



National Measurement (Recognized-Value Standard of Measurement of Position) Determination 2017

I, Dr R. Bruce Warrington, Chief Metrologist, National Measurement Institute, make the following determination.

Dated 11 October 2017

R. BRUCE WARRINGTON

Dr R. Bruce Warrington
Chief Metrologist

Contents

1 Name.....	1
2 Commencement	1
3 Authority.....	1
4 Definitions	1
5 Schedules	1
6 Recognized-value standards of measurement in the Australian Fiducial Network	2
7 Calculation of global Cartesian coordination at an epoch t years.....	2
Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network	3
Schedule 2—Repeals	12
<i>Recognized-value standard of measurement of position 2012 (No. 1)</i>	<i>12</i>

1 Name

This instrument is the *National Measurement (Recognized-Value Standard of Measurement of Position) Determination 2017*.

2 Commencement

This instrument commences the day after registration.

3 Authority

This instrument is made under section 8A(1) of the *National Measurement Act 1960*.

4 Definitions

Note: ***Recognized-value standard of measurement*** is defined in the Act.

In this instrument:

Act means the *National Measurement Act 1960*.

Reference Ellipsoid means the Geodetic Reference System 1980 (GRS80) ellipsoid with a semi-major axis (a) of 6 378 137 metres exactly and an inverse flattening (1/f) of 298.257 222 101.

Note: The Geodetic Reference System 1980 could in 2017 be viewed on the International Union of Geodesy and Geophysics (IUGG) website (<http://www.iugg.org>).

Reference Epoch means 2020.0.

Reference Frame means the Geocentric Datum of Australia 2020 (GDA2020) realised by the coordinates of the Australian Fiducial Network (AFN) geodetic stations, referred to in Schedule 1 of this instrument, in the International Terrestrial Reference Frame 2014 (ITRF2014) at the Reference Epoch.

Note 1: The Geocentric Datum of Australia 2020 could in 2017 be viewed on the Intergovernmental Committee on Surveying and Mapping's website (<http://www.icsm.gov.au>).

Note 2: The International Terrestrial Reference Frame 2014 (ITRF2014) could in 2017 be viewed on the International Earth Rotation and Reference Systems Service's (IERS) website (<https://www.iers.org>).

5 Schedules

Each instrument that is specified in a Schedule to this instrument is amended or repealed as set out in the applicable items in the Schedule concerned, and any other item in a Schedule to this instrument has effect according to its terms.

6 Recognized-value standards of measurement in the Australian Fiducial Network

- (1) The positions listed in Schedule 1 and in the stated Reference Ellipsoid and Reference Frame are recognized-value standards of measurement of the physical quantity position for geodetic stations in the Australian Fiducial Network (AFN).
- (2) Uncertainties listed in Schedule 1 are such that $X \pm u(X)$ represents a 95% confidence interval, and similarly for the other quantities.
- (3) For conversion from global Cartesian coordinates to latitude, longitude and ellipsoidal height the Reference Ellipsoid must be used.

7 Calculation of global Cartesian coordinates at an epoch t years

Global Cartesian coordinates of the AFN can be expressed at an epoch t (years) through the application of the following linear model using the coordinates (X, Y, Z) and velocities (V_X, V_Y, V_Z) listed in Schedule 1:

$$\begin{bmatrix} X \\ Y \\ Z \end{bmatrix}_t = \begin{bmatrix} X \\ Y \\ Z \end{bmatrix}_{2020} + (t - 2020) \begin{bmatrix} V_X \\ V_Y \\ V_Z \end{bmatrix}$$

This model is valid for 15 years either side of the Reference Epoch:

$$|t - 2020| \leq 15$$

Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network

Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network

Note: See sections 6 and 7.

	Coordinates (m) at 2020.0			Coordinate Uncertainty (m)			Velocity (m / year)			Velocity Uncertainty (m / year)		
Site	<i>X</i>	<i>Y</i>	<i>Z</i>	<i>u(X)</i>	<i>u(Y)</i>	<i>u(Z)</i>	<i>V_X</i>	<i>V_Y</i>	<i>V_Z</i>	<i>u(V_X)</i>	<i>u(V_Y)</i>	<i>u(V_Z)</i>
Ceduna (SA)	-3753473.1960	3912741.0310	-3347959.6998	0.0244	0.0249	0.0229	-0.0421	0.0024	0.0501	0.0002	0.0002	0.0002
Manton Dam (NT)	-4091359.6096	4684606.4258	-1408579.1371	0.0098	0.0105	0.0072	-0.0355	-0.0137	0.0576	0.0002	0.0001	0.0002
Mt Stromlo (ACT)	-4467103.2062	2683039.4818	-3666948.7613	0.0100	0.0080	0.0090	-0.0367	0.0006	0.0452	0.0002	0.0002	0.0002
Sydney (NSW)	-4648240.8666	2560636.4510	-3526317.7982	0.0107	0.0082	0.0093	-0.0352	-0.0015	0.0453	0.0002	0.0002	0.0002
Tidbinbilla (ACT)	-4460996.9609	2682557.0875	-3674442.6411	0.0104	0.0082	0.0093	-0.0368	0.0007	0.0452	0.0002	0.0002	0.0002
Hobart (TAS)	-3950072.2586	2522415.3710	-4311637.4095	0.0094	0.0079	0.0098	-0.0395	0.0083	0.0411	0.0002	0.0002	0.0002
Melbourne (VIC)	-4130636.7623	2894953.1442	-3890530.2534	0.0098	0.0083	0.0094	-0.0393	0.0042	0.0448	0.0002	0.0002	0.0002
Parkes (NSW)	-4554255.2088	2816652.4429	-3454059.6981	0.0107	0.0085	0.0093	-0.0363	-0.0015	0.0467	0.0002	0.0002	0.0002
Hillarys (WA)	-2355572.1203	4886093.2099	-3343993.6599	0.0081	0.0112	0.0091	-0.0478	0.0106	0.0491	0.0002	0.0001	0.0002
Bundaberg (QLD)	-5125977.5335	2688801.2479	-2669890.2146	0.0113	0.0082	0.0082	-0.0311	-0.0105	0.0490	0.0002	0.0002	0.0002

Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network

	Coordinates (m) at 2020.0			Coordinate Uncertainty (m)			Velocity (m / year)			Velocity Uncertainty (m / year)		
Site	<i>X</i>	<i>Y</i>	<i>Z</i>	<i>u</i> (<i>X</i>)	<i>u</i> (<i>Y</i>)	<i>u</i> (<i>Z</i>)	<i>V_X</i>	<i>V_Y</i>	<i>V_Z</i>	<i>u</i> (<i>V_X</i>)	<i>u</i> (<i>V_Y</i>)	<i>u</i> (<i>V_Z</i>)
Kalgoorlie (WA)	-2862346.1852	4678388.0851	-3245553.1345	0.0091	0.0120	0.0096	-0.0460	0.0069	0.0505	0.0002	0.0001	0.0002
Norfolk Island (NSW)	-5457454.4185	1166108.4501	-3078178.9928	0.0120	0.0071	0.0088	-0.0245	-0.0095	0.0398	0.0001	0.0002	0.0002
Albany (WA)	-2441715.0069	4629128.6333	-3633362.7930	0.0091	0.0125	0.0105	-0.0479	0.0122	0.0478	0.0002	0.0002	0.0002
Burnie (TAS)	-3989420.9187	2699532.9340	-4166619.7796	0.0100	0.0083	0.0101	-0.0397	0.0070	0.0426	0.0002	0.0002	0.0002
Liawenee (TAS)	-3973071.4774	2612492.7923	-4238233.8906	0.0099	0.0083	0.0103	-0.0396	0.0076	0.0418	0.0002	0.0002	0.0002
Burakin (WA)	-2511499.0840	4892172.2095	-3220858.0287	0.0088	0.0124	0.0096	-0.0471	0.0088	0.0501	0.0002	0.0001	0.0002
Kellerberrin (WA)	-2527265.3639	4813192.3590	-3324975.7001	0.0087	0.0124	0.0097	-0.0472	0.0095	0.0496	0.0002	0.0001	0.0002
Norseman (WA)	-2844072.6212	4589300.5857	-3385094.4352	0.0091	0.0117	0.0097	-0.0463	0.0080	0.0498	0.0002	0.0001	0.0002
Hyden (WA)	-2603131.0876	4717143.4739	-3402748.0718	0.0088	0.0122	0.0098	-0.0471	0.0096	0.0493	0.0002	0.0001	0.0002
Warakurna (WA)	-3583757.5864	4538446.7043	-2683056.6943	0.0090	0.0101	0.0081	-0.0420	-0.0014	0.0537	0.0002	0.0001	0.0002
Buckleboo (SA)	-3863896.2323	3723681.6406	-3436456.0075	0.0105	0.0102	0.0097	-0.0415	0.0024	0.0493	0.0002	0.0002	0.0002
Beechworth (VIC)	-4297030.4444	2827160.2393	-3759485.1907	0.0112	0.0091	0.0102	-0.0381	0.0023	0.0453	0.0002	0.0002	0.0002
Yeelana (SA)	-3787467.5311	3685160.4447	-3559786.1635	0.0093	0.0091	0.0090	-0.0420	0.0038	0.0486	0.0002	0.0002	0.0002
Saltia (SA)	-3998750.5658	3608798.4710	-3404651.9508	0.0098	0.0093	0.0090	-0.0407	0.0014	0.0493	0.0002	0.0002	0.0002

Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network

	Coordinates (m) at 2020.0			Coordinate Uncertainty (m)			Velocity (m / year)			Velocity Uncertainty (m / year)		
Site	<i>X</i>	<i>Y</i>	<i>Z</i>	<i>u</i> (<i>X</i>)	<i>u</i> (<i>Y</i>)	<i>u</i> (<i>Z</i>)	<i>V_X</i>	<i>V_Y</i>	<i>V_Z</i>	<i>u</i> (<i>V_X</i>)	<i>u</i> (<i>V_Y</i>)	<i>u</i> (<i>V_Z</i>)
West Wylong (NSW)	-4471091.7769	2868001.2873	-3519326.3705	0.0103	0.0083	0.0091	-0.0370	-0.0005	0.0466	0.0002	0.0002	0.0002
Bairnsdale (VIC)	-4265638.5627	2701208.9154	-3884372.5851	0.0118	0.0094	0.0109	-0.0381	0.0034	0.0442	0.0002	0.0002	0.0002
Port Kembla (NSW)	-4599806.4397	2558778.9950	-3590075.1156	0.0116	0.0087	0.0100	-0.0356	-0.0007	0.0450	0.0002	0.0002	0.0002
Douglas Daly (NT)	-4079102.7002	4661682.9452	-1515238.0262	0.0113	0.0122	0.0079	-0.0360	-0.0128	0.0574	0.0002	0.0001	0.0002
Toowoomba (QLD)	-4994482.4972	2663618.0089	-2931171.1575	0.0121	0.0088	0.0091	-0.0324	-0.0079	0.0481	0.0002	0.0002	0.0002
Andamooka (SA)	-4035145.8277	3741808.3918	-3213842.4359	0.0098	0.0094	0.0088	-0.0403	-0.0002	0.0504	0.0002	0.0002	0.0002
Gabo Island (VIC)	-4379911.9542	2537393.8597	-3867574.2197	0.0112	0.0087	0.0103	-0.0370	0.0026	0.0436	0.0002	0.0002	0.0002
Coober Pedy (SA)	-3927330.9419	3965547.9511	-3077376.8165	0.0093	0.0093	0.0083	-0.0409	-0.0005	0.0514	0.0002	0.0002	0.0002
Katherine (NT)	-4147413.8177	4581462.5900	-1573359.0837	0.0098	0.0103	0.0072	-0.0358	-0.0128	0.0572	0.0002	0.0001	0.0002
Wagin (WA)	-2455774.3624	4735625.3849	-3485038.1973	0.0083	0.0112	0.0094	-0.0477	0.0110	0.0486	0.0002	0.0001	0.0002
Ravensthorpe (WA)	-2664852.2528	4602498.8360	-3509390.6909	0.0088	0.0116	0.0097	-0.0471	0.0100	0.0488	0.0002	0.0001	0.0002
Mt Cavanagh (NT)	-3929412.1216	4183417.4556	-2773890.6215	0.0096	0.0099	0.0083	-0.0404	-0.0028	0.0530	0.0002	0.0002	0.0002
Wiluna (WA)	-2871830.1215	4930661.0498	-2841419.6642	0.0083	0.0109	0.0083	-0.0452	0.0039	0.0524	0.0002	0.0001	0.0002
Tibooburra (NSW)	-4383698.9008	3417850.9363	-3117538.7823	0.0110	0.0096	0.0093	-0.0379	-0.0029	0.0501	0.0002	0.0002	0.0002

Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network

	Coordinates (m) at 2020.0			Coordinate Uncertainty (m)			Velocity (m / year)			Velocity Uncertainty (m / year)		
Site	X	Y	Z	$u(X)$	$u(Y)$	$u(Z)$	V_X	V_Y	V_Z	$u(V_X)$	$u(V_Y)$	$u(V_Z)$
Ivanhoe (NSW)	-4310476.3634	3190508.6627	-3441393.5542	0.0098	0.0085	0.0088	-0.0384	-0.0001	0.0480	0.0002	0.0002	0.0002
Broome (WA)	-3234208.1569	5134028.8375	-1958815.1914	0.0088	0.0113	0.0075	-0.0413	-0.0046	0.0560	0.0002	0.0001	0.0002
Nhill (VIC)	-4035390.1167	3193137.6972	-3755906.1988	0.0100	0.0089	0.0095	-0.0402	0.0038	0.0464	0.0002	0.0002	0.0002
Warramunga (NT)	-4193700.6368	4289270.2773	-2160904.9454	0.0100	0.0102	0.0077	-0.0375	-0.0088	0.0553	0.0002	0.0002	0.0002
Mt Magnet (WA)	-2629526.8926	4978260.9506	-2987965.8480	0.0082	0.0112	0.0086	-0.0463	0.0064	0.0514	0.0002	0.0001	0.0002
Larrimah (NT)	-4208011.6662	4479077.7734	-1701337.7347	0.0111	0.0114	0.0078	-0.0360	-0.0122	0.0568	0.0002	0.0001	0.0002
Leonora (WA)	-2905528.2178	4775175.2276	-3062280.3715	0.0085	0.0109	0.0087	-0.0455	0.0053	0.0515	0.0002	0.0001	0.0002
Tuross Head (NSW)	-4477434.2788	2572331.0877	-3731376.5980	0.0101	0.0079	0.0092	-0.0365	0.0010	0.0444	0.0002	0.0002	0.0002
Bald Rock (VIC)	-4188591.0788	3020461.0294	-3731086.9242	0.0097	0.0083	0.0092	-0.0391	0.0027	0.0461	0.0002	0.0002	0.0002
Horn Island (QLD)	-4960946.6284	3834778.7885	-1164513.3408	0.0110	0.0094	0.0069	-0.0291	-0.0205	0.0564	0.0002	0.0002	0.0002
Mt Emu (VIC)	-4065544.7571	3013958.9753	-3869590.3370	0.0106	0.0090	0.0101	-0.0398	0.0044	0.0453	0.0002	0.0002	0.0002
Stony Point (VIC)	-4111952.8138	2856387.6375	-3938194.1385	0.0097	0.0082	0.0095	-0.0393	0.0046	0.0444	0.0002	0.0002	0.0002
Alice Springs (NT)	-4052052.7360	4212835.9841	-2545104.5883	0.0095	0.0098	0.0079	-0.0393	-0.0052	0.0540	0.0002	0.0002	0.0002
Roslyn Bay (QLD)	-5121089.4297	2863243.2415	-2493143.3274	0.0164	0.0118	0.0100	-0.0311	-0.0118	0.0503	0.0002	0.0002	0.0002

Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network

	Coordinates (m) at 2020.0			Coordinate Uncertainty (m)			Velocity (m / year)			Velocity Uncertainty (m / year)		
Site	X	Y	Z	$u(X)$	$u(Y)$	$u(Z)$	V_X	V_Y	V_Z	$u(V_X)$	$u(V_Y)$	$u(V_Z)$
Larrakeyah (NT)	-4072230.1682	4713609.1735	-1366659.3497	0.0113	0.0122	0.0077	-0.0354	-0.0139	0.0577	0.0002	0.0001	0.0002
Broken Hill (NSW)	-4235701.4667	3372839.2104	-3360245.2676	0.0104	0.0092	0.0092	-0.0390	-0.0003	0.0489	0.0002	0.0002	0.0002
Cape Ferguson (QLD)	-5054583.3968	3275504.1131	-2091538.4726	0.0108	0.0086	0.0075	-0.0312	-0.0143	0.0529	0.0002	0.0002	0.0002
Wallal (WA)	-3060306.4338	5165740.4734	-2144656.6187	0.0086	0.0113	0.0077	-0.0425	-0.0023	0.0552	0.0002	0.0001	0.0002
Spring Bay (TAS)	-3988046.7045	2498705.5367	-4290516.8742	0.0113	0.0090	0.0113	-0.0392	0.0079	0.0411	0.0002	0.0002	0.0002
Eucla (WA)	-3410392.1827	4229088.8868	-3330284.3849	0.0093	0.0103	0.0091	-0.0439	0.0043	0.0504	0.0002	0.0002	0.0002
Coonabarabran (NSW)	-4687675.6162	2786705.8985	-3297865.3737	0.0110	0.0085	0.0092	-0.0352	-0.0034	0.0472	0.0002	0.0002	0.0002
Arubiddy (WA)	-3183133.6965	4393393.4410	-3342516.9213	0.0086	0.0100	0.0088	-0.0449	0.0057	0.0503	0.0002	0.0002	0.0002
Baladonia (WA)	-3002034.1354	4472882.6994	-3403723.4851	0.0087	0.0106	0.0091	-0.0457	0.0072	0.0498	0.0002	0.0002	0.0002
Mainoru (NT)	-4306320.1817	4444883.0498	-1537980.0653	0.0115	0.0116	0.0078	-0.0348	-0.0140	0.0571	0.0002	0.0002	0.0002
Bingleburra (NSW)	-4743762.8083	2559346.3040	-3399327.9127	0.0115	0.0085	0.0096	-0.0345	-0.0030	0.0459	0.0002	0.0002	0.0002
Portland (VIC)	-3926098.9113	3110284.5779	-3935497.1170	0.0110	0.0096	0.0108	-0.0408	0.0057	0.0452	0.0002	0.0002	0.0002
Rocklands (NT)	-4445289.3356	4025824.8715	-2164421.6420	0.0108	0.0103	0.0079	-0.0360	-0.0102	0.0549	0.0002	0.0002	0.0002
Thevanard (SA)	-3735034.6262	3908923.6990	-3372521.9630	0.0100	0.0102	0.0094	-0.0422	0.0027	0.0499	0.0002	0.0002	0.0002

Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network

	Coordinates (m) at 2020.0			Coordinate Uncertainty (m)			Velocity (m / year)			Velocity Uncertainty (m / year)		
Site	<i>X</i>	<i>Y</i>	<i>Z</i>	<i>u</i> (<i>X</i>)	<i>u</i> (<i>Y</i>)	<i>u</i> (<i>Z</i>)	<i>V_X</i>	<i>V_Y</i>	<i>V_Z</i>	<i>u</i> (<i>V_X</i>)	<i>u</i> (<i>V_Y</i>)	<i>u</i> (<i>V_Z</i>)
Exmouth (WA)	-2417814.5397	5401707.5260	-2370380.3097	0.0080	0.0117	0.0079	-0.0452	0.0031	0.0533	0.0002	0.0001	0.0002
Fitzroy Crossing (WA)	-3547066.8913	4918047.3803	-1971686.4311	0.0095	0.0115	0.0077	-0.0401	-0.0064	0.0562	0.0002	0.0001	0.0002
Gnangara (WA)	-2368688.0424	4881316.7075	-3341794.9823	0.0081	0.0114	0.0092	-0.0477	0.0105	0.0492	0.0002	0.0001	0.0002
Flinders Island (TAS)	-4147112.4604	2567153.7563	-4096196.5874	0.0109	0.0087	0.0106	-0.0385	0.0056	0.0425	0.0002	0.0002	0.0002
New Norcia (WA)	-2414152.3781	4907778.6372	-3270644.2049	0.0088	0.0125	0.0096	-0.0475	0.0097	0.0496	0.0002	0.0001	0.0002
Tom Price (WA)	-2706524.4877	5221344.9511	-2461226.3825	0.0087	0.0124	0.0084	-0.0447	0.0021	0.0536	0.0002	0.0001	0.0002
North Star (NSW)	-4854589.1186	2752849.4480	-3078537.4439	0.0117	0.0088	0.0091	-0.0338	-0.0060	0.0479	0.0002	0.0002	0.0002
Cooladdi (QLD)	-4707740.5468	3213770.3725	-2852875.4128	0.0122	0.0098	0.0091	-0.0352	-0.0068	0.0504	0.0002	0.0002	0.0002
Birdsville (QLD)	-4355739.6469	3740194.4994	-2769171.5091	0.0113	0.0105	0.0090	-0.0378	-0.0053	0.0523	0.0002	0.0002	0.0002
Boulia (QLD)	-4496431.9209	3785936.3941	-2467980.3960	0.0111	0.0101	0.0083	-0.0363	-0.0083	0.0534	0.0002	0.0002	0.0002
Hughenden (QLD)	-4833918.6817	3485758.7318	-2266147.6174	0.0125	0.0101	0.0084	-0.0334	-0.0118	0.0531	0.0002	0.0002	0.0002
Julia Creek (QLD)	-4687826.4385	3697044.2812	-2237232.1656	0.0118	0.0103	0.0083	-0.0345	-0.0111	0.0539	0.0002	0.0002	0.0002
Neutral Junction (NT)	-4123557.7648	4274539.2155	-2318810.9705	0.0122	0.0124	0.0089	-0.0383	-0.0072	0.0548	0.0002	0.0002	0.0002
Lambina (SA)	-3957272.6859	4088878.0706	-2872293.9157	0.0097	0.0098	0.0084	-0.0404	-0.0022	0.0525	0.0002	0.0002	0.0002

Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network

	Coordinates (m) at 2020.0			Coordinate Uncertainty (m)			Velocity (m / year)			Velocity Uncertainty (m / year)		
Site	<i>X</i>	<i>Y</i>	<i>Z</i>	<i>u</i> (<i>X</i>)	<i>u</i> (<i>Y</i>)	<i>u</i> (<i>Z</i>)	<i>V_X</i>	<i>V_Y</i>	<i>V_Z</i>	<i>u</i> (<i>V_X</i>)	<i>u</i> (<i>V_Y</i>)	<i>u</i> (<i>V_Z</i>)
Mt Doreen (NT)	-3916571.9695	4428011.7783	-2388294.0779	0.0119	0.0126	0.0089	-0.0396	-0.0055	0.0548	0.0002	0.0001	0.0002
Jervois (NT)	-4237233.1317	4077484.9793	-2462642.0014	0.0117	0.0116	0.0087	-0.0380	-0.0068	0.0540	0.0002	0.0002	0.0002
Coen (QLD)	-4956013.1005	3710714.3539	-1528615.7435	0.0150	0.0117	0.0081	-0.0305	-0.0179	0.0555	0.0002	0.0002	0.0002
Laura (QLD)	-5000453.3825	3572456.4740	-1701780.3240	0.0132	0.0107	0.0079	-0.0307	-0.0169	0.0547	0.0002	0.0002	0.0002
Northcliffe (WA)	-2311144.1346	4712785.4091	-3611358.5979	0.0084	0.0119	0.0100	-0.0483	0.0128	0.0476	0.0002	0.0001	0.0002
Kilkivan (QLD)	-5073245.0941	2668929.5700	-2787555.0317	0.0127	0.0091	0.0090	-0.0316	-0.0094	0.0486	0.0002	0.0002	0.0002
Meadow (WA)	-2373305.7835	5181466.1948	-2854287.0682	0.0084	0.0126	0.0089	-0.0467	0.0069	0.0514	0.0002	0.0001	0.0002
Yarragadee (WA)	-2389026.6159	5043317.0600	-3078529.5586	0.0080	0.0114	0.0087	-0.0472	0.0085	0.0505	0.0002	0.0001	0.0002
North Bourke (NSW)	-4587935.3985	3116314.3026	-3139419.8358	0.0113	0.0092	0.0093	-0.0363	-0.0040	0.0490	0.0002	0.0002	0.0002
Harding River Dam (WA)	-2713833.2684	5303935.1133	-2269513.7542	0.0081	0.0113	0.0077	-0.0441	0.0007	0.0542	0.0002	0.0001	0.0002
Port Headland (WA)	-2867484.8313	5242158.9057	-2223764.3419	0.0085	0.0118	0.0079	-0.0434	-0.0006	0.0547	0.0002	0.0001	0.0002
Murchison (WA)	-2556630.0412	5097138.2863	-2848384.7843	0.0083	0.0117	0.0085	-0.0462	0.0058	0.0518	0.0002	0.0001	0.0002
Gascoyne (WA)	-2482748.2739	5243145.5489	-2642213.9892	0.0093	0.0143	0.0094	-0.0458	0.0047	0.0525	0.0002	0.0001	0.0002
Normanton (QLD)	-4728960.2818	3819993.0037	-1923811.0896	0.0140	0.0122	0.0085	-0.0334	-0.0137	0.0550	0.0002	0.0002	0.0002

Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network

	Coordinates (m) at 2020.0			Coordinate Uncertainty (m)			Velocity (m / year)			Velocity Uncertainty (m / year)		
Site	<i>X</i>	<i>Y</i>	<i>Z</i>	<i>u</i> (<i>X</i>)	<i>u</i> (<i>Y</i>)	<i>u</i> (<i>Z</i>)	<i>V_X</i>	<i>V_Y</i>	<i>V_Z</i>	<i>u</i> (<i>V_X</i>)	<i>u</i> (<i>V_Y</i>)	<i>u</i> (<i>V_Z</i>)
King Island (TAS)	-3953946.8747	2888865.8595	-4073040.9386	0.0096	0.0083	0.0097	-0.0403	0.0066	0.0437	0.0002	0.0002	0.0002
Hernani (NSW)	-4887853.3609	2545879.9420	-3202305.1047	0.0124	0.0088	0.0097	-0.0333	-0.0053	0.0466	0.0002	0.0002	0.0002
Christmas Island (WA)	-1696344.7537	6039590.0096	-1149275.0866	0.0075	0.0132	0.0072	-0.0419	-0.0015	0.0538	0.0002	0.0001	0.0002
Lord Howe Island (NSW)	-5082756.5673	1944860.6793	-3315203.5926	0.0116	0.0076	0.0092	-0.0304	-0.0056	0.0433	0.0002	0.0002	0.0002
Eidsvold (QLD)	-5049378.8605	2785132.1517	-2716869.1227	0.0147	0.0102	0.0100	-0.0319	-0.0097	0.0493	0.0002	0.0002	0.0002
Nebo (QLD)	-5068236.7291	3081711.6353	-2337561.3869	0.0163	0.0122	0.0101	-0.0314	-0.0126	0.0515	0.0002	0.0002	0.0002
Aramac (QLD)	-4827919.3114	3349814.0161	-2472422.8950	0.0114	0.0093	0.0082	-0.0338	-0.0102	0.0521	0.0002	0.0002	0.0002
Tambo (QLD)	-4820440.5593	3216767.7633	-2656380.4455	0.0154	0.0116	0.0104	-0.0341	-0.0088	0.0511	0.0002	0.0002	0.0002
Mulgathing (SA)	-3833528.0707	3961621.4057	-3197513.8708	0.0102	0.0103	0.0092	-0.0415	0.0009	0.0509	0.0002	0.0002	0.0002
Kidman Springs (NT)	-4017486.2068	4628837.9322	-1759281.7840	0.0171	0.0183	0.0106	-0.0372	-0.0107	0.0568	0.0002	0.0001	0.0002
Renner Springs (NT)	-4192073.9978	4368928.5517	-1999279.4623	0.0109	0.0112	0.0080	-0.0370	-0.0100	0.0559	0.0002	0.0002	0.0002
Esperance (WA)	-2800842.3479	4500734.2962	-3534898.1927	0.0171	0.0260	0.0185	-0.0466	0.0094	0.0489	0.0002	0.0002	0.0002
Jabiru (NT)	-4236472.9665	4559859.3702	-1388764.0422	0.0170	0.0175	0.0095	-0.0347	-0.0147	0.0576	0.0002	0.0001	0.0002
Yellowdine (WA)	-2698549.7646	4741476.9407	-3293657.2537	0.0147	0.0232	0.0163	-0.0466	0.0082	0.0501	0.0002	0.0001	0.0002

Schedule 1—Recognized-value standards of measurement in the Australian Fiducial Network

	Coordinates (m) at 2020.0			Coordinate Uncertainty (m)			Velocity (m / year)			Velocity Uncertainty (m / year)		
Site	X	Y	Z	$u(X)$	$u(Y)$	$u(Z)$	V_X	V_Y	V_Z	$u(V_X)$	$u(V_Y)$	$u(V_Z)$
Walhallow (NT)	-4344184.0427	4247715.9745	-1934909.3899	0.0182	0.0186	0.0110	-0.0360	-0.0113	0.0559	0.0002	0.0002	0.0002

Schedule 2—Repeals

Recognized-value standard of measurement of position 2012 (No. 1)

1 The whole of the determination

Repeal the determination.