

Commonwealth of Australia

*Telecommunications Act 1997*

**Telecommunications (National Broadband  
Network—Designated Information) Determination  
2008 (No. 1)**

I, ANTHONY NORMAN ALBANESE, Minister for Infrastructure, Transport, Regional Development and Local Government, on behalf of the Minister for Broadband, Communications and the Digital Economy in accordance with an authorisation under section 18C of the *Acts Interpretation Act 1901*, make this Determination under subsection 531C(1) of the *Telecommunications Act 1997*.

Dated 6 August 2008

ANTHONY NORMAN ALBANESE  
Minister for Infrastructure, Transport, Regional Development and Local  
Government

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**1 Name of Determination**

This Determination is the *Telecommunications (National Broadband Network—Designated Information) Determination 2008 (No. 1)*.

**2 Commencement**

This Determination commences on the day on which it is notified in the *Gazette*.

**3 Definitions**

(1) In this Determination:

*Act* means the *Telecommunications Act 1997*.

**ADSL** means Asymmetrical Digital Subscriber Line.

**ADSL2** means Asymmetrical Digital Subscriber Line version 2.

**ADSL2+** means Extended bandwidth ADSL2.

**bridged tap** means a length of unterminated communications wire connected in parallel across a communications wire.

**cabinet** means a copper cross-connect facility located at an intermediate point between a Lower CCF (or a customer's premises in some cases) and an exchange.

**communications wire** means a copper or aluminium based wire forming part of a public telecommunications network.

**conduit** means a pipe placed underground in which cables can be laid.

**core network** means that part of a telecommunications network that is not a customer access network.

**core transmission network** means that part of the core network that consists of the connection by optical fibre or by microwave radio between exchanges and/or points of interconnection for the transmission of carriage services.

*Note:* This does not include any links between mobile base stations that are used for base station to base station communications.

**cross-connect facility or CCF** means a termination device for multiple cables consisting of wire terminating modules or strips, allowing communications wires from one or more cables to be connected to communications wires in another cable but does not include cable joints where the connections are permanent and not readily accessible.

*Note:* A CCF logically has an A (customer) and B (network) side, but does not have to be actually implemented as two discrete sides as in a traditional distribution frame. The major types of CCF within the local loop are located within exchanges (main distribution frames), within roadside cabinets and specific street furniture (pillars/cabinets). There may also be CCFs within customer premises.

**customer access module** means a device that provides ring tone, ring current and battery feed to customer equipment.

*Note:* Examples are remote subscriber stages, remote subscriber units, integrated remote integrated multiplexers and non-integrated remote integrated multiplexers and the customer line module of a local switch.

**customer access network or CAN** means that part of a telecommunications network that allows end-users to connect to a local switch, base station, node or exchange.

**Department** means the Department administered by the Minister administering the Act.

**distribution area** means a designated sub-division of an exchange serving area directly served by the Lower CCF, namely a pillar or large pair gain system.

*Note 1:* ‘Directly served’ means that there is no other cross-connect facility between that Lower CCF and the network boundary point.

*Note 2:* Distribution areas may also contain locations that are served as direct main cable fed customers and direct branch cable fed customers.

**distribution network** means that part of the customer access network between the Lower CCF and the network boundary point.

**exchange** means a building that contains customer access modules and other electronics and that:

- (a) is connected to other exchanges by transmission systems including optical fibre or by microwave radio (and sometimes directly to other carriers and the Internet); and
- (b) supplies carriage services and related services to remote customer access modules or to end-users.

**exchange serving area or ESA** means an area served from an exchange.

**HFC** means Hybrid Fibre Coaxial.

**FTTN** means Fibre-to-the-Node.

**GDA94** means Geocentric Datum of Australia 1994.

**large pair gain system** means a device that is placed in the customer access network that is fed by optical fibre and provides PSTN services and/or broadband services (e.g. ADSL, ADSL2, ADSL2+, VDSL and VDSL2) to subscribers.

*Note:* Large pair gain systems include remote integrated multiplexers, remote concentrator multiplexers, remotely located multi-service access nodes (MSAN), remotely located customer multiplexers, and any other remotely located fibre fed aggregation point that provides a range of telephony and broadband services.

**Lower CCF** means the cross-connect facility closest to the network boundary point.

*Note 1:* The lower CCF is not a main distribution frame located at the customer’s premises.

*Note 2:* This does not include control joints or cable joints where the connections are permanent and not readily accessible.

**main network** means that part of the customer access network between the exchange and the Lower CCF.

*Note:* This is also known as a feeder network.

**metallic cable** means a number of twisted pairs of communications wire that are wrapped together.

**microwave radio** means the technology for transmitting radio waves between two locations with directional antennas, forming a fixed radio connection between the two points.

**network boundary point** means the boundary of a telecommunications network ascertained in accordance with section 22 of the Act.

**nominated carrier** means a carrier specified in Schedule 1 to this Determination.

**nominated exchange serving area** means an exchange serving area specified in Schedule 2 to this Determination.

**optical fibre** means a glass or plastic fibre designed to guide light across its length.

**pillar** means a metallic cable cross-connect facility located at the Lower CCF.

*Note:* This does not include facilities located at the exchange or at the customer's premises.

**point of interconnection** means a physical point of connection in Australia between a network operated by a carrier or a carriage service provider and other network operated by a carriage service provider.

**PSTN** means the Public Switched Telephone Network.

*Note:* The PSTN is a telephone network accessible by the public providing switching and transmission facilities using analogue and digital technologies.

**service area** means the geographic extent of a carrier's network.

**service in operation** means a PSTN service provided over Telstra's CAN.

**small pair gain system** means a device that concentrates PSTN services so that fewer communications wires may be used than would otherwise be required to provide a service to a given number of PSTN subscribers.

**TAB vector format** means the MapInfo proprietary format that contains a spatial representation of data using points, lines and polygons.

**TEA Model** means Telstra Efficient Access Model.

**Telstra** means Telstra Corporation Limited (ABN 33 051 775 556).

**TransACT** means Transact Capital Communications Pty Ltd (ABN 23 093 966 888).

**ULLS** means Unconditioned Local Loop Service.

**VDSL** means Very High Speed Digital Subscriber Line.

**VDSL2** means Very High Speed Digital Subscriber Line version 2.

*Note 1:* Each of the following expressions used in this Determination has the meaning given by the Act:

- Australia
- authorised information officer
- carrier
- carriage service
- carriage service provider
- customer equipment
- line
- point-to-multipoint service
- telecommunications network.

*Note 2:* The following expression used in this Determination has the meaning given by the *Telecommunications (Consumer Protection and Service Standards) Act 1999*:

- payphone.

(2) In this Determination, the following service location categories are used:

<b>Service location category</b>	<b>Demographic size</b>
Urban	Township/community grouping of 10,000 people or more

Major Rural	Township/community grouping of more than 2,500 people but less than 10,000 people
Minor Rural	Township/community grouping of 201 people or more but not more than 2,500 people within a standard zone
Remote	Township/community grouping of 200 or less people or township/community grouping located outside a standard zone

(3) In this Determination, the following ULLS Band categories are used:

<b>ULLS Band</b>	<b>Description</b>
Band 1	CBD areas of Sydney, Melbourne, Brisbane, Adelaide and Perth
Band 2	Urban areas of capital cities, metropolitan regions and large provincial centres (including other CBD areas not already included in Band 1)
Band 3	Semi-urban areas including outer metropolitan and smaller provincial towns
Band 4	Rural and remote areas

#### **4 Designated information**

- (1) For the purposes of paragraph 531C(1)(a) of the Act:
- (a) the information mentioned in clause 5 of this Determination is specified as designated information for the purposes of the application of the Act to nominated carriers;
  - (b) the information mentioned in clause 6 of this Determination is specified as designated information for the purposes of the application of the Act to Telstra; and
  - (c) the information mentioned in clause 7 of this Determination is specified as designated information for the purposes of the application of the Act to TransACT.
- (2) Designated information specified in subclause (1) does not include information of a carrier in relation to which an authorised information officer has given, whether before or after this Determination is made, an undertaking to that carrier in accordance with paragraph (aa) of section 531B of the Act to the extent that the information subject to the undertaking is substantially the same as the information specified in subclause (1) and is in substantially the same manner and form specified in clauses 8 and 9.

## **5 Network information – Nominated carriers**

### ***Core Transmission Network***

- (1) For each core transmission network of a nominated carrier, the following is designated information:
  - (a) details of the optical fibre cable core transmission network topology identifying the suburb, town and city (but not a street or an exact location) through which the core transmission network passes or terminates; and
  - (b) details of the microwave radio transmission topology identifying the suburb, town and city (but not a street or an exact location) through which the core transmission network passes or terminates.

*Note:* The designated information specified in subclause 5(1) relates only to core transmission networks that are owned by a nominated carrier or in relation to which a nominated carrier is the nominated carrier (as defined in section 7 of the Act) in accordance with a nominated carrier declaration made under subsection 81(1) of the Act.

- (2) For each nominated carrier, the designated information includes a description of the design, dimensioning and deployment of optical fibre in the core transmission network. For Telstra this will include, but is not limited to, Telstra's document entitled *Optical Fibre Cable – outside plant – technical requirements*.

### ***Points of Interconnection***

- (3) For each nominated carrier, the designated information includes the location of all standard commercial points of interconnection for telephony and Internet carriage services, identified by reference to the suburb, town and State or Territory (but not by reference to a street or an exact location) in which the point of interconnection is located.

*Note:* The information must not disclose details about the nominated carrier's customers.

- (4) For each nominated carrier, the designated information includes a list of the telephony and Internet carriage services to which interconnection is offered at each of its standard commercial points of interconnection.
- (5) For each nominated carrier, the designated information includes the technical description of the interfaces and protocols for each type of carriage service mentioned in subclause (4) for which interconnection is offered and a description of the nominated carrier's rules for providing interconnection to each type of service.

***HFC service areas and HFC network***

- (6) For each nominated carrier, the designated information includes the boundaries of each of the carrier's HFC service areas.
- (7) For each nominated carrier's HFC network, the designated information includes:
  - (a) the location of optical fibre source distribution points, which are points in the HFC network where fibre cables from fibre end points are connected to a HFC distribution device and then to a regional or network head end; and
  - (b) the number of optical fibre end points for each service area, which are the points in the HFC network where coaxial cable is connected to a HFC distribution device that is connected to optical fibre.

**6 Network information – Telstra**

***Statistical information on Telstra's customer access network***

- (1) For each nominated exchange serving area, the following is designated information:
  - (a) the number of small pair gain systems located in the PSTN;
  - (b) the maximum, minimum, average, median, upper quartile and lower quartile cable length from the exchange to all pillars and all large pair gain systems;
  - (c) the maximum, minimum, average, median, upper quartile and lower quartile cable length from each pillar and each large pair gain system to the network boundary point of each customer's premises;
  - (d) the maximum, minimum, average, median, upper quartile and lower quartile cable length from the exchange to the network boundary point of each customer's premises, where the customer's premises is fed directly from the exchange; and
  - (e) the number of services in operation serviced directly from the exchange and the number of services in operation serviced by pillars and large pair gain systems.
- (2) For each distribution area within each nominated exchange serving area, the following is designated information:
  - (a) the number of pillars;
  - (b) the type of each pillar;
  - (c) the number of large pair gain systems;
  - (d) the type of each large pair gain system;

- (e) the number of cabinets; and
  - (f) the type of each cabinet.
- (3) For Telstra's national PSTN, the designated information includes the following information identified by reference to the service location categories described in subclause 3(2) and by reference to the ULLS Band categories described in subclause 3(3):
- (a) the number of each type of pillar;
  - (b) the number of each type of cabinet;
  - (c) the number of each type of large pair gain system; and
  - (d) the number of each type of small pair gain system.

***Core transmission network and main network***

- (4) For each nominated exchange serving area, the designated information includes:
- (a) the location of all conduit in Telstra's core transmission network and main network;
  - (b) the location of all optical fibre cable located in Telstra's core transmission network and main network; and
  - (c) the location of all metallic cable located in Telstra's core transmission network and main network.
- (5) For each section of conduit identified under paragraph 6(4)(a), the designated information includes:
- (a) the conduit section length;
  - (b) the diameter of the conduit or conduits;
  - (c) the number of conduits;
  - (d) the fibre count of each fibre optic cable in the section;
  - (e) the type of each fibre optic cable in the section;
  - (f) the pair count of each metallic cable in the section;
  - (g) the gauge of the communications wire in the section;
  - (h) the type of each metallic cable in the section;
  - (i) the type of any other cables in the section; and
  - (j) the size of any sub-duct in the section.

***Distribution customer access network***

- (6) For Telstra, the designated information includes a description of the design, dimensioning and deployment of its distribution customer access

network. The designated information includes the Telstra documents entitled *Access Network Design – Design Project Overview* and *Access Network Design – Pits & Conduits (Standard Urban Application)*.

***Technical descriptions***

- (7) For Telstra, the designated information includes a generic technical description of each type of:
  - (a) large pair gain system; and
  - (b) small pair gain system.
- (8) For Telstra, the designated information includes the technical descriptions of the following services provided over metallic cable:
  - (a) the Voice Grade Dedicated Line service, which is used for services including traffic control systems, fire alarms, security systems and telemetry monitoring services;
  - (b) the carriage service used to support public and private payphones;
  - (c) the low frequency out of voice frequency band services which are used to support services such as alarm services;
  - (d) the service used to support dial-up and dedicated EFTPOS services;
  - (e) the following leased line digital data services:
    - (i) point-to-point services;
    - (ii) point-to-multipoint services;
    - (iii) 1.2kbps to 48kbps services;
    - (iv) multiple 64kbps services; and
  - (f) the PABX Analogue Indial service.

***TEA Model***

- (9) For Telstra, the designated information includes the complete set of ULLS Band 2 category and ULLS Band 3 category databases and associated tables for the current version of the TEA Model.

*Note 1:* This does not include the modules in the TEA Model that manipulate the raw data.

*Note 2:* ULLS Band 2 and ULLS Band 3 categories are described in subclause 3(3).

- (10) For Telstra, the designated information includes the following TEA Model documentation:
  - (a) TEA Model Schematic dated May 2008; and
  - (b) TEA Model Data Dictionary dated May 2008.

## **7 Network information – TransACT**

For TransACT, the designated information includes the boundaries of each of its FTTN service areas.

## **8 Approved manner in which designated information is to be given to an authorised information officer**

For the purposes of paragraph 531C(1)(b) of the Act, the approved manner in which designated information is to be given to an authorised information officer under section 531F of the Act is in a Microsoft compatible format on a CD-ROM or DVD-ROM (PC-formatted). Carriers must include an index of all electronic documents on the CD-ROM or DVD-ROM. The CD-ROM or DVD-ROM and index must be sent by registered courier to the authorised information officer at the following address:

Authorised Information Officer  
National Broadband Network Taskforce  
Department of Broadband,  
Communications and the Digital Economy  
38 Sydney Ave  
FORREST ACT 2603

## **9 Approved form in which designated information is to be given to an authorised information officer**

- (1) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclause 5(1) of this Determination is to be given to an authorised information officer under section 531F of the Act in:
  - (a) PDF format as a schematic or geographic representation of each core transmission network identifying the connectivity between all exchanges and points of interconnection in a form substantially similar to the form specified in Schedule 3 to this Determination; or
  - (b) Microsoft Excel format in a tabular form substantially similar to the format specified in Schedule 4 to this Determination.
- (2) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclause 5(2) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Word or PDF format in a form that substantially addresses the matters specified in Schedule 5 to this Determination.
- (3) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclauses 5(3) and (4) of this Determination is to be given to an authorised information officer under section 531F of the

Act in Microsoft Excel format in a form substantially similar to the form specified in Schedule 6 to this Determination.

- (4) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclause 5(5) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Word or PDF format with a separate document for the each type of service that can be interconnected.
- (5) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclause 5(6), paragraph 5(7)(a) and clause 7 of this Determination is to be given to an authorised information officer under section 531F of the Act in a TAB vector format using the GDA94 coordinate system or such other format as the Department agrees in writing.
- (6) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in paragraph 5(7)(b) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Excel format in a form substantially similar to the form specified in Schedule 7 to this Determination.
- (7) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclause 6(1) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Excel format in a form substantially similar to the form specified in Schedule 8 to this Determination.
- (8) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclause 6(2) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Excel format in a form substantially similar to the form specified in Schedule 9 to this Determination.
- (9) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclauses 6(3) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Excel format in a form substantially similar to the form specified in Schedule 10 to this Determination.
- (10) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclauses 6(4) and (5) of this Determination is to be given to an authorised information officer under section 531F of the Act in TAB vector format using the GDA94 coordinate system, or such other format as the Department agrees in writing, in a form substantially similar to the form specified in Schedule 11 to this Determination.

- (11) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclause 6(6) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Word or PDF format in a form that substantially addresses the matters specified in Schedule 12 to this Determination.
- (12) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclause 6(7) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Word or PDF format with a separate document for each type of large pair gain system and small pair gain system.
- (13) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclause 6(8) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Word or PDF format with a separate document for each service mentioned in subclause 6(9).
- (14) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclauses 6(9) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Access database format.
- (15) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in subclause 6(10) of this Determination is to be given to an authorised information officer under section 531F of the Act in a Microsoft Word or PDF format.
- (16) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in clauses 5, 6 and 7 of this Determination is to be marked 'Strictly Private & Confidential'. This marking is to be applied to the top and bottom of each page of Microsoft Word, Microsoft Excel and PDF format documents and is to be included in the title of all electronic documents provided.
- (17) For the purposes of paragraph 531C(1)(c) of the Act, the designated information specified in clauses 5, 6 and 7 of this Determination is to be marked with the date at which the information was compiled. This marking is to be applied to the top and bottom of each page of Microsoft Word, Microsoft Excel and PDF format documents and is to be included in the title of all electronic documents provided.

**10 Approved period within which designated information is to be given to an approved information officer**

For the purposes of paragraph 531C(1)(d) of the Act, 10 business days is specified as the approved period within which nominated carriers are to give designated information mentioned in this Determination to an authorised information officer under section 531F of the Act.

*Note:* Carriers should give the designated information to an authorised information officer as soon as practicable but no later than 10 business days from the commencement of this Determination.

**Schedule 1      Nominated carriers**

AAPT Limited	ABN 22 052 082 416
Agile Pty Limited	ABN 36 080 855 321
Amcom Pty Ltd	ABN 33 009 336 341
Digital River Networks Pty Ltd	ABN 47 098 597 329
Macquarie Telecom Network Carrier Services Pty Limited	ABN 62 082 931 020
NextGen Networks Pty Limited	ABN 32 094 147 403
Optus Networks Pty Limited	ABN 92 008 570 330
Pipe Networks Limited	ABN 21 099 104 122
Primus Telecommunications Pty Limited	ABN 69 071 191 396
Soul Pattinson Telecommunications Pty Limited	ABN 79 001 726
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Telstra Corporation Limited	ABN 33 051 775 556
Transact Capital Communications Pty Limited	ABN 23 093 966 888
Vodafone Australia Limited	ABN 86 056 161 043

**Schedule 2      Nominated exchange serving areas**

	<b>ESA CODE</b>	<b>SITE NAME</b>	<b>STATE</b>	<b>UNBUNDLED LOCAL LOOP BAND</b>
1	HALL	HALL	ACT	Band 4
2	JBRA	JERRABOMBERRA	ACT	Band 3
3	MNSH	MONASH	ACT	Band 2
4	ADLG	ADELONG	NSW	Band 4
5	ANNA	ANNA BAY	NSW	Band 3
6	BRPT	BANORA POINT	NSW	Band 2
7	BAUL	BAULKHAM HILLS	NSW	Band 2
8	BGAN	BERRIGAN	NSW	Band 4
9	BEXL	BEXHILL	NSW	Band 3
10	BNYA	BINYA	NSW	Band 4
11	BLAK	BLAKEHURST	NSW	Band 2
12	BOWN	BOWNA	NSW	Band 4
13	BNHL	BROKEN HILL	NSW	Band 4
14	CPFT	CAPTAINS FLAT	NSW	Band 4
15	CARR	CARRAMAR	NSW	Band 2
16	CHAT	CHATSWOOD	NSW	Band 2
17	CHLM	CHILLINGHAM	NSW	Band 4
18	CLNS	CLUNES	NSW	Band 3
19	CBLE	COONAMBLE	NSW	Band 4
20	CBRA	CULBURRA	NSW	Band 3
21	DALO	DANDALOO	NSW	Band 4
22	GLFD	GLENFIELD	NSW	Band 3
23	HORS	HORSLEY PARK	NSW	Band 3
24	LCAT	LAKE CATHIE	NSW	Band 3
25	LANS	LANSDOWNE	NSW	Band 4
26	MGPK	MANNERING PARK	NSW	Band 3
27	MATG	MATONG	NSW	Band 4
28	MRWA	MERRIWA	NSW	Band 4
29	MOLG	MOLONG	NSW	Band 4
30	MRLD	MOORLAND	NSW	Band 4
31	MRSE	MORISSET	NSW	Band 3
32	MORV	MORVEN	NSW	Band 4
33	MULY	MULLALEY	NSW	Band 4
34	NTRT	NEVERTIRE	NSW	Band 4
35	SING	SINGLETON	NSW	Band 3
36	SLPT	SOLDIERS POINT	NSW	Band 2
37	TALB	TALBINGO	NSW	Band 4

	<b>ESA CODE</b>	<b>SITE NAME</b>	<b>STATE</b>	<b>UNBUNDLED LOCAL LOOP BAND</b>
38	TRGE	TRANGIE	NSW	Band 4
39	TUMU	TUMUT	NSW	Band 3
40	WSTF	WAGSTAFF POINT	NSW	Band 2
41	WYD M	WYANGALA DAM	NSW	Band 4
42	HDSS	HOWARD SPRINGS	NT	Band 3
43	ALCR	ALICE RIVER	QLD	Band 4
44	ATHE	ATHERTON	QLD	Band 3
45	BARN	BARNEY VIEW	QLD	Band 4
46	BOOY	BOOYAL	QLD	Band 4
47	BNPS	BROWNS PLAINS	QLD	Band 2
48	CPHL	CAMP HILL	QLD	Band 2
49	CTRS	CHARTERS TOWERS	QLD	Band 4
50	DGBH	DINGO BEACH	QLD	Band 4
51	DNAN	DOONAN	QLD	Band 3
52	DRAY	DRAYTON	QLD	Band 3
53	DYST	DYSART	QLD	Band 4
54	EMPS	EIGHT MILE PLAINS	QLD	Band 2
55	ELIM	ELIMBAH	QLD	Band 3
56	GNDN	GLENDEN	QLD	Band 4
57	GMGN	GLENMORGAN	QLD	Band 4
58	HATT	HATTON VALE	QLD	Band 3
59	HERG	HERVEY RANGE	QLD	Band 4
60	JAND	JANDOWAE	QLD	Band 4
61	MLE5	MILES	QLD	Band 4
62	MUTA	MUTARNEE	QLD	Band 4
63	NMKT	NEWMARKET	QLD	Band 2
64	NGOO	NORTH GOOBURRUM	QLD	Band 3
65	NGRE	NORTH GREGORY	QLD	Band 4
66	PDPT	PARADISE POINT	QLD	Band 2
67	PLBA	PIALBA	QLD	Band 3
68	PKBA	PINKENBA	QLD	Band 3
69	RAGN	RAGLAN	QLD	Band 4
70	RICH	RICHMOND	QLD	Band 4
71	SMFD	SMITHFIELD	SA	Band 2
72	SPNE	STRATHPINE	QLD	Band 2
73	TGRA	TALLEBUDGERA	QLD	Band 2
74	TEXA	TEXAS	QLD	Band 4
75	WACL	WACOL	QLD	Band 2

	<b>ESA CODE</b>	<b>SITE NAME</b>	<b>STATE</b>	<b>UNBUNDLED LOCAL LOOP BAND</b>
76	WALL	WALLANGARRA	QLD	Band 4
77	ALFD	ALFORD	SA	Band 4
78	CLCA	CALCA	SA	Band 4
79	CNBY	COFFIN BAY	SA	Band 4
80	CLBR	CRYSTAL BROOK	SA	Band 4
81	GRNM	GERANIUM	SA	Band 4
82	LSDE	LONSDALE	SA	Band 2
83	LYDH	LYNDOCH	SA	Band 3
84	VRHR	VICTOR HARBOR	SA	Band 3
85	LOEY	LONGLEY	TAS	Band 4
86	MION	MIDDLETON	TAS	Band 4
87	SABY	SANDY BAY	TAS	Band 2
88	SENE	SELBOURNE	TAS	Band 4
89	SBRY	SOUTH BRUNY	TAS	Band 4
90	WERY	WESTBURY	TAS	Band 4
91	ZEAN	ZEEHAN	TAS	Band 4
92	ALEY	APSLEY	VIC	Band 4
93	ARAT	ARARAT	VIC	Band 3
94	CGAN	CARDIGAN	VIC	Band 4
95	CARU	CARRAJUNG	VIC	Band 4
96	COLD	COLDSTREAM	VIC	Band 3
97	CGWA	CUDGEWA	VIC	Band 4
98	EURA	EUROA	VIC	Band 4
99	GALE	GARDENVALE	VIC	Band 2
100	GYON	GLENLYON	VIC	Band 4
101	GRBT	GOORAMBAT	VIC	Band 4
102	GRTA	GRETA	VIC	Band 4
103	GRUY	GRUYERE	VIC	Band 3
104	HAST	HASTINGS	VIC	Band 2
105	HEDE	HEDLEY	VIC	Band 4
106	HEYD	HEYWOOD	VIC	Band 4
107	IGON	INVERGORDON	VIC	Band 4
108	IRYM	IRYMPLE	VIC	Band 3
109	JVLE	JORDANVILLE	VIC	Band 2
110	KYNG	KOOYONG	VIC	Band 2
111	LAVL	LAVERS HILL	VIC	Band 4
112	LVSX	LAVERTON SOUTH	VIC	Band 2
113	LBGE	LETHBRIDGE	VIC	Band 4
114	LSPT	LOCH SPORT	VIC	Band 4

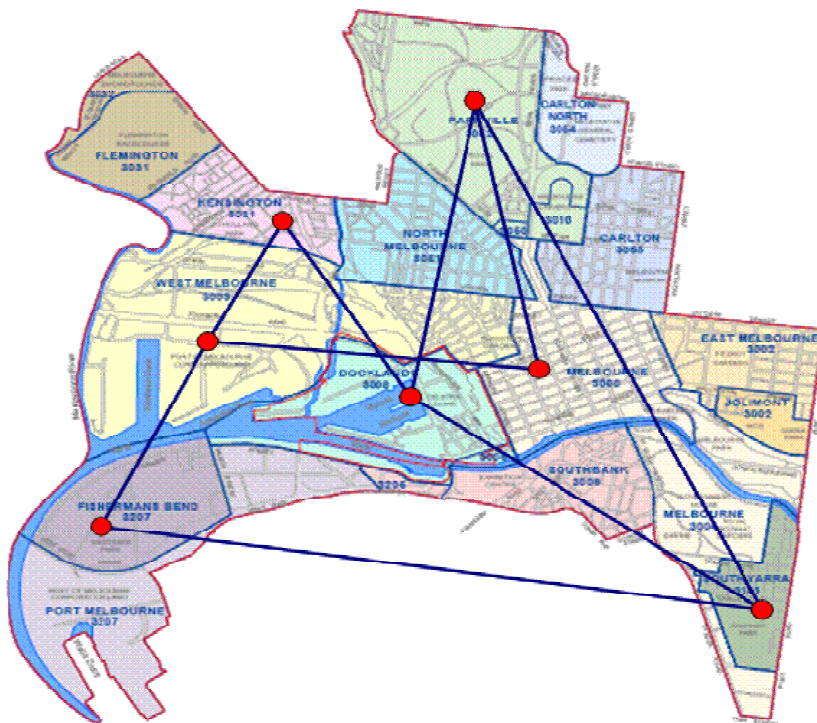
	<b>ESA CODE</b>	<b>SITE NAME</b>	<b>STATE</b>	<b>UNBUNDLED LOCAL LOOP BAND</b>
115	LONS	LONSDALE	VIC	Band 1
116	MAIR	MAIN RIDGE	VIC	Band 3
117	MNYN	MEENIYAN	VIC	Band 4
118	MONB	MONBULK	VIC	Band 3
119	MLOC	MORDIALLOC	VIC	Band 2
120	NAGB	NAGAMBIE	VIC	Band 4
121	NARA	NARRACAN	VIC	Band 4
122	RESH	RESEARCH	VIC	Band 2
123	SEFN	SEAFORD NORTH	VIC	Band 2
124	TYER	TYERS	VIC	Band 4
125	WARA	WOORARRA	VIC	Band 4
126	AUSD	AUSTRALIND	WA	Band 3
127	BATA	BATEMAN	WA	Band 2
128	BCHE	BECHER	WA	Band 3
129	CVNN	CARNARVON NORTH	WA	Band 4
130	COLI	COLLIE	WA	Band 4
131	GIRR	GIRRAWHEEN	WA	Band 2
132	HAMS	HAMERSLEY	WA	Band 2
133	JDLP	JOONDALUP	WA	Band 2
134	KLNI	KALANNIE	WA	Band 4
135	MAYM	MAYLANDS	WA	Band 2
136	MTNA	MOUNT HELENA	WA	Band 3
137	NBWA	NABAWA	WA	Band 4
138	NRBN	NAREMBEEN	WA	Band 4
139	PMBT	PEMBERTON	WA	Band 4
140	RMND	REDMOND	WA	Band 4
141	SPRD	SPEARWOOD	WA	Band 2
142	WLTE	WELLINGTON	WA	Band 1
143	DGRY	DE GREY	WA	Band 4

**Schedule 3 Approved form for designated information mentioned in subclause 5(1) of this Determination**

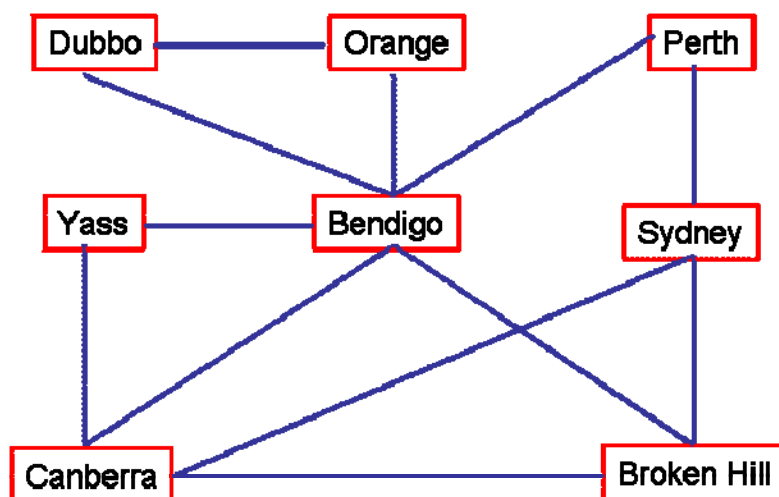
The approved form for schematic or graphic representations mentioned in paragraph 9(1)(a) is a diagram that sets out at a high level the topology of the network, however it would not contain any underlying data such as geospatial coordinates that could be extracted and used for analysis.

For a graphic representation, the topology would be shown on a real world map, see figure 1. For a schematic representation, the topology would not have any additional mapping data, see figure 2.

**Figure 1**



**Figure 2**



**Schedule 4      Approved form for designated information mentioned in subclause 5(1) of this Determination**

For all nominated carriers except Telstra, the approved form for the tabular format mentioned in paragraph 9(1)(b) of this Determination is as follows:

Point A			Point B			Type of Link
Name of exchange or point of interconnection <i>(if applicable)</i>	Suburb	City/Town	Name of exchange or point of interconnection <i>(if applicable)</i>	Suburb	City/Town	

Legend:      Type of Link = fibre or microwave

For Telstra, the approved form for the tabular format mentioned in paragraph 9(1)(b) of this Determination is as follows:

Point A		Point B		Type of Link
Name of exchange or point of interconnection <i>(if applicable)</i>	Identification Code	Name of exchange or point of interconnection <i>(if applicable)</i>	Identification Code	

**Schedule 5 Approved form for designated information mentioned in subclause 5(2) of this Determination**

The approved form for designated information mentioned in subclause 5(2) of this Determination must address the following matters:

**1. Core Transmission Network – Optical Fibre**

A description of the design, dimensioning and deployment of optical fibre in the core transmission network, including specific information on the following types of routes and the extent that there are significant differences between them.

**2. Route Types**

1. Inter-capital backhaul
2. Major regional backhaul
3. Minor regional backhaul:
4. Inter-exchange:
  - 4.1 Central Business Districts of capital cities
  - 4.2 Urban areas of:
    - 4.2.1 Capital city metropolitan areas
    - 4.2.2 Major regional centres

**3. Design Factors**

The description should cover, at a minimum:

1. the network elements required for the cable route (e.g. cable type, fibre count, regenerators, repeaters, use of conduit, other); and
2. the key factors to be taken into account in determining the appropriate dimensioning of the route, in particular the fibre count, including a description of how those factors influence the dimensioning of the route.

**4. Historical Developments and Geographical Variations**

To the extent that there are significant differences in relation to the information provided for items 1 – 3 above, an outline of those differences and the period(s) over which they applied. Any significant State, Territory or regional differences should be included.

**Schedule 6      Approved form for designated information mentioned in subclauses 5(3) and (4) of this Determination**

For all nominated carriers except Telstra, the approved form for designated information mentioned in subclauses 5(3) and (4) of this Determination is as follows:

Name of standard commercial point of interconnection	Suburb	Town/City	State/Territory	Services that can be interconnecte d

For Telstra, the approved form for the tabular format mentioned in paragraph 9(1)(b) of this Determination is as follows:

Name of standard commercial point of interconnection	Identification Code	State/Territory	Services that can be interconnecte d

**Schedule 7      Approved form for designated information  
mentioned in paragraph 5(7)(b) of this  
Determination**

The approved form for designated information mentioned in paragraph 5(7)(b) of this Determination is as follows:

HFC Service Area	Number of optical fibre end points



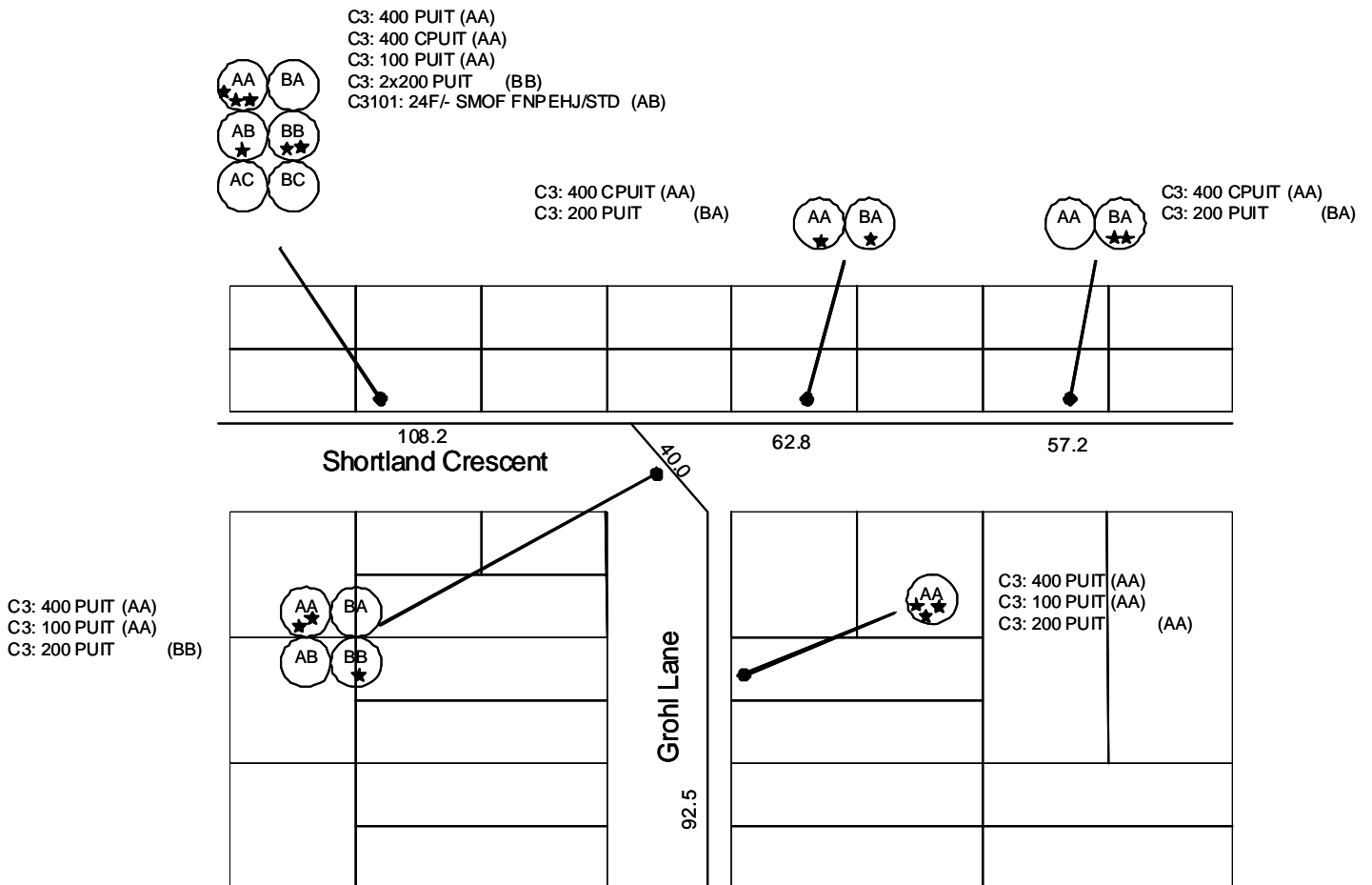




**Schedule 11 Approved form for designated information mentioned in subclauses 6(4) and 6(5) of this Determination**

The approved form for designated information mentioned in subclauses 6(5) and 6(6) of this Determination is a plan that shows the location of conduit and all of the cables that are located in each section of conduit.

Where codes are used to identify different cable types and/or sizes, then a data dictionary must also be included. The data dictionary is also to specify the codes used to identify the cables that are used in the core transmission network, main network and distribution network.



**Schedule 12      Approved form for designated information mentioned in subclause 6(6) of this Determination**

The approved form for designated information mentioned in subclause 6(7) of this Determination must address the following matters:

**1.      Customer Access Network**

A description of the design, dimensioning and deployment of the distribution customer access network as outlined below.

To the extent that distribution customer access network differs according to the different areas, Telstra should address at least the following:

- 1          Central Business Districts of capital cities
- 2          Urban (including capital city metropolitan areas)
3.        Major Rural
4.        Minor Rural
5.        Remote

**2.      Key Customer Access Network Elements**

1.        Distribution Network
  - 1.1      Metallic cable
  - 1.2      Cross-connect facilities
  - 1.3      Conduit and pipes
  - 1.4      Manholes and pits
  - 1.5      Bridged taps

**3.      Design Factors**

The description should cover, at a minimum:

1.        network architecture;
2.        the network elements listed at 1.1-1.5 above (with respect to metallic cable, describe the use of different gauges of communications wire);

3. selection & location of cross-connection facilities (e.g. pillar, MSAN, CMUX, IRIM, etc.); and
4. the key factors to be taken into account in determining the appropriate dimensioning of the network elements, including an outline of how those factors influence the dimensioning.

**4. Historical Developments and Geographical Variations**

To the extent that there are significant differences in relation to the information provided for items 1 – 3 above, provide an outline of those differences and the period(s) over which they applied. Any significant State, Territory or regional differences should be included.