ACCC Mobile Infrastructure Report – data interpretation guide v3

1. Introduction

This guide accompanies the data release for the annual ACCC Mobile Infrastructure Report, providing clarifying information for mobile sites and coverage map files.

The data within the datasets is sourced from the ACCC's <u>Audit of Telecommunications</u> <u>Infrastructure Assets – Record Keeping Rules</u> (Infrastructure RKR). The information included is collected from the three national Mobile Network Operators (MNOs):

- Singtel Optus Pty Limited (ACN 052 833 208) (Optus)
- Telstra Corporation Limited (ACN 051 775 556) (Telstra)
- TPG Telecom Limited (ACN 093 058 069) (TPG)

2. Mobile sites data

A mobile site hosts radio equipment that uses radiofrequency spectrum to provide connectivity to mobile devices. With the use of backhaul, they connect end users to their service provider's core network for voice and data connectivity. A mobile site can exist in various forms, such as an individual mobile tower, buildings or light poles as well as inside buildings.

Mobile sites data is captured across CSV formatted files. There is one CSV file per MNO, per year. Mobile sites data is at 31 January for each reporting year from 2018 to 2023.

File names follow this format: *Mobile sites - MNO - year*. For example, Optus data as at 31 January 2019 is named: 'Mobile sites - Optus - 2019'.

The mobile sites datasets include information provided under two versions of the Infrastructure RKR:

- Infrastructure RKR 2017 this version of the RKR is applicable to the 2018 and 2019 datasets
- 2. <u>Infrastructure RKR 2020</u> this version of the RKR is applicable to the 2020-2022 datasets
- 3. Infrastructure RKR 2022 this version of the RKR is applicable to the 2023 dataset

There are some variances in the data collected on each mobile site under the two versions of the RKR. These are detailed below.

Variable	Description	Infrastructure RKR 2017	Infrastructure RKR 2020 & 2022
Year	The reporting period to which the data relates. The reference date is as at 31 January. For example, a year value of 2018 would be mobile sites as at 31 January 2018. The values are 2018, 2019, 2020, 2021, 2022 or 2023.	Yes	Yes
MNO	MNO means Mobile Network Operator. These are Telstra, Optus or TPG	Yes	Yes
Latitude	A geographic coordinate system associated with positions on Earth. The values are specified in degrees and range from -90° to 90° to both sides of the equator, making latitude Northern and Southern.	Yes	Yes
Longitude	A geographic coordinate system associated with positions on Earth. The values are specified in degrees and range from -180° to 180° to both sides of the equator, making longitude Eastern and Western.	Yes	Yes
Technology type & frequency band	Technology type indicates the type of technology deployed at each mobile site. The values are GSM, WCDMA, UMTS, LTE, NR, IoT or NB IoT. - GSM means Global System for Mobile Communications and relates to 2 nd generation technology (2G) - WCDMA means Wideband Code-Division Multiple Access and relates to 3 rd generation technology (3G). - UMTS mean Universal Mobile Telecommunications System (UMTS) relates to 3 rd generation technology (3G) - LTE means Long-Term Evolution and relates to 4 th generation technology (4G) - NR means New Radio and relates to 5 th generation technology (5G) - IoT means Internet of Things - NB IoT means Narrowband Internet of Things. Frequency band indicates the frequency band of radiofrequency spectrum used at each site. Spectrum is used to transmit information over radio waves. The values are 700 MHz, 850 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2600 MHz, 3500 Mhz, 3600 Mhz, and 26000 Mhz.	Yes	Yes

	Different combinations of technology type and frequency bands are used at a mobile site. These are reflected in the column headers. For example, LTE700 would be 4G technology deployed at 700 MHz frequency band or UMTS900 would be 3G technology deployed at the 900 MHz frequency band. The specified values are "Y" if Yes for that technology type/frequency band and blank if No.		
RFNSA ID	RFNSA ID means Radio Frequency National Site Archive identification number and is a unique location-based identifier. ¹	No	Yes
Co_funded	This variable indicates whether the construction of a mobile site was funded under a co-contribution program (whether under federal, state or local government). The values are "Y" for Yes and blank for No. The record-keeper is only required to identify the relevant co-contribution programs for sites that received funding on and after 18 May 2020 (when the relevant requirement came into force), unless the co-contribution program is the Federal Government's Mobile Black Spot Program, for which the record- keeper is required to identify the sites that received funding on and after 1 January 2015.	No	Yes
Co_contribution _program	 The relevant program/s under which co- contribution funding was provided The values are: Federal Co-investment TAS WCst, Federal Mobile Black Spot Program (MBSP) New South Wales Mobile Blackspot NBSP NSW Direct Northern Territory Co-investment Northern Territory ISCA Northern Territory Co-investment NT RTCP Priority Round 125 (MBSP) South Australia Government Direct Victorian Mobile Blackspot VMP (Victorian Mobile Project) Victorian Government Direct Victorian Mobile Project) Western Australia Co-investment Goodlands Western Australian Government 	Νο	Yes

¹ <u>https://www.rfnsa.com.au/?first=1</u>

	- TAS Great Eastern Drive		
	 Connecting Victoria Mobile Program (CVMP) 		
	- NSW Central Coast Rail		
	 QLD Department of Transport and Main Roads Ph 1 		
	 Department of Primary Industries and Regions South Australia (SA Gov) 		
Round	The relevant round/s of the co-contribution program for which funding was provided	No	Yes
	The values are 1, 2, 2.1, 3, 4, 4.1, 5 and PL (Priority Locations)		

3. Coverage maps

One way the MNOs estimate and illustrate mobile coverage is by producing coverage maps which indicate where their customers can expect to have mobile reception. Coverage maps are modelled on predictive coverage and therefore may not reflect the 'on the ground' experience for all end users. There are several factors that can impact mobile coverage including buildings, foliage/trees, bad weather, hills or mountains, the number of nearby people using the same mobile site and hardware compatibility.

The parameters that underpin these predictive coverage models differ across the MNOs. These parameters can also change across time for a given MNO. These changes could mean that increases or decreases in the measurement of coverage from year to year may not necessarily reflect changes in the predicted 'on the ground' experience of end users. Instead, the changes may reflect differences in parameters that underpin the modelling of the predictive coverage maps or variations in the precision/accuracy of the models. Slight fluctuations in coverage areas from year to year could also result from optimisation activities undertaken by the MNOs, such as adjusting the tilt of antennas to reduce interference. Additionally, the introduction of new versions of prediction models/tools and potential differences in rounding and aggregation can result in minor variability in coverage predictions year to year, even if there are no actual changes in coverage.

The coverage maps provide information about historical levels of coverage as at 31 January for each respective year from 2018 to 2023. For the most up to date coverage information, users should refer to the coverage maps available on the public website of the service provider.

The tables below show the coverage maps that are available and the associated information for each MNO. All coverage maps are in KML format.

In addition, from 2018 to 2023, the MNOs have provided coverage maps based on different levels of coverage. In providing coverage maps in accordance with the RKR, the MNOs have interpreted the requirements differently. There are two types of coverage maps available:

 Outdoor coverage – coverage and quality of reception a customer can expect when using a device outdoors with typical handheld use, based on an elevated upright standing, head height position.²

² More information is available here: <u>https://amta.org.au/understanding-coverage-maps/</u>

 External antenna (Ext Ant) coverage – expected coverage when a device is augmented using an external antenna or other coverage extension device that utilises an external antenna.³

In general, coverage maps which are based on external antenna coverage predict wider coverage areas than coverage maps based on outdoor coverage.

The ACCC has indicated the level of coverage for each coverage map in the 'level of coverage' column in the below tables. The level of coverage for each coverage map is also indicated in the file name.

Where the technology level maps were not provided by the MNOs, the ACCC has aggregated the frequency band coverage maps submitted by the MNOs to create additional technology level coverage maps. Technology level coverage maps provide information on the overall geographic reach of each technology deployed by the MNOs (i.e. 3G/4G/5G). The ACCC has indicated, in the 'author' column, where it has produced technology level coverage maps using information provided by the MNOs, to distinguish from maps that were directly provided by the MNOs.

Where applicable, coverage maps by frequency band are in the <u>relevant zip folder</u>. These type of zip folders follow this naming format: *Coverage maps by frequency band - MNO - year*. For example, the coverage maps by frequency band for Telstra in 2022 are in the zip folder named 'Coverage maps by frequency band - Telstra – 2022'.

³ More information is available here: <u>https://amta.org.au/understanding-coverage-maps/</u>

3.1. Optus

Year	Technology	Level of coverage	Frequency band (MHz)	File name	Author	Fill colour
			ALL	Coverage map - Optus - 3G - Outdoor - 2018	ACCC	
	3G	Outdoor	900	Optus_3G_900_Outdoor_2018	Ontuo	
			2100	Optus_3G_2100_Outdoor_2018	Optus	
			ALL	Coverage map - Optus - 4G - Outdoor - 2018	ACCC	
2018			700	Optus_4G_700_Outdoor_2018	ACCC	
	40	Outdoor	1800	Optus_4G_1800_Outdoor_2018		
	40	Outdoor	2100	Optus_4G_2100_Outdoor_2018	Ontuo	
			2300	Optus_4G_2300_Outdoor_2018	Optus	
			2600	Optus_4G_2600_Outdoor_2018		
	3G		ALL	Coverage map - Optus - 3G - Outdoor - 2019	ACCC	
		3G Outdoor	900	Optus_3G_900_Outdoor_2019	Ontuo	
			2100	Optus_3G_2100_Outdoor_2019	Optus	
			ALL	Coverage map - Optus - 4G - Outdoor - 2019	4000	
2019			700	Optus_4G_700_Outdoor_2019	ACCC	
	40		1800	Optus_4G_1800_Outdoor_2019		
	46	Outdoor	2100	Optus_4G_2100_Outdoor_2019	Ontuo	
			2300	Optus_4G_2300_Outdoor_2019	Optus	
			2600	Optus_4G_2600_Outdoor_2019		
			ALL	Coverage map - Optus - 3G - Outdoor - 2020	ACCC	
	3G	Outdoor	900	Optus_3G_900_Outdoor_2020	Ontuo	
2020			2100	Optus_3G_2100_Outdoor_2020	Optus	
	40	Outdoor	ALL	Coverage map - Optus - 4G - Outdoor - 2020	ACCC	
	4G	Outdoor	700	Optus_4G_700_Outdoor_2020	AUUU	

			1800	Optus_4G_1800_Outdoor_2020								
			2100	Optus_4G_2100_Outdoor_2020	Ontue							
			2300	Optus_4G_2300_Outdoor_2020	Optus							
			2600	Optus_4G_2600_Outdoor_2020								
	50	Quitdo en	2500	Coverage map - Optus - 5G - Outdoor - 2020	ACCC							
	5G	56 Outdoor	3500	Optus_5G_3500_Outdoor_2020	Optus							
			ALL	Coverage map - Optus - 3G - Outdoor - 2021	ACCC							
	3G	Outdoor	900	Optus_3G_900_Outdoor_2021	Ontur							
			2100	Optus_3G_2100_Outdoor_2021	Optus							
		Outdoor & Ext Ant	ALL	Coverage map - Optus - 4G - Outdoor & Ext Ant - 2021	4000							
		Ext Ant	700	Optus_4G_700_ExtAnt_2021								
	4G								900	Optus_4G_900_Outdoor_2021		
			1800	Optus_4G_1800_Outdoor_2021								
2021		Outdoor	2100	Optus_4G_2100_Outdoor_2021	Optus							
			2300	Optus_4G_2300_Outdoor_2021								
			2600	Optus_4G_2600_Outdoor_2021								
			ALL	Coverage map - Optus - 5G - Outdoor - 2021	ACCC							
				2100	Optus_5G_2100_Outdoor_2021							
	5G	Outdoor	2300	Optus_5G_2300_Outdoor_2021	Ontuo							
			3500	Optus_5G_3500_Outdoor_2021	Optus							
			26000	Optus_5G_26000_Outdoor_2021								
			ALL	Coverage map - Optus - 3G - Ext Ant - 2022	ACCC							
	3G	Ext Ant	900	Optus_3G_900_ExtAnt_2022	Ontuo							
			2100 Optus_3G_2100_ExtAnt_2022	Optus_3G_2100_ExtAnt_2022	Optus							
ZUZZ			ALL	Coverage map - Optus - 4G - Ext Ant - 2022	ACCC							
	4G	4G Ext Ant	700	Optus_4G_700_ExtAnt_2022								
			900	Optus_4G_900_ExtAnt_2022	Optus							

			1800	Optus_4G_1800_ExtAnt_2022			
			2100	Optus_4G_2100_ExtAnt_2022			
			2300	Optus_4G_2300_ExtAnt_2022			
			2600	Optus_4G_2600_ExtAnt_2022			
			ALL	Coverage map - Optus - 5G - Outdoor - 2022	ACCC		
		2100	Optus_5G_2100_Outdoor_2022				
	5G	Outdoor	2300	Optus_5G_2300_Outdoor_2022	Optus		
			3500	Optus_5G_3500_Outdoor_2022	Optus		
			26000	Optus_5G_26000_Outdoor_2022			
	20	Outdoor	900	Coverage map - Optus - 3G - Outdoor - 2023	ACCC		
	36	Ext Ant	900	Coverage map - Optus - 3G - Ext Ant - 2023	ACCC		
		Outdoor 4G	ALL	Coverage map - Optus - 4G - Outdoor - 2023	4000		
			700	Optus_4G_700_Outdoor_2023	ACCC		
	4G		900	Optus_4G_900_Outdoor_2023	Optus		
			1800	Optus_4G_1800_Outdoor_2023	Optus		
			2100	Optus_4G_2100_Outdoor_2023	Optus		
2023			2300	Optus_4G_2300_Outdoor_2023	Optus		
			2600	Optus_4G_2600_Outdoor_2023	Optus		
		Ext Ant	ALL	Coverage map - Optus - 4G - Ext Ant - 2023	ACCC		
			ALL	Coverage map - Optus - 5G - Outdoor - 2023	ACCC		
		5G Outdoor	900	Optus_5G_900_Outdoor_2023	Optus		
	50		2100	Optus_5G_2100_Outdoor_2023	Optus		
	30		2300	Optus_5G_2300_Outdoor_2023	Optus		
			3500	Optus_5G_3500_Outdoor_2023	Optus		
			261	26000	Optus_5G_26000_Outdoor_2023	Optus	

3.2. Telstra

Year	Technology	Level of coverage	Frequency band (MHz)	File name	Author	Fill colour			
0010	3G	Ext Ant	ALL	Coverage map - Telstra - 3G - Ext Ant - 2018	Telstra				
2018	4G	Ext Ant	ALL	Coverage map - Telstra - 4G - Ext Ant - 2018	Telstra				
2010	3G	Ext Ant	ALL	Coverage map - Telstra - 3G - Ext Ant - 2019	Telstra				
2019	4G	Ext Ant	ALL	Coverage map - Telstra - 4G - Ext Ant - 2019	Telstra				
	3G	Ext Ant	ALL	Coverage map - Telstra - 3G - Ext Ant - 2020	Telstra				
2020	4G	Ext Ant	ALL	Coverage map - Telstra - 4G - Ext Ant - 2020	Telstra				
	5G	Outdoor	ALL	Coverage map - Telstra - 5G - Outdoor - 2020	Telstra				
	IoT	loT Ext Ant	IoT Evt Ant	700 -	Telstra_LTE-M_700_ExtAnt_2021	Teletra			
			EXLAN		Telstra_NBIoT_700_ExtAnt_2021	Teistra			
			ALL	Coverage map - Telstra - 3G - Ext Ant - 2021	ACCC				
	3G	3G	3G	3G	Ext Ant	850	Telstra_3G_850_ExtAnt_2021	Talatus	
			2100	Telstra_3G_2100_ExtAnt_2021	leistra				
			ALL	Coverage map - Telstra - 4G - Ext Ant - 2021	ACCC				
2021			700	Telstra_4G_700_ExtAnt_2021					
	4G	Ext Ant	1800	Telstra_4G_1800_ExtAnt_2021	Talatua				
			2100	Telstra_4G_2100_ExtAnt_2021	Teistra				
			2600	Telstra_4G_2600_ExtAnt_2021					
			ALL	Coverage map - Telstra - 5G - Outdoor - 2021	ACCC				
	5G	Outdoor	2600	Telstra_5G_2600_Outdoor_2021	Tolotro				
			3600	Telstra_5G_3600_Outdoor_2021					
2022	loT	Outdoor	700	Telstra_CAT-M_700_Outdoor_2022	Telstra				

(
				Telstra_NBIoT_700_Outdoor_2022		
		Ext Ant	700	Telstra_CAT-M_700_ExtAnt_2022	Toletro	
			700	Telstra_NBIoT_700_ ExtAnt_2022	Teistia	
			ALL	Coverage map - Telstra - 3G - Outdoor - 2022	ACCC	
	20	Outdoor	850	Telstra_3G_850_Outdoor_2022	Talatra	
	36		2100	Telstra_3G_2100_Outdoor_2022	Teistia	
		Ext Ant	ALL	Coverage map - Telstra - 3G - Ext Ant - 2022	ACCC	
			ALL	Coverage map - Telstra - 4G - Outdoor - 2022	ACCC	
			700	Telstra_4G_700_Outdoor_2022		
	10	Outdoor	1800	Telstra_4G_1800_Outdoor_2022	Telstra	
	46		2100	Telstra_4G_2100_Outdoor_2022		
			2600	Telstra_4G_2600_Outdoor_2022		
		Ext Ant	ALL	Coverage map - Telstra - 4G - Ext Ant - 2022	ACCC	
		5G Outdoor	ALL	Coverage map - Telstra - 5G - Outdoor - 2022	ACCC	
	FC		850	Telstra_5G_850_Outdoor_2022		
	00		2600	Telstra_5G_2600_Outdoor_2022	Telstra	
			3600	Telstra_5G_3600_Outdoor_2022		
		Outdoor	700	Telstra_CAT-M_700_Outdoor_2023	Teletra	
	IoT		700	Telstra_NBIoT_700_Outdoor_2023	Teistra	
	101	Ext Ant	700	Telstra_CAT-M_700_ExtAnt_2023	Telstra	
			700	Telstra_NBIoT_700_ ExtAnt_2023	Teistra	
2023			ALL	Coverage map - Telstra - 3G - Outdoor - 2023	ACCC	
	30	Outdoor	850	Telstra_3G_850_Outdoor_2023	Telstra	
	56		2100	Telstra_3G_2100_Outdoor_2023	Telstra	
_		Ext Ant	ALL	Coverage map - Telstra - 3G - Ext Ant - 2023	ACCC	
	4G	Outdoor	ALL	Coverage map - Telstra - 4G - Outdoor - 2023	ACCC	

			700	Telstra_4G_700_Outdoor_2023	Telstra	
			1800	Telstra_4G_1800_Outdoor_2023	Telstra	
			2100	Telstra_4G_2100_Outdoor_2023	Telstra	
			2600	Telstra_4G_2600_Outdoor_2023	Telstra	
		Ext Ant	ALL	Coverage map - Telstra - 4G - Ext Ant - 2023	ACCC	
		EC Outdoor	ALL	Coverage map - Telstra - 5G - Outdoor - 2023	ACCC	
50	FC		850	Telstra_5G_850_Outdoor_2023	Telstra	
	56	Outdoor	2600	Telstra_5G_2600_Outdoor_2023	Telstra	
			3600	Telstra_5G_3600_Outdoor_2023	Telstra	

3.3. TPG⁴

Year	Technology	Level of coverage	Frequency band (MHz)	File name	Author	Fill colour	
	2G	Outdoor	900	Coverage map - TPG - 2G - Outdoor - 2018	TPG		
			ALL	Coverage map - TPG - 3G - Outdoor - 2018	ACCC		
	3G ⁵	Outdoor	900	TPG_3G_900_Outdoor_2018	TPG		
			2100	TPG_3G_2100_Outdoor_2018	TPG		
2018			ALL	Coverage map - TPG - 4G - Outdoor - 2018	ACCC		
			700	TPG_4G_700_Outdoor_2018	TPG		
	4G	4G Outdoor	850	TPG_4G_850_Outdoor_2018	TPG		
			1800	TPG_4G_1800_Outdoor_2018	TPG		
			2100	TPG_4G_2100_Outdoor_2018	TPG		
	3G⁵		ALL	Coverage map - TPG - 3G - Outdoor - 2019	ACCC		
		3G ⁵ (Outdoor	900	TPG_3G_900_Outdoor_2019	TPG	
			2100	TPG_3G_2100_Outdoor_2019	TPG		
2010			ALL	Coverage map - TPG - 4G - Outdoor - 2019	ACCC		
2019			700	TPG_4G_700_Outdoor_2019	TPG		
	4G	Outdoor	850	TPG_4G_850_Outdoor_2019	TPG		
			1800	TPG_4G_1800_Outdoor_2019	TPG		
			2100	TPG_4G_2100_Outdoor_2019	TPG		
			ALL	Coverage map - TPG - 3G - Outdoor - 2020	ACCC		
2020	3G	Outdoor	900	TPG_3G_900_Outdoor_2020	TPG		
				2100	TPG_3G_2100_Outdoor_2020	TPG	

⁴ TPG's coverage maps do not include coverage it could access via its roaming agreement with Optus.

⁵ TPG's 3G 2018 and 2019 coverage maps are based on higher power thresholds than its 2020 and 2021 coverage maps due to a bug in its mapping software. Higher power thresholds for mobile sites means each site has a wider area of predicted coverage. It is a significant exercise to re-predict historical maps. Therefore, 2018 and 2019 coverage maps have not been re-predicted to align with the lower power threshold of the 2020 coverage maps onwards.

			ALL	Coverage map - TPG - 4G - Outdoor - 2020	ACCC		
			700	TPG_4G_700_Outdoor_2020	TPG		
	4G	Outdoor	850	TPG_4G_850_Outdoor_2020	TPG		
			1800	TPG_4G_1800_Outdoor_2020	TPG		
			2100	TPG_4G_2100_Outdoor_2020	TPG		
	loT	Outdoor	900	TPG_NBIoT_900_Outdoor_2021	TPG		
			ALL	Coverage map - TPG - 3G - Outdoor - 2021	ACCC		
	3G	Outdoor	900	TPG_3G_900_Outdoor_2021	TPG		
			2100	TPG_3G_2100_Outdoor_2021	TPG		
			ALL	Coverage map - TPG - 4G - Outdoor - 2021	ACCC		
	4G	4G Outdoor	700	TPG_4G_700_0utdoor_2021	TPG		
2021			850	TPG_4G_850_Outdoor_2021	TPG		
			1800	TPG_4G_1800_Outdoor_2021	TPG		
			2100	TPG_4G_2100_Outdoor_2021	TPG		
			2600	TPG_4G_2600_Outdoor_2021	TPG		
		5G Outdoor	ALL	Coverage map - TPG - 5G - Outdoor - 2021	ACCC		
	5G		700	TPG_5G_700_Outdoor_2021	TPG		
			3600	TPG_5G_3600_Outdoor_2021	TPG		
	loT	Outdoor	900	TPG_NBIoT_900_Outdoor_2022	TPG		
			ALL	Coverage map - TPG - 3G - Outdoor - 2022	ACCC		
	3G	Outdoor	900	TPG_3G_900_Outdoor_2022	TDO		
2022			2100	TPG_3G_2100_Outdoor_2022	- TPG		
2022			ALL	Coverage map - TPG - 4G - Outdoor - 2022	ACCC		
	40	Outdoor	700	TPG_4G_700_Outdoor_2022			
	40	Uuluooi	850	TPG_4G_850_Outdoor_2022	TPG		
				1800	TPG_4G_1800_Outdoor_2022]	

			2100	TPG_4G_2100_Outdoor_2022				
			ALL	Coverage map - TPG - 5G - Outdoor - 2022	ACCC			
	5G	Outdoor	700	TPG_5G_700_Outdoor_2022	TDC			
			3600	TPG_5G_3600_Outdoor_2022	IPG			
		Outdoor		TPG_NBIoT_900_Outdoor_2023	TPG			
	101	Ext Ant	900	TPG_NBIoT_900_ExtAnt_2023	TPG			
			ALL	Coverage map - TPG - 3G - Outdoor - 2023	ACCC			
		Outdoor	900	TPG_3G_900_Outdoor_2023	TDC			
	3G	3G	2100	TPG_3G_2100_Outdoor_2023	IPG			
		Ext Ant	ALL	Coverage map - TPG - 3G - Ext Ant - 2023	ACCC			
	4G		ALL	Coverage map - TPG - 4G - Outdoor - 2023	ACCC			
			700	TPG_4G_700_Outdoor_2023	TPG			
2023		4G	Outdoor 4G	850	TPG_4G_850_Outdoor_2023	TPG		
				1800	TPG_4G_1800_Outdoor_2023	TPG		
			2100	TPG_4G_2100_Outdoor_2023	TPG			
		Ext Ant	ALL	Coverage map - TPG - 4G - Ext Ant - 2023	ACCC			
			ALL	Coverage map - TPG - 5G - Outdoor - 2023	ACCC			
			700	TPG_5G_700_Outdoor_2023	TPG			
	5G	Outdoor 5G	2100	TPG_5G_2100_Outdoor_2023	TPG			
			3600	TPG_5G_3600_Outdoor_2023	TPG			
			26000	TPG_5G_26000_Outdoor_2023	TPG			
				Ext Ant	ALL	Coverage map - TPG - 5G - Ext Ant - 2023	ACCC	