Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
900 MHz GSM (mobile)	No spare capacity	880 MHz - 960 MHz	Cell - C	GSM 900 Mobile	1x11 MHz duplex	Fully utilised
			MTN	GSM 900 Mobile	1x11 MHz duplex	Fully utilised
			Vodacom	GSM 900 Mobile	1x11 MHz duplex	Fully utilised
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned(duplex)	Comment
1.3 -1.5 GHz Fixed duplex shared band with reserved channels in some instances	Spectrum is available on a radio co-ordinated basis for PtP low capacity links	1350 - 1517 MHz	Ekurhuleni Metro	Links	3x 500 kHz duplex	PtP ad hoc
			Eskom	Links	4x 25 kHz duplex	PtP national
			Eskom	Links	1x 500 kHz duplex	PtP ad hoc
			National Research Foundation	Links	4x 250 kHz duplex	PtP ad hoc
			Nelson Mandela Metro	Links	4x 500 kHz duplex	PtP ad hoc
			SANDF	Links	4x 25 kHz duplex	PtP national
			SAND	Links	3x 500 kHz duplex	PtP national
			SAPS	Links	4x 25 kHz duplex	PtP national
			SAPS	Links	13x 500 kHz duplex	PtP national
			Telkom	Links	4x 25 kHz duplex	PtP national
			Telkom	Links	3x 500 kHz duplex	PtP national
			Transnet	Links	3x 25 kHz duplex	PtP national
			Transnet	Links	3x 500 kHz duplex	PtP national
			X-Strata	Links	2x 500 kHz duplex	PtP ad hoc
Frequency Band	Availability	Frequency Band Size	User	Application	Ch Bandwidth available	Comment
					(SIMPLEX)	
1.5 GHz shared fixed simplex band	Spectrum is available on a radio co-ordinated basis for PtP low capacity simplex links	1517 - 1525 MHz	none	destination band for migrating VHF/UHF links. E.g.Alarms etc	140 x 25 kHz & 7 x 500 kHz channels available	not utilised yet
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	<u>Comment</u>
1.5 GHz TDAB & SDAB only	Yes. One assignment so far	1452 - 1479.5 MHz T/DAB & 1479.5 - 1492 MHz S/DAB	Worldspace	Digital Audio Broadcasting: (Terrestrial & Space)	2 x 2.5 MHz simplex	National deployment for audio broadcasting (unknown if operational or not)
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned(duplex)	Comment
1.7/1.8 GHz (mobile and fixed)	No Spare capacity	1710 - 1880 MHz (2 x75 MHz)	Vodacom	GSM 1800 mobile	1x 12 MHz duplex	Fully utilised
			MTN	GSM 1800 mobile	1x 12 MHz duplex	Fully utilised

			Cell C	GSM 1800 mobile	1x 12 MHz duplex	Fully utilised
			Neotel	Fixed Data	1x 12 MHz duplex	Fully utilised
			Telkom	GSM 1800 mobile	1x 12 MHz duplex	Fully utilised
			WBS	Fixed Data	1x 12 MHz duplex	Fully utilised
			WBS	Fixed Data	1x 10 MHz TDD block	Fully utilised
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
1.9 GHz DECT (fixed)	No Spare capacity	1880 - 1900 MHz	Telkom	DECT	1x 20 MHz block	National block assignment to Telkom for DECT
			Bokone USAL Limpopo	Cor Dect Broadband	1x 20 MHz block	Details on deployment unavailable (unknown if operational or not) (regional)
			Cordless DECT phones (portable)	DECT	1x 20 MHz block	Cordless DECT phones (unlicensed)
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>Üser</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
1.9 GHz Extended DECT	No Spare capacity	1900 - 1920 MHz	Telkom	Extended DECT	1x 20 MHz block	Full national block assigned to Telkom for Extended DECT.
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
2.0 GHz FS Band	Spectrum is available on a radio co-ordinated basis for PtP low/medium capacity links	2025 - 2110 MHz // 2200 - 2285 MHz	CSIR	Links	2 x 4.6 MHz simplex	Satellite Tracking Links (ad hoc)
			Richardsbay Minerals	Links	2x 3.5 MHz duplex	PtP ad hoc "new plan"
					3x 7 MHz duplex	PtP ad hoc "new plan"
			Transnet	Links	2x 28 MHz duplex	Ad hoc "legacy" 2 GHz links moved from 3G band (deployments unknown)
			SANDF	Links	2x 28 MHz duplex	Ad hoc "legacy" 2 GHz links moved from 3G band (deployments unknown)

			Telkom	Links	1x 28 MHz duplex 4x 3.5 MHz duplex	Ad hoc "legacy" 2 GHz links moved from 3G band (deployments unknown) Ad hoc "legacy" 2 GHz links moved from 3G band (deployments
			Telsis (military)	Links	1x 28 MHz duplex	unknown) Ad hoc "legacy" 2 GHz links moved from 3G band (deployments
			Mbombela Municipality (ad hoc)	Links	4x 3.5 MHz duplex	unknown) PtP ad hoc "new plan"
			Sumbandilasat	Downlink	1x 60 MHz	Satellite Links (ad hoc)
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
1.9/2.1 GHz (3G - mobile)	No spare capacity	1920 - 1980 MHz // 2110 - 2170 MHz (FDD)	Vodacom	3G Mobile/Data	2x 15MHz duplex	National
		(MTN	3G Mobile/Data	2x 15MHz duplex	National
			Cell C	3G Mobile/Data	2x 15MHz duplex	National
			Telkom	3G Mobile/Data	2x 15MHz duplex	National
		2010 - 2025 MHz (TDD)	Vodacom		1x 5MHz TDD	National
		,	MTN	 -	1x 5MHz TDD	National
			vacant	 -	1x 5MHz TDD	unassigned
Frequency Band	Availability	Frequency Band Size	User	Application	Ch Bandwidth assigned	Comment
2.3/2.4 GHz ***	No Spare capacity left. Identified as probable	2300 - 2483.5 MHz	Telkom	Links	34x 2 MHz duplex	TDMA National
*** Parts of this band is also used for ISM & Short Range Devices which are spectrum licence exempt. 2.3 - 2.4 GHz identified as IMT band	future high demand IMT band		Armscor	Links	1x2 MHz TDD	Ad hoc Military (unknown application or if still operational)
			DENEL	Links	1x 0.01 MHz TDD	Ad hoc Military (unknown application
						or if still operational)

			SABC	Outside Broadcasting Video Links	1x 28 MHz simplex	OB video links at sporting, and other venues (ad hoc national basis) (unknown if still used)
			Dimension RF	Outside Broadcasting Video Links	1x 28 MHz simplex	OB video links at sporting, and other venues (ad hoc national basis) (unknown if still used)
			SAPS	Mobile Video	2x 28 MHz simplex	Ad hoc mobile helicopter video links when needed (unknown if still used)
			Ilali Holdings	Mine Safety	1x 20 MHz TDD	Unknown if still used
			East Coast Assist	Marine Safety Buoy	1x 30 MHz TDD	Unknown if still used
			Transnet	Links	1x 3.5 MHz duplex	Regional TDMA
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
2.6 GHz	Yes,130 MHz spectrum available (pending high demand spectrum licensing process being in place)	2500 - 2690 MHz	Sentech	Broadband	2500 - 2550 MHz	Band not finalised. Council committee deliberating on this band
			WBS (iBurst)		2550 - 2565 MHz	Band not finalised. Council committee deliberating on this band
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
3.5 GHz	Yes, 2x 14 MHz available (pending high demand spectrum licensing process being in place)	3400 - 3600 MHz	Sentech	Unknown	1x 14 MHz duplex	National license
			Neotel	Unknown	1x 28 MHz duplex	National license
			Telkom	Unknown	1x 28 MHz duplex	National license
			USAL	Unknown	1x 14 MHz duplex	National license
			Spare	Unknown	1x 14 MHz duplex	Available.Band not finalised
Frequency Band	Availability	Frequency Band Size	User	Application	Ch Bandwidth assigned	Comment

C-Band satellite, (space-Earth) & terrestrial FS	Yes. Spectrum available for satellite services pending radio coordination with existing terrestrial services.	3.6 - 4.2 GHz	Telkom	Links	1x 600 MHz duplex	PtP "legacy" national fixed services Backhaul as well as C- Band Satellite
			La Fontaine Restaurant	VSAT	unknown	Ad hoc Legacy assignment from 1991 (unknown if utilised)
			Mc Gregor WC	VSAT	unknown	Ad hoc Legacy assignment from 1991 (unknown if utilised)
			Moag JS	VSAT	unknown	Ad hoc Legacy assignment from 1991 (unknown if utilised)
			Molefe TG	VSAT	unknown	Ad hoc Legacy assignment from 1991 (unknown if utilised)
			Scandurra S	VSAT	unknown	Ad hoc Legacy assignment from 1991 (unknown if utilised)
			University of Cape Town	VSAT	unknown	Ad hoc Legacy assignment from 1991 (unknown if utilised)
			Anglo Platinum Management Services	VSAT	0.5 MHz	Ad hoc Satellite service
			Barrick Africa	VSAT	0.582 MHz	Ad hoc Satellite service
			Peoples Republic of China Embassies	VSAT	2.0017 MHz	Ad hoc Satellite service
			Council for Geoscience	VSAT	8 MHz	Ad hoc Satellite service
			CSIR	Sat Tracking	600 MHz	Ad hocAssistance to NASA
			СТВТО	VSAT	0.624 MHz	Ad hoc Satellite service
			Globecast SA	Sat downlink	9 MHz	Ad hoc Satellite service

			Impala Platinum Holdings	VSAT	0.52 MHz	Ad hoc Satellite
			Impaia i latinam Holaings	100/11	0.02 1/11/2	service
			JICA	VSAT	0.38 MHz	Ad hoc Satellite
						service
			Multichoice	Sat downlink	3 MHz	Ad hoc Satellite
						service
			NECSA	VSAT	3.2 MHz	Ad hoc Satellite
						service
			Neotel	VSATs	10.29958 MHz	Ad hoc Satellite
			L			service
			Orbicom	Sat downlinks	471.6985 MHz	Ad hoc Satellite
			1			service
			SA Trade Mission	VSAT	2.6 MHz	Ad hoc Satellite
			<u> </u>			service
			SANDF	Sat downlinks	380 MHz	Ad hoc Satellite
			<u> </u>			service
			Transtel (Transnet)	VSAT	3.9422 MHz	Ad hoc Satellite
			_			service
			UN World Food Program	VSAT	0.275 MHz	Ad hoc Satellite
			<u> </u>			service
			Verizon Business	VSAT	1.8 MHz	Ad hoc Satellite
			<u> </u>		. 	service
			Vodacom	VSAT	7.77 MHz	Ad hoc Satellite service
			WBS	VSAT and PMP	148.02 MHz	Ad hoc Satellite
			L	LINKS		service
			Weather Bureau	VSAT	0.023 MHz	Ad hoc Satellite
			1			service
			Worldbank	VSAT	18 MHz	Ad hoc Satellite
			-{,,,		. 	service
			Worldcom Solutions	VSAT	2.222 MHz	Ad hoc Satellite
Francisco Dond	Aveilability	Francisco Bond Cine	Heer	Application	Ch Dandwidth againmad	service
Frequency Band	Availability	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
4.4 - 5.0 GHz	Yes. Spectrum is	4488 - 4684 MHz & 4800 -	SANDF	Links	4x 28 MHz duplex	PtP ad hoc defence
	available to SANDF,	5000 MHz				
	SAPS on a radio co-					
	ordinated basis. (a)					
	reserved for Government					
	National Security					
	backhaul links.					
	Destination band for					
	Military and Safety &					
Î.	lo	Î.	İ	ı		1
	Security due to clearing of 3G band.					

			SAPS	Links	3x 28 MHz duplex	PtP ad hoc (National TETRA Network)
			SAPS	Aeronautical Mobile Video	4x 10 MHz TDD blocks	National Crime Scene Monitoring
4.4 - 5.0 GHz	(b) reserved for Outside Broadcasting events. Destination band for OB from migration from 3G band.	4400 - 4490 MHz & 4690 - 4800 MHz	Telemedia	Outside Broadcasting Links	4x 10 MHz TDD blocks	National video coverage of Sporting And News Venues
			Airtime SABC	Outside Broadcasting Links	5x 10 MHz TDD blocks	National video coverage of Sporting And News Venues
			Mnet	Outside Broadcasting Links	2x 10 MHz TDD blocks	National video coverage of Sporting And News Venues
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
C-Band satellite, (Earth-space) & terrestrial FS	Yes. Spectrum available for satellite services pending radio coordination with existing terrestrial services.	5.85-6.725 GHz	WBS	Links	5-20 MHz TDD channels	PtP ad hoc (5875 - 5925 MHz)
			Anglo Platinum Management Services	VSAT	0.5 MHz	Ad hoc Satellite service
			Barrick Africa	VSAT	0.592 MHz	Ad hoc Satellite service
			Peoples Republic of China Embassies	VSAT	0.27 MHz	Ad hoc Satellite service
			Council for Geoscience	VSAT	1.0 MHz	Ad hoc Satellite service
			CSIR	Sat Tracking	2.4 GHz	Ad hoc Assistance to NASA
			СТВТО	VSAT	0.684 MHz	Ad hoc Satellite service
			Embassy Slovac Republic	VSAT	0.1 MHz	Ad hoc Satellite service
			Globecast SA	Sat uplink	18 MHz	Ad hoc Satellite service
			Impala Platinum Holdings	VSAT	0.52 MHz	Ad hoc Satellite service
			Infovan	Links	30 MHz	PtP ad hoc (5875 - 5925 MHz)
			JICA	VSAT	0.3 MHz	Satellite service
			Mitsol	Links	15 MHz TDD	PtP ad hoc (5875 - 5925 MHz)
			Multichoice	VSAT	3 MHz	Ad hoc Satellite service
			NECSA	VSAT	0.4 MHz	Ad hoc Satellite service
			Neotel	VSAT	10.46868 MHz	Ad hoc Satellite service

			Orbicom	Sat uplink	501.6985 MHz	Ad hoc Satellite service
			SA Trade Mission	VSAT	2.6 MHz	Ad hoc Satellite service
			SANDF	VSAT	380 MHz	Ad hoc Satellite service
			Sentech	VSAT	8.02 MHz	Ad hoc Satellite service
			Telkom	VSAT	575 MHz	Ad hoc Satellite service
			Transtel (Transnet)	VSAT	3965.4 MHz	Ad hoc Satellite service
			UN World Food Program	VSAT	0.275 MHz	Ad hoc Satellite service
			Urban Brew Studios	VSAT	9 MHz	Ad hoc Satellite service
			Vodacom	VSAT	5.2 MHz	Ad hoc Satellite service
			WBS	VSAT	4.018 MHz	Ad hoc Satellite service
			Verizon Business	VSAT	5.6 MHz	Ad hoc Satellite service
			Weather Bureau	VSAT	0.023 MHz	Ad hoc Satellite service
			Worldbank	VSAT	18 MHz	Ad hoc Satellite service
Frequency Band	Availability	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
6.0 GHz lower	No.	5.9452 - 6.40479 GHz	Telkom	Links	8x 29.65 MHz duplex	PtP Legacy band assigned to Telkom
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
6.0 GHz upper normal	No.	6.460 - 7.080 GHz	Telkom	Links	8x 40 MHz duplex	PtP Legacy band assigned to Telkom
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
6.0 GHz upper interleaved	No.	6.440 - 7.080 GHz	Telkom	Links	16x 20 MHz duplex	PtP Legacy band assigned to Telkom
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
7.0 GHz lower	Yes. Spectrum is available on a radio co- ordinated basis	7.121 - 7.429 GHz	Eskom	Links	4x 28 MHz duplex	PtP ad hoc
			Karsten Farms	Links	1x 28 MHz duplex	PtP ad hoc
			Platitel (USAL)	Links	2x 28 MHz duplex	PtP ad hoc
			Neotel	Links	1x 28 MHz duplex	PtP ad hoc
			SANDF	Links	1x 28 MHz duplex	PtP ad hoc
			Telkom	Links	5x 28 MHz duplex	PtP ad hoc
			Telfree	Links	1x 28 MHz duplex	PtP ad hoc
				1		
			Richardsbay Minerals	Links	1x 28 MHz duplex	PtP ad hoc
			Richardsbay Minerals Vodacom		1x 28 MHz duplex 5x 28 MHz duplex	PtP ad hoc PtP ad hoc
			Richardsbay Minerals	Links	1x 28 MHz duplex	PtP ad hoc
			Richardsbay Minerals Vodacom	Links Links	1x 28 MHz duplex 5x 28 MHz duplex	PtP ad hoc PtP ad hoc
			Richardsbay Minerals Vodacom Emid	Links Links Links	1x 28 MHz duplex 5x 28 MHz duplex 1x 28 MHz duplex	PtP ad hoc PtP ad hoc PtP ad hoc

			Weather Bureau	Links	1x 28 MHz duplex	PtP ad hoc
			SABC	Links	3x 28 MHz duplex	PtP ad hoc
			Dimension RF	Links	1x 28 MHz duplex	PtP ad hoc
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	Application	Ch Bandwidth assigned	Comment
7.0 GHz upper	Yes. Spectrum is available on a radio co- ordinated basis	7.457 - 7.737 GHz	SANDF	Links	2x 28 MHz duplex	PtP ad hoc
			Telkom	Links	5x 28 MHz duplex	PtP ad hoc
			Vodacom	Links	5x 28 MHz duplex	PtP ad hoc
			Amatole	Links	2x 28 MHz duplex	PtP ad hoc
			Stellenbosch University	Links	1x 28 MHz duplex	PtP ad hoc
requency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
7.0 GHz "old" analogue	No. Discontinued channel plan	7.435048 - 7.703282 MHz	Telkom	Links	6x 23.324 MHz duplex	PtP Legacy band assigned to Telkom
			Weather Bureau	Links	2x 25 MHz duplex	PtPad hoc "legacy"
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
3.0 GHz lower analogue (digital)	Yes. Spectrum is available on a radio co- ordinated basis	7.7477 - 8.26657 GHz	Eskom	Links	2x 29.65 MHz duplex	PtP ad hoc
			SANDF	Links	4x 29.65 MHz duplex	PtP ad hoc
			Broadband Infraco	Links	2x 29.65 MHz duplex	PtP ad hoc
			Transnet	Links	4x 29.65 MHz duplex	PtP ad hoc
			Vodacom	Links	2x 29.65 MHz duplex	PtP ad hoc
			SAPS	Links	1x 29.65 MHz duplex	PtP ad hoc
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
3.0 GHz upper	Yes. Spectrum is available on a radio co- ordinated basis.	8.286 - 8.489 MHz	City of Cape Town	Links	2x 7 MHz duplex	PtP ad hoc
			CSIR	Links	1x 20 MHz	PtP ad hoc
			Eskom	Links	6x 7 MHz duplex	PtP ad hoc
			MTN	Links	1x 7 MHz duplex	PtP ad hoc
			N.I.T.R.	Links	1x 20 MHz	PtP ad hoc
			Phalabora Mining Company	Links	1x 12 MHz	PtP ad hoc
			Richardsbay Minerals	Links	1x 7 MHz duplex	PtP ad hoc
			SANDF	Links	3x 7 MHz duplex	PtP ad hoc
			SAPS	Links	3x 7 MHz duplex	PtP ad hoc
			Transnet	Links	4x 7 MHz duplex	PtP ad hoc
			Afrocall Satellite	Links	?x 14 MHz duplex	PtP ad hoc
			Mitsol PTY Ltd	Links	?x 14 MHz duplex	PtP ad hoc

			Internet Solutions	Links	?x 14 MHz duplex	PtP ad hoc
Frequency Band	Availability	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
10 GHz (PtMP)	No.	10.150 - 10.300 // 10.50 - 10.650 GHz	MTN	Links	1x 28 MHz duplex	PtMP ad hoc
			Cell C	Links	1x 28 MHz duplex	PtMP ad hoc
			Neotel	Links	1x 28 MHz duplex	PtMP ad hoc
			Sentech	Links	1x 28 MHz duplex	PtMP ad hoc
			WBS	Links	1x 28 MHz duplex	PtMP ad hoc
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
11 GHz FS band & satellite FSS	No. Sharing with BSS & Ku band services	10.7 - 11.7 GHz	Telkom	Links	12X 40 MHz duplex	PtP national "legacy" assignment
			MTN	Links	2x 40 MHz duplex	PtP ad hoc assignments
			Africa Business News CNBC		4.5 MHz	Ad hoc Satellite servic
			Citrine Communications		120 MHz	Ad hoc Satellite service
			Globecast South Africa		28.5 MHz	Ad hoc Satellite servic
			Intelsat SA		0.7168 MHz	Ad hoc Satellite service
			Internet Solutions		19.562 MHz	Ad hoc Satellite servic
			Liquid Telecommunications Operations		36 MHz	Ad hoc Satellite servic
			Orbicom	·†	396 MHz	Ad hoc Satellite servic
			Scandurra S	·†	180 MHz	Ad hoc Satellite servic
			Sentech	·†	72 MHz	Ad hoc Satellite servic
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
13 GHz	Yes. Spectrum is available on a radio co-ordinated basis.	12.75 - 13.25 GHz	Telkom	Links	8x 28 MHz duplex	PtP ad hoc
			Broadband Infraco	Links	2x 28 MHz duplex	PtP ad hoc
			Eskom	Links	2x 28 MHz duplex	PtP ad hoc
			Stellenbosch University	Links	1x 28 MHz duplex	PtP ad hoc
			Amatole Telecomms	Links	2x 28 MHz duplex	PtP ad hoc
			MTN	Links	2x 28 MHz duplex	PtP ad hoc
			Pretoria City Council	Links	1x 28 MHz duplex	PtP ad hoc
			SABC	Links	1x 28 MHz duplex	PtP ad hoc
			SANDF	Links	2x 28 MHz duplex	PtP ad hoc
			Sentech	Links	5x 28 MHz duplex	PtP ad hoc
			Transnet	Links	5x 28 MHz duplex	PtP ad hoc
Frequency Band	Availability	Frequency Band Size	User	Application	Ch Bandwidth assigned	Comment

11.7 - 14.5 GHz Ku Band	Yes. Spectrum is available for satellite services.	11.7 - 14.5 GHz	Africa Business News CNBC	SNG/ENG/VSAT	9 MHz	Ad hoc Satellite service
			African Bank	VSAT	1.37 MHz	Ad hoc Satellite service
			Al Jazeera Network	SNG/ENG/VSAT	6 MHz	Ad hoc Satellite service
			APTN	SNG/ENG/VSAT	18 MHz	Ad hoc Satellite service
			British Telecomms	SNG/ENG/VSAT	9 MHz	Ad hoc Satellite service
			Citrine Communications	Feeder link	8x 30 MHz	Ad hoc Satellite service
			CNN	SNG/ENG/VSAT	18 MHz	Ad hoc Satellite service
			CSIR	Telemetry Tracking & Command		Ad hoc Satellite service
			Dimension Television	Command SNG/ENG/VSAT	9 MHz	Ad hoc Satellite service
			Embassy of Angola	VSAT	unknown	Ad hoc Satellite service
			Eskom	VSAT	0.392 MHz	Ad hoc Satellite service
			Exficor SA	VSAT	0.128 MHz	Ad hoc Satellite service
			Globecast South Africa	SNG/ENG/VSAT	562.695 MHz	Ad hoc Satellite service
			Intelsat	SNG	2.1504 MHz	Ad hoc Satellite service
			Mentor Facility	SNG/ENG/VSAT	112 MHz	Ad hoc Satellite service
			Multichoice	Feeder links	1465.12 MHz	Ad hoc Satellite service
			Neotel	VSAT	31.04496 MHz	Ad hoc Satellite service
			NH van der Westhuizen	SNG	9 MHz	Ad hoc Satellite service
			On Digital Media	Feeder links	108 MHz	Ad hoc Satellite service
			Orbicom	Feeder links	476 MHz	Ad hoc Satellite service
			Purple Turtle	SNG/ENG/VSAT	4.4 MHz	Ad hoc Satellite service
			SAAB Grintek	VSAT	0.8 MHz	Ad hoc Satellite service
			SABC	SNG/ENG/VSAT	60 MHz	Ad hoc Satellite service
			Scandurra S	?	360 MHz	Ad hoc Satellite service
			Sentech	Feeder Links	532.7 MHz	Ad hoc Satellite service
			Siemens	VSAT	6.62 MHz	Ad hoc Satellite service
			Vodacom	VSAT	varying BW	Ad hoc Satellite service
			Telemedia	Feeder links	684 MHz	Ad hoc Satellite service
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
45 OUE FO Fixed dynley shared	V 0	44.50.45.05011-	Falsana	I to Lo	(duplex)	DID
15 GHz FS Fixed duplex shared band with reserved channels in some instances	Yes. Spectrum is available on a radio co- ordinated basis. Some channels were assigned on reserved basis	14.50 - 15.35GHz	Eskom	Links	3x 28 MHz duplex	PtP national
			WBS	Links	1x 28 MHz duplex	PtP national

				Links	1x 28 MHz duplex	PtP ad hoc
			MTN	Links	1x 28 MHz duplex	PtP national
			Vodacom	Links	1x 28 MHz duplex	PtP national
				Links	1x 28 MHz duplex	PtP ad hoc
			Transnet	Links	1x 28 MHz duplex	PtP national
			Tshwane University of	Links	1x 28 MHz duplex	PtP ad hoc
			Technology		·	
			Cell-C	Links	1x 28 MHz duplex	PtP national
			Mweb	Links	2x 14 MHz duplex	PtP ad hoc
			SASOL	Links	4x 7 MHz duplex	PtP ad hoc
			SANDF	Links	2x 7 MHz duplex	PtP ad hoc
			City of Johannesburg	Links	4x 14 MHz duplex	PtP ad hoc
			Rustenburg Platinum Mines	Links	2x 7 MHz FDD	PtP ad hoc
		1	Neotel	Links	2x 28 MHz duplex	PtP national
		1	SAPS	Links	1x 28 MHz duplex	PtP ad hoc
			Telemedia	ОВ	1x 28 MHz	PtP ad hoc
Frequency Band	Availability	Frequency Band Size	<u>User</u>	Application	Ch Bandwidth assigned	Comment
18 GHz	Yes. FS services on co- ordinated basis. Also Sharing with FSS services	17.7 GHz - 19.7 GHz	Telkom	Links	17x 55 MHz <u>or</u> 34x 27.5 MHz <u>or</u> 131x 7.5 MHz duplex	PtP national "legacy assignment
			Vodacom	Links	4x 27.5 MHz duplex	PtP ad hoc
			Nelson Mandela Metro	Links	1x 27.5 MHz duplex	PtP ad hoc
			Joburg Metro	Links	1x 27.5 MHz duplex	PtP ad hoc
			Ekurhuleni Metro	Links	1x 27.5 MHz duplex	PtP ad hoc
			Boksburg City Council	Links	1x 27.5 MHz duplex	PtP ad hoc
			Orbicom	Sat feeder link	2x 33 MHz	Uplink
		 	MTN	Links	1x 27.5 MHz duplex	PtP ad hoc
		<u> </u>	Anglo Operations Limited	Links	2x 27.5 MHz duplex	PtP ad hoc
			L~	- 4	=x = 1 . 0 = dap.ox	
			De Beers	Links	2x 55 MHz duplex	PtP ad hoc
Frequency Band	Availability	Frequency Band Size	De Beers User	Links Application	2x 55 MHz duplex Ch Bandwidth assigned	PtP ad hoc Comment
Frequency Band 23 GHz	Availability Yes. Spectrum is available on a radio co- ordinated basis. Some channels were assigned on reserved basis	Frequency Band Size 21.2 - 23.6 GHz (subdivided in 10x subbands)	De Beers User Transnet	Links Application Links	2x 55 MHz duplex Ch Bandwidth assigned Subband 1a &1b duplex	PtP ad hoc Comment PtP national
Frequency Band 23 GHz	Yes. Spectrum is available on a radio co-ordinated basis. Some	21.2 - 23.6 GHz (subdivided	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned Subband 1a &1b duplex	Comment
	Yes. Spectrum is available on a radio co-ordinated basis. Some channels were assigned	21.2 - 23.6 GHz (subdivided	<u>User</u> Transnet	Application Links	Ch Bandwidth assigned	Comment PtP national

			Telewave	Links	1x 28 MHz duplex	PtP ad hoc
			Vaalreefs	Links	1x 3.5 MHz & 1x 7 MHz	PtP ad hoc
					duplex	
			Iscor	Links	1x 7 MHz duplex	PtP ad hoc
			Richardsbay Minerals	Links	6x 7 MHz duplex	PtP ad hoc
			Boksburg City Council	Links	1x 7 MHz duplex	PtP ad hoc
			Mweb	Links	2x 14 MHz duplex	PtP ad hoc
			Rand Water	Links	1x 7 MHz duplex	PtP ad hoc
			BMW of SA	Links	1x 14 MHz duplex	PtP ad hoc
			Pretoria City Council	Links	2x 14 MHz duplex	PtP ad hoc
			SAPS	Links	2x 14 MHz & 1x 28 MHz	PtP ad hoc
					duplex	
			SASOL	Links	2x 7 MHz duplex	PtP ad hoc
			City of Cape Town	Links	1x 7 MHz & 1x 14 MHz duplex	PtP ad hoc
			Amatole Telecomms	Links	3x 28 MHz duplex	PtP ad hoc
			Highveld Racing	Links	1x 28 MHz duplex	PtP ad hoc
			SANDF	Links	2x 14 MHz or 9x 7 MHz	PtP ad hoc
					duplex	
			MTN	Links	1x 28 MHz duplex	PtP ad hoc
			Teleservice	Links	1x 28 MHz duplex	PtP ad hoc
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
26 GHz	Yes. Spectrum is	24.549 - 26.453 GHz	Telkom	Links	6x 28 MHz duplex	PTP & PtMP National
	available on a radio co-					
	ordinated basis. Some					
	channels were assigned					
	on reserved basis		Transnet	Links PtP	1x 28 MHz duplex	PtP ad hoc
			Internet Solutions	Links PtP	1x 28 MHz duplex	PtP ad hoc
			WBS	Links PtP & PtMP	1x 28 MHz duplex	PTP & PtMP National
			MWeb	Links PtP & PtMP	1x 28 MHz duplex	PtP ad hoc
			MTN	Links PtP & PtMP	2x 28 MHz duplex	PTP & PtMP National
			Vodacom	Links PtP & PtMP	3x 28 MHz duplex	PTP & PtMP National
			Tshwane University of	Links PtP	2x 28 MHz duplex	PtP ad hoc
			Tshwane University of Technology Neotel	Links PtP & PtMP	2x 28 MHz duplex 5x 28 MHz duplex	PtP ad hoc

	Screamer	Links PtP & PtMP	1x 28 MHz duplex	PtP ad hoc (unknown
				if operational)

			Sentech	Links PtP & PtMP	2x 28 MHz duplex	PTP & PtMP National
Frequency Band	Availability	Frequency Band Size	User	<u>Application</u>	Ch Bandwidth assigned	Comment
28 GHz	Yes. Spectrum is available on a radio co- ordinated basis. Some channels were assigned on reserved basis	27.0 - 29.5 GHz	Afro Call Satellite	PtMP	2x 56 MHz duplex	PtMP national
	011.0001.100.200.0		WBS	PtMP	4x 28 MHz duplex	PtMP national
			MTN	PtMP	4x 28 MHz duplex	PtMP national
			Dimension Data	PtMP	4x 28 MHz duplex	PtMP national
Frequency Band	Availability	Frequency Band Size	User	Application	Ch Bandwidth assigned	Comment
31 GHz	Yes. Spectrum is available. No assignments	31.0 - 31.8 GHz	none	Video surveilance & HAPS	none	not utilised yet
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
32 GHz	Yes	31.8 - 33.4 GHz	none	HDFS		not utilised yet
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
38 GHz	Yes. Spectrum is available on a radio co- ordinated basis	37.0 - 39.5 GHz	Telkom	links	2x 56 MHz duplex	PtP national
	oraliated basic		Internet Solutions	links	1x 56 MHz duplex	PtP ad hoc
			Mweb	links	1x 56 MHz duplex	PtP ad hoc
			Sentech	links	1x 28 MHz duplex	PtP ad hoc
			Eskom	links	1x 56 MHz duplex	PtP national
			Mweb	links	2x 14 MHz duplex	PtP ad hoc
			Transnet	links	1x 28 MHz duplex	PtP national
			Vodacom	links	1x 56 MHz duplex	PtP national
			MTN	links	1x 56 MHz duplex	PtP national
			Cell - C	links	1x 56 MHz duplex	PtP national
			Rosewell Trading	links	1x 14 MHz duplex	PtP ad hoc
			SAPS	links	1x 28 MHz duplex	PtP ad hoc
			Screamer	links	1x 56 MHz duplex	PtP ad hoc
			Tshwane University of Technology	links	1x 28 MHz duplex	PtP ad hoc
			Neotel	links	1x 56 MHz duplex	PtP national
<u>Frequency Band</u>	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	<u>Comment</u>
42 GHz	No (planning phase)	40.5 - 43.5 GHz	none	HDFS (high density fixed service)	not available yet	interest shown from industry
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	<u>Comment</u>

60 GHz	Yes, whole band available for assignment	1x 7 GHz block (57 - 64 GHz)		PtP links	yet.	Various vendors have shown interest to use the band. Regulations
						to be put in place.
Frequency Band	<u>Availability</u>	Frequency Band Size	<u>User</u>	<u>Application</u>	Ch Bandwidth assigned	Comment
71-76 GHz // 81-86 GHz	Yes, whole band available for assignment	2x 5 GHz blocks		PtP links	·	Various vendors have shown interest to use the band. Regulations to be put in place.