



Directlink Joint Venture

Transmission Network Service Provider

2017/18 Annual Performance Report

August 2018

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1. ANNUAL COMPLIANCE REPORTING

1.1 NETWORK SAFETY AND RELIABILITY

1.1.1 IMPROVEMENT PROGRAMS AND ACTIVITIES

Directlink continues to implement and run programs designed to improve its safety and reliability. Directlink undertakes regular audits to assess the effectiveness of its activities and programs in relation to safety. The audits also provide a structured approach to continually identifying opportunities for improvement.

Directlink staff are encouraged to continually innovate the way they carry out their work and to strive for improved safety outcomes through the ongoing annual safety awards. Staff are nominated for their achievements and innovative methods for improving the overall safety of Directlink for staff, contractors, the environment, property and the public.

An audit of the Directlink ENSMS was undertaken in February 2018 and a number of non-compliances were identified as listed in Table 1 below.

TABLE 1: NON-COMPLIANCES RELATING TO THE SAFETY AND RELIABILITY OF THE ELECTRICITY NETWORK

Identified non-compliances	Actions against non-compliances	Progress of actions
The ENSMS requires further development to be fit for purpose and compliant with AS 5577	APA has lodged a program of proposed actions with IPART.	Activities to address the issues has commenced and are due to be completed by February 2019.
The ENSMS requires effective deployment to be compliant with AS 5577	APA has lodged a program of proposed actions with IPART.	Activities to address the issues has commenced and are due to be completed by February 2019.
The FSA requires further development, focusing on appropriate stakeholder consultation and risk management principles to be compliant with AS 5577 and ISO 31000	APA has lodged a program of proposed actions with IPART.	Activities to address the issues has commenced and are due to be completed by August 2019.

1.2 PUBLIC AWARENESS

1.2.1 PROGRAMS AND ACTIVITIES

Directlink maintains an ongoing involvement with the Dial Before You Dig (DBYD) service in NSW. This service provides an external interface for the public to inform Directlink of threats, allowing the effective management of third party works that have the potential to impact APA assets.

Directlink has undertaken a number of activities throughout the year in relation to improving public awareness and safety, including programs of vegetation management and signage improvement.

Directlink engages with the NSW Fire and Rescue to ensure familiarisation with the Directlink assets. The aim of this is for the local NSW Fire and Rescue to be aware of the risks at the Directlink converter stations and the Directlink cable route in advance of any emergency.

Directlink field staff regularly liaise with local land owners during routine cable route maintenance, and distribute out Dial Before You Dig relevant information. Directlink field staff also regularly liaise with local excavation contractors through the APA Dial Before You Dig engagement processes. .

1.3 BUSHFIRE MANAGEMENT

1.3.1 PROGRAMS AND ACTIVITIES

Directlink has a long term vegetation maintenance contract for the ongoing vegetation management along the high voltage cable route easement. The contractor provides a monthly report with supporting information to demonstrate work progress for the month, and to report on incidents and other issues identified. The ongoing engagement of the vegetation contractor ensures the management of vegetation along the route supporting Directlink's Bushfire management processes.

Directlink has not identified any non-compliances with the ENSMS in relation to the Bushfire Management process.

TABLE 2: NON-COMPLIANCES RELATING TO THE MANAGEMENT OF BUSHFIRE RISK

Identified non-compliances	Actions against non-compliances	Progress of actions
N/A	N/A	N/A

1.3.2 BUSHFIRE RISK MANAGEMENT REPORT

The bush fire risk associated with Directlink is assessed and managed in accordance with section 12 of the Directlink Electricity Network Safety Management System.

There have been no events or incidents associated with bush fire risk management at Directlink. All hot work is managed in accordance with APA's risk assessment and permit issuing processes, including consideration of any total fire bans in place.

No complaints were received during the reporting period regarding the bush fire management activities.

Directlink has completed and instigated a number of opportunities for improvement that were identified during an audit of its bushfire risk management early in 2016.

2. CONTEXTUAL INFORMATION

2.1 DEVIATION FROM STANDARDS

Directlink is a single asset rather than a network that evolved over time. Consequently there is no need to deviate from the standard set in the Electricity Network Safety Management System.

The Directlink Electricity Network Safety Management System is specifically written for the Directlink asset.

2.2 SIGNIFICANT COMMUNITY INFRASTRUCTURE

Directlink provides inter regional transmission services between Powerlink and Essential Energy networks and as such does not directly supply power to any significant community infrastructure.

3. FORMAL SAFETY ASSESSMENT

3.1 CLASSIFICATION OF RISK LEVELS

Directlink utilises the following classification levels:

- Negligible and low risks are those manageable by routine plans and procedures. Proper diligence and care must be exercised and reasonable steps / precautions shall be taken to ensure the risk level is controlled and monitored for changes which could affect the risk classification.
- Intermediate (moderate) risks are those risks that require special controls to be identified and implemented. Work can proceed once a supervisor has confirmed the process has been adequately followed and that risk controls have been identified and implemented. Proper diligence and care shall be exercised and reasonable steps / precautions shall be taken to ensure the risk level is controlled to as low as reasonably practicable. Regular monitoring of the effectiveness of controls is required.
- High and extreme risks are those where effective controls are difficult to implement or not available.
 - Where a high or extreme risk is encountered work must not proceed and immediate action is required to eliminate HSE risks or minimise those risks, so far as is reasonably practicable.
 - If not reasonably practicable to do so, all appropriate control measures must be applied and the risks escalated to the appropriate management level for resolution and approval to proceed before work

commences. The relevant business General Manager must approve high risk work, and Executive Group Manager must approve extreme risks work. Monitoring of changes, which could affect the risk classification, must be carried out.

Directlink endeavours to implement both direct and indirect controls to mitigate residual risk levels to intermediate or lower.

3.2 RISKS WITHIN THE SCOPE OF THE ENSMS

The risks incorporated into the ENSMS are:

- Operational and maintenance non-conformance;
- Operational and maintenance staff and contractor safety;
- Substandard reliability;
- Public safety and asset awareness;
- Protection of property;
- Bushfire causation and impact;
- Emergency management and abnormal operating conditions;
- Technical change management;

Currently the risk of substandard reliability is not ALARP. A number of substandard reliability risks remain at an intermediate level and Directlink has a program of capital expenditure to implement systemic changes that will reduce these risks over the next three years.

3.3 FORMAL SAFETY ASSESSMENT REVIEWS

Directlink undertook a review of its Formal Safety Assessments (FSA) in preparation for its ENSMS audit in February 2018. In reviewing the FSA Directlink re-examined each risk on the register to ensure its ongoing relevance, controls and risk ratings.

The ENSMS audit then identified a number of areas where work was required to address non-compliances with AS 5577. Directlink is in the process of implementing the suggested actions and improving the FSA.

4. SAFETY RISK MANAGEMENT ACTIONS

4.1 OVERVIEW

Directlink utilises the APA safety management system for ENSMS safety risk management actions. The APA safety management system incorporates a work flow process for incident reporting, investigation, and corrective action. Each step of the work flow process is automatically monitored with alerts to trigger managerial action when a due date is approaching.

Risk Management Actions – Open, Completed And Raised

Criteria	Number
Number of risk management actions within the ENSMS scope that were raised in the reporting year	8
Number of open safety risk management actions within the ENSMS scope from any reporting year	<ul style="list-style-type: none"> • 1 Noise Complaint (has since been closed out) • 1 Site safety incident (has since been closed out)
Percentage of safety risk management actions within the ENSMS scope completed by the due date within the reporting year	75%

5. COMPLIANCE WITH DIRECTIONS

Directlink has not received any directions from IPART during the current reporting year.

Data On Directions Issued By IPART

Total number of directions issued by IPART	Total number of directions issued by IPART	Total number of directions issued by IPART
N/A	N/A	N/A

5.1 OUTSTANDING DIRECTIONS NOT COMPLIED WITH

Directlink currently has no outstanding compliance actions associated with directions from IPART.

6. STATISTICAL REPORTING

Network Asset Failures

Asset type	Asset population or length	Target functional failure rate	Conditional failures past due in the reporting year	Functional failures			
				Unassisted		Assisted	
				No fire	Fire	No fire	Fire
Pole/tower	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pole top structures / components	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Conductor – Transmission / sub-transmission	366 km	3 p.a.	0	10	0	0	0
Conductor – High Voltage	< 1 km	0	N/A	N/A	N/A	N/A	N/A
Conductor – Low voltage	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Service wire	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary plant – power transformers	6	0	0	0	0	0	0
Primary plant – distribution transformers	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary plant – reactive plant	642	0	0	0	0	0	0
Primary plant – switchgear	74	0	4	1	0	0	0
Secondary plant – protection equipment	43	0	1	18	0	0	0
Secondary plant - SCADA	9	0	0	3	0	0	0
Secondary plant – substation batteries	42	0	0	0	0	0	0

Directlink has classified Conditional Failures as resulting where there was no loss of function, but was necessary to address the condition through an outage.

Directlink has classified Unassisted Functional Failure as resulting in a loss of function of the equipment.

APA has classified Assisted Functional Failures as resulting in a loss of function of the equipment from human intervention or external influences outside of normal design parameters.

Vegetation Encroachment On Network Assets

Criteria	Inside bushfire prone areas	Outside bushfire prone areas
Category 1 defects	0	0
Category 2 defects overdue	0	0
Category 3 & 4 defects overdue	0	0
Total vegetation encroachments as a result of third parties	0	0

Category 1 Defects: Defects that pose a direct and immediate risk to the safety of the public/staff and requiring immediate rectification.

Category 2 Defects: Defects that pose a risk to the safety of the public/staff and require rectification with one month.

Category 3 Defects: Defects that pose a predictable future risk to the safety of the public/staff and require rectification within 6 months.

Category 4 Defects: Defects that pose a predictable future risk to the safety of the public/staff but can be rectified through planned maintenance.

Ground Clearance Below Minimum

Criteria	Inside bushfire prone areas	Outside bushfire prone areas
Number of OH spans for which inspections were planned	N/A	N/A
Number of OH spans for which inspections became overdue	N/A	N/A
Number of OH spans for which LIDAR inspections became overdue	N/A	N/A
Number of defects identified	N/A	N/A
Number of defect rectifications that became overdue	N/A	N/A
Total ground clearance encroachments as a result of third parties	N/A	N/A

Clearance to Structures Below Minimum

Criteria	Inside bushfire prone areas	Outside bushfire prone areas
Category 1 defects	N/A	N/A
Category 2 defects overdue	N/A	N/A
Category 3 & 4 defects overdue	N/A	N/A
Total structure encroachments as a result of third parties	N/A	N/A

Unauthorised Access to the Network

Criteria	Network Operator	Accredited Service Providers	General Public
Major substations and switching stations	0	0	1
Distribution substations, regulators, switches and associated equipment	0	0	0
Electricity mains outside major substations	0	0	0
Communications equipment outside major substations	0	0	0

Customer Safety Reporting

Criteria	Number
Number of customer shocks from installations caused by the ENO's electricity network	0