

Annexure A of Form A 2

Form A2 – Application to Amend Radio Frequency Spectrum License.

1. Proposed Amendments (Annexure A)

Gagasi FM seeks to amend its current Radio Frequency Spectrum Licence by adding a ninth transmitter that will operate as a gap-filler for the Empangeni–Richards Bay corridor. A certified copy of the existing licence is attached and marked **Annexure A** of this Form A2.

Technical parameters of the additional installation

Item	Specification
Station name	Empangeni
Site owner	Sentech
Operating frequency	102.1 MHz
Geographic position	28° 44' 38" S, 31° 53' 31" E
Site elevation	137 m amsl
Mast height	52 m
Centre of radiation	167 m agl
Emission designator	250KF8EHF
Transmitter power output	2 000 W
Antenna gain	7.5 dBd
Effective radiated power	1 kW (vertical polarisation)
Antenna pattern	Directional, null fill enabled
Beam azimuth and tilt	To be confirmed with the Authority

The transmitter will integrate into the existing satellite programme feed and Sentech telemetry network, ensuring uniform delay, RDS identity and remote fault logging across all sites. No changes are proposed to the eight licensed transmitters already in service.

INDIVIDUAL SOUND RADIO FREQUENCY SPECTRUM LICENCE AMENDMENT SCHEDULE OF TECHNICAL SPECIFICATIONS



IGAGAS19.5 FM

TRANSMITTER SITE NAME	GEOGRAPHIC COORDINATES		FREQ MHz	HEIGHT (m)		EMISSION OF DESIGNATION OF	FREQUENCY STABILITY/HZ	SPURIOUS EMISSION	MAX. DEVIATION	MAX. ERP/KW	ANTENNA		SIGNAL DISTRIBUTION
	LONGITUDE	LATITUDE		SITE	MID-AIR						AZIM	POL.	
DURBAN NORTH	31E02.24	29S45.32	100.1	149	50	2500F3E3HF	2000	60dB/1mV	75 kHz	5	OMNI-DIRECTIONAL	V	SENT-CH
GREYTON	30E32.10	29S00.46	89.6	1557	129	2500F3E3HF	2000	60dB/1mV	75 kHz	10	OMNI-DIRECTIONAL	V	SENT-CH
GLENGOE	29E56.51	28S09.04	107.9	1771	102	2500F3E3HF	2000	60dB/1mV	75 kHz	10	OMNI-DIRECTIONAL	V	SENT-CH
JOHANN	30E43.00	28S46.11	97.5	847	198	2500F3E3HF	2000	60dB/1mV	75 kHz	25	OMNI-DIRECTIONAL	M	SENT-CH
PORT SHEPSTONE	28E02.51	29S41.37	100.5	494	159	2500F3E3HF	2000	60dB/1mV	75 kHz	10	OMNI-DIRECTIONAL	V	SENT-CH
PRETORIA/LEBURG	30E19.49	29S34.47	98.6	1029	75	2500F3E3HF	2000	60dB/1mV	75 kHz	0.1	DIRECTIONAL	V	SENT-CH
NOUVEAU	29E11.07	28S32.04	99.1	1717	129	2500F3E3HF	2000	60dB/1mV	75 kHz	10	OMNI-DIRECTIONAL	V	SENT-CH
LILUND	31E23.36	29S27.00	94.7	967	100	2500F3E3HF	2000	60dB/1mV	75 kHz	30	DIRECTIONAL	V	SENT-CH

Compiled by:

B. Sethele
RF Specialist: Broadcasting Spectrum

Approved by:

M. Mchunu
Acting SM: FREQ SPEC

Date: 15/05/2014

TRANSMISSION SPECIFICATIONS FOR IGAGASI FM NETWORK IN THE KWAZULU NATAL PROVINCE

STATION		CODE		GEO. CO-ORDINATES						HEIGHTS			TRANSMITTER			ANTENNA						FEED				
NAME		LATITUDE		LONGITUDE		SITE	MAST	ANT	FREQ	CH	PWR	GAIN	ERP	DIR	BEAM		NULL		POL	TYPE	FROM					
		Deg	Min	Sec	Deg										Min	Sec	AZM	WIDTH				TILT	FILL			
DUREAN		N53	-29	46	12	30	43	0	841	180	249	0	841	99.5	120	5	7	25	ND	0	360	0.75	N	VER	MS410	STL
DUREAN NORTH		N53.1	-29	45	52	31	2	24	149	60	50	100.1	126	0.5	10.8	6	DIR	295	220	1	N	VER	N53	RBR		
GLENCOE		N75	-28	5	4	29	56	51	1711	138	102	107.9	204	1	10	10	ND	50	360	1	Y	VER	N64	RBR		
GREYTOWN		N64	-29	0	46	30	32	10	1557	164	128	88.6	11	1	10	10	ND	85	360	1	Y	VER	N53	RBR		
MOORIVER		N63	-29	11	7	29	52	4	1717	164	128	89.1	16	1	10	10	ND	20	360	1.5	Y	VER	N53	RBR		
PETERMARITZBURG		N53.2	-29	34	47	30	19	49	1059	95	75	58.5	110	0.1	0	0.1	DIR	95	180	0	N	VER	N53	RBR		
PORT SHEPSTONE		N40	-30	44	8	30	17	18	494	218	158	103.5	160	1	10	10	ND	0	360	1.6	Y	VER	N53	RBR		
ULUNDI		N133	-28	27	0	31	23	38	1020	140	100	94.7	72	3	10	30	DIR	0	220	0	Y	VER	N64	RBR		

