DSN Service Capabillities

Antenna Dia (m)	Type	Location	DSS No.	S-Band Uplink	EIRP (dBW)	S-Band Downlink	S GAIN / G/T (Note 2) @ 45 deg (dB)	X-Band Uplink	EIRP (dBW)	X-Band Downlink	X GAIN / G/T (Note 2) @ 45 deg (dB)	K-Band Uplink	EIRP (dBW)	K-Band Downlink	K GAIN / G/T (Note 2) @ 45 deg (dB)
26	E.O.[1,4]	Canberra, Australia	46	2025 - 2120 [7]	94.4	2200 - 2300	52.5 / 31.9	-	-		-	-	-	-	-
26	E.O.[1,4]	Madrid, Spain	66	2025 - 2120 [7]	94.4	2200 - 2300	52.5 / 31.8	-	-	-	-	-	-	-	-
34	BWG-1[1,3]	Goldstone, CA USA	24	2025 - 2120 [9]	99.1	2200 - 2300	56.8 / 41.3	7145 - 7190 [7] 7190 - 7235 [7, 14]	109.9	8400 - 8500	68.3 / 52.8	-	-	09/21/09 [5, 15]	77.3/54.3 [13, 15]
34	BWG-1[1,3]	Canberra, Australia	34	2025 - 2120 [9]	99.1	2200 - 2300	56.8 / 40.8	7145 - 7190 [7] 7190 - 7235 [7, 14]	109.9	8400 - 8500	68.3 / 53.7	-	-	31800 - 32300 09/29/08 [5, 15]	79.0/65.6 [6, 13] 77.3/54.3 [13, 15]
34	BWG-1[1,3]	Madrid, Spain	54	2025 - 2120 [9]	99.1	2200 - 2300	56.8 / 41.0	7145 - 7190 [7] 7190 - 7235 [7, 14]	109.9	8400 - 8500	68.3 / 53.7	-	-	04/15/08 [5, 6] 09/27/10 [5, 15]	79.0/64.4 [6, 13] 77.3/54.3 [13, 15]
34	BWG-2[1,3]	Goldstone, CA USA	25	-	-	-	-	7145 - 7190 [7] 7190 - 7235 [7, 14]	110.0	8400 - 8500	68.4 / 53.7	34200 - 34700 [11] 08/1/10 [5]	108.5 [13]	31800 - 32300	79.0 / 64.1
34	BWG-2[1,3]	Goldstone, CA USA	26	-	-	-	-	7145 - 7190 [7] 7190 - 7235 [7, 14]	109.9	8400 - 8500	68.3 / 55.5	-	-	31800 - 32300	79.1/65.7 [6, 13]
34	BWG-2[1,3]	Madrid, Spain	55	-	-	-	-	7145 - 7190 [7] 7190 - 7235 [7, 14]	110.0	8400 - 8500	68.3/55.3	-	-	31800 - 32300	79.1/65.4 [6, 13]
34	HEF[1,3]	Goldstone, CA USA	15	-	-	2200 - 2300	56.0 / 40.2	7145 - 7190 [7]	110.1	8400 - 8500 [12]	68.3 / 54.0	-	-	-	-
34	HEF[1,3]	Canberra, Australia	45	2025 - 2110 [8] 06/01/2008 [5]	77.8	2200 - 2300	56.0 / 40.2	7145 - 7190 [7]	110.1	8400 - 8500 [12]	68.3 / 54.0	-	-	-	-
34	HEF[1,3]	Madrid, Spain	65	2025 - 2110 [8] 06/01/2008 [5]	77.8	2200 - 2300	56.0 / 39.6	7145 - 7190 [7]	110.1	8400 - 8500 [12]	68.3 / 54.0	-	-	-	-
34	HSB[1]	Goldstone, CA USA	27	2025 - 2120 [8]	77.1	2200 - 2300	54.8/ 34.7	-	-	-	-	-	-	-	-
70	D.S.[3]	Goldstone, CA USA	14	2110 - 2120 [9,10]	105.8/118.8	2270 - 2300	63.5 / 51.0	7145 - 7190 [7]	116.1	8400 - 8500	74.5 / 62.9	-	-	-	-
70	D.S.[3]	Canberra, Australia	43	2110 - 2120 [9,10]	105.8/118.8	2270 - 2300	63.5 / 50.9	7145 - 7190 [7]	116.2	8400 - 8500	74.6 / 62.8	-	-	-	-
70	D.S.[3]	Madrid, Spain	63	2110 - 2120 [9]	105.8/118.8	2270 - 2300	63.5 / 50.9	7145 - 7190 [7]	116.3	8400 - 8500	74.6 / 63.1	-	-	-	-

Notes:

1. These stations can be used for Earth Orbiting (Category A) missions.
2. Performance values based on 45 deg. elevation, vacuum condition & Diplexed (if possible) single band mode.
3. These stations are used for Deep Space (Category B) missions.
4. These 26M stations will be closed in the future (FY09).
5. Planned Operational Date.
6. 31800-32300 MHz.
7. Transmit power range: 200 W to 20 KW (23 to 43 dBW).
8. Transmit power range: 50 W to 200 W (17 to 23 dBW).
9. Transmit power range: 200 W to 20 KW (23 to 43 dBW).
10. Transmit power range: 20 KW to 400 KW (43 to 56 dBW).
11. Transmit power range: 50 W to 800 W (17 to 29 dBW).
12. 8200 - 8600 MHz for VLBI Service.
13. Estimated values.
14. Near-Earth spectrum
15. 25500-27000 MHz (Ka2)

Credit: E. Luers

As of: February 2008