

NEED/OPPORTUNITY STATEMENT (NOS)



Installation of Fibre Networks - Phase 2

NOS- 000000001355 revision 2.0

Ellipse project no.: P0007978

TRIM file: [TRIM No]

Project reason: Capability - Obsolescence/Manufacturer support withdrawn

Project category: Prescribed - Replacement

Approvals

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Approved	Lance Wee	Asset Strategy Manager
Date submitted for approval	9 November 2016	

Change history

Revision	Date	Amendment
0	6 June 2016	Initial issue
1	13 October 2016	Update to 2016/17 dollars
2	9 November 2016	Update to format

1. Background

TransGrid's Telecommunications Infrastructure Renewal and Development Strategy¹ details the organisational requirement to roll out protected fibre rings as the new basis for the telecommunications network structure. The strategy provides a 15 year plan through to 2028 for the development of this network. The initial rollout of this strategy occurred under Need 699 – Installation of OPGW Fibre Networks and phase two covers the work to be completed across the entire HV Network in the 5 to 10 year timeframe of the strategy.

2. Need/opportunity

By continuing the installation of fibre networks, TransGrid will be working towards the objectives of the renewal and development strategy including:

- > Consolidating telecommunications network technology by superseding limited bandwidth systems such as Microwave and Power Line Carrier;
- > Implementing high bandwidth communications to the majority of sites to enable greater access to operational data and remote systems. This will generate greater efficiency in operating the network, faster responses to network incidents and will result in higher reliability of the high voltage network;
- > Implementing high bandwidth communications to the majority of sites to enable greater access to corporate data systems. This will drive greater efficiency in the delivery of capital, operational and maintenance work at substation sites; and
- > Implementing a technology that will enable the rationalisation of disparate systems and devices across TransGrid into a single network that will serve TransGrid into the foreseeable future.

The need for phase two of the Installation of Fibre Networks will be assessed against the benefits as identified in the Business Case for Need 699, such as improved efficiency for working at remote sites, reduction in operations and maintenance expenditure and enabling new technologies over the 30 year analysis period of the investment.

3. Related Needs/opportunities

- > Need ID 699 – Installation of OPGW Fibre Networks

4. Recommendation

It is recommended that options be considered to address the identified opportunity.

¹ Refer SSA Asset Management - Strategy - Development and Renewal - Telecommunications Infrastructure