

**COMMUNICATIONS
ALLIANCE LTD**



INDUSTRY GUIDELINE

G665:2022

TELECOMMUNICATIONS – FACILITIES
INFORMATION SHARING

G665:2022 Telecommunications – Facilities Information Sharing Industry Guideline

Communications Alliance Ltd was formed in 1997 to provide a unified voice for the Australian communications industry and to lead it into the next generation of converging networks, technologies and services.

Disclaimers

- 1) Notwithstanding anything contained in this Industry Guideline:
 - a) Communications Alliance disclaims responsibility (including where Communications Alliance or any of its officers, employees, agents or contractors has been negligent) for any direct or indirect loss, damage, claim, or liability any person may incur as a result of any:
 - i) reliance on or compliance with this Industry Guideline;
 - ii) inaccuracy or inappropriateness of this Industry Guideline;
or
 - iii) inconsistency of this Industry Guideline with any law; and
 - b) Communications Alliance disclaims responsibility (including where Communications Alliance or any of its officers, employees, agents or contractors has been negligent) for ensuring compliance by any person with this Industry Code/Guideline.
- 2) The above disclaimers will not apply to the extent they are inconsistent with any relevant legislation.

Copyright

© Communications Alliance Ltd 2022

This document is copyright and must not be used except as permitted below or under the Copyright Act 1968. You may reproduce and publish this document in whole or in part for your or your organisation's own personal or internal compliance, educational or non-commercial purposes. You must not alter or amend this document in any way. You must not reproduce or publish this document for commercial gain without the prior written consent of Communications Alliance. Organisations wishing to reproduce or publish this document for commercial gain (i.e. for distribution to subscribers to an information service) should apply to Communications Alliance by contacting the Communications Alliance Commercial Manager at info@commsalliance.com.au.

INTRODUCTORY STATEMENT

The Communications Alliance *Telecommunications – Facilities Information Sharing Industry Guideline (G665:2022)* has been developed in good faith to facilitate efficient interactions between the telecommunications industry, energy suppliers and relevant Australian Government agencies in relation to the sharing of information regarding telecommunications facilities and the standardised approach to sharing and the use of this information for the purposes of protection during events which may cause major disruptions to telecommunications services.

Communications Alliance has developed this Guideline for Telecommunications information sharing in response to the Royal Commission into National Natural Disaster Arrangements established on 20 February 2020 and the NSW Government independent inquiry into the 2019 / 20 bushfire season that recommended the need to share Telecommunications facilities data with State and Territory jurisdictions to assist with emergency management planning and recovery activities during disasters.

The purpose of facility information sharing is to enable data users such as Australian, State and Territory governments and their agencies and energy suppliers who are responsible for planning, managing, and responding to a disaster or emergency to have sufficient data about telecommunications infrastructure assets to enable them to proactively plan for natural or other disasters or emergency event/s. It is not intended to address aspects of criticality or redundancy which are dynamic and require real time network expertise to advise upon via the relevant carrier liaison or operations centre.

The Guideline sets out the minimum Facility Data Sharing Information Set and has other information identified as additional. C/CSPs primary focus is on providing telecommunications services, not providing spatial datasets of all associated network assets. Some information that Australian, State and Territory governments would like is data that is either not held or is in disparate systems and difficult to extract.

C/CSPs are committed to ongoing improvement with provision of information to support the needs of Australian, State and Territory governments and their agencies and energy suppliers who are responsible for planning, managing, and responding to a disaster or emergency.

C/CSPs will be periodically reviewing and updating this Guideline over time, particularly in relation to the Facility Data Sharing Information Set, as additional information sets (in Figure 2) may become available and able to be added to the minimum information set.

2022 Revision

The Guideline was reviewed in 2022. As a result of the review a minor revision was undertaken to include a definition for Specified Telecommunications Facilities.

Alexander R. Osborne
Chair

Communications Resilience Administration Industry Group

NOVEMBER 2022

TABLE OF CONTENTS

1	GENERAL	3
1.1	Introduction	3
1.2	Scope	3
1.3	Objectives	4
1.4	Guideline review	4
2	ACRONYMS, DEFINITIONS AND INTERPRETATIONS	5
2.1	Acronyms	5
2.2	Definitions	5
2.3	Interpretations	6
3	FACILITY DATA SHARING INFORMATION SET	7
4	DELIVERY / FORMAT	10
5	FACILITY DATA SHARING INFORMATION SET PROVISION REQUIREMENTS	11
6	REFERENCES	14
	PARTICIPANTS	15

1 GENERAL

1.1 Introduction

- 1.1.1 The development of the Guideline was facilitated by Communications Alliance through a Working Committee comprising representatives from the telecommunications industry.
- 1.1.2 The Guideline should be read in the context of other relevant codes, guidelines and documents, including the:
- (a) *G663:2022 Telecommunications – Emergency Communications Protocol Industry Guideline.*
- 1.1.3 The Guideline should be read in conjunction with related legislation, including the:
- (a) *Telecommunications Act 1997 (Act);* and
 - (b) *Telecommunications (Interception and Access) Act 1979.*
- 1.1.4 If there is a conflict between the requirements of this Guideline and any requirements imposed on a Carrier or Carriage Service Provider (C/CSP), the other requirement or obligation takes precedence over this Guideline.
- In particular, a C/CSP's contractual arrangements with its customers regarding Major Service Disruptions and other matters covered by this Guideline remain unaffected by this Guideline and have precedence over this Guideline.
- 1.1.5 Statements in boxed text are a guide to interpretation only.

1.2 Scope

- 1.2.1 The Guideline applies to:
- (a) the Carriers, and Carriage Service Providers section of the telecommunications industry under section 110 of the Act; and
 - (b) Australian Government State and Territory agencies, and other sectoral bodies who choose to participate in the Guideline.
- 1.2.2 The Guideline deals with the following telecommunications activities as defined in section 109 of the Act:
- (a) carrying on business as a Carrier; or
 - (b) carrying on business activities as a Carriage Service Provider; or
 - (c) supplying Goods or Service(s) for use in connection with the supply of a Listed Carriage Service.

1.3 Objectives

The objectives of the Guideline are to:

- (a) develop a standardised set of specified telecommunications facilities information; and
- (b) establish arrangements for pro-active engagement relating to the secure sharing of Specified Telecommunications Facilities information between C/CSPs and approved Australian, State and Territory governments and their agencies and energy suppliers who are responsible for planning, managing, mitigating, co-ordinating and responding to a disaster or emergency.

1.4 Guideline review

The Guideline will be reviewed every 5 years, or earlier in the event of significant developments that affect the Guideline or a chapter within the Guideline.

2 ACRONYMS, DEFINITIONS AND INTERPRETATIONS

2.1 Acronyms

For the purposes of the Guideline:

C/CSP

means Carrier/Carriage Service Provider

DU

means Data Users

2.2 Definitions

For the purposes of the Guideline:

Act

means the *Telecommunications Act 1997 (Cth)*.

Carriage Service Provider

has the meaning given by section 87 of the Act.

Carrier

has the meaning given by section 7 of the Act.

Data Users

means Australian, State and Territory governments and their agencies and energy suppliers who are responsible for planning, managing and responding to a disaster(s) or emergency.

Specified Telecommunications Facilities

means:

- mobile base stations (including small cells) on macro towers, rooftops and poles (such as electricity poles or streetlight poles);
- fixed line (telephony and broadband) equipment in exchange buildings; and
- above-ground backhaul (microwave) transmission systems; and
- data centres used to provide telecommunications services.

It excludes:

- in-building coverage systems for mobile services;
- exchange facilities that do not directly provide fixed line services (for example, transmission hubs and/or points of interconnect);
- fixed line equipment in roadside cabinets (for example, remote integrated multiplexers); and
- all underground transmission systems.

2.3 Interpretations

In the Guideline, unless the contrary appears:

- (a) headings are for convenience only and do not affect interpretation;
- (b) a reference to a statute, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of those;
- (c) words in the singular includes the plural and vice versa;
- (d) words importing persons include a body whether corporate, politic or otherwise;
- (e) where a word or phrase is defined, its other grammatical forms have a corresponding meaning;
- (f) mentioning anything after include, includes or including does not limit what else might be included;
- (g) words and expressions which are not defined have the meanings given to them in the Act; and
- (h) a reference to a person includes a reference to the person's executors, administrators, successors, agents, assignees and novatees.

3 FACILITY DATA SHARING INFORMATION SET

The purpose of facility data sharing is to inform DUs on the location of Specified Telecommunications Facilities where data protection and information security concerns can be reasonably managed, for proactive planning and protection of these facilities and / or during a natural or other disaster or emergency event/s.

It is intended that facility data sharing augment consultation with a telecommunications carrier's network operations centre, and is not to be used as a substitute, noting many aspects of a telecommunications facility's criticality and redundancy arrangements are dynamic in a crisis and require a carrier's real time network expertise to advise.

Carriers will use existing processes for liaison and collaboration during a disaster or emergency to engage with emergency organisations, but the assessment of the relative importance and priority of individual telecommunications facilities under threat remains the responsibility of the telecommunications carrier.

The facility data sharing information set in Figure 1 was developed by the telecommunications industry and may be used as guidance (in addition to a C/CSP's own assessment framework) for determining what facility information should be shared with DUs. C/CSPs will also continue to provide information to DUs relating to telecommunications facilities impacted or under impending threat from natural or other disasters.

DUs should refer to the contact list/process advised in G663:2020 Telecommunications – Emergency Communications Protocol Industry Guideline for real time information during major service disruptions. DUs can also contact Communications Alliance for assistance in obtaining or providing stakeholder contacts.

To ensure that the facility data sharing information set supplied aligns to the underlying policy objective, that relevant considerations are addressed, and to help support consistency across jurisdictions, the following high-level principles shall apply to the supply of telecommunications facilities information to DUs: -

- DUs seeking access to the facility data sharing information set should discuss with individual telecommunications providers their individual access request and whether a data sharing agreement is required.
- Where State/Territories share a common border, it is expected that those State/Territories that share the common border will securely manage the sharing of the telecommunications facility data sharing information set between them.
- The telecommunications facility data sharing information set is not a substitute for engagement with a C/CSP's network operation centre on considerations of network asset criticality and redundancy.
- Only the C/CSP's network operation centre will have the expertise and up to the minute network data to accurately advise on network asset criticality and redundancy, and indeed they may reshape aspects of network criticality and redundancy in response to emergency developments in real time where possible.
- C/CSPs will share information in good faith that:
 - is suitable solely for the purpose stated above;

- is readily available (i.e. does not need to be created or aggregated by the C/CSP); and
- the C/CSP is otherwise permitted to share.
- C/CSPs and their representatives are not responsible for circumstances where the shared information is misinterpreted, used for another purpose and/or acted upon in a way that causes loss or harm.

Other information may be proactively shared with DUs by C/CSPs, however that is dependent on the individual C/CSP and is outside the scope of this Guideline. In general, information should not be shared if there is significant variability in the available data or potential for misinterpretation. There is no requirement to share information where there is a lack of relevance to the purpose as outlined above.

In addition, we note that some information requested by DUs is already publicly available to emergency services through the Radio Frequency National Site Archive (RFNSA).

FIGURE 1
Minimum Facility Data Sharing Information Set

Item	Description	Explanatory Text
Site Manager	Name of the entity responsible for the site	
Network Provider	Name of the network provider responsible for the telecommunications facility	
Site Address	Physical address	
Site Name if applicable	Additional site name if applicable.	
Latitude	Decimal or sexagesimal	Geodetic datum to be included
Longitude	Decimal or sexagesimal	Geodetic datum to be included
Site ID	This may include the site identification, Site Name or unique identifier/label.	
Site status or service status	Only active sites are proposed for inclusion as part of this Minimum Facility Data Sharing Information Set.	
Asset Description / Structure type	Common name for the asset or structure type	May include (for example) monopole, roof top, attached to a tower, tower, mast, exchange and / or roadside cabinets.
Emergency contact	Relevant contact details will be supplied by each provider.	

4 DELIVERY / FORMAT

Interim Delivery Process

The standardised set of minimum facility data sharing information detailed in Figure 1 will be available as agreed from individual C/CSPs.

Information provided by C/CSPs must comply with Australian Government information security standards.

Information supplied by C/CSPs will be in an encrypted format. Initially this will be a .csv or spreadsheet.

Long Term Delivery Process

The long-term delivery process requested by C/CSPs is for a secure, centralised and approved Commonwealth repository.

NOTE: Ongoing C/CSP delivery of the agreed standardised set of minimum facility data sharing information needs to have agreed governance processes in place, especially in respect to who has access to the information and information security.

C/CSPs are unable to vet/authenticate DUs, as they do not have the resources or information to adequately and efficiently verify the identity of a DU, especially when managing a disaster or emergency.

C/CSPs will still engage as per current processes, with Australian, State and Territory governments and their agencies and energy suppliers when responding to disasters or emergency situations.

It is requested that each State and Territory identify an authorised individual or department that is approved by the State/Territory to securely store and manage the C/CSP's facility data sharing information set. The authorised individual or department for the State or Territory will manage:

- the security of the supplied facility data sharing information set;*
- the access approval process for DUs;*
- assisting C/CSPs in supplying the facility data sharing information set; and*
- the authorisation and recording of individual DU applications in advance of a disaster or emergency.*

Governance arrangements may be in the form of an MoU and a data sharing agreement/schedule/ frequency of data delivery with each C/CSP.

5 FACILITY DATA SHARING INFORMATION SET PROVISION REQUIREMENTS

Security requirements

For security reasons, the facility data sharing information set should be partitioned, if applicable, by State/Territory. In addition, access should be limited to the area managed by the relevant groups on a role-based permissions basis (for example, a central NSW Rural Fire Service group would have access to all data for NSW, but a local fire service would only have access to information about areas they were responsible for or were being deployed to).

C/CSPs may require a DU accessing the facility data sharing information set to comply with certain access controls and request proof of security protocols or third-party testing detailing the secure use and storage of information.

Security for data that is deemed “shared” is to be access controlled via role-based permissions. For role-based permissions, only data relevant to the role, and the State/Territory of that role function should be accessed.

The facility data sharing information set received by a DU is to be stored securely, encrypted at rest and is not to be distributed outside of Australian borders. DUs should comply with Australian Government information security standards. Data should only be used for the purposes stated in Section 3 above.

Data access and restrictions

A C/CSP may require in the interim that access to shared facility data sharing information be subject to:

- a) a data sharing agreement between the C/CSP and the DU;
- b) the DU providing evidence of their security arrangements;
- c) the C/CSP or DU controlling the further distribution of the facility data sharing information set, thereby controlling access to the data; and
- d) direct access to shared data being strictly managed using username/password in combination with a role-based access model that limits access to the shared data as agreed between the C/CSP and the data user.

C/CSPs expect that approved DU recipients of facility data sharing information sets should have restrictions in place to restrict data for viewing only and not to allow reproduction, copying or screen scraping by any recipient other than the authorised/intended DU.

If data is stored in a database, data is not to be available for download. Data should only be presented with 'read only' access.

FIGURE 2
Additional Information

The following additional items are information which may or may not be made available by a particular C/CSP.

NOTE: It is not intended that a C/CSP will purposely withhold this additional information, where held by the C/CSP and readily available. Additional information will be provided subject to its being held by the C/CSP and any limitations on the availability caused by system limitations or specific security concerns.

Item	Data Type	Comments
1. Asset Picture	Text	Embedded picture of asset.
2. Criticality	Text	1. High: Large customer impacts over a broad geographical scale (e.g. exchanges) 2. Medium: Moderate customer impacts in localised areas (e.g. mobile sites, fixed wireless hub) 3. Low: Low customer impacts in localised areas (e.g. sites dedicated to specific customers or customer CPE)
3. Asset Fire Treatment	Text	Describe firebreaks, barriers, construction, etc. to restrict spread of fire.
4. Asset Fire Protection	Text	Describe fire protection system installed on site, e.g.: fire breaks, hose reels, sprinkler systems, extinguishers, etc.
5. Access Details	Text	Suggest that data is chosen from a drop-down list with the following choices: a. Two-wheel drive accessible at all times. b. Four-wheel drive recommended in inclement weather. c. Four-wheel drive required at all times. d. Accessible only by foot. e. Accessible by air. f. Accessible by water. g. Other.
6. Primary Power Source	Text	Describe primary power connection to site, e.g.: commercial mains, solar power, fuel cell, generator, etc.

Item	Data Type	Comments
7. On-site Back-up Power Source	Text	Suggest that data is chosen from a drop-down list with the following choices: a. Yes b. No
8. Estimated service availability following loss of mains power	Text	a. Zero b. Short duration (up to 4 hours) c. Extended duration (more than 4 hours) Note: All durations are subject to the type of power source used and the site conditions at the time. For real time information, consult with C/CSP.
9. Tower Height	Numeric	Height of tower structure.
10. Antennae Details	Numeric	Suggest that data is chosen from a drop-down list with the following choices: a. Number of antennae b. Number of antenna sectors c. Antenna azimuths d. Antenna elevations

6 REFERENCES

Publication	Title
Industry Codes	
C536:2020	Emergency Call Service Requirements Industry Code
Industry Guidelines	
G644:2020	Emergency Call Service Protections Requirements
G663:2022	Telecommunications – Emergency Communications Protocol
Legislation	
<i>Privacy Act 1988</i>	
<i>Telecommunications Act 1997</i>	
<i>Telecommunications (Consumer Protection and Service Standards) Act 1999</i>	
<i>Telecommunications (Emergency Call Service) Determination 2019</i>	
<i>Emergencies Act 2004 (ACT)</i>	
<i>Emergency Management Act 2013 (NT)</i>	
<i>Disaster Management Act 2003 (QLD)</i>	
<i>Emergency Management Act 2004 (SA)</i>	
<i>Emergency Management Act 2006 (TAS)</i>	
<i>Emergency Management Act 2013 (VIC)</i>	
<i>Emergency Management Act 2005 (WA)</i>	
<i>State Emergency and Rescue Management Act 1989 (NSW)</i>	
<i>Essential Services Act 1988 (NSW)</i>	
Online Resource	
Radio Frequency National Site Archive - https://www.rfnsa.com.au	

PARTICIPANTS

The Working Committee that revised the Guideline consisted of the following organisations and their representatives:

Organisation	Representative
Aussie Broadband	Eric Erickson
CISCO	Kim Yan
Enex Testlabs	Matt Tett
Everbridge	David Hall
Everbridge	Elliot Pittam
Macquarie Telecom Group	Matthew O'Rourke
NBN Co	Nicole Blackwell
NBN Co	Cameron Scott
NEXTDC	George Dionisopoulos
Optus	Quinton Meiring
Symbio	Fionola O'Keefe
Telstra	Paul Harrison
Telstra	Geoff Gerrand
Telstra	Hugh Wilson
TPG Telecom	Alexander R. Osborne
Vocus	Jonathan Gleeson

This Working Committee was chaired by Alexander R Osborne. Craig Purdon of Communications Alliance provided project management support.

Communications Alliance was formed in 1997 to provide a unified voice for the Australian communications industry and to lead it into the next generation of converging networks, technologies and services.

In pursuing its goals, Communications Alliance offers a forum for the industry to make coherent and constructive contributions to policy development and debate.

Communications Alliance seeks to facilitate open, effective and ethical competition between service providers while ensuring efficient, safe operation of networks, the provision of innovative services and the enhancement of consumer outcomes.

It is committed to the achievement of the policy objective of the *Telecommunications Act 1997* - the greatest practicable use of industry self-regulation without imposing undue financial and administrative burdens on industry.



Published by:
**COMMUNICATIONS
ALLIANCE LTD**

Level 12
75 Miller Street
North Sydney
NSW 2060 Australia

Correspondence
PO Box 444
Milsons Point
NSW 1565

T 61 2 9959 9111
F 61 2 9954 6136
E info@commsalliance.com.au
www.commsalliance.com.au
ABN 56 078 026 507