DERM does not have sufficient evidence to issue a notice, or notices, mentioned in Recommendation 18 or otherwise decides not to, the CG and/or DERM should provide the Ombudsman with reasons why, within two weeks of the date of publication of this report.

Recommendation 20

The CG and/or DERM evaluate the relevant responses to the notices mentioned in Recommendation 18.

Recommendation 21

Within four weeks of the date of publication of this report, the CG in conjunction with DIP and DERM, develop and publish on DIP's website a statement about the roles and responsibilities of the CG, DIP, DERM and CNI about noise from night-time surface work, including proactive monitoring proposed to be undertaken, who is to do which monitoring, and the methodology of that monitoring.

Recommendation 22

Within two weeks of the CG and/or DERM's receipt of any responses to any notices mentioned in Recommendation 18, the statement mentioned in Recommendation 21 is to be revised to set out the general details of a proactive monitoring program, informed by the response to the notice.

11.9 CG coordination with DERM about regulation of noise

The preamble to the SDPWO Act provides that it is:

An Act to provide for State planning and development through a coordinated system of public works organisation, for environmental coordination, and for related purposes.

As an introduction to Part 4 (Environmental coordination) of the SDPWO Act, s.25 states:

The Coordinator-General shall, of the Coordinator-General's own motion or at the direction of the Minister, coordinate departments of the Government and local bodies throughout the State in activities directed towards ensuring that in any development proper account is taken of the environmental effects.

One of the purposes of the SDPWO Act is to require the CG to secure the proper planning, preparation, execution, coordination, control and enforcement of a program of works, planned developments, and environmental coordination for the State.⁵⁰⁰ This section looks at the extent to which the CG has discharged that responsibility in respect of noise from night-time surface work.

11.9.1 CG's jurisdiction

As I have mentioned, up until the CG's transfer to DEEDI, the DIP Compliance Unit undertook compliance activities on behalf of the CG.

The Director of DIP's Compliance Unit, Officer E, told my officers that the CG has a supervisory role and does not undertake on the ground investigations. He went on to say.⁵⁰¹

... The way the unit was set up is to rely in a lot of ways on third party auditing, so the requirement to, for an independent auditor to audit the compliance with conditions every six months and for there to be the condition that the proponent has to report on compliances, exceedences, that sort of thing ...

I guess one of the primary functions of the unit is to overview those compliance reports in relation to those projects ...

Officer E elaborated:⁵⁰²

I've also had a couple of meetings with, I've had a meeting with [DERM Officer A] and her boss ... to discuss strategic enforcement and that. They were, she indicated that they were going to do some night monitoring, a program of it and if they found an exceedence what they wanted to do, and we said well look you know, you've got the ability to take it further, but we'd welcome the chance to discuss strategic enforcement. So if you think or we think it might be a good thing for the CG to actually pursue, then we would have a look at that. Obviously we don't, we've got very limited evidence gathering powers, so we'd certainly rely on DERM to gather that evidence. That was the sort of conversation we had.

Later, Officer E clarified:⁵⁰³

No, no, what that was [DERM Officer A] said if we're going to do this monitoring program, if we identify exceedences, do you want us to report to you or do you want to decide what happens, you know that sort of thing, how are we going to work together ...

I said that we'd certainly like to know what they are, and we welcome the chance to sit down and have a strategic discussion. Our powers are really sort of, fairly blunt, sort of

⁵⁰⁰ Section 11(2), SDPWO Act; see also the discussion of the SDPWO Act in section 5.1.1 of this report.

⁵⁰¹ Record of interview, line 177.

⁵⁰² Record of interview, line 568.

⁵⁰³ Record of interview, line 1123.

sledge hammer type things. We don't have the ability to, the DERM legislation, they've got a few more tools, have more finesse like EPA and environmental protection orders, environmental evaluation orders, powers to, various powers. Power to issue a penalty infringement notice, that sort of thing, we don't have any of that. But, so really it was just a discussion that you know, if you identify exceedences, let us know, we'll sit down and you know, they, I think it was envisaged that they might say look you know it might be better if the CG does this first one or, you know, this is an easy one, I don't know, but there was, it was just to have a strategic discussion about who, is it better for the CG to take action or DERM.

However, after further questions from my officers, Officer E stated:

Yeah well the CG has responsibility for condition 7, so that the construction is not to create excessive noise ... at night.

Based on this advice to my officers, DIP's Compliance Unit has not adequately discharged that responsibility. Rather, it has:

- relied on third party audits, and reports from TJH, about compliance and non-compliance with the condition
- engaged in discussions with DERM about 'strategic enforcement' (a term I am unfamiliar with)
- entered into an oral agreement with DERM officers that DERM will contact the CG if an exceedence is identified, and a decision will then be made as to which agency will take action (there is no evidence that this ever happened).

Officer E told my officers that DERM Officer A advised him that DERM was going to do a period of proactive night-time noise monitoring.⁵⁰⁴ However, Officer E did not know what happened in that regard:

I think, look they do, my understanding they do, they have done monitoring and they certainly had people like [Officer V] go out and have a look at how TJH do their monitoring, cause he's made some comments on that. This program, it was only, it was going to be for a couple of weeks around the Kalinga sort of Toombul area was my understanding.

I don't know what happened with that.

My investigation has revealed that DERM did not proceed with any proactive night-time noise monitoring.

I also refer to my comments in section 10.6.4 above about DERM's failure to take action in respect of the findings contained in the Heggies report.

Opinion 40

The failure of the DIP Compliance Unit to properly monitor DERM's regulation of noise from night-time surface work from the Project constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

⁵⁰⁴ Record of interview, line 1123.

CG/DIP's response

Please give consideration to removing Proposed Opinion 39 (Opinion 40) for the following reasons.

The Ombudsman appears to have concluded from the statements by Officer E in his interview (extracted at pages 168-169 of the Proposed Report) that DIP has not adequately discharged its responsibilities.

The DIP Compliance Unit has acted in accordance with the Strategic Compliance Plan⁵⁰⁵ in its reliance on third party audits. The Strategic Compliance Plan states that third party-auditing is a fundamental aspect of an effective compliance program and through conditions the CG may require proponents to have their activities audited by an independent and suitably qualified person and report to the CG. The Compliance Unit will review audit reports and make recommendations to the CG if any further action is necessary. Such an approach has been used in relation to this Project.

The DIP Compliance Unit has had significant interaction with DERM in relation to the regulation of noise from night-time surface work. Officer E gave examples of such interaction in his interview when he stated that DERM attend monthly meetings with DIP and CNI and are invited on a regular basis to attend inspections.⁵⁰⁶ Evidence of attendance at these monthly meetings is provided in the Supporting Material along with a sample of email communications and exchanges of information between DIP and DERM officers.

CNI's response

CNI did not comment on proposed opinion 39 (Opinion 40).

DERM's response

DERM did not comment on proposed opinion 39 (Opinion 40).

My comment

My officers have reviewed the 'Supporting Material' provided by DIP. That material reveals that significantly more requests for guidance came from DERM to DIP than oversight and direction from DIP to DERM. Namely, they comprised:

- nine emails from DERM to DIP asking questions or seeking direction
- one telephone call from DERM to DIP asking a question
- three 'CNI' meetings at which DERM and DIP were present; however, TJH and CNI also attended those meetings (the minutes were prepared by CNI)
- nine emails from DIP to DERM forwarding TJH NCRs without comment
- one email from DIP to DERM forwarding NCRs with a question about it
- three emails from DIP to DERM asking questions or providing direction.

Particularly, from the material, the email from DERM to DIP dated 17 May 2010 states:

DERM is going to start kicking off a government Noise Monitoring program this week.
[original emphasis]

⁵⁰⁵ Refer to Supporting Material.

⁵⁰⁶ Record of interview, lines 554-557.

Also, the email from DIP to DERM dated 8 June 2010 states:

As discussed, I would also like to institute a more regular catch up with you on compliance action from the Airport Link project to avoid duplication and to coordinate strategic actions.

There is no evidence the 'catch up' eventuated.

On the information I have summarised, I make Opinion 40 (proposed opinion 39) as proposed.

11.9.2 Coordination by CG

Officer F told my officers that the DIP Compliance Unit sometimes seeks and receives the CG's coordination instructions about certain Project issues. The example given by Officer F was the adequacy of the six-monthly audit reports provided by TJH:

Interviewer	What I am trying to work out is the extent to which the information is disseminated within the Department of Infrastructure and Planning. So you know presumably there will be discussions within your work unit about what you're going to do on particular matters and what direction you're going to take. I guess my question is how much further up the line do your reports go? Do you report to the Coordinator General ...
Officer F	Well certainly ...
Interviewer	... and ...
Officer F	... briefing notes can go that far, yeah they do.
Interviewer	So in what circumstances would those kinds of briefing notes go out?
Officer F	I believe public interest, I believe that there's, if, it's, mainly, we had issues with regarding, as you mentioned, the six monthly audit reports. Initially they weren't of a standard that would meet the conditions, they weren't reporting on all worksites and they weren't reporting on all the conditions. So that's where we've identified that as an issue and we've reported that to the executive director for the Coordinator General's attention in 2009, and so, that also was, that information was relayed to CNI to say look, let them know that our opinion that your reports initially weren't satisfactory and they didn't meet the standards. So after a period of time, and I see it now, like the last reports are meeting the requirements. So it has taken a while but yeah, in, to answer your question, we've, again we identify certain issues, like the audit reports and the incident reporting, the timing of it, those sort of reports or matters go higher up, and they did go higher up just for the Coordinator General to say well I recommend yes, you do issue a notice on that one, something like that ...
Interviewer	...
Interviewer	So where there are significant issues arising that would be reported further up the line ...
Officer F	That's correct.
Interviewer	... to the Coordinator General.
Officer F	That's correct.

However, none of the voluminous documents received by my Office, nor the comments of the officers we interviewed, indicated that any detailed instructions were given to the DIP Compliance Unit about the coordination of the regulation of noise from night-time surface work.

The proposed report stated:

I understand that the CG cannot provide such coordination instructions if he is not aware of the issues facing the DIP Compliance Unit and DERM in its exercise of jurisdiction under the CG's conditions. Given the CG's environmental coordination role, I consider that the CG ought to arrange a regular briefing note from the DIP Compliance Unit to the CG, supported by a regular meeting between a representative of the DIP Compliance Unit and the CG (or appropriate Deputy CG). I consider senior officers of DERM should also participate in the preparation of briefing notes and attend meetings.

The proposed report contained the following:

Proposed Opinion 40

DIP's failure to keep the CG informed; and to give instructions to the DIP Compliance Unit (as the Unit assisting the CG in his coordination role) or DERM, about environmental coordination issues arising from the Project is unreasonable in light of the CG's environmental coordination role. This constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

CG/DIP's response

Two submissions were received on this point. The first submission stated:

Please give consideration to removing Proposed Opinion 40 for the following reasons.

The suggestion that the CG was not aware of and/or not kept informed of the issues arising from the Project and consequently did not provide instructions to DIP Compliance Unit, is inaccurate and does not fairly represent the circumstances.

Proposed Opinion 40 appears to rely primarily on the fact that the Ombudsman was unable to locate materials relating to advice provided to the CG, or resultant instruction, in the material provided by DIP during the investigation (page 170 of the Proposed Report). The material provided by DIP and the CG in response to the Ombudsman's request for information was focussed on action taken in relation to night surface construction activities, and not on the course of communications between the CG and the Compliance Unit in relation to environmental coordination issues arising from the Project.

The former CG, Mr Colin Jensen, was actively involved in and alive to the complex issues arising from the Project. There were (and continue to be) regular discussions and other communications between the CG and the DIP Compliance Unit (including the giving of instructions by the CG) about environmental coordination issues arising from the Project. The subsequent CG and current CG have similarly been regularly informed and actively involved in issues arising from the Project.

Examples are contained in the Supporting Material and include:

- attendance by the CG at a fortnightly briefing from TJH on the progress of and issues arising with the Project. The briefing is also attended by DIP officers from the Infrastructure Projects Group and Compliance Unit;
- the issuing of instructions by the CG to the DIP Compliance Unit to issue a show cause notice for non-compliance;

- the issuing of a request by the DCG to CNI by email to provide information in relation to the conducting of 24/7 works;⁵⁰⁷ and
- the provision of briefing notes to the CG and DCG about topics such as the lateness and inadequacy of the six-monthly compliance report submitted by CNI, the submission of independent noise monitoring conducted by CNI, and a Toombul CLG request to halt Saturday and Sunday night works.

These are just some examples. The CG and DIP would be happy to provide the Ombudsman with further information on this issue, if required.

My Office invited a further response and the current CG wrote to me by letter dated 8 April 2011 asking certain questions about what his response should be about.

My Office provided him with answers and reiterated the invitation for a further response. That response was provided by the current CG by letter dated 12 May 2011. In summary, the current CG contends:

- It is not good public administration for the CG to have a 'hands on' role in respect of the day to day coordination of the regulation of noise from night-time surface work.
- However, 'Given the complexity of the Airport Link project and the impacts it has created, the previous Coordinators-General and I have taken a close interest in the project and have been proactive in visiting the work sites, asking questions, seeking technical and legal advices and, based on these, issuing instructions to the Compliance Unit. This was in addition to instructions given in response to specific issues brought to the Coordinator-General's attention by the Compliance Unit or complaints received directly by the Coordinator-General.'
- 'The Coordinator-General has also delegated all his powers and functions to his Deputy Coordinators-General (other than the powers to delegate and to hold an inquiry)⁵⁰⁸ to enable the good administration and efficient functioning of the Office of the Coordinator-General. In the case of the Airport Link project, the Deputy Coordinator-General (Infrastructure and Land) also provides instructions to the Compliance Unit about the coordination of the regulation of noise from night-time surface works and has done so throughout the project.'
- 'It is also my view that, in the case of compliance activities, it is not necessary for the Coordinator-General to provide the Compliance Unit and DERM with ongoing detailed instructions about the coordination of the regulation of noise from night-time surface works because the Coordinator-General has provided the Compliance Unit and DERM the authority to deal with these matters without such instruction.'
- In the case of the DIP Compliance Unit, the CG contends that authority is the DIP Strategic Compliance Plan, which is approved by the CG. Particularly, he states that 'The Strategic Compliance Plan therefore provides a framework for compliance that enables the Compliance Unit to undertake a range of activities to support the coordination of the regulation of noise from night-time surface works without the need for ongoing detailed instructions from the Coordinator-General. In undertaking these activities, the Compliance Unit liaised with DERM about the regulation of noise from night-time surface works.'
- In the case of DERM, the CG contends that authority is the CG's granting of jurisdiction for condition 9 to DERM⁵⁰⁹ under s.54B(3) of the SDPWO Act. The

⁵⁰⁷ Email from Principal Executive Officer to the Deputy DCG to CNI on 6 August 2009 (page 57 of Proposed Report).

⁵⁰⁸ Under s.11 of the SDPWO Act.

⁵⁰⁹ The grant of jurisdiction was originally made to the then EPA.

current CG explains 'By nominating an entity with the relevant experience and resources to have jurisdiction for a condition, the Coordinator-General is exercising his environmental coordination role. I do not consider this role requires the Coordinator-General to provide ongoing detailed instructions to a nominated entity as to how it manages the regulation of compliance with a condition. The Coordinator-General retains jurisdiction for such a condition and has a coordination role. The Coordinator-General will provide guidance to a nominated entity about compliance matters where the Coordinator-General feels that it is necessary in a particular situation. The Coordinator-General also will consult with the nominated entity about the coordination of compliance actions taken by the Coordinator-General and the nominated entity in relation to the condition. ... In addition to the jurisdiction granted to DERM for condition 9, DERM has jurisdiction independent of this under the *Environmental Protection Act 1994* in respect of environmental nuisance. DERM has the expertise and resources to ensure compliance with noise conditions and for this reason was given jurisdiction for condition 9. It would not be appropriate for the Coordinator-General to interfere with these functions of DERM by giving detailed ongoing instructions to DERM about the regulation of noise from night-time surface works.'

The current CG provided six examples (supported by documents) of occasions where the Compliance Unit has received instructions from the CG or his delegate about the regulation of noise created by night-time surface work when they considered it necessary. The current CG states that those examples are not exhaustive.

CNI's response

CNI did not comment on proposed opinion 40.

DERM's response

DERM did not comment on proposed opinion 40.

My comment

While my Office's investigation focused on noise from night-time surface work, proposed opinion 40 was wider, relating to the discharge by the CG and the DIP Compliance Unit of 'environmental coordination issues arising from the Project'.

I note that in the CG/DIP's earlier submission, the CG/DIP provided some information about DIP's briefings to the CG and DERM about environmental coordination issues arising from the Project.

As to the latter submission, the current CG agrees that the CG has a coordination role in regulating noise from night-time surface work and submits that the role has been appropriately discharged by Coordinators-General. In effect, the role is discharged 'through the Compliance Unit' under the supervision of his Deputy Coordinators-General, and within the framework set out in the Strategic Compliance Plan. In the current CG's submission, it is unnecessary for him to be involved in a 'hands on' role in a day to day coordination of the regulation of noise from night-time surface work. He also submits that it is appropriate that DERM is the nominated entity for regulating noise impacts from such work.

To be clear, I consider that the CG has a coordination role in relation to all environmental effects of the Project, including noise from night-time surface work. I hold this view based on the requirements of the SDPWO Act, particularly s.10(2) and s.25 (which both describe the CG's coordinating role in relation to supervision of impacts on the environment). I also hold this view based upon the fact that the Project was declared a significant project under s.26 and has been through the EIS process, which required the CG's close examination of the environmental effects of the Project.

I note the DIP Compliance Unit was established to assist the CG with that coordination role. This is appropriate and I consider that if the CG adequately resources the unit and is satisfied that it is performing satisfactorily, it will be capable of contributing to the efficient discharge of the coordination role.

The submissions provided demonstrate that the respective Coordinators-General have been actively involved in responding to issues raised by the DIP Compliance Unit about the Project and that the unit has kept the respective CGs informed, as issues arose. However, the submissions do not demonstrate that a structured, cohesive and integrated approach (including with the assistance of the nominated entity DERM) has been put in place by the CG about the coordination and management of issues arising from night-time noise from the Project.

I consider that, if my recommendations are implemented (particularly Recommendations 18-22), the CG will be capable of demonstrating an improved coordination role in this area.

I therefore make an alternative Opinion 41.

Opinion 41

Until at least April 2011, the CG has failed to establish a structured, cohesive and integrated approach to the coordination and management of noise from night-time surface work sufficient to demonstrate his coordination role has been effectively discharged under the SDPWO Act. This constitutes administrative action that is unreasonable for the purposes of s.49(2)(b) of the Ombudsman Act.

I received a late submission from the current CG dated 20 May 2011, which indicated that he was committed to establishing a structured, cohesive and integrated approach to the coordination and management of noise from night-time surface work in future.

I was pleased to note the CG's following recent example of his move towards a structured, cohesive and integrated approach:

This type of approach was used recently in relation to the jacked box works at the Kalinga Park East worksite. These works involve the jacking of two concrete boxes under the North Coast Railway Line and were due to commence in the week preceding the Easter and Anzac Day public holiday period and planned to be conducted 24 hours a day, seven days a week.

The Coordinator-General and DERM took a coordinated approach in addressing the potential for these works to contravene the Coordinator-General's conditions as follows:

- The Coordinator-General issued a letter to BrisConnections requesting information in relation to its apparent view that the works fell within the “special circumstances” exception under condition 7(b); and
- DERM issued a notice to TJH under section 451 of the EP Act requiring information in relation to the works to enable an assessment of whether the proposed works would unlawfully cause environmental nuisance under section 440 of the EP Act.

The information obtained by DERM in response to the section 451 notice was shared with the Compliance Unit of the Office of the Coordinator-General. Following my consideration of BrisConnections’ response to my letter, TJH’s response to the section 451 notice ... I formed the view that there were a number of factors which would give rise to special circumstances. I advised BrisConnections of my view by letter and asked that the noisy works be delayed until after 12 noon on Anzac Day. I also provided my views to DERM. ...

Following this action, BrisConnections provided additional advice on mitigation measures being undertaken to manage noise and confirmed that demolition of the headwall would not occur on Anzac Day morning. Extensive noise monitoring by DERM (independent of TJH) was undertaken during the public holiday period. I am advised that no levels of noise in excess of the noise goals in condition 9 were detected.

The proposed report contained the following:

Proposed Recommendation 27

The CG take steps to be kept regularly informed, and to give instructions to the DIP Compliance Unit and DERM, about environmental coordination issues arising from the Project.

CG/DIP’s response

The CG acknowledges Proposed Recommendation 27 but considers that such steps have already been taken by the CG.

It is noted that Proposed Recommendation 27 relies on Proposed Opinion 40. The Ombudsman is referred to the submissions under Proposed Opinion 40, including the examples of instruction and advice on this topic.

The CG intends to institute a monthly briefing note from the Compliance Unit, which will include information from DERM on compliance issues. This will serve to document a process which already occurs through meetings, emails and briefing notes on environmental coordination issues.

CNI’s response

CNI did not comment on proposed recommendation 27.

DERM’s response

DERM suggests that this proposed Recommendation should read ‘The CG take steps to be kept regularly informed, and to give advice to the DIP Compliance Unit and DERM, about environmental coordination issues arising from the Project’. DERM notes that a significant amount of formal and informal avenues already exist and are utilised for the exchange of information between departments.

My comment

I make Recommendation 23, which is slightly modified to reflect some matters raised in the CG/DIP's and DERM's responses, and my altered Opinion 41 (proposed opinion 40).

Recommendation 23

For the duration of the Project, the CG arrange receipt of a monthly briefing note from the DIP Compliance Unit that:

- gives an update on the implementation of my recommendations
- includes information from DERM on compliance issues

and, as may be required, give instructions to the DIP Compliance Unit and DERM about those issues and environmental coordination issues generally arising from the Project.

11.10 Reporting to Minister

CNI's Marketing, Communication and Consultation Plan of July 2010 states:⁵¹⁰

Thiess John Holland (as BrisConnections' delegate for D&C communication and consultation activities) is responsible for arranging regular Project update meetings with elected representatives along the corridor (see Appendix One for full list). CNI will be represented at each of these meetings.

CNI representatives at these meetings should not provide any information that has not been previously approved or made publicly available through another forum. Any requests for information made to CNI that cannot be answered at the meeting will be taken on notice and a response will be provided in a timeframe agreed with the elected representative or their officers.

The Minister's name appears in appendix 1 of the plan, but in his capacity as a State Member of Parliament whose constituents are affected by the Project.

Officer C told my officers about a regular CNI briefing to the Minister:⁵¹¹

- | | |
|-------------|---|
| Interviewer | Is there any, in terms of that collaboration between CNI and the department is that a formal type thing ... or is that just as it's required, so for example, would you or one of your counterparts or a number of your counterparts meet on a regular basis? |
| Officer C | Certainly [Officer U] has a strong working relationship with CNI. I have a working relationship with CNI (a) through the board activity and (b) CNI and Thiess John Holland generally meet on a fortnightly basis with the Minister's office, the Minister for Infrastructure and Planning, and his officers and I am the, I go as the departmental rep to those meetings. Other than that, I have a relationship with officers within CNI that I can ring them up and have a chat. |
| Interviewer | So when you have these meetings ... if you're not involved in compliance and you're not involved in laying out conditions what do you actually discuss? |

⁵¹⁰ Section 7.4.1.

⁵¹¹ Record of interview, line 211.

Officer C Sorry the meeting from CNI?
Interviewer Yes.
Officer C The meeting is between the Minister for Infrastructure and Planning where he gets a fortnightly update.
Interviewer What's the update?
Officer C On how the, generally on, first of all it's his electorate, so
Interviewer He has an interest.
Officer C There's an interest there as a politician, most of the work is in his electorate, and secondly, it's basically a project update as to progression.
Interviewer Is there ever any discussion about any adverse impacts it might be having?
Officer C In the meetings that I have attended CNI do present briefs on issues that might have been raised within the, I call them issues, across a spectrum, that might have been raised by his constituents, businesses, or even Thiess John Holland. So CNI brief the Minister first, then Thiess John Holland come in, so that takes about an hour, then for another half an hour Thiess John Holland come in and give an overview of project progression, significant events, tunnel boring machines, that sort of stuff.
Interviewer Where it's at at the particular time.
Officer C Where it's at, yes, as of their reporting period, of the current reporting period and also between CNI, Thiess John Holland potential media events and opportunities and the like. And any community liaison that had occurred or be coming up.
Interviewer Is there a record of any information provided by CNI to the Minister for those briefs?
Officer C Certainly the Minister is given information, the Minister and his offices.
Interviewer By CNI?
Officer C By CNI and that's like PowerPoint charts or aerial pictures or pictures inside the tunnel, that sort of stuff. Or media opportunities and the like. CNI provide that.
Interviewer Is it part of a set agenda or requested data?
Officer C I can't answer that for you.

And later:

Officer C Let me clarify this. There's officers from CNI, there's normally the chairman of BrisConnections or a senior officer, and the program director from TJH or his senior representative, plus the TJH, um, ... is the Communications Manager or Director of Communications. So it's senior level to meet the Minister.

I understand the CG does not have a regular meeting with the Minister that is equivalent to CNI's and TJH's meetings with the Minister, discussed above. I consider such equivalent meetings are necessary to give the Minister a view of the Project from the point of view of the environmental coordination by the CG and environmental issues being dealt with by the regulatory agencies.

The proposed report contained the following:

Recommendation 28

The CG regularly meet with the Minister to advise him about environmental coordination and the status of environmental regulation of the Project, including the regulation of noise from night-time surface work.

CG/DIP's response

The CG acknowledges Proposed Recommendation 28 but considers that such action is already taken by the CG.

The CG currently attends the fortnightly meetings the Minister attends with CNI and TJH which are referred to in the extract of the interview with Officer C in the Proposed Report (page 171).

The CG also regularly meets with the Minister in his capacity as the CG about many topics, including the Airport Link project. In these meetings the CG and the Minister or his advisors raise respective issues of concern.

The new CG notes that new arrangements will have to be considered in relation to his meetings with the Minister going forward to deal with the fact that the role of the DG of DIP is now undertaken by another person.

CNI's response

CNI did not comment on proposed recommendation 28.

However, CNI made comments about the section in which proposed recommendation 27 appeared. Namely:

No specific information was sought from CNI as to the level of briefing given to the elected representatives in Queensland. The implication in this section appears to be that there is limited briefing given to the relevant Minister and that briefing is conducted only by CNI. We understand that this implication is incorrect. CNI provides the following briefings:

All elected representatives within the project corridor (local, state and federal) are offered briefings about the project. Council representatives and State Members of Parliament have accepted regular briefings which occur in general about every six weeks and involve project Community Liaison officers and CNI Communications officers. In addition, the CEO of BrisConnections and the CEO of CNI also meet with elected representatives on an irregular or as needs basis. Meetings with federal representatives have occurred on an ad hoc basis.

These meetings are to provide elected representatives and/or their staff with briefings on current and future project activities. Elected representatives also discuss complaints or concerns which they may have regarding project construction activities/permanent design.

In addition to this CNI also provides information and briefings to the State Government as required. Ministers with an interest or responsibility for the project include the Premier, the Minister for Infrastructure and Planning, the Minister for Transport (Northern Busway Windsor to Kedron) and the Minister for Roads (Airport Roundabout Upgrade). Information provided includes updates on progress, community and business issues and future works. BrisConnections and Thiess John Holland also provide information and attend meetings as required.

These briefings do not represent or replace internal agency process but are supplementary in nature.

DERM's response

DERM did not comment on proposed recommendation 28.

My comment

I note the comments of the CG/DIP and DERM; however, I retain a slightly modified Recommendation 24 (proposed recommendation 28) to ensure that regular reporting to the Minister continues to be done in future.

Recommendation 24

The CG regularly report to the Minister to advise him about:

- the regulation of noise from night-time surface work
- environmental coordination and the status of environmental regulation in each significant project.

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This bibliography comprises documents that have been specifically identified throughout this report. It also comprises documents relating to the investigation that are in the public domain. However, I have excluded correspondence, notes and meeting minutes released under the *Right to Information Act 2009* (RTI). I have excluded those documents because:

- during the investigation my Office gathered voluminous other correspondence and meeting minute documents that have not been made public
- to publish the details of those that have been released under RTI would not properly reflect the depth of my Office's investigation.

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