

BRITISH DX CLUB
AFRICA ON SHORTWAVE



**COUNTRY-BY-COUNTRY GUIDE TO DOMESTIC AND
EXTERNAL SHORTWAVE BROADCASTING IN AFRICA,
INCLUDING OPPOSITION AND SELECTED TARGET
BROADCASTS TO THE AFRICAN CONTINENT**

FEBRUARY 2012

ALGERIA

RADIO ALGÉRIENNE

Radio Algérienne is part of Entreprise Nationale De Radiodiffusion Sonore (ENRS).

Address: Radio Algérienne, 21 Boulevard des Martyrs, Algiers, Algeria.

Web: www.radioalgerie.dz

Radio Algérienne is not currently heard on shortwave. The relay of the Qur'an programme that had been heard via shortwave transmitters in France was discontinued at the end of 2011, probably due to the contract with TDF having expired. New 250 kW shortwave transmitters for Radio Algérienne are currently being installed at Ourgla and Bechar in Algeria itself. It is unclear when the new transmitters will be operational but the following frequencies have been registered for B-11 season:

Transmitter Sites: Bechar - 250 kW and Ourgla - 250 kW.

Times/UTC	Days	Lang.	Target	Freq/kHz
0400-0600	Daily	French	North Africa/Sahel	7265-our 7380- bec
0600-0700	Daily	French	North Africa/Sahel	9490-our 9815- bec
1800-1900	Daily	French	North Africa/Sahel	11690- bec 11715-our
1900-2300	Daily	French	North Africa/Sahel	11770-our 11785- bec

Radio started in Algeria in 1925 through private auspices but was eventually taken over by the French government. During the Algerian War of Independence [1954-1962] clandestine radio played its part thanks to the Voice of Fighting Algeria supporting the Algerians and pirate stations supporting the OAS, the faction fighting to keep Algeria French. After independence, Algerian radio relayed its domestic services on SW for many years. An external service was introduced in 1973 after the installation of five 100 kW and three 50 kW shortwave transmitters, and liberation and opposition programmes were also aired on shortwave to such places as the former Spanish Sahara, Palestine and Chile.

Radio Algérienne's own shortwave transmitters were last reported in late 2000. These had carried domestic services, Chaîne 1 (Arabic), Chaîne 2 (Tamazight), and Chaîne 3 (French), as well the Radio Algiers International external service. In 2003, Bassil Ahmad Zoubi of the Arab States Broadcasting Union confirmed that Algiers had ceased shortwave broadcasts of their own "until further notice" because of technical problems, according to a HFCC Report by Jeff White in a NASB Newsletter of that year.

However, in early 2006 Radio Algérienne signed a contract with VT Communications for its "Holy Qur'an" service to be relayed via shortwave transmitter sites in the UK. Relays via VTC were discontinued in October 2008 in favour of relays via TDF transmitters in France, which were themselves discontinued at the end of 2011.

Speaking at a seminar on the future of radio in early March 2009, the Algerian Secretary of State for Communications and former director of Algerian Radio, Azzedine Mihoubi said "For radio, our strategy is to provide multiple applications and usages in a multi-media environment. Radio will benefit from a national FM network with some 300 retransmitters to fill shadow zones, and the installation of an international centre for shortwave broadcasting". As a result of this, new 250 kW shortwave transmitters for Radio Algérienne are currently being installed at Ourgla and Bechar.

NATIONAL RADIO OF THE SAHARAN ARAB DEMOCRATIC REPUBLIC

Operated by the Polisario Front in support of independence for Western Sahara. National Radio of the Saharan Arab Democratic Republic began shortwave transmissions in 1993. The shortwave transmitter is located in the south-western Algerian town of Tindouf, near to the border with Western Sahara.

Address: Polisario Front, BP 10, El Mouradia, Algiers, Algeria.

Web web.jet.es/rasd

Transmitter Site: Tindouf, Algeria.

Shortwave transmissions were last heard on 6297 kHz have not been reported since June 2011, presumably due to a transmitter problem. The station continues to be heard on mediumwave 1550 kHz with the following schedule:

Times/UTC	Days	Language	Target	Freq/kHz
0600-1300	Daily	Arabic	North-West Africa	1550
1700-2300	Daily	Arabic	North-West Africa	1550
2300-2330	Daily	Spanish	North-West Africa	1550

ANGOLA

RADIO NACIONAL DE ANGOLA

Radio Nacional de Angola is the official state-operated radio station with headquarters in Luanda. It was established on 8 December 1975, following independence from Portugal and replaced the existing Radio Angola service. In recent years, Radio Nacional de Angola has only broadcast on two shortwave frequencies: 4950v and 7217v kHz. In July 2006 it was reported that RNA was to get two new shortwave transmitters. Glenn Swiderski, a representative of a US company called the LBA Group, reported to Glenn Hauser's DX Listening Digest that LBA had sold to Angola two shortwave transmitters of 25 kW each made by Elcor. One was for single frequency 4950 kHz; the other dual frequency 7245/11955 kHz. It is thought that one of these new transmitters was introduced for RNA's coverage on 4950v kHz, with an older 15 kW unit continuing to operate on 7217v kHz.

RNA - CANAL A

Canal A is the main nationwide broadcasting channel of Radio Nacional de Angola.

Address: Radio Nacional de Angola, Canal A, CP 1329, Luanda, Angola.

Web: www.rna.ao/canalA

Transmitter Site: Luanda-Mulenvos - 25 kW

Times/UTC	Days	Language	Target	Freq/kHz
24 hours	Daily	Portuguese	Domestic	4950v

RADIO N'GOLA YETU

Radio N'Gola Yetu was established in October 1999 and broadcasts in the 12 national languages of Angola: Bangala, Cokwe, Fiote, Luvale, Lunda, Kikongo, Kimbundu, Kwanyama, Ngangela, Nyaneka-Humbi, Umbundu, and Songo.

Address: Radio N'gola Yetu, CP 1329, Luanda, Angola.

Web: www.rna.ao/ngolayetu

Transmitter Site: Luanda-Mulenvos - 15 kW

Times/UTC	Days	Language	Target	Freq/kHz
0000-0100	Mon	Portuguese	Domestic	7217v
0000-0100	Tue	Lunda	Domestic	7217v
0000-0100	Wed	Luvale	Domestic	7217v
0000-0100	Thu	Songo	Domestic	7217v
0000-0100	Fri	Lunda	Domestic	7217v
0000-0100	Sat	Luvale	Domestic	7217v
0000-0100	Sun	Nyaneka/Bangala	Domestic	7217v
0100-0200	Mon	Songo	Domestic	7217v
0100-0300	Tue	Cokwe	Domestic	7217v
0100-0300	Wed	Kimbundu	Domestic	7217v
0100-0300	Thu	Ngangela	Domestic	7217v
0100-0300	Fri	Umbundu	Domestic	7217v
0100-0300	Sat	Kwanyama	Domestic	7217v
0100-0300	Sun	Fiote	Domestic	7217v
0200-0330	Mon	Kikongo	Domestic	7217v
0300-0500	Tue	Kwanyama	Domestic	7217v
0300-0500	Thu	Kikongo	Domestic	7217v
0300-0500	Wed	Fiote	Domestic	7217v
0300-0500	Fri	Cokwe	Domestic	7217v
0300-0500	Sat	Kimbundu	Domestic	7217v
0300-0500	Sun	Ngangela	Domestic	7217v
0330-0500	Mon	Umbundu	Domestic	7217v
0500-0530	Daily	Bangala	Domestic	7217v
0530-0600	Daily	Nyaneka	Domestic	7217v
0600-0700	Daily	Lunda	Domestic	7217v
0700-0800	Daily	Songo	Domestic	7217v
0800-0900	Daily	Luvale	Domestic	7217v
0900-1030	Daily	Ngangela	Domestic	7217v
1030-1200	Daily	Fiote	Domestic	7217v
1200-1300	Daily	Portuguese - National News	Domestic	7217v
1300-1430	Daily	Umbundu	Domestic	7217v
1430-1600	Daily	Cokwe	Domestic	7217v

1600-1730	Daily	Kimbundu	Domestic	7217v
1730-1900	Daily	Kikongo	Domestic	7217v
1900-2000	Daily	Oxiwambo	Domestic	7217v
2000-2200	Daily	International Sce - see below	External	7217v
2200-0100	Daily	Portuguese - relay Canal A	Domestic	7217v

RADIO NACIONAL DE ANGOLA - INTERNATIONAL SERVICE

Radio Nacional de Angola's International Service is for foreign nationals living in Angola, as well as listeners in neighbouring countries.

Address: Radio Nacional de Angola, International Service, CP 1329, Luanda, Angola.

Transmitter Site: Luanda-Mulenvos - 15 kW

Times/UTC	Days	Language	Target	Freq/kHz
2000-2100	Daily	French	Southern Africa	7217v
2100-2200	Daily	English	Southern Africa	7217v

PROVINCIAL STATIONS

Provincial broadcasting stations on shortwave declined in number throughout 1980's with those from Benguela and Lobito lasting until the early part of the 1990's.

In October 2011 it was reported that the Moxico provincial station of Radio Nacional de Angola will have a new shortwave transmitter with an output of 25 kW according to board president, Pedro Cabral on 14 October. It will be installed in Alto-Luena district with the aim of improving coverage of the station in the province. RNA had a shortwave transmitter in Moxico which was active until the early 1980s when it went off the air for technical reasons. (Angop/gruporadioescuchaargentino via Arnaldo Slaen, DXLD) *Moxico used to be on 5192v but unlikely they would use that out of band channel.*

CLANDESTINE/OPPOSITION RADIO

For many years the UNITA rebel movement led by Jonas Savimbi had a radio station that was widely heard on SW. **A Voz da Resistencia do Galo Negro** (The Voice of the Resistance of the Black Cockerel) was located in Jambas, the UNITA stronghold in south-eastern Angola. It was last heard in 1999 just before the town was overrun by Angolan government troops. Savimbi was killed in 2002 and as such UNITA's armed struggle against the ruling MPLA government ceased.

TARGET BROADCASTS TO ANGOLA

ANGOLA, FALO SÓ

Web: www.voanews.com/portuguese/news/angola-fala-so.html

Transmitter Sites: Botswana (Moepeng Hill) 100 kW; USA (Greenville) 250 kW; Sao Tome (Pinheira) 100 kW.

Times and frequencies for B-11 effective 30 October 2011

Times/UTC	Days	Language	Target	Freq/kHz
1730-1800	Fri	Portuguese	Angola	9880-bot 15670-sao 17650-gre
1800-1830	Fri	Portuguese	Angola	9880-bot 15670-bot 17650-gre

VOA Press Release, 29 July 2011: Voice of America's new Portuguese language call-in show to Angola has become such a hit with audiences, the program is growing from 30-minutes to a full-hour format starting this week. Angola, Fala Só, which roughly translates to "Just Say It" in English, went on the air in March, tackling a range of issues, from politics and health to rules on social behavior. Washington-based host Luis Costa Ribas says the show is being expanded because producers have been getting hundreds of calls by listeners who want to be on the weekly program, which is broadcast on medium wave, shortwave, mobile and streamed on the Internet. Luis Costa Ribas Ribas says, "The extra thirty minutes will allow time for more listeners to have a voice and express an opinion that can be heard all over Angola. It can also give us more room for follow-up on some hot topics, without taking time away from our audiences". Callers from anywhere in Angola are welcome to phone in or text-message their questions or comments to the show, which is partly funded by a grant from the U.S. State Department. The title for the Portuguese language show was inspired by a popular expression, which is often used in the Angolan capital, Luanda. (VOA press release 29 July 2011 via DXLD)

VISÃO ANGOLA

Visão Angola (Vision Angola) was a programme that was aired by VOA on shortwave to Angola until early 2011. It was produced by Multipress, a local media organisation in Angola formed in 2005 and supported by USAID to broadcast news, information, debates and interviews about Angola.

RADIO ECCLESIA

Luanda-based Catholic FM radio station Radio Ecclesia had been on shortwave broadcasting to Angola whilst their shortwave licence was pending approval by the Angolan government. They hired airtime from transmitters in Madagascar, Germany and South Africa until they were discontinued in 2003. Radio Ecclesia continues on FM in Angola but nothing has been reported recently of their proposed shortwave operations.

ASCENSION ISLAND

BBC ATLANTIC RELAY STATION

The BBC World Service opened its overseas shortwave relay station on Ascension Island in 1966, with four 250 kW transmitters becoming fully operational by spring 1967, improving coverage to Africa and Latin America. Two additional 250 kW transmitters were moved from Daventry to Ascension Island in 1988. Nowadays the relay station is operated by Babcock (previously known as VT Communications), originally formed from the privatisation of the BBC World Service transmitter sites, and currently includes relays of the BBC, FEBA Radio and Family Radio.

Address: BBC Atlantic Relay Station, English Bay, Ascension Island.

Transmitter Site: English Bay - 6 x 250 kW.

Times/UTC	Days	Station	Language	Target	Freq/kHz
0300-0400	Daily	BBC	English	Southern Africa	7385
0300-0600	Daily	BBC	English	West Africa	7255
0300-0400	Daily	Deutsche Welle	Swahili	East Africa	9800
0400-0700	Daily	BBC	English	West Africa	6005
0430-0500	Daily	BBC	French	Central Africa	6135
0430-0500	Daily	BBC	French	Central Africa	7415
0530-0600	Daily	BBC	Hausa	West Africa	6135
0530-0600	Daily	BBC	Hausa	West Africa	7305
0600-0629	Daily	BBC	French	West Africa	6135
0600-0629	Daily	BBC	French	Central Africa	7305
0600-0700	Daily	BBC	English	West Africa	9410
0600-0700	Daily	BBC	English	West Africa	12015
0629-0700	Daily	BBC	Hausa	West Africa	9440
0629-0700	Daily	BBC	Hausa	West Africa	11800
0700-0729	Daily	BBC	French	West Africa	11800
0700-0800	Daily	BBC	English	West Africa	11770
0700-0800	Daily	BBC	English	West Africa	13820
0700-0800	Daily	BBC	English	West Africa	15400
0800-1130	Daily	BBC	English	West Africa	15400
0800-1800	Daily	BBC	English	West/Central Africa	17830
1200-1230	Daily	BBC	French	West Africa	17545
1200-1230	Daily	BBC	French	West/Central Africa	21630
1300-1700	Daily	BBC	English	Central/Southern Africa	17640
1400-1430	Daily	BBC	Hausa	West Africa	15105
1400-1430	Daily	BBC	Hausa	West Africa	17780
1400-1430	Daily	BBC	Hausa	West Africa	21630
1500-2100	Daily	BBC	English	West Africa	15400
1500-1600	Daily	Family R	English	Southern Africa	21840
1600-1800	Daily	BBC	English	West/Central Africa	13790
1600-1700	Daily	Family R	English	East Africa	17545
1700-1800	Daily	Family R	English	Central Africa	17545
1800-1830	Daily	BBC	French	West/Central Africa	11860
1800-1830	Daily	BBC	French	West/Central Africa	15105
1800-1830	Daily	BBC	French	West/Central Africa	17885
1800-2100	Daily	BBC	English	West/Central Africa	11810

1800-1900	Daily	Family R	Igbo	West Africa	11875
1830-1845	Daily	FEBA R	French	Central Africa	15250
1830-1930	Daily	Family R	French	West Africa	17660
1900-2000	Daily	Family R	Yoruba	West Africa	11655
1930-2000	Daily	BBC	Hausa	West Africa	11890
1930-2000	Daily	BBC	Hausa	West Africa	15105
1930-2000	Daily	BBC	Hausa	West Africa	17885
2000-2100	Daily	Family R	English	West/Central Africa	15195
2000-2100	Daily	Family R	English	West/Central Africa	15520
2100-2300	Daily	BBC	English	West/Central Africa	9915
2100-2300	Daily	BBC	English	West Africa	12095
2100-2200	Daily	Family R	English	West/Central Africa	15195
2145-2200	Mo/Tu/Th/Fr	FEBA R	Hassinya	West Africa	11985
2200-2215	Mo/Tu/Th/Fr	FEBA R	Pulaar	West Africa	11985

FIRST DRM TRANSMISSION FOR SOUTHERN AFRICA

The DRM Consortium made its first ever DRM transmissions for Southern Africa in French and English on 11 October 2011 on the occasion of the Digital Radio Conference organised by the European Broadcasting Union (EBU) at the headquarters of the European Parliament in Brussels. The two day conference included two live studio discussions on the possibilities and future of digital radio from the multimedia radio studio of the European Parliament. The programmes showcased multiplatform and distribution techniques in front of a studio audience of Digital Radio Conference delegates. The live show in French from 1200-1300 UTC was followed two hours later (1400-1500 UTC) by a Digital Radio Show in English with international participation including the chairpersons of the DRM and WorldDMB Consortia. Both the French and English programmes were carried live on 21800 kHz (DRM) from Ascension Island and were expected to be heard in South Africa, Angola, Zambia, Lesotho, Namibia, Zimbabwe, Botswana and Mozambique. Ruxandra Obreja, DRM Chairperson, says: "This is an exciting and imaginative undertaking that will demonstrate practically, even if for a short while, to European MPs and radio enthusiasts at thousands of kilometres apart the capacity of DRM to cover huge areas with excellent audio quality programmes. We are grateful to the EBU for the opportunity to showcase, alongside other platforms, that part of DRM, the only standard for all bands below and above 30 MHz, that could offer so much to the radio lovers in Africa". (edited from original report from the DRM Consortium via Radio Netherlands Media Network)

BENIN

ORTB - RADIO BENIN

Radio Benin is the state-operated broadcasting service of ORTB in Benin . It is inactive on shortwave.

Address: Office de Radiodiffusion et Television du Benin (ORTB), BP 366, Cotonou, Benin.

Web: www.ortb.info

Benin's national broadcasting service started in 1961 with the installation of 1 kW mediumwave and 1, 4 and 30 kW shortwave transmitters, all located in the capital, Cotonou. Since the 1970's, broadcasts from Cotonou on shortwave were from a 30 kW transmitter, with Radio Benin last being reported in 2006 on 7210 kHz.

ORTB - RADIO PARAKOU

Radio Parakou is an ORTB regional station. It is inactive on shortwave.

Address: ORTB Parakou, Parakou, Benin.

Radio Parakou commenced shortwave operations in April 1983, but has not been heard on shortwave since January 2009 when it was on 5025 kHz. An earlier daytime frequency was 7190 kHz. Swedish DXer, Christer Brunstroem, reported to DX Listening Digest in July 2007 that Mr Eric Biokou, the chief engineer of Radio Parakou, had said in an email that the station used an RIZ transmitter manufactured in (what used to be) Yugoslavia, which was installed in 1995. This was the transmitter heard in Europe most evenings on 5025 kHz and was rated at 10 kW. Radio Parakou also had two older transmitters which were broken and could not be repaired as spare parts were not available.

TRANS WORLD RADIO

Trans World Radio is currently awaiting a licence to commence shortwave operations from its site at Parakou. Jari Savolainen in DSWCI DX Window commented on 19 February 2009 that they were hoping it would have been granted during 2009, but as 2011 drew to a close there had not been any further news. After the licence was secured, it was expected to then take a year or more for fund raising and constructing. TWR is already on-air from Parakou on mediumwave 1566 kHz with a 100 kW transmitter.

BOTSWANA

RADIO BOTSWANA

Radio Botswana is the state-run broadcasting service for Botswana. It is currently inactive on shortwave.

Address: Radio Botswana, Private Bag 0060, Gaborone, Botswana.

Web: www.dib.gov.bw

Vashek Korinek in South Africa reported in January 2006 that Mr Kingsley Reetsang of Radio Botswana had said that they were implementing a comprehensive network of FM transmitters all over the country. Once these were in place they would do the necessary measurements and assess the situation. If the FM and AM networks did not cover Botswana 100%, a return to shortwave would be considered, otherwise the shortwave broadcasts would be abandoned permanently. However, in a report dated 14 May 2007 by the Botswana Press Agency (via Media Network Weblog), Mr Reetsang acknowledged that shortwave transmitters that were used in the past have since aged, leaving areas without access to radio. He said it is not easy for his department to repair the transmitters, as doing so would be uneconomic. Part of the reason, he said, is because the world is experiencing a transition to digital technology and "these new technologies are being tested by big technological companies. Once they bear positive fruits we follow suit". Radio Botswana's past shortwave frequencies have included: 3356, 4820, 7255, and 9595 kHz.

IBB BOTSWANA TRANSMITTING STATION

The International Broadcasting Bureau's Botswana Transmitting Station is located at Moepeng Hill, 20 km from the town of Selebe-Phikwe, in Botswana's Central Province, in the East Central part of the country, near the neighboring countries of Zimbabwe and the Republic of South Africa. It was opened in 1991 and serves most of the African continent.

Address: IBB-Botswana Transmitter Plant, Private Bag 0038, Selibe-Phikwe, Botswana.

Transmitter Site: Moepeng Hill - 4 x 100 kW.

Times/UTC	Days	Service	Language	Target	Freq/kHz
0300-0330	Daily	Afia Darfur	Arabic	Daruf/Sudan	9845
0300-0400	Daily	VOA	English	Africa	15580
0300-0430	Daily	VOA	English	Africa	9885
0300-0600	Daily	VOA	English	Southern Africa	4930
0330-0400	Daily	VOA	English	Africa	15580
0330-0430	Daily	VOA	Kirundi/Kinyarwanda	Great Lakes	9400
0500-0700	Daily	VOA	English	Africa	15580
0530-0630	Mon-Fri	VOA	French	Africa	6020 9480
1400-1500	Daily	VOA	Kurdish	Middle East	15265
1400-1500	Daily	VOA	English	Africa	17715
1400-1700	Daily	VOA	English	Southern Africa	4930
1500-1530	Daily	VOA	Hausa	West Africa	17650
1500-1600	Daily	VOA	English	Africa	17715
1600-1630	Sat/Sun	VOA	Somali	Horn of Africa	15620
1630-1700	Mon-Fri	VOA	Sudanese English	Sudan	9790
1630-1700	Daily	VOA	Swahili	East Africa	13740
1700-1720	Fri-Sun	VOA - Studio 7	Shona	Zimbabwe	4930
1700-1730	Mon-Thu	VOA - Studio 7	Shona	Zimbabwe	4930
1700-1800	Daily	VOA	Portuguese	Southern Africa	9880
1720-1740	Fri-Sun	VOA - Studio 7	English	Zimbabwe	4930
1730-1800	Daily	VOA	English	Africa	15580
1730-1800	Mon-Fri	VOA	Afan Oromo	Horn of Africa	13625
1730-1800	Mon-Thu	VOA - Studio 7	English	Zimbabwe	4930
1740-1800	Fri-Sun	VOA - Studio 7	Ndebele	Zimbabwe	4930
1800-1810	Fri	VOA - Studio 7	Shona	Zimbabwe	4930

1800-1830	Daily	VOA	English	Africa	15580
1800-1830	Mon-Fri	VOA	Portuguese	Southern Africa	9880 15670
1800-1830	Mon-Thu	VOA - Studio 7	Ndebele	Zimbabwe	4930
1800-1830	Sat/Sun	VOA	English	Southern Africa	4930
1810-1820	Fri	VOA - Studio 7	English	Zimbabwe	4930
1820-1830	Fri	VOA - Studio 7	Ndebele	Zimbabwe	4930
1830-1900	Mon-Fri	VOA - Studio 7	English - LiveTalk	Zimbabwe	4930
1830-1900	Sat/Sun	VOA	English	Southern Africa	4930
1830-1930	Daily	VOA	English	Africa	15580
1830-2100	Daily	VOA	English	Southern Africa	4930
1900-2000	Daily	VOA	French	Africa	12080
2000-2030	Daily	VOA	French	Africa	9815 12080
2030-2100	Sat/Sun	VOA	French	Africa	9775 9815 15225
2100-2200	Daily	VOA	English	Africa	15580

BURKINA FASO

RTB - RADIO BURKINA

Radio Burkina is the state-run broadcasting service for Burkina Faso. It is inactive on shortwave.

Address: Radio Burkina, BP 7029, Ouagadougou, Burkina Faso.

Web: radio.rtb.bf

Radio Burkina has not been heard on shortwave since January 2010. Prior to that it had been observed with the following schedule: 0530-0800 on 5030 kHz, 0800-1700 on 7230 kHz, 1700-0000 on 5030 kHz

Broadcasting in Upper Volta, as the country was then known, started in 1959, a year before independence. The first shortwave transmitter was of 4 kW, which was joined by a 25 kW transmitter in 1962. It was not until 1986 that another shortwave transmitter was added of 50 kW replacing the old 25 kW unit. In 2002 a new 100 kW shortwave transmitter built by RIZ in Croatia was installed. This, along with the antenna, was refurbished in 2004 with technical and financial assistance from Taiwan.

TRANS WORLD RADIO

As part of a joint project with HCJB, Trans World Radio was seeking permission to set up a new shortwave transmission facility in Burkina Faso in 1999 which would have improved reception in West Africa. A HCJB supporter had apparently donated funds for a 100 kW transmitter but the project did not materialise.

TARGET BROADCASTS TO BURKINA FASO

VOICE OF THE UPPER VOLTAN POPULAR REVOLUTION

There has been only brief shortwave clandestine radio activity. This was back in 1983 when the Voice of the Upper Voltan Popular Revolution was heard from a transmitter believed to be located in Libya.

BURUNDI

RADIO-TELEVISION NATIONALE DU BURUNDI

RTNB is the state-run broadcasting service in Burundi. It no longer broadcasts on shortwave.

Address: RTNB, BP 1000, Bujumbura, Burundi.

Web: www.rtnb.bi

Radio Burundi was established in 1960 and first broadcast on shortwave via a 10 kW transmitter. A 25 kW shortwave transmitter was added in 1970, followed by a 100 kW unit in 1988 and this remained in use, although irregularly at times, until mid-2003 when Radio Burundi was last reported on 6140 kHz.

RADIO CORDAC

Radio CORDAC was a Protestant missionary radio service directed to listeners throughout Central Africa that was launched on Christmas Eve in 1963. It closed in 1977 when the Burundi government decided to no longer permit private radio stations in the country.

RADIO DEMOCRACY

During Burundi's bloody civil war in 1996, a pro-Hutu clandestine station called Radio Democracy was briefly observed on 7040 kHz shortwave.

CAMEROON

CRTV NATIONAL SERVICE - RADIO YAOUNDE

CRTV is based in the capital, Yaounde. The National Service is inactive on shortwave.

Address: CRTV, BP 1634, Yaounde, Cameroon.

Web: www.crtv.com

Radio was established in the capital in 1955 by SORAFOM, the French agency responsible for implementing broadcasting aid projects overseas. Shortwave transmitters of 1 and 4 kW were initially installed and these remained in use for several years to come. A 30 kW shortwave transmitter was added in 1962. In 1977, a new transmitter of 100 kW was installed, which greatly improved the reach of the National Service and also saw the introduction of an International Service. Frequencies used by Yaounde in the 1970's, 80's and 90's included 4850, 4972, 6060 and 9745 kHz. The National Service from Yaounde was last reported in early 2000 on 4850 kHz.

CRTV REGIONAL STATIONS

All CRTV Regional Stations are believed to be inactive on shortwave and now operate on FM only.

DOUALA: Radio Douala was the first radio station to be established in what was French Cameroon in the early 1940's with just 150 Watts. After a break it was revived in 1946. A 1 kW shortwave transmitter was then installed in Douala by SORAFOM in 1955. This gave several years service before eventually taken out of service, presumably due to its condition. In 1983, a new 100 kW shortwave transmitter was installed as part of a general upgrade for the station. This transmitter operated on 4795 and 7150 kHz and lasted for twelve years or so. It was last heard on shortwave in the mid-1990's. Radio Douala was referred to as the Litoral Provincial Station.

GAROUA: SORAFOM set up a radio station in Garoua in 1958, which included a 4 kW shortwave transmitter. A 30 kW shortwave transmitter added in 1964. In 1977 a new 100 kW transmitter was installed and replaced that of 30 kW, whilst the 4 kW transmitter remained on standby. Radio Garoua was the Northern Provincial Station and operated on 5010 and 7240 kHz. It was last heard in the late 1990's.

BUEA: broadcasting in Anglophone Cameroon had always depended on the Nigeria Broadcasting Corporation for airing its programmes until a station was established in Buea in 1966. An initial 1 kW shortwave transmitter was soon increased to 4 kW and this operated on 3970 and 6005 kHz as the South-West Provincial Station. Radio Buea had been heard on 6005 kHz up until the early part of 2011, but James MacDonell in Niger State, Nigeria, commented to DXLD on 21 October 2011 "I have not heard the elusive Cameroon transmitter on 6005 [Buea] for several months now so I wonder if it is finally gone for good?"

BERTOUA: the station at Bertoua was first heard on shortwave in 1977 when a 20 kW transmitter was installed. It operated on 4750 and 7195 kHz and was the Eastern Provincial Station of Radio Cameroon. Having been reactivated at least twice during its lifetime, the station was last heard in the mid-1990's.

BAFOUSSAM: as the Western Provincial Station, this was the last provincial radio station to be established in Cameroon on shortwave, coming on air in early 1980. It operated on 4000 and 5955 kHz with 20 kW. It was last heard in the mid-1990's.

TARGET BROADCASTS TO CAMEROON

SAWTU LINJIILA (RADIO VOICE OF THE GOSPEL)

Sawtu Linjiila is a broadcast from the Lutheran World Federation for Fulani listeners in West Africa.

Address: Sawtu Linjiila, Centre Multimedia Chrétien, BP 02, Njoundéré, Cameroon.

Transmitter Site: Issoudun, France - 500 kW.

Times/UTC	Days	Language	Target	Freq/kHz
1830-1900	Daily	Fulani	West Africa	9800

RADIO FREE SOUTHERN CAMEROONS

RFSC had broadcast as a target broadcast in support of the Coalition of Southern Cameroons Liberation Movements. Having started in October 2005, RFSC broadcasts were brokered by TDP via a 500 kW transmitter at Krasnodar in Russia. It was last heard on 15695 kHz during the A-06 period.

CANARY ISLANDS

RADIO NACIONAL DE ESPANA

Radio Nacional de Espana opened the Centro Emisor de Atlantico shortwave relay station at Las Mesas, Tenerife, in 1964 with two 50 kW SW transmitters for relays to the Americas. They remained in service until 1988.

DOMESTIC STATIONS ON SHORTWAVE

Post-war shortwave activity in the Canary Islands saw Radio Club Tenerife operating with a low-power transmitter of 0.5 kW with a commercial service from Santa Cruz de Tenerife. In the 1950's, Radio Atlantico also operated on shortwave from Las Palmas with transmitters of 0.3 and 3 kW, along with La Voz de la Isla de la Palma from Santa Cruz de la Palma at 0.35 kW (all as per editions of WRTH). These stations remained on shortwave until the early 1960's when domestic broadcasting in the Canary Islands moved entirely to mediumwave and FM.

FULL GOSPEL LAS PALMAS CHURCH

In 2002 unauthorised broadcasts commenced from the Full Gospel Las Palmas Church over a 100 Watt transmitter on 6715 kHz usb (later 6719) with relays of Church Services for Korean seafarers in the Atlantic. These, however, were last heard in late 2003 and have not been reported since.

CAPE VERDE

RADIO NACIONAL DE CABO VERDE

Radio Nacional de Cabo Verde (A Voz do Sao Vicente) was seemingly last reported in late 1989 on 3930 kHz from a 10 kW transmitter. The last entry for shortwave in the WRTH was in the 1991 edition where it stated that the station was inactive on 3930.1 kHz.

Shortwave broadcasting in Cape Verde prior to independence from Portugal in 1975 had been in the hands of low-powered private radio stations such as CR4AA - Radio Clube de Cabo Verde (Praia, Ilha de Santiago), CR4AB - Radio Clube Mindelo and CR4AC - Radio Barlavento (both in Mindelo, Sao Vicente).

After independence, CR4AA and CR4AC were eventually nationalised and became the government-operated radio stations known as Emissora Oficial de Republica de Cabo Verde (6025 kHz - 0.5 kW) and Voz de Sao Vicente (3930/7155 kHz - 10 kW).

CENTRAL AFRICAN REPUBLIC

RADIO CENTRAFRIQUE - RADIODIFFUSION-TELEVISION CENTRAFRICAINE

Radio Centrafrique is the state-operated radio service of the Central African Republic.

Address: Radio Centrafrique, BP 940, Bangui, Central African Republic.

Web: www.radiocentrafrique.org

Transmitter Site: Bangui-Bimbo.

Times/UTC	Language	Target	Freq/kHz
0600v-1630v	French/Vernaculars	Domestic	7220
-1900v	French/Vernaculars	Domestic	5035

Note: shortwave transmissions have not been reported recently.

In recent years, Radio Centrafrique has been heard on 7220 kHz during daytime hours only. A new 1 kW shortwave transmitter was installed in May 2010 to operate on 5035 kHz. However, as of February 2012 there have been no recent reports of either the new transmitter on 5035 or the old transmitter on 7220 kHz and both may currently be inactive.

The Central African Republic had no radio station prior to independence, as it was served by broadcasts originating from the federal stations in Brazzaville and Fort Lamy. SORAFOM, the French agency responsible for implementing broadcasting aid projects overseas, established a temporary portable 250 Watt transmitter-recording studio combination mounted on a truck upon independence in 1958 and this served Bangui until a permanent 3 kW shortwave transmitter was introduced. In the early 1960's this was replaced with a 30 kW shortwave transmitter to allow better coverage of the country and this remained in service until it was itself replaced with a new 100 kW shortwave transmitter in 1970. In 1980, a 50 kW shortwave transmitter was installed by China, but this and a 50 kW mediumwave transmitter were reported to be in poor condition by the end of the 1990's. A new 1 kW shortwave transmitter donated by HCJB Global Voice was installed in May 2010, although since then reports of it have been few and far between.

In late 2004/early 2005, Radio Centrafrique was relayed from TDF Issoudun in France from a 500 kW SW transmitter with domestic programming beamed back to the Central African Republic between 1700-2300 UTC on 9590 kHz with information leading up to elections in the country in May 2005. This was arranged to ensure coverage of the whole country which would not have otherwise not been possible from the 50 kW mediumwave and shortwave transmitters in Bangui.

RADIO ICDI

Radio ICDI (Integrated Community Development International) is a Christian ministry founded by Jim Hocking in 2003. Official broadcasts with a 1 kW shortwave transmitter started on 1 March 2007 on 6030 kHz with Christian programming and community health information. A second 1 kW shortwave transmitter donated by HCJB Global Voice was installed in April 2010 and went live on 1 April 2011 on 3390 kHz. Neither frequency has been reported in the second half of 2011 and it is unknown if Radio ICDI is currently active on shortwave.

Address: Radio ICDI, BP 362, Bangui, Central African Republic.

Web: www.icdinternational.org

Transmitter Site: Boali - 2 x 1 kW.

Times/UTC	Languages	Target	Freq/kHz
0500-0800	French/Sango/Fulfude/Bayaka	Domestic	6030 - not reported recently
1600-2000	French/Sango/Fulfude/Bayaka	Domestic	6030 - not reported recently
1500-2100	French/Sango/Fulfude/Bayaka	Domestic	3390 - not reported recently

Note: if either transmitter is confirmed as active, times of operation will be subject to confirmation.

RADIO NDEKE LUKA

Radio Ndeke Luka was established by the French-based Fondation Hironnelle as a replacement for Radio MINURCA (see below) with the intention of acting as a link between the UN, NGOs and the population. It commenced transmissions first on FM in 2000 and then with a shortwave relay in 2003 via a VT Communications transmitter in the UK. The shortwave transmission was cancelled in July 2005. Radio Ndeke Luka continues to broadcast on FM in the Central African Republic and its website also refers to a two-hour daily programme in Sango broadcast over Radio ICDI between 6-8 pm local time.

Address: Radio Ndeke Luka, Avenue de l'indépendance - concession du PNUD, Bangui, Central African Rep.

Web: www.radiondekeluka.org

Transmitter Site: Boali (via Radio ICDI) - 1 kW.

Times/UTC	Languages	Target	Freq/kHz
1700-1900	Sango	Domestic	6030

Note: current status subject to confirmation - see Radio ICDI entry above.

RADIO MINURCA

In 1998, Radio MINURCA was established by the United Nations in the Central African Republic to provide information to the public in the run-up to elections in the country. It operated initially from a main shortwave transmitter capable of 20 kW on 9900 kHz (this subsequently had technical problems and power was much reduced) and a low power transmitter of around 100 Watts on 5900/9500 kHz, as well as FM. Radio MINURCA closed on 1st February 2000 and the equipment shipped to Sierra Leone for the UN mission there.

CEUTA AND MELILLA

There is no shortwave broadcasting in Ceuta, Melilla, or any other Spanish possessions in North Africa.

CHAD

OFFICE NATIONALE DE RADIODIFFUSION ET DE TÉLÉVISION DU TCHAD - RADIO TCHAD

Radio Tchad is the state-operated broadcasting service of Chad. Its current shortwave transmitter was commissioned in 1984 and refurbished in 2004 thanks to financial and technical help from Taiwan.

Address: RNT, BP 892, N'djamena, Chad.

Transmitter Site: N'djamena-Gredia - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
24 hours	Daily	French/Arabic/Vernaculars	Domestic	6165

Note: first observed to be operating with a 24 hour schedule by Bill Bingham in South Africa (via DXLD) on 18 November 2011.

Davie Kernick of Interval Signals Online comments: Found a live audio stream of Radiodiffusion National Tchadienne on a third-party website at <http://tchadonline.com/tv-tchad>. Been observing extensively since Sunday 20 November 2011, and it appears that this service is now on air 24/7 (possibly has a break on Fridays though, haven't had opportunity to verify that). The shortwave transmitter on 6165 kHz has been carrying the same French/Arabic/vernacular programming every time I've checked via various Global Tuners, including overnight. So: no more sign-on/sign-off, therefore no interval signal or national anthem aired. (Dave Kernick, Interval Signals Online (intervalsignals.net) via DXLD, 28 November 2011)

BRIEF NOTES ON SW BROADCASTING IN CHAD

In the days prior to Chad's independence, a problem for the administration of French Equatorial Africa was the fact that its broadcasting system in Brazzaville was too weak and struggled to reach all parts of the federation. As a result a station in Chad was established in the late-1940's. However, it proved to be ineffective and was soon abandoned. But with the Arabic-speaking northern part of Chad becoming increasingly influenced from other countries in North Africa, in 1955 France revived the discontinued AEF federal station in response to propaganda broadcasts from Egypt's Voice of the Arabs service. The relaunched AEF station used a 4 kW shortwave transmitter located at Fort Lamy (N'djamena).

After independence, Radiodiffusion Nationale Tchadienne was given an additional 30 kW shortwave transmitter in 1962 and this remained in service until 1972 when it was replaced with a new 100 kW unit. However, the 1970's saw the start of increased interference in Chad's affairs from Libya, who were behind various rebel factions opposed to the government of the time, and it was during heavy fighting in early 1979 that this RNT transmitter was destroyed. A new 100 kW HF transmitter was commissioned later that year to replace it, but was immediately silenced and not reactivated until early 1984. RNT remained almost permanently active on shortwave for many years that followed, although by 2001 the transmitter had fallen into a state of disrepair and the station was not heard on HF until it was refurbished in 2004 thanks to financial and technical help from Taiwan.

RADIO MOUNDOU

Radio Moundou, an RNT regional station broadcasting in the south of the country, was first heard on shortwave in early 1983 with a 5 kW transmitter on 5288v kHz. By 1985 the transmitter was reportedly operating on only half-power and a new 20 kW unit was planned, but by the early 1990's Radio Moundou was no longer heard on shortwave and continued on FM only.

RADIO ABECHÉ

Radio Abeche, an RNT regional station near to the border with Sudan, was first reported in the mid-1980's on 5900 kHz with 1 kW. Like Radio Moundou, it appears to have left shortwave in the early 1990's and continued on FM.

CLANDESTINE/OPPOSITION RADIO

Disputes with Libya and Sudan in the 1980's saw the appearance of a few related radio stations and programmes, either aimed at or originating from Chad. The most well-known of these was **Radio Bardai** which claimed to operate from the rebel-held stronghold of Bardai in northern Chad, but which actually originated from a Libyan-based SW transmitter on 6009 kHz. Other stations aimed at Chad from Libya included **Voice of the Chadian Popular Revolution** and **Voice of the Struggling Chadian People**. In the late 1980's Chad responded to Libya's challenge on the airwaves by hosting the anti-Qaddafi station **Voice of the Libyan People** from a transmitter seemingly located in the south of the country. This station was last heard just before Chad-Libya relations improved in early 1991.

COMOROS

OFFICE DE RADIO ET TELEVISION DES COMORES - RADIO COMORES

Radio Comores is the national radio service of the Union of the Comoros. It is no longer on shortwave.

Web: www.radiocomores.km (live stream)

A 4 kW shortwave transmitter was introduced in the Comoros in early 1960's for Radio Television Francaise and subsequently remained in service through to independence in 1975 and on until the early 1990's. A new 60 kW shortwave transmitter was then added in 1989. In September 1997, the Director of Radio Comores confirmed that they had a technical problem and at that time hoped to be back on air "within two months". It appears that they have not been heard on shortwave since then. The last reported frequency was 3331 kHz, with 7260 kHz an earlier daytime outlet.

DEMOCRATIC REPUBLIC OF CONGO

RADIO TELE CANDIP

Educational radio station established in 1974. Has been controlled by rebel factions in the past.

Address: Radio Candip, BP 373, Bunia, Democratic Republic of Congo.

Transmitter Site: Bunia - 1 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0400-0700	Daily	French/Vernaculars	Domestic	5066.3v
1300-1900v	Daily	French/Vernaculars	Domestic	5066.3v

Note: evening sign-off time varies between 1900 and 1910.

RADIO KAHUZI

Radio Kahuzi is operated by a Christian group called Believer's Express Service, Inc. The station was established by Richard and Kathy McDonald that has been broadcasting from Bukavu since 1991 on FM. A 1 kW shortwave transmitter was added in February 2001, reaching a larger portion of Central Africa.

Address: Believer's Express Service, Inc, PO Box 189, Eastanollee, Georgia 30538, USA, or Richard McDonald, Radio Kahuzi, BP 42, Cyangugu, Rwanda.

Transmitter site: Bukavu - 0.8 kW (built by HCJB).

Times/UTC	Days	Language	Target	Freq/kHz
0500-0700	Mon-Fri	French	Domestic	6209.6v
1630-2000	Mon-Fri	Swahili/English/French	Domestic	6209.6v

RADIODIFFUSION-TELEVISION NATIONALE CONGOLAISE

There is currently no shortwave service from the Kinshasa-based national station of Radiodiffusion-Television Nationale Congolaise (RTNC) and it now operates on FM only. RTNC in Kinshasa was last reported on shortwave in the late 1990's on 15245v kHz from a 100 kW transmitter. Previous frequencies from Kinshasa since the 1980's also included 6140 7100 7255 9650 and 15350 kHz in use at one time or another. RTNC relays via Africa No 1 ay Moyabi in Gabon for coverage across the DRC began in early 2002 but were discontinued a year or so later. These were scheduled at 0400-0600 and 1600-1900 on 9770 kHz.

All official RTNC regional stations are believed to be inactive on shortwave. Some of the RTNC regional stations reported on shortwave since the mid-1980's but now inactive include: Bandundu (7115), Bukavu (3276v/4840v/4848v/4867v/6713v, as well as 2nd harmonics on 6552v/9696v, Kananga (6125/7865), Kisangani (11455), Lubumbashi (4751/7205/7435), Mbandaka (5995) and Mbuji-Mayi (7295).

WRTH 2010 says that new 10 kW shortwave transmitters are planned in future for **Goma** and **Bukavu** in the 60 metre-band. However, both of these locations have had the installation of shortwave transmitters planned since at least 2004. These are transmitters believed to have been supplied by RIZ in Croatia and have continually been delayed due to the unrest in the east of the country.

RADIO TANGAZENI KRISTO

Radio Tangazeni Kristo is a religious broadcasting station established in 2004 that had planned shortwave broadcasts from Aru on a 0.3 kW transmitter on 4845 kHz. It now operates on FM and the shortwave transmissions were never seemingly confirmed.

RADIO LIBERTE

Radio Liberte was a station that broadcast in support of the rebel Congolese Liberation Movement led by Jean-Pierre Bemba. It reportedly broadcast from Gbadolite in north-east DRC, on the border with the Central African Republic. It was widely heard during the evenings back in 2000 on 15725 kHz with 9800 (mornings) and 12925 (afternoons) also reportedly used. RTL said it had a staff of 25 at the time.

BRIEF NOTES ON SW BROADCASTING IN DR CONGO

Broadcasting began in the Belgian-Congo in 1937 when Jesuit Fathers installed two transmitters in Leopoldville to carry educational and religious programming. The Belgian colonial government of the time were keen to encourage programming specifically for Africans and the use of vernaculars in broadcasting. During World War II, private stations gave time to the government to address African évolués, and in 1942 a private radio station, **Radio Congolia**, started programmes in African languages which were later subsidised by the colonial government. In May 1943, the Belgian government inaugurated **Radio Congo-Belge** in Leopoldville with a 50 kW shortwave transmitter as an international propaganda station, along the lines of France's Radio Brazzaville just across the Congo River. In 1944 this facility was turned over to the colonial government, and in 1949 RCB took over native broadcasting in the Congo, using four African languages as well as French. The Belgian Ministry for the Colonies also undertook an ambitious project looking toward providing continuous services, both national and local, local origination of regional programming, introduction of a wired wireless service and widespread use of public loudspeakers. By 1959, RCB had a second service, **Radio Congo-Belge Africaine** featuring programmes in local languages. Broadcasting stations were also developed further around the country, and those on shortwave included **Radio Leopoldville**, **Radio Coquilhatville**, **Radio Bukavu**, **Radio Elisabethville**, **Radio Lululabourg**, **Radio Stanleyville**, all originating local programming as well as rebroadcasting material from the main station at Leopoldville. At the start of the 1960's there were also some private radio stations still on shortwave, such as **Radio Leo** (Leopoldville), and **Radio College**, **Radio Elisabeth**, and **Radio UFAC** (all in Elisabethville)

When the Belgian-Congo became independent in 1960 as the Republic of Congo (and later to become the Democratic Republic of Congo), the new government inherited a strong broadcasting system. Radio Congo-Belge became the government-controlled **Radiodiffusion Congolaise** (later known as **Radiodiffusion-Télévision Nationale Congolaise**), with the regional stations continuing their role of providing local programming as well as relaying programmes from the Leopoldville. A government broadcasting station was also established in the Province of Katanga as **Radio Katanga** and was significant in the crisis that occurred in the early 1960's. By the late 1960's, broadcasting in DRC had settled own into a set pattern. The main RTNC station in Kinshasa (ex-Leopoldville) had 10 and 50 kW shortwave transmitters, whilst shortwave broadcasting in the regions was carried out by **Radio Lubumbashi** (ex-Radio Elisabethville), **Radio Mbandaka** (ex-Radio Coquilhatville), **Radio Bukavu**, **Radio Kasai** (ex-Radio Luluabourg), **Radio Kisangani** (ex-Radio Stanleyville), and new stations **Radio Mbuji-Mayi** and **Radio Bandundu**. In the case of Radio Lubumbashi, it had several shortwave transmitters which included one of 100 kW and this was used for a foreign service known as **The Voice of African Brotherhood**, broadcasting in French, English, Swahili and Portuguese. In 1967, all private broadcasting in the Democratic Republic of Congo was suspended. The only exception was **Radio Collège** in Elisabethville, which worked closely with RTNC and was spared initial closure because of its excellent production facilities. However, it presumably closed soon after.

TARGET BROADCASTS TO DR CONGO

RADIO OKAPI

Radio Okapi is a joint initiative between the UN Mission in the DRC and Fondation Hirondelle. It was established in early 2002 and is currently relayed via Meyerton, South Africa, as a target broadcast to the DRC. Three 10 kW transmitters in Kinshasa that were used on 6030, 9550 and 11690 kHz when Radio Okapi was first established are now inactive. Within the DRC, Radio Okapi is now aired on a network of FM transmitters around the country, in addition to the shortwave relays from Meyerton and Dhabbaya.

Address: Radio Okapi , 12 Av. des Aviateurs , Kinshasa, Gombe, Democratic Rep. of Congo.

Web: www.radiookapi.net

Transmitter site: Meyerton, South Africa - 250 kW; Dhabbaya, Abu Dhabi - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0400-0500	Daily	French/Lingala	DR Congo	11690-mey
1600-1700	Daily	French/Lingala	DR Congo	11795-dha

RADIO KIMPWANZA

Radio Kimpwanza briefly aired programmes on shortwave in March 2009 as a target broadcast in support of Rassemblement des Patriotes pour la Libération du Congo (RPLC). The transmissions were brokered by TDP and were aired on Sunday's in the Lingala language via a 250 kHz transmitter in Samara, Russia, on 15260 kHz.

REPUBLIC OF CONGO

RADIO CONGO

Radio Congo is the government-controlled broadcasting service of the Republic of Congo. It was reactivated on shortwave in January 2009, although with a much reduced schedule.

Address: R Congo, Direction Générale de Radio TV du Congo, B. P. 2912, Brazzaville, Rep. of Congo.

Transmitter Site: Brazzaville.

Times/UTC	Days	Language	Target	Freq/kHz
1700-1830v	irregular	French/Vernacular	Domestic	6115

Radio Congo, Brazzaville, was heard on 6115 kHz at 1800 UTC on 2 January 2012 by David Sharp in Australia. Abruptly faded up from noise, then convenient "Radio Congo" ID and into presumed news in French. Difficult copy, with very low modulation (David Sharp, DXplorer); same heard in the UK on 17 January 2012 from tune-in at 1755 with news reports in French. Difficult signal with adjacent channel splatter but modulation sounded quite good. Transmitter went off abruptly in midsentence before the end of the news at 1824 (Dave Kenny).

BRIEF NOTES ON SW BROADCASTING IN CONGO

In 1935 Europeans living in Brazzaville started a small private broadcasting station which the Free French commandeered in 1940. A 50 kW shortwave transmitter was then purchased from the United States and put on the air as an allied propaganda station in 1943. The successor to this station was **Radio Brazzaville** and this operated as part of the French government system until 1972, broadcasting three international services, all relayed from Paris and aimed at Africa, Madagascar, and the Far East. In late 1972, however, the Congo government nationalised Radio Brazzaville and took over control. Meanwhile, in 1946 the Congo colony had acquired its own station, which was called **Radio-AEF**, reflecting the fact that it was supposed to serve all four territories in the federation, though in reality it was far too weak to do so. The federation paid a subsidy to Radiodiffusion Française, as the broadcasting system of metropolitan France was then called, to operate these federal stations. Although Radio AEF-Brazzaville used five local languages as well as French, they could have had little impact, for Europeans and African évolués had nearly all the receivers. With the coming of independence in 1958, each of the four newly independent countries chose to operate its own radio service, but Radio-AEF continued its regional role for a time as **Radio Inter-Equatorial**. In 1960 this role was finally abandoned for good.

Upon independence in August 1960, **Radio Congo** soon had shortwave transmitters of 4, 25 and 50 kW available for its domestic service. In 1967, new facilities were provided by China which included two additional shortwave transmitters of 50 kW at Brazzaville. Radio Congo opened a regional station in 1971 at Pointe Noire, Brazzaville's seaport, which included a 4 kW shortwave transmitter. This remained in service for several years, although was reported inactive in a BBCM survey for Congo in 1994. The political leanings of the Congolese government from the 1960's through to the 1990's saw Radio Congo often identifying itself as the **Voice of the Revolution**. In 1980, Chinese technicians were back in Brazzaville to help put seven 50 kW shortwave transmitters back into operation that had slowly fallen into disrepair throughout the 70's. This gave Radio Congo a new lease of life on shortwave, although it never appeared that all transmitters available at once, with only two parallel outlets being on air at once. Around 1984, prior to Namibia's independence, Radio Congo hosted a weekly programme on shortwave on behalf SWAPO called **Voice of Namibia**. With ageing facilities, Radio Congo had an upgrade in August 1991 when two new 100 kW shortwave transmitters were introduced. In addition, at least one older 50 kW shortwave transmitter was still operational and it gave the station the means to continue broadcasting throughout the day on HF. However, for most of the 1990's Radio Congo had problems in maintaining their shortwave transmitters and there were several periods when the station was irregular or inactive. Occasional repairs helped put them back on air and in 2004 it was reported that their shortwave service was relying on one 100 kW transmitter operating at 50 kW, along with one of the older 50 kW transmitters.

DJIBOUTI

RADIODIFFUSION TELEVISION DE DJIBOUTI

Radiodiffusion Television de Djibouti is the state-operated broadcasting service of Djibouti. Radio Djibouti's current shortwave transmitter was donated by the US government's IBB in early 2005 in exchange for the installation of a 600 kW mediumwave transmitter for use by Radio Sawa.

Address: RTD, Avenue Saint Laurent du Var, BP 97, Djibouti, Republic of Djibouti.

Web: www.rtd.dj

Transmitter Site: Djibouti-Doraleh - 50 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0300-2100	Daily	Afar/Arabic/Somali	Horn of Africa	4780

Note: after several months off air, Radio Djibouti has been heard most days since mid-January 2012.

TARGET BROADCAST TO DJIBOUTI

VOIX DE DJIBOUTI (VOICE OF DJIBOUTI)

The Voice of Djibouti is described on its website as "a free and independent radio, the first in the history of Djibouti. It aims to give a voice to the people in Djibouti, by offering a space for information and expression". The first broadcast was on 7 January 2010 via a transmitter in Samara, Russia, brokered by TDP, with a weekly programme aired on Thursdays. It was cancelled in September 2011.

EGYPT

EGYPTIAN RADIO AND TELEVISION UNION

ERTU is owned and operated by the Egyptian government. Following its inauguration in 1934, the Egyptian Broadcasting Corporation, as it was then called, developed slowly until the emergence of Colonel Nasser in 1952 when Egyptian radio's coverage and influence rapidly grew throughout the Arab World and North Africa.

EGYPTIAN RADIO - GENERAL PROGRAMME

The General Programme is the ERTU's flagship radio service. It was founded in 1934. Although intended primarily for a domestic audience, it has traditionally been broadcast on shortwave for Arabic-speaking listeners outside of Egypt.

Address: Egyptian Radio and Television Union, PO Box 1186, Cairo 11511, Egypt.

Web: www.ertu.org/radio (in Arabic)

Transmitter Site: Abis - 250 kW; Abu Zaabal - 100/250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0700-1100	Daily	Arabic	West & Central Africa	17510-abz
1900-0700	Daily	Arabic	Western Europe/North America	9305-abs

VOICE OF THE ARABS

Voice of the Arabs was founded in 1953 and was once the most influential broadcast medium in the Middle East and North Africa. As well as the main programme, it also once had specialised programmes in Arabic for the people of Palestine, the Arabian Peninsula and the Maghreb.

Address: Voice of the Arabs, ERTU, PO Box 1186, Cairo 11511, Egypt.

Transmitter Site: Abu Zaabal - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
1900-0030	Daily	Arabic	North-East Africa	11540-abz

NILE VALLEY RADIO (Wadi El Nile)

Nile Valley Radio first took to the air in 1984 as a joint Egyptian-Sudanese venture, replacing the existing Sudan Corner programme, and is a service intended for Sudanese immigrants in the Nile Valley. It was first heard on shortwave in late 2007.

Address: Wadi El Nile, ERTU, PO Box 1186, Cairo 11511, Egypt.

Transmitter Site: Abu Zaabal - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
1700-2300	Daily	Arabic	North-East Africa	9250-abz

RADIO CAIRO

Radio Cairo was founded in 1953 and is the external service of Egyptian radio. It has traditionally served listeners outside of the Arab world with its African and overseas services.

Address: Radio Cairo, Egyptian Radio and Television Union, PO Box 11511, Cairo, Egypt.

Web: www.ertu.gov.eg

Transmitter Site: Abis - 250 kW; Abu Zaabal - 100/250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0300-0500	Daily	Swahili	East Africa	9745-abz
0400-0600	Daily	SeTswana	Southern Africa	13650-abz
1015-1215	Daily	Arabic	Middle East	17480-abz
1215-1330	Daily	English	South & South-East Asia	17870-abz
1230-1400	Daily	Indonesian	South-East Asia	15710-abs
1300-1400	Daily	Dari	West Asia	15065-abz
1300-1600	Daily	Arabic	West Africa	15080-abs
1330-1530	Daily	Persian	West Asia	17810-abz
1400-1600	Daily	Pashto	West Asia	15065-abz
1500-1600	Daily	Albanian	South-East Europe	13580-abz
1500-1600	Daily	Uzbek	Central Asia	15160-abz
1530-1730	Daily	Swahili	East Africa	17810-abz
1600-1700	Daily	Afar	East Africa	15285-abz
1600-1800	Daily	Urdu	West Asia	6270-abz
1600-1800	Daily	English	Central & Southern Africa	15345-abz
1700-1730	Daily	Somali	East Africa	15285-abz
1700-1900	Daily	Turkish	South-East Europe	9280-abs
1730-1900	Daily	Amharic	East Africa	15285-abz
1800-1900	Daily	Italian	Southern Europe	6270-abz
1800-2100	Daily	Hausa	West Africa	9990-abs
1845-2000	Daily	Fulfulde	West Africa	15520-abz
1900-2000	Daily	German	Central Europe	6270-abz
1900-2000	Daily	Russian	Russia	9280-abs
1900-2030	Daily	English	West & Central Africa	15290-abz
2000-2115	Daily	French	Western Europe	6270-abz
2000-2200	Daily	Arabic	Australasia	6860-abz
2030-2230	Daily	French	West & Central Africa	9280-abs
2115-2245	Daily	English	Western Europe	6270-abz
2215-2330	Daily	Portuguese	South America	9290-abz
2300-0030	Daily	English	North America	6270-abz
2330-0045	Daily	Arabic	South America	9250-abs 9290-abz
0030-0430	Daily	Arabic	North America	6270-abz
0045-0200	Daily	Spanish	The Americas	9250-abs 9315-abz
0200-0330	Daily	English	North America	9315-abz

EQUATORIAL GUINEA

RADIODIFUSION DE GUINEA ECUATORIAL

Radiodifusion de Guinea Ecuatorial (RNGE) is the national broadcaster of Equatorial Guinea and has two broadcasting stations in Bata (Rio Muni) and Malabo (Bioko Island).

RIO MUNI

RADIO BATA

Radio Bata is the state-operated broadcasting service based on mainland Rio Muni. Radio Bata's broadcasting facilities were improved with help from Chinese technicians and it was reactivated with a new 50 kW shortwave transmitter in early 2005.

Address: Radio Nacional de Guinea Ecuatorial, Ap. 749, Bata, Equatorial Guinea.

Transmitter Site: Bata - 50 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0500-2300	Daily	Spanish/Vernaculars	Domestic	5005

RADIO AFRICA

Radio Africa was reactivated in early 2005 with a new 50 kW shortwave transmitter installed for Equatorial Guinea by Chinese technicians. This transmitter is leased to and operated by Pan American Broadcasting and airs US evangelical programmes.

Address: Radio Africa, PO Box 851, Malabo, Equatorial Guinea, or: Pan American Broadcasting, 7011 Koll Center Parkway, Ste 250, Pleasanton, California 94566-3253, United States of America.

Web: www.radioafricanetwork.com; see also www.radiopanamericanbroadcasting.com

Transmitter Site: Bata - 50 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0500v-2300v	Daily	English	Africa	15190 (identifies as Radio East Africa at weekends)

Note: currently inactive, Radio Africa has not been heard since May 2011.

Bruce Jensen spoke by phone with the parent company Pan American Broadcasting (very close to Bruce's home in California) in early February 2012, and they have apparently been under the impression that Radio Africa was "on the air" with only occasional downtime for routine maintenance. Bruce's phone calls to them are surprising!

BIOKO ISLAND (FERNANDO PO)

RADIO MALABO

Radio Malabo is the state-operated broadcasting service based on Bioko Island. After a year or so off-air, a new 20 kW transmitter and antenna was inaugurated for Radio Malabo in November 2007 (replacing an existing 10 kW unit).

Address: R Nac de Guinea Ecuatorial, Av. 3 de Agosto 90, Ap. 195, Malabo, Equatorial Guinea.

Transmitter Site: Malabo (Semu) - 20 kW transmitter.

Times/UTC	Days	Language	Target	Freq/kHz
0530v-1830v	Daily	Spanish/Vernaculars	Domestic	6250

ERITREA

ERITREAN RADIO - VOICE OF THE BROAD MASSES OF ERITREA (DIMTSI HAFASH)

Voice of the Broad Masses of Eritrea (Dimtsi Hafash) is state run and operates two networks with programmes in nine Eritrean ethnic languages, (Tigrinya, Arabic, Tigre, Kunama, Saho, Afar, Bilen, Hedareb and Nara), Amharic, Oromo and Somali. Prior to the defeat of the Mengistu regime in Ethiopia in 1991, it had operated as a clandestine radio station supporting the Eritrean People's Liberation Front and other opposition groups.

Address: Ministry of Information, Radio Division, PO Box 872, Asmara, Eritrea.

Web: www.shabait.com (also see alenalki.com - live audio of Dimtsi Hafash 1 available)

ERITREAN RADIO - VOBME - PROGRAMME 1

Transmitter Site: Asmara/Selea Daro - 100 kW.

Main frequency: 7205 kHz

Times/UTC	Days	Languages
0355-1000	Daily	Tigrinya/Tigre/Kunana
1300-1800	Daily	Tigrinya/Tigre/Kunana

ERITREAN RADIO - VOBME - PROGRAMME 2

Transmitter Site: Asmara/Selea Daro - main transmitter 100 kW.

Main frequency: 7175 kHz

Additional/alternative frequencies reported recently: 4770 7130 7200 7215 9720 9820 kHz

Times/UTC	Days	Languages
0355-1000	Daily	Arabic/Afar/Amharic/Oromo/Saho/Bilen/Hedareb/Nara/Somali
1300-1800	Daily	Arabic/Afar/Amharic/Oromo/Saho/Bilen/Hedareb/Nara/Somali

Note: Eritrean radio also carries programming on behalf of groups opposed to the current Ethiopian government and may be jammed by Ethiopia.

SHORTWAVE TRANSMITTER OPERATED BY THE ERITREAN MINISTRY OF INFORMATION

This is believed to be a transmitter previously assigned to Radio Bana (see below), which is now used for relays of Eritrean radio and Ethiopian opposition groups. Transmissions may be jammed by Ethiopia.

Transmitter Site: Asmara - 10 kW.

Times/UTC **Freq/kHz**

0355-1000 and 1300-1725 5060

Note: this transmitter has not been reported recently on 5060 kHz; possibly assigned to broadcast VOBME on another frequency.

RADIO BANA

Radio Bana was established to broadcast educational programmes produced by Adult Education and Media, Ministry of Education. Having not been heard for a while, Ilpo Parviainen reported the following to DSWCI's DX Window in November 2010: "According to many Internet sources, Eritrean security forces raided the headquarters of Radio Bana on 22 February 2009 (quote from BBC: "Eritrea has arrested up to 54 journalists in a new media crackdown ... Eritrean authorities on 22 February 2009 ordered a raid on the premises of Radio Bana, a small station in the heart of the capital that puts out educational programmes under the sponsorship of the Education Ministry. Its entire staff of around 50 journalists were arrested"). I got in contact with one of the volunteer workers who had been working on Radio Bana and he is rather sure that the story of Radio Bana ended on that day. Several people who worked there are still in prison and the transmitting facilities were taken over by the Ministry of Information. They launched a new frequency (5060 kHz) and after that the programmes identified have had a totally different kind of nature ("Voice of Oromo Liberation", "Arbegnoch Voice Radio"). They also have a standard morning programme (this programme name is still unidentified for me, but I myself have never heard "Radio Bana" in the early morning hours here on 5060). (Ilpo Parviainen/DSWCI DX Window).

TARGET BROADCASTS TO ERITREA

VOICE OF PEACE AND DEMOCRACY OF ERITREA

Believed to support the Ethiopian-backed National Alliance of Eritrean Forces.

Transmitter Site: via Radio Ethiopia External Service - Gedja - 100 kW

Times/UTC	Days	Language	Target	Freq/kHz
0400-0430	Mon/Wed/Fri	Tigrinya/Vernaculars	Horn of Africa	7235v 9560v
1800-1830	Mon/Wed/Fri	Tigrinya/Vernaculars	Horn of Africa	7235v 9560v

VOICE OF THE DEMOCRATIC ALLIANCE

Broadcasts in support of the opposition Eritrean Democratic Alliance.

Address: Eritrean Democratic Alliance, Box 13043, Khartoum, Sudan.

Web: www.meskerem.net/edapage.htm

Transmitter Site: via Radio Ethiopia External Service - Gedja - 100 kW

Times/UTC	Days	Language	Target	Freq/kHz
1500-1530	Mon/Tue/Wed/Fri	Arabic	Horn of Africa	7235v 9560v
1500-1530	Tue/Thu/Sat	Tigrigna	Horn of Africa	7235v 9560v
1530-1600	Mon/Wed/Fri	Kunama	Horn of Africa	7235v 9560v
1530-1600	Tue/Thu/Sat	Afar	Horn of Africa	7235v 9560v
1530-1600	Sun	Tigrinya	Horn of Africa	7235v 9560v

VOICE OF ERITREA

Broadcasts in support of the Eritrean People's Movement.

Web: <http://maihabar.org>

Transmitter Site: via Radio Ethiopia External Service - Gedja - 100 kW

Times/UTC	Days	Language	Target	Freq/kHz
1800-1830	Tue/Thu/Sat	Tigrinya	Horn of Africa	7235v 9560v

VOICE OF ASENA

Broadcasts in support of assenna.com.

Web: www.assenna.com

Transmitter Site: Samara, Russia - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
1730-1800	Mon/Wed/Fri	Tigrinya	Eritrea	12115

BROADCASTS FROM ETHIOPIA TO ERITREA

Anti-Eritrean government programmes had been broadcast during 2008 from a shortwave transmitter believed to be located in Ethiopia on 8000 kHz to counter Ethiopian opposition broadcasts from Eritrea on 7999.4 kHz (note: almost the same frequency). These transmissions were last reported in mid-November 2008. However, in May 2009 Thorsten Hallmann reported some "Dimtse Ertra" programmes on 7165 and 7175 kHz jamming Eritrea. This type of programming is also aired on Tuesdays, Thursdays and Saturdays at 1800-1835 on 7235 (ex-7165) and 9560v kHz via Radio Ethiopia External Service transmitters. Mauno Ritola compared these programmes with recordings from 8000 kHz last year and found that they had identical IDs and jingles, and as such it seems that this is standard Ethiopian propaganda aimed at Eritrea.

ETHIOPIA

RADIO ETHIOPIA - EXTERNAL SERVICE

Address: Radio Ethiopia, Audience Relations, PO Box 654, Addis Ababa, Ethiopia.

Web: www.angelfire.com/biz/radioethiopia/

Transmitter Site: Addis Ababa (Geja) - 2 x 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0400-0430	Mon/Wed/Fri	Eritrean opposition	East Africa/Middle East	7235v 9560v
0700-0800	Daily	Somali	East Africa/Middle East	7235v 9560v
1200-1300	Daily	Somali	East Africa/Middle East	7235v 9560v
1300-1400	Daily	Afar	East Africa/Middle East	7235v 9560v
1400-1500	Daily	Arabic	East Africa/Middle East	7235v 9560v
1500-1600	Daily	Eritrean opposition	East Africa/Middle East	7235v 9560v
1600-1700	Daily	English	East Africa/Middle East	7235v 9560v
1700-1800	Daily	French	East Africa/Middle East	7235v 9560v
1800-1830	Mon-Sat	Eritrean opposition	East Africa/Middle East	7235v 9560v

Note: Radio Ethiopia External Service has been heard using a third transmitter on occasions since late 2011, such as 7195 or 7200 kHz. This has however seemingly been used to interfere with transmissions of Eritrean radio.

Eritrean opposition broadcasts via Radio Ethiopia External Service (subject to confirmation):

0400-0430 Voice of Peace and Democracy of Eritrea (Mon/Wed/Fri)

1500-1600 Voice of the Democratic Alliance (Daily)

1800-1830 Voice of Peace and Democracy of Eritrea (Mon/Wed/Fri)

1800-1830 Voice of Eritrea (Tue/Thu/Sat)

RADIO ETHIOPIA - NATIONAL SERVICE

Radio Ethiopia is the state-operated broadcasting service of Ethiopia.

Address: Radio Ethiopia, PO Box 1020, Addis Ababa, Ethiopia.

Web: www.angelfire.com/biz/radioethiopia/

Transmitter Site: Addis Ababa (Geja) - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0300-1200	Daily	Amharic/Vernaculars	Domestic	9705
1200-1300	Mon-Fri	English	Domestic	9705
1200-1300	Sat/Sun	Amharic/Vernaculars	Domestic	9705
1300-2100	Daily	Amharic/Vernaculars	Domestic	9705

Note: the frequencies of 5990 and 7110 kHz are no longer heard.

VOICE OF THE TIGRAY REVOLUTION (DIMTSI WOYANE TIGRAY)

Official broadcasting station of the Tigre Region.

Address: Voice of the Tigray Revolution, PO Box 450, Mekele, Tigray, Ethiopia.

Web: www.dimtsiwoyane.com

Transmitter Site: Addis Ababa (Geja) - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0300-1730	Daily	Tigrigna/Afar	Domestic	5935 5950 (alt: 5980 / 6170)
1730-1900	Mon-Fri	Tigrigna/Afar	Domestic	5935 5950 (alt: 5980 / 6170)

RADIO OROMIYA

Official broadcasting station of the Oromiya Region.

Address: Radio Oromiya, PO Box 2919, Adama, Ethiopia.

Transmitter Site: Addis Ababa (Geja) - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0330-0600	Daily	Oromia	Domestic	6030
0600-0900	Sat/Sun	Oromia	Domestic	6030
0900-1100	Daily	Oromia	Domestic	6030
1100-1530	Sat/Sun	Oromia	Domestic	6030
1530-1900	Daily	Oromia	Domestic	6030

AMHARA STATE REGIONAL RADIO

Official broadcasting station of the Amhara Region.

Transmitter Site: Addis Ababa (Geja) - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0300-0600	Daily	Amharic	Domestic	6090
0900-1100	Daily	Amharic	Domestic	6090
1400-1900	Daily	Amharic	Domestic	6090

RADIO FANA

Radio Fana is described as Ethiopia's first national private broadcasting station.

Address: Radio Fana, PO Box 30702, Addis Ababa, Ethiopia.

Web: www.radiofanaa.com

Transmitter Site: Addis Ababa - 2x 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0300-2100	Daily	Amharic/Oromo/Somali/Afar	Domestic	6110 7210 (6890-irregular)

TARGET BROADCASTS TO ETHIOPIA

In addition to programmes broadcast by various opposition groups over Eritrean Radio, the following target broadcasts are currently directed to Ethiopia from transmitters in Europe:

RADIO DEMOCRACIA

Broadcasts in support of the Ethiopian People's Revolutionary Party (EPRP-Democratic).

Address: EPRP-Democratic, 850 Sligo Avenue Suite # 8, Silver Spring, MD-20877, USA.

Web: www.eprp-ihapa.com

Transmitter Site: Samara, Russia - 250 kW (brokered by TDP)

Times/UTC	Days	Language	Target	Freq/kHz
1200-1300	Sun	Amharic	Ethiopia	21555

VOICE OF THE OROMO LIBERATION FRONT

Broadcasts in support of the Oromo Liberation Front.

Address: Oromo Liberation Front, PO Box 73247, Washington, DC 20056, USA

Web: www.oromoliberationfront.org

Transmitter Site: Nauen, Germany - 500 kW

Times/UTC	Days	Language	Target	Freq/kHz
1600-1630	Sun	Oromo	Ethiopia	11760

ESAT RADIO

ESAT describes itself as the first independent Ethiopian satellite service tasked to produce accurate and balanced news and information, as well as other entertainment, sports and cultural programming created for and by Ethiopians. ESAT Radio started testing on shortwave in late August 2011 and regular programmes were launched in October 2011. The purpose of the shortwave broadcasts is to overcome the jamming of satellite TV by the Ethiopian government.

Web: www.ethsat.com

Transmitter Site: unconfirmed, possibly Grigoriopol, Moldova-PMR

Times/UTC	Days	Language	Target	Freq/kHz
1700-1800	Tue/Thu/Sat/Sun	Amharic	Ethiopia	15370
1700-1800	Mon/Wed/Fri	Amharic	Ethiopia	15390

VOICE OF OROMO LIBERATION (SBO)

Broadcasts in support of the Oromo Liberation Front.

Address: Oromo Liberation Front, PO Box 73247, Washington, DC 20056, USA, or SBO/VOL, PO Box 510610, D-13366 Berlin, Germany.

Web: www.oromoliberationfront.org

Transmitter Site: Issoudun, France - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
1700-1800	Wed/Sun	Oromo/Amharic	Ethiopia	11810

DIMTSE TEWAHEDO

Operated by the US-based Ethiopian Orthodox Tewahedo Church,

Web: www.mahiberekidusan.org

Transmitter Site: Samara, Russia - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
1830-1930	Sat	Amharic	Ethiopia	12120

JAMMING OF BROADCASTS TO ETHIOPIA

Deutsche Welle and Voice of America broadcasts to Ethiopia, as well as those of opposition groups, have been jammed by the Ethiopian government in the past. The latest schedules for DW and VOA are below and may be subject to noise jamming:

DEUTSCHE WELLE SERVICES TO ETHIOPIA

Transmitter Sites: Kigali, Rwanda - 250 kW; Sines, Portugal - 250 kW.

Times/UTC	Days	Language	Freq/kHz
1400-1500	Daily	Amharic	9880-kig 11930-kig 21480-sin
1600-1700	Daily	Amharic	9800-kig 11835-kig 17780-sin

VOICE OF AMERICA SERVICES TO ETHIOPIA

Transmitter Sites: Dhabbaya, Abu Dhabi, UAE - 250 kW; Iranawila, Sri Lanka - 250 kW; Meyerton, South Africa - 100 kW; Moepeng Hill, Botswana - 100 kW; Kuwait - 250 kW; Nauen, Germany - 250 kW; Santa Maria di Galeria, Vatican - 250 kW; Wertachtal, Germany - 250 kW.

Times/UTC	Days	Language	Freq/kHz
1730-1800	Mon-Fri	Afaan Oromo	9320-kwt 9485-nau 9860-ira 11905-wer 13625-bot
1800-1900	Daily	Amharic	9320-kwt 9485-nau 9860-ira 11905-mey 13625-wer
1900-1930	Mon-Fri	Tigrinya	9320-kwt 9485-nau 9860-ira 11905-dha 13625-smg

GABON

RADIODIFFUSION TELEVISION GABONAISE - RADIO GABON

RTG is currently inactive on shortwave. It was last reported in mid-2008 (4777 kHz - 0500-0800/1600-1700v and 7270 kHz - 0800-1600).

AFRICA NO. 1

Africa No 1 is a commercial service for French-speaking Africa operating from studios in Libreville.

Address: Africa No.1, BP 1, Libreville, Gabon.

Email: africa@africa1.com

Transmitter Site: Moyabi-Moanda - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0500-2300	Daily	French	Central Africa	9580

Since 2007, the Libyan government had been the majority shareholder of Africa No 1 with 52%, the Gabonese government owned 35% and the Gabonese private sector 13%. As a result of the crisis in Libya, it had been reported that Africa No 1 was in financial trouble due to Libyan funding being discontinued. However, Africa No 1 continued to be heard on 9580 kHz. It is unclear what the current situation is following the fall of the Gaddafi regime.

On shortwave, Africa No 1 currently operates with only one shortwave transmitter on 9580 kHz. A transmitter that operated on 17630 and 15475 kHz has been inactive since November 2008. Mike Cooper reported the following to World of Radio/DX Listening Digest on 10 March 2009: "Africa No. 1 says the absence of transmissions on 15475 and 17630 is temporary and the station confirms it is still operating on 9580. In reply to an e-mail I sent to the engineering address, I received a reply from the head of their FM transmission department which said there was a major breakdown in the IML transmitter (15475) and the station is waiting on replacement parts which are difficult to find. The situation isn't helped by the current business situation, the e-mail added. As for 17630, CEIOCM technicians are currently working to get that frequency back on" (Mike Cooper, 10 March 2009, DX Listening Digest).

THE MOYABI TRANSMITTING STATION

Moyabi was inaugurated in 1979 and over the years has seen relays of Radio France Internationale, Swiss Radio International and Radio Japan, amongst others (more recently, an African Music Station was believed to originate from Moyabi as a source of jamming or distraction against the now-silent Libyan-opposition radio station, Sawt al-Amal). At the end of the B-07 season on 29 March 2008, Radio Japan discontinued the last remaining relays via Moyabi by an international broadcasting station, leaving just Africa No 1 as the the sole user of the transmitting station.

GAMBIA

GAMBIA RADIO AND TELEVISION SERVICE

GRTS is Gambia's public service broadcaster. It does not broadcast on shortwave.

Address: GTRS, Mile 7 Studios, PO Box 387, Bangui, Gambia.

Web: www.gtrs.gm

Radio Gambia, as it was then known, had broadcast on shortwave until the mid-1970's when its transmitter was last heard on 4820 kHz.

TARGET BROADCAST TO GAMBIA

BAATI REWMI RADIO - VOICE OF THE NATION

"Baati Rewmi Radio - Voice of the Nation" broadcast in support of the Save the Gambia Democracy Project (STGDP). The first series of broadcasts in support of STGDP were aired on shortwave between June 2005 and March 2006, resuming on 22 May until 2 October 2010 with a weekly broadcast on Saturdays at 1815-1830 on 15225 kHz via Nauen. The STGDP website at www.savethegambia.org described the radio station's aims as "to begin the process of constructive dialogue, STGDP wishes to introduce a direct weekly radio broadcasting programme in all local languages to the Gambia. This radio broadcast is not an anti/pro-government radio, or a pro/anti-opposition radio but rather a pro-democracy radio, with a belief that this will help bring about the building of the institutions of democracy which ultimately will lead to political stability, economic development and prosperity to the shores of the Gambia. We will be looking forward to working with responsible, independent media in the Diaspora and at home and together we will have a positive impact to our motherland".

GHANA

GHANA BROADCASTING CORPORATION

GBC is the public broadcasting service in Ghana.

Address: GBC, PO Box 1633, Broadcasting House, Ring Road Central, Kanda, Accra, Ghana.

Web: www.gbcghana.com

GBC has been inactive on shortwave since 2007. It had been merged into a single service in 2003 following the breakdown of the Radio 1 transmitter on 4915 kHz. This meant that the existing transmitter for Radio 2 had to be moved from 3366/6130 kHz to 4915 kHz and Radio 1 and Radio 2 were subsequently merged into a single service. In April 2006 the remaining transmitter was repaired and reactivated, with a source at GBC reporting the following to BDXC's Chris Greenway: "Our transmitter for the 4915 kHz was off air for some time because some spare parts had to be changed. We had the spare parts about a week ago and they have been fixed. At the moment there is a test transmission going on and all will return to normal very soon. Management is even contemplating buying a brand new transmitter and also another one with the view of resuming our External Service".

However, in 2007 GBC was again inactive on shortwave, although as recent as November 2007 Ghana's Minister for Finance and Economic Planning was quoted as saying that "the Ghana Broadcasting Corporation would install a 50 kW transmitter to improve upon its shortwave service and introduce a second channel to be situated in Kumasi for commercialisation and public education on government policies and programmes".

The Ghana Broadcasting Corporation external service was discontinued in the early part of the 1990's.

GUINEA-BISSAU

RADIODIFUSÃO NACIONAL DE REPUBLICA DE GUNIÉ-BISSAU

RDN is the state-run broadcasting service in Guinea-Bissau. It does not broadcast on shortwave.

Address: RDN, CP 1919, Bissau, Guinea-Bissau.

The last shortwave entry in WRTH was in the 1987 edition and by 1988 was reported as inactive. Its last frequency was 5475v kHz. Prior to that it had operated on 5040v kHz.

GUINEA

RADIO-TÉLÉVISION GUINÉENNE - RADIO CONAKRY

Radio-Télévision Guinéenne (RTG) is the state-operated broadcasting service of Guinea.

Address: Radio Conakry, BP 391, Conakry, Guinea.

Web: www.rtg-conakry.com

Transmitter Site: Conakry.

Times/UTC	Days	Language	Target	Freq/kHz
0555(0755 Sun)-2300v	Daily	French/Vernaculars	Domestic	7125 - irregular

A 1953 experimental French station in Conakry made Guinea one of the early broadcasting centres in French West Africa. The Conakry station began a regularly scheduled service in 1956. The cancellation of French aid in 1958 following a dispute over independence was a set-back, but by 1959 locally-produced programming was again on the air. In 1961, East Germany donated a 100 kW shortwave transmitter and the link with the communist-bloc was reflected in the new name of "Voice of the Revolution". In 1992 the transmitter site at Sofoniya was renovated and three shortwave frequencies were in use at this time. However, since the end of the 1990's Conakry's only shortwave frequency has been 7125 kHz, still in use today although somewhat irregular.

FAMILIA FM

Familia FM is a private station broadcasting on 105.3 FM in Conakry and since late March 2010 has also broadcast on shortwave with a 1 kW transmitter on 4900 kHz.

Web: www.familiafm.com

Transmitter Site: Timbi-Madina - 1 kW

Times/UTC	Days	Language	Target	Freq/kHz
1800-0000	Daily	French/Pular/Maninka	Domestic	4900

IVORY COAST

RADIODIFFUSION TELEVISION IVOIRIENNE

RTI is the state-broadcasting service of Ivory Coast. It no longer broadcasts on shortwave.

Address: RTI, BP 191, Abidjan, Ivory Coast.

Web: www.rti.ci

Radio Abidjan started in 1949 with a 200 Watt transmitter. More than a decade passed by before a high-powered shortwave transmitter of 100 kW was installed. By the early 1970's, Radio Adidjan had both domestic and external services on shortwave, the latter which included programmes in English. Past frequencies included 4940, 6015 and 11920 kHz, with 7215 kHz the last to be reported in late 1996.

KENYA

KENYA BROADCASTING CORPORATION

Kenya Broadcasting Corporation is a state corporation established by an Act of Parliament CAP 221 of the laws of Kenya to undertake public services. It no longer broadcasts on shortwave.

Address: KBC, PO Box 30456, Nairobi, Kenya.

Web: www.kbc.co.ke

Kenya was the first country in tropical Africa to have a regular broadcasting service, with the first station opened in 1928. In 1931 the service was taken over by Cable and Wireless, who was responsible for programming in English and Asian languages, whilst the Department of Information rented transmitters for programmes for Africans. In addition the British Forces Broadcasting Service set up a station in 1948, with some programmes for African listeners. In 1956, the Kenya Broadcasting Service was formed, which evolved into the Kenya Broadcasting Corporation in 1961 and became the country's broadcasting service upon independence in 1963.

The Voice of Kenya, as it was then known, had various services on shortwave. For example, the shortwave schedule for 1987 comprised of the following: National Service: 0200/0230-0630 on 6075; 0630-1330 on 7140; 1330-1830 on 6150. General Service: 0200/0230-0630 on 6045; 0630-1330 on 7270; 1330-2010/2110 on 6100. Central Service: 0700-1900 on 4915 and Eastern Service: 0250-0630 on 4885; 0630-1330 on 7240; 1330-1830 on 4885. The last shortwave operation from KBC was the Eastern Service, which was last heard in June 2006 on 4915 kHz. The National Service in Swahili and the General Service in English both left shortwave in the 1990's when the KBC established two new MF networks to cover the country.

LESOTHO

LESOTHO NATIONAL BROADCASTING SERVICE - RADIO LESOTHO

LNBS is the state-run broadcasting service in Lesotho. It no longer broadcasts on shortwave.

Address: LNBS, PO Box 552, Lerotholi Street, opposite Royal Palace, Maseru 100, Lesotho.

Web: www.radioles.co.ls

The Catholic Community Centre was the first organisation to establish a broadcasting station in Lesotho in 1964. The Lesotho National Broadcasting Service was inaugurated in October 1966 with a 600 kW mediumwave transmitter. Shortwave followed by 1967 when a 10 kW transmitter was installed. This remained in service until 1980 when a new 100 kW shortwave transmitter came on air as part of the deal that established a BBC relay station in Lesotho. Vashek Korinek in South Africa reported in January 2006 that the Chief Engineer at Radio Lesotho had said that as their shortwave transmitter was over 20 years old it was getting almost impossible to obtain spares, but that they would like to continue shortwave broadcasts. Although they had planned to order a new transmitter when their financial year began in April 2006, this did not seemingly materialise and they have not been heard since. 4800 kHz was their long time and last shortwave frequency.

BBC WORLD SERVICE RELAY STATION

BBC World Service relay station in Lesotho was opened in 1979 with two 100 kW shortwave transmitters. It closed on 30th September 1996, with shortwave relays switching to Meyerton in South Africa.

LIBERIA

LIBERIA BROADCASTING SYSTEM

LBS is the state-owned broadcasting service in Liberia. It no longer broadcasts on shortwave.

Address: Liberia Broadcasting System, PO Box 594, Paynesville, Liberia.

Web: www.liberiabroadcastingsystem.net

More commonly known by its callsign of ELBC, the Liberian government set up the Liberian Broadcasting Corporation in 1959. A contract was arranged with the British firm Rediffusion to build, own, and operate a new radio station, which went on air in 1959. Four years later its ownership reverted to the government. It broadcast on shortwave (3255 kHz being its well-known frequency) for many years until the outbreak of

civil war in Liberia. In 1990 the station facilities were destroyed and ELBC became the callsign for the station operated by Ecomog peacekeepers, reportedly from a mobile transmitter on 7275 kHz. After the civil war, LBS did not return to shortwave. In July 2005, the Liberian Observer reported that the Liberia Broadcasting System had launched a fund drive to obtain a shortwave transmitter in order to extend LBS broadcasts nationwide. The station's main building has been in ruins since the 1990 civil crisis. Then Transitional Government Chairman Charles Gyude Bryant, launching the fund-raising awareness programme for the resuscitation of the station, said everything would be done to meet the needs of the station through its budgetary allotment.

RADIO ELWA

Radio ELWA is a Christian radio station in Monrovia. It is currently inactive on shortwave.

Address: Radio ELWA, Box 192, Monrovia, Liberia.

Web: www.elwaministries.org

ELWA, originally licensed to the Sudan Interior Mission, aired its first programme in 1954 and at its peak broadcast extensively in English, French and many native Liberian languages. The station was silenced in 1990 when the first civil war broke out in Liberia, returning in August 1993 with a 10 kW SW transmitter. It again left the air in early 1996 when fighting once again broke out in Monrovia. The transmitter was stolen and subsequently used by Charles Taylor's 'Radio Liberia International'. In 1995, ELWA took delivery of a 1937 vintage GE SW transmitter, a gift from KGEI. The transmitter was never installed due to the unrest and was reportedly stripped of all parts and left unusable. A 1 kW shortwave transmitter built by HCJB Global was installed in 2000 (for 4760 kHz) and a 5 kW shortwave transmitter built by Elcor in 2008 (for 6070 kHz). In early 2011, both shortwave transmitters were inactive due to the theft of copper wire for the antenna and other equipment. In November 2011 it was reported that the ELWA studio compound in Monrovia had been completely destroyed by fire, although the FM transmitter was reported to have been undamaged.

STAR RADIO

Star Radio is an independent radio station for Liberia in partnership with Fondation Hironnelle. It is currently believed to be inactive on shortwave.

Address: Star Radio, Old CID Road, PO Box 3081, 1000 Monrovia 10, Liberia.

Web: www.starradio.org.lr

FM from Star Radio broadcasts commenced in Monrovia in July 1997, followed by shortwave (3400/5890 kHz) in October 1997. Within months their licence was suspended by the Liberian government and eventually the station left the air. It resumed local FM operations in May 2005, followed by a shortwave relay via VTC relay sites at either Ascension Island or Rampisham, UK. By the end of the B-08 season, Star Radio shortwave relays had been discontinued. However, in May 2010 a brand new 2.5 kW shortwave transmitter was introduced. It had been most recently operating on 3960 kHz but has not been reported since October 2010.

RADIO VERITAS

Radio Veritas is the Official Electronic Media Outlet of the Catholic Archdiocese of Monrovia. It is currently believed to be inactive on shortwave.

Address: Radio Veritas, Catholic Media Centre, PO Box 3569, Mamba Point, 10 Monrovia 1000, Liberia.

Web: www.camcam.org.lr

Radio Veritas commenced shortwave operations in October 1997. Soon afterwards the Liberian government of the time started a campaign to get the radio station closed down and there followed spells when they either had their broadcast time severely curtailed or were not on the air at all. The station was partially destroyed by fighting in July 2003. Radio Veritas was reactivated on shortwave in June 2005, but was silent again by early 2008 due to a transmitter problem. At this time they were also reportedly in the process of moving to a new site in Monrovia. Since then they have remained off-air on shortwave. Shortwave frequencies last used were 6090 (mornings) and 5470 (evenings) with 10 kW transmitter reportedly operating at just 6 kW.

RADIO LIBERIA INTERNATIONAL

Radio Liberia International had operated on shortwave (5100/6100 kHz) but is now inactive. It was first heard in 1996 and may have used ELWA's former 10 kW shortwave transmitter, probably stolen by Charles Taylor's NPFL.

VOICE OF LIBERTY

Voice of Liberty was a project of WJIE in Kentucky using the old shortwave transmitter of High Adventure Ministries that was previously located in South Lebanon, near to the border with Israel. It had operated from Liberia on 11515 kHz but is now inactive.

VOICE OF AMERICA RELAY STATION

The VOA relay station in Liberia, which went on air in 1963, was abandoned during the civil war of 1990. Relays were subsequently transferred to other shortwave transmitter sites, with the IBB Relay Station in Sao Tome becoming the permanent replacement for Liberia when it commenced shortwave operations in 1996.

LIBYA

RADIO TELEVISION LIBYA - RADIO LIBYA

Radio-Television Libya has been heard by DXers since at least 18 October 2011 and appears to be the replacement for the Voice of Africa external service.

Transmitter Site: Sabrata, Libya - 500 kW

Times/UTC	Days	Language	Target	Freq/kHz
1600-1800	Daily	French	Africa	11600

Much to everyone's surprise Libya has resumed an external service on shortwave. It was first reported by S Aoki in Japan on 19 October (via S Hasegawa DXLD). Initially it has been heard only in French from 1600-1800 on 11600 kHz. Strong signal here but with very muffled audio. It IDs variously as Radio Libya ("Radio Libye" in French) or Radio-Television Libya.

Libyan radio has restarted its External Service (via Media Network, 25 October 2011): Danish DXer Anker Petersen reports to Hard-Core DX: "I listened to Libya this afternoon (Oct 24) at 1610-1735 UTC on 11600.00 kHz which had a broadcast in French with SINPO 35433 - 45443 and S up to 9+30 dB, but a very muffled voice audio. Their audio of music was perfect: Vienna waltzes and light instrumental music which was often played! They had frequent, new ID's: " Radio Libye, Tripoli" and "Ici Radio Télévision Libye, Tripoli". "This obviously has replaced the former Gaddafi names "Libyan Jamahariyah Broadcasting Corporation" and the external service "Voice of Africa". Mostly talks on the same time schedule as former Voice of Africa in French about the revolution and future democracy in Libya, about the obduction of the corpse of Muammar Gaddafi, the declaration of military victory of Libya in Benghazi and the democratic election yesterday in Tunisia and about developments in Syria. All was very different content to what was heard on the Voice of Africa!" (Source: Anker Petersen, Denmark, via Hard-Core DX)

LIBYAN ON SHORTWAVE BEFORE THE FALL OF THE GADDAFI REGIME

LIBYAN JAMAHIRIYAH BROADCASTING - VOICE OF AFRICA

Libyan Jamahiriya Broadcasting was the state-owned radio broadcaster of Libya during the time of Muammar Gaddafi regime. Since October 1998, LJB's external service had been known as the "Voice of Africa" reflecting Libya's desire to direct its influence across the African continent. Prior to this the service was called the "Voice of the Greater Arab Homeland". Libyan Radio's shortwave transmissions originated from Sabrata, Libya. The shortwave transmitters in Libya were originally withdrawn from service in early 2002 and replaced by relays from transmitters at Issoudun in France. However, at the end of March 2007 all shortwave transmissions switched back to Libya and relays via Issoudun were discontinued.

Despite the start of the uprising and civil war in Febraury 2011, broadcasts from the Tripoli-based Voice of Africa (pro-Gaddafi) continued to be heard on shortwave until 15 August 2011, by which time supporters of the NTC had closed in on Sabrata, the coastal town between Tripoli and the Tunisian border, where the transmitter site is located. Up until the time that the shortwave transmitters fell silent, the schedule had been irregular, some days on, most days off, but when heard the content of the broadcasts in Swahili, English, French and Hausa remained the same although only one shortwave transmitter was used rather than two.

LIBYAN JAMAHIRIYAH BROADCASTING

A relay of Libyan Jamahiriya TV audio or the Libyan Radio domestic service on 8500 kHz (initially on 7500 kHz) had been reported irregularly since early March 2011 from what may be the second transmitter previously used by the Voice of Africa. Libyan Radio domestic service was observed by Dave Kenny on 8500 kHz daytime until 18 August 2011.

COALITION PSYOPS BROADCASTS

Shortwave broadcasts originating from the US military through their Commando Solo airborne radio station were first heard in late March 2011 with messages in Arabic and English aimed at Gaddafi's armed forces. They had been reported on 6877-usb and 10404-usb, and on 1 June 2011 was heard a new frequency of 10125-usb. In early August, new 9376-usb was also observed.

RADIO SAWA

In response to the crisis in Libya and other North African countries, the US-funded Radio Sawa started using shortwave again on a temporary basis between April and October 2011.

SAWT AL-AMAL (VOICE OF HOPE)

Libyan-opposition radio station Sawt al-Amal (Voice of Hope) began shortwave broadcasts to Libya in January 2006, daily at 1200-1400 on a frequency in the range 17620-17695 kHz from a hired-transmitter at Maiac-Grigoriopol (Moldova-Pridnestrovye). It was jammed by Libya and also shadowed by a radio station playing non-stop Frano-African music believed to originate from a transmitter at Moyabi in Gabon. Sawt al-Amal was last heard in July 2007.

In the 1970's and 80's, Libya was also the source and target of several clandestine and opposition radio stations, usually involving countries in dispute that Libya was in dispute with. These include Chad, Sudan, and Egypt, amongst others.

MADAGASCAR

RADIO MADAGASIKARA/RADIO NATIONALE MALGACHE

Radio Madagasikara is the state-run broadcasting service in Madagascar.

Address: Radio Madagasikara, BP 4422, Antananarivo 101, Madagsacar.

Web: takelaka.dts.mg/radmad/

Transmitter Site: Fenoarive - 10/20/30/100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0300-0500	Daily	Malagasy/French	Domestic	3288v 5010v
0500-1500	Daily	Malagasy/French	Domestic	6135v 7105v 9690v
1500-1900	Daily	Malagasy/French	Domestic	3288v 5010v
1900-2100	Sat/Sun	Malagasy/French	Domestic	3288v 5010v

Note: Radio Madagasikara may use 4910 kHz as an alternative to 5010 kHz.

RADIO NETHERLANDS RELAY STATION

The Radio Netherlands Relay Station in Madagascar went into full operation in mid-1972.

Address: Radio Nederland Madagascar Relay Station, PO Box 404, Antananarivo 101, Madagascar.

Transmitter Site: Talata-Volondry - 50/250 kW.

Times/UTC	Days	Station	Language	Target	Freq/kHz
0230-0330	Daily	AWR	Malagasy	Madagascar	3215
0300-0330	Daily	Vatican R	English	East Africa	11625
0315-0400	Daily	NHK R Japan	Swahili	East Africa	7395
0330-0345	Daily	Vatican R	Swahili	East Africa	11625
0345-0400	Mon-Sat	Vatican R	Swahili	East Africa	11625
0345-0400	Sun	Vatican R	Somali	Horn of Africa	11625
0400-0500	Daily	R Voice of the People	English/Vernacular	Southern Africa	11610
0400-0429	Daily	R Tamazuj	Sudanese langs	Sudan	11940
0400-0415	Daily	Vatican R	Amharic	Horn of Africa	11625
0415-0430	Daily	Vatican R	Tigrigna	Horn of Africa	11625
0430-0457	Daily	R Hirad	Somali	Horn of Africa	13750*
0430-0500	Daily	Vatican R	French	Central & West Africa	11625
0500-0530	Daily	Vatican R	English	Central/Southern Africa	11625

0530-0600	Daily	Vatican R	Portuguese	Southern Africa	11625
0530-0630	Mon-Fri	Voice of America	French	West/North-West Africa	12060
0530-0600	Daily	NHK R Japan	French	Central Africa	13840
1000-1030	Daily	Voice of America	Portuguese	Southern Africa	11915
1300-1400	Daily	AWR	Vietnamese	South-East Asia	17670
1300-1400	Daily	Voice of America	Somali	Horn of Africa	15620
1400-1430	Daily	Voice of Tibet	Tibetan	East/South Asia	17560
1430-1530	Daily	AWR	Malagasy	Madagascar	3215
1430-1515	Daily	NHK R Japan	Hindi	South Asia	15720
1530-1630	Daily	R Dabanga	Sudanese Arabic	Darfur/Sudan	13800
1600-1700	Daily	Family R	Swahili	East Africa	9590
1600-1630	Daily	R Voice of the People	English/Vernacular	Southern Africa	9345
1600-1630	Mon/Tue	Vatican R	Swahili	East Africa	13765
1630-1657	Daily	R Netherlands	Dutch	Middle East	11965
1630-1657	Daily	R Netherlands	Dutch	Central/East Africa	11655
1630-1655	Daily	Fiangonana Loterana	Malagasy	Madagascar	3215
1630-1645	Mon/Tue	Vatican R	Amharic	Horn of Africa	13765
1645-1700	Mon/Tue	Vatican R	Tigrinya	Horn of Africa	13765
1700-1727	Daily	R Netherlands	Dutch	Southern Africa	11655
1700-1800	Daily	Family R	English	East Africa	7385
1700-1727	Daily	R Hirad	Somali	Horn of Africa	11850*
1700-1730	Mon-Thu	VOA - Studio 7	Shona	Zimbabwe	12080
1700-1720	Fri-Sun	VOA - Studio 7	Shona	Zimbabwe	12080
1720-1740	Fri-Sun	VOA - Studio 7	English	Zimbabwe	12080
1730-1857	Daily	R Hirad	Somali	Horn of Africa	11850*
1730-1800	Mon-Thu	VOA - Studio 7	English	Zimbabwe	12080
1730-1800	Daily	NHK R Japan	Swahili	East Africa	13730
1740-1800	Fri-Sun	VOA - Studio 7	Ndebele	Zimbabwe	12080
1800-1957	Daily	R Netherlands	English	Central Africa	11655
1800-2000	Daily	Family R	English	East Africa	7395
1800-1900	Daily	R Voice of the People	English/Vernacular	Southern Africa	9345
1800-1857	Daily	Deutsche Welle	Hausa	West Africa	17800
1800-1830	Mon-Thu	VOA - Studio 7	Ndebele	Zimbabwe	12080
1900-2057	Daily	R Netherlands	English	Central Africa	7425
1900-2000	Daily	Family R	English	Southern Africa	6020
2000-2100	Daily	Family R	English	Southern Africa	6020
2000-2030	Daily	NHK R Japan	French	Central/West Africa	17650
2100-2200	Daily	R Netherlands	Indonesian	South-East Asia	9365
2100-2130	Mon-Fri	Voice of America	French	Central/West Africa	9815

* to be confirmed

Ex-Radio Sweden Hörby SW transmitters moved to Madagascar: RNW confirmed the purchase of three 500 kW shortwave transmitters from the ex-Radio Sweden shortwave site at Hörby in Sweden in April 2011. RNW decided it was time to replace the existing 40-year-old Philips transmitters at Madagascar and rather than invest in new transmitters, the opportunity was taken to purchase the three ABB transmitters (installed in 1993) from the Swedish station at Hörby which was closed at the end of 2010. The transmitters were dismantled and shipped to RNW's station in Madagascar. There were two reasons for buying these transmitters: Firstly, in order to guarantee the reliability of existing services from Madagascar it is necessary to replace the current 40-year-old transmitters as soon as possible, and secondly the "new" ABB transmitters are much more energy efficient, so that the relatively small investment will be recouped in a short time. The first tests from these transmitters took place in November 2011. (via RNW Programme Distribution)

WORLD CHRISTIAN BROADCASTING - MADAGASCAR WORLD VOICE

In November 2004 World Christian Broadcasting obtained 85 acres of land in Madagascar for a new transmitter site. Since then the project to get Madagascar World Voice, as the station will be known, has been making steady progress towards its goal of broadcasting Gospel programming to Middle East, Africa, South America, China, Russia, India, Indonesia and Europe. It is expected that the station will be on air towards the end of the B-11 season.

Transmitter Site: Mahajanga, Madagascar - 3 x 100 kW

Times and frequencies registered for the period 1 February-30 March 2012

Times/UTC	ITU Zones	Freq/kHz	Times/UTC	ITU Zones	Freq/kHz
0600-0630	53,52,57	7355	0930-1000	53,48,47,38,37,28	15660
0630-0700	53,52,57	9565	1000-1030	53,48,47,38,37,28	17660
0700-0730	53,52,57	11870	1030-1100	39,40,41,42,31,32	9585
0730-0800	53,52,57	13635	1100-1130	39,40,41,42,31,32	11870
0800-0830	53,48,47,38,37,28	9565	1130-1200	39,40,41,42,31,32	13650
0830-0900	53,48,47,38,37,28	11870	1200-1230	39,40,41,42,31,32	15660
0900-0930	53,48,47,38,37,28	13630	1230-1300	39,40,41,42,31,32	17660

Glenn Hauser at HFCC Dallas on 15 September reported the following to DXLD: "Had a nice conversation with Kevin Chambers, Director of Engineering at World Christian Broadcasting. Target for Madagascar World Voice to start up is now toward the end of the B-11 season. A test schedule has been registered effective as early as 1 February 2012. But we saw the transmitters still in the Continental factory. They are almost complete but obviously have not been shipped yet. Antennas are as wind-resistant as they can afford to build them, but cyclones periodically hit the area, even on the NW coast of the island, and are bound to batter the station at some point. He says sometimes the storms head up the Mozambique channel, sometimes loop around from the north. As for KNLS Alaska, they continue to have problems getting needed parts for one of the old transmitters, but still hope to have the second one back on the air during the B-11 season. Kevin agreed that they need to watch out for unregistered Taiwan/China jamming on KNLS frequencies. He does rely on a few reception reports from dentro-China. They expect to reach southern China better from Madagascar than they can now from the other side via Alaska, and are also looking forward to serving Latin America from Madagascar, altho propagation predictions are not too favorable. I told him that the other Madagascar station, the RNW relay, enjoys good reception even here regardless of the azimuth, as we are close to antipodal, so MWV should also do well. Did not seem to think that the RNW facilities, soon up for grabs, would have been suitable for WCB needs. WCB is already broadcasting in Spanish via WRMI; WCB operates out of Nashville to its very remote SW site(s), and they invited me to visit should I be in TN (Glenn Hauser at HFCC Dallas, 15 September, DXLD)

TARGET BROADCAST TO MADAGASCAR

RADIO MADA INTERNATIONALE

Radio Mada Internationale was originally an initiative of Tiako I Madagasikara (I Love Madagascar, TIM) and broadcast in support of the deposed president Marc Ravalomanana. It commenced shortwave broadcasts on 21 March 2009 but was discontinued shortly afterwards. It was reactivated in October 2009 in connection with the Gasy Tia Tanindrazana (GTT) which describes itself as a collective of various associations and individuals from Madagascar, Europe and other countries opposed to the coup in Madagascar. It ended shortwave transmissions at the end of the B-10 season in March 2011.

MALAWI

MALAWI BROADCASTING CORPORATION

The Malawi Broadcasting Corporation is the state-run broadcasting organisation in Malawi.

Address: Malawai Broadcasting Corporation, PO Box 30133, Chichiri, Blantyre 3, Malawai.

MBC is inactive on shortwave. It was last heard on shortwave in 2002 on 3380 and 7130 kHz, by which time their Director of Engineering reported that they needed to replace the valves to keep their only remaining 50 kW shortwave transmitter operational, although the cost of US\$20,000 was a problem as the station's finances were in poor shape.

TWR MALAWI

TWR Malawi was last listed in WRTH 2010 as having future plans for a 1 kW shortwave transmitter at Lilongwe to operate on 4870 kHz. This was to be phase two of a project that has been planned since 2002 (the first phase saw TWR being introduced on FM in Malawi). No mention is made in WRTH 2011.

MALI

OFFICE DE RADIODIFFUSION-TELEVISION DU MALI (ORTM)

RTM is the state-operated broadcasting service in Mali.

Address: Office de Radiodiffusion-Television du Mali , rue de la Marne No 287, BP 171, Bamako, Mali.

Web: www.ortm.ml

Transmitter Site: Bamako - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0555-0800	Daily	French/Vernaculars	Domestic	5995
0800-1800	Daily	French/Vernaculars	Domestic	9635
1800-0000	Daily	French/Vernaculars	Domestic	5995

Note: News in English at 1905-1920 on Saturdays.

CHINA RADIO INTERNATIONAL RELAY STATION

China Radio International was first relayed via transmitters in Mali in 1988. Since then China has given further technical assistance to Mali and extended its agreement to use Bamako as a relay station.

Address: China Radio International, Beijing, China 100040.

Web: www.cri.com.cn

Transmitter Site: Bamako - 2 x 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0800-0900	Daily	Hausa	Africa	7295
1300-1400	Daily	English	Africa	13685 17880
1400-1500	Daily	English	Africa	13685 17630
1500-1600	Daily	English	Africa	13685 17630
1600-1700	Daily	Arabic	Africa	15125 17880
1700-1730	Daily	Swahili	Africa	113645 15125
1730-1830	Daily	Hausa	Africa	11640 13645
1830-1930	Daily	Arabic	Africa	11640 13685
1930-2000	Daily	Portuguese	Africa	11640 13630
2000-2100	Daily	English	Africa	11640 13630
2100-2130	Daily	English	Africa	11640 13630
2130-2230	Daily	French	Africa	11975 13630
2230-2300	Daily	Chinese	Africa	11975 15505
2300-0000	Daily	Chinese	Africa	7295 11975

MAURITANIA

RADIO OF THE ISLAMIC REPUBLIC OF MAURITANIA

Radio Mauritanie is the state-operated broadcasting service in Mauritania.

Address: Radio Mauritanie, BP 200, Nouakchott, Mauritania.

Transmitter Site: Nouakchott - 100 kW

Times/UTC	Days	Language	Target	Freq/kHz
0600v-0100v	Daily	Arabic/French/Vernaculars	Domestic	7245

Note: Sign-on is variable, sometimes before, sometimes after 0600

MAURITIUS

MAURITIUS BROADCASTING CORPORATION

MBC is inactive on shortwave. MBC was last listed on shortwave in the 1988 edition of the World Radio Television Handbook.

MAYOTTE

There is no shortwave broadcasting on Mayotte.

MOROCCO

RADIODIFFUSION-TELEVISION MAROCAINE

RTM is the state-operated broadcasting service in Morocco.

Address: RTM, 1 Rue Brihi, PO Box 1042, Rabat, Morocco.

Web: www.rtm.ma

Transmitter Site: Nador - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0900v-2200v	Daily	Arabic	Europe/North Africa/Middle East	15349.15v

RADIO MEDITERRANÉE INTERNATIONALE - MEDI 1

Medi 1 is a commercial broadcasting service based in Tangiers that first went on air in 1980.

Address: Medi 1, 3 Rue Emsallah, 90000 Tanger, Morocco.

Web: www.medi1.com

Transmitter Site: Nador - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0500-0000	Daily	Arabic/French	Europe/North Africa/Middle East	9575

IBB RELAY STATION - BRIECH

IBB transmissions from the IBB Briech were discontinued on 30 March 2008, with relays of Radiodiffusion-Television Marocaine (RTM) ending a month later on 30 April 2008. The Briech facility was 18 miles southwest of Tangier and began broadcasting in 1993. US international broadcasting in Morocco originally started in 1949 with the Tangier Relay Station.

MOZAMBIQUE

RADIO MOZAMBIQUE

Radio Mozambique shortwave transmitters were officially decommissioned during 2001 in favour of mediumwave and FM. Radio Mozambique's last reported SW freqs in 2001 were 3210 9639v 11818v and 15295v kHz.

RADIO TERRA VERDE

Radio Terra Verde was heard in April 2005 on 7135 kHz with relay of its Maputo FM service. The station reportedly has links with Renamo, the former rebel opposition group but now an official opposition party in Mozambique.

TARGET BROADCAST TO MOZAMBIQUE

VOICE OF AMERICA - VIDA SEM MEDO (Life Without Fear)

Reporters, medical doctors, youth and the community from Mozambique discuss HIV/AIDS and related health issues.

Addresses: VOA, 330 Independence Avenue, SW, Washington, DC 20237, USA.

Transmitter Site: Talata-Volondry, Sri Lanka - 250 kW; Iranawila, Sri Lanka - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
1000-1030	Sat/Sun	Portuguese	Mozambique	11915-mdg 17850-ira

NAMIBIA

NAMIBIA BROADCASTING CORPORATION

Namibia Broadcasting Corporation is currently inactive on shortwave. In January 2006, Vashek Korinek reported that Mike Evans of NBC had told him that the NBC Board had not made any decision about the long term future of their shortwave (and mediumwave) operations. All equipment was still in place, but with it being over 20 years old some spares and repairs would be needed. NBC was likely to take the decision in the next three months or so, but Mike pointed out that NBC are financially very strapped at the moment. (Vashek Korinek-South Africa via DXplorer, 26 January 2006). NBC's last operational shortwave frequencies were 6060 and 6175 kHz. Prior to that, 3270 and 3290 kHz had been used overnight.

NIGER

ORTN - LA VOIX DU SAHEL

ORTN is the state-operated broadcasting service in Niger.

Address: ORTN - La Voix du Sahel, BP 361, Niamey, Niger.

Web: www.ortn-niger.com/radio.php

Transmitter Site: Niamey - 100 kW transmitter.

Times/UTC	Days	Language	Target	Frequencies/kHz
0500-2300 (-2200 Sun)	irregular	French/Vernaculars	Domestic	9705

NIGERIA

FEDERAL RADIO CORPORATION OF NIGERIA

The Federal Radio Corporation of Nigeria (FRCN) is Nigeria's publicly-funded radio broadcasting organisation. Among its subsidiaries are the domestic radio network known as Radio Nigeria and the Voice of Nigeria international radio service. (Wikipedia)

VOICE OF NIGERIA

The Voice of Nigeria is the official international broadcasting station of Nigeria. Founded in 1961, it began life as the External Service of the then Nigerian Broadcasting Corporation (now Federal Radio Corporation of Nigeria). The nation's growing commitment informed the need to have an external channel through which authoritative information about the African situation could be disseminated to the entire world. Even then, its transmission, using a 10 kW HF transmitter, was limited to West Africa for two hours daily in English and French. Broadcast hours increased to six in 1963 with the commissioning of five prototype RCA 100 kW transmitters. In 1989, five Brown Boveri transmitters with antennae system were acquired. On 5 January 1990, VON became autonomous, and in 1996, three state-of-the-art 250 kW Thomcast AG transmitters were commissioned. The transmitting station is located on 40 hectares at Ipokodo, Ikorodu in Lagos State. While the Administrative Head quarters is in Abuja, the Federal Capital, News and programmes emanate from both the Lagos and Abuja studios. (Wikipedia)

Address: Voice of Nigeria, 7th Floor, Radio House, Herbert Macaulay Way, Garki-Abuja, Nigeria

Web: www.voiceofnigeria.org

Transmitter Site: Ikorodu - 350 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0500-0700	Daily	English	Europe/North Africa	15120
0700-0800	Daily	French	Europe/North Africa	15120
0800-0900	Daily	Hausa	West Africa	9690
0900-1500	Daily	English	West Africa	9690
1500-1600	Daily	English	Europe/North Africa	15120
1600-1630	Daily	Swahili	East Africa	9690
1630-1700	Daily	Yoruba	West Africa	9690
1700-1730	Daily	Igbo	West Africa	9690
1730-1800	Daily	Arabic	North Africa	15120
1800-1900	Daily	English	Europe/North Africa	15120
1900-2000	Daily	English	West Africa	7255
2000-2100	Daily	French	West Africa	7255
2100-2200	Daily	Hausa	West Africa	7255
2200-2300	Daily	Fulani	West Africa	7255

A new transmitter site at Abuja (Lugbe) is expected to be operational in the near future, consisting of three Thomson TSW2300 DRM compatible 250 kW transmitters for use in the range 5.9-26 MHz. The new site had originally been expected to come on air in late 2009 but has been delayed. Voice of Nigeria has been reported since October 2011 with irregular tests.

One such test was on 23 January 2012: A station playing African music was logged on 15119.85 kHz from approx 1130-1510 UTC. After 1500 it was causing severe interference to Voice of Nigeria with its scheduled transmission in English on 15120.0 kHz. Noel Green reports that "there is now confirmation via Mauno Ritola that the Afro pop music heard on the 23 January on 15120 originated from the new Abuja (Lugbe) transmitting station". (observations by Glenn Hauser/DXLD, Noel Green and Alan Pennington)

RADIO NIGERIA-KADUNA

Radio Nigeria-Kaduna is the regional broadcasting station of the FRCN for Kaduna State.

Address: Radio Nigeria-Kaduna, Broadcasting House, PO Box 250, Kaduna, Nigeria.

Web: www.radionigeriaonline.com

Transmitter Site: Kaduna - 50 kW.

Times/UTC	Days	Service/Language	Target	Freq/kHz
0400-2305	Daily	Channel 1 - Hausa	Domestic	6090v

Note: had been off-air during late September/early October 2011 due to power supply problems.

RADIO NIGERIA NATIONAL STATION-ABUJA ("THE VOICE OF UNITY")

Radio Nigeria-Abuja is the National Station of the FRCN based in the capital, Abuja.

Address: Radio Nigeria-Abuja, PMB 71, Garki, Abuja, Nigeria.

Web: www.radionigeriaonline.com

Transmitter Site: Abuja.

Times/UTC	Days	Language	Target	Freq/kHz
0530-1200	Daily	English/Vernaculars	Domestic	7275 (alt: 7350)

Other Nigerian domestic stations that had operated on shortwave, such as **Radio Nigeria-Kaduna Channel 2** (4770 kHz), **Radio Nigeria-Enugu** (6025 kHz) and **Radio Nigeria-Ibadan** (6050 kHz), are all believed to be inactive on shortwave at present.

CURRENT TARGET BROADCAST TO NIGERIA

HAMADA RADIO INTERNATIONAL

Hamada Radio International is a commercial service broadcasting to Nigeria that started on 6 December 2010. It is brokered by Radio Miami International and broadcast via shortwave transmitters in Germany.

Transmitter Site: Wertachtal, Germany - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0530-0600	Mon-Fri	Hausa	Nigeria	7350-wer
1930-2000	Mon-Fri	Hausa	Nigeria	11865-wer

PAST TARGET BROADCASTS TO NIGERIA

RADIO DEMOCRAT INTERNATIONAL / RADIO KUDIRAT NIGERIA

RDI was operated by the National Liberation Council of Nigeria (NALICON) and was first heard on 12 June 1996, the third anniversary of the annulled 1993 Nigerian presidential results. It broadcast via a transmitter at Meyerton, South Africa. A few weeks after its launch it evolved into Radio Kudirat Nigeria, named after the late Alhaja Kudirat Abiola, wife of Moshood Abiola, presumed winner cancelled elections. RKD was heard for the last time in October 1999.

VOICE OF FREE NIGERIA

Operated by the Free Nigeria Movement, the Voice of Free Nigeria was first heard in June 2007 from a hired-shortwave transmitter in Germany (although much speculation at the time suggested the transmitter may have been located in Algeria). FNM discontinued broadcasts in July 1998 as the changing political scene in Nigeria deemed them to be no longer necessary.

RADIO NADECO

Radio Nadeco described itself as the "Voice of Free Nigeria" and broadcast in support of the National Democratic Coalition of Nigeria (Nadeco). Broadcasts started in June 1997 and were transmitted via WWCR, Nashville, USA. It was discontinued in August 1997.

VOICE OF NEW NIGERIA

Radio New Nigeria described itself as the "Voice of the Nigerian Advocacy Group for Democracy and Human Rights", a Boston based pressure group. The station began broadcasting in June 1997 via hired transmitters in Germany.

RADIO YORUBA

Radio Yoruba was short-lived radio station operated by the Coalition of Yoruba Movements Resident Abroad, according to a message in the soc.culture.nigeria news group in July 1998. It was said to operate on shortwave for one hour on Monday evenings.

RADIO SAVE NIGERIA BROADCASTING SERVICE

The Save Nigeria Broadcasting Service or "Radio SNBS" was operated by the Nigerian Advocacy Group for Democracy and Human Rights(NAG-DHR), a Boston USA based pressure group which opposed the Nigerian government. From 12 June 1997 until about January 1998 NAG-DHR had operated a station called Radio New Nigeria via a hired Deutsche Telekom shortwave transmitter in Germany. According to Glenn Hauser's "World of Radio" programme, the replacement service, broadcast via a US private station WGTG, Georgia, USA and was launched on 12 June 1996. They broadcast on Saturdays from 1930-2000 UTC on 9400 kHz in English and vernacular languages and were last heard in October 1998.

VOICE OF ODUDUWA

Voice of Oduduwa was first reported in June 1998. It was believed to be operated by Egbe Omo Yoruba (Association of Yoruba Descendants worldwide). It hired airtime via US commercial shortwave station WHRA in Greenbush, Maine. They broadcast on Mondays from 2100-2200 UTC on 15460 kHz in the Yoruba language. Associated broadcasts by Igbo and Ijaw groups were broadcast on the same frequency at the same time on Wednesdays and Fridays respectively.

OGENE NDIQBO RADIO

Ogene Ndiqbo Radio was believed to have begun broadcasting in July 1998. It was operated by the Eastern Mandate Union Abroad (a pro-democracy group of Igbo exiles) and the World Igbo Council. It hired airtime via a US commercial station World Harvest Radio via Maine. Associated broadcasts by Yoruba and Ijaw groups were broadcast on the same frequency and at the same time on Mondays and Fridays, respectively. They broadcast on wednesdays from 2100-2200 UTC on 15460 kHz (via WHRA).

VOICE OF BIAFRA INTERNATIONAL

Voice of Biafra International was a project of Biafra Foundation and Biafra Actualization Forum and was first broadcast in September 2001 as a weekly one-hour programme via Meyerton, South Africa. This was discontinued in August 2007. It was then aired over WHRI in the USA until December 2009.

RADIO JAKADA INTERNATIONAL

Radio Jakada International was a new broadcast to Nigeria that started on 1 May 2002 at 1900-2000 on 12125 kHz. It was been brokered by TDP and reportedly broadcast from the transmitter site at Tbilisskaya-Armavir in southern Russia. It first series of broadcasts ended on 22 July 2002, resuming on 27 March 2003 from 1900-1930 Monday-Friday only on 15170 kHz, this time reportedly from Meyerton in South Africa. It was believed to have been discontinued by the end of the A-03 season.

SALAMA RADIO INTERNATIONAL

Salama Radio was first on the air in 2001 with Christian Pentecostal programming. It was reactivated on 5 June 2005 with a twice weekly broadcast at 1930-2030 Wed/Sun on 11885 kHz (Woofferton 300 kW / 180 deg) in Hausa/English, brokered by VT Communications, and was cancelled from 14 September 2005.

RADIO SAA

Radio Saa had a twice-weekly broadcast in Hausa during March/April 2007. The transmitter site was believed to be Issoudun, France.

ASO RADIO INTERNATIONAL

Aso Radio International is operated by Aso Radio & Television Services plc and aired on 93.5 FM in Abuja. It commenced shortwave transmissions in November 2008 via a TDP-brokered transmitter in Samara, Russia. These were discontinued in September 2009.

RADIO BIAFRA

Radio Biafra was established as an independent radio station broadcasting on shortwave in April 2009. The project was funded through donations from supportive private individuals in Biafra. It broadcast in Igbo and English via Skelton, UK. Broadcasts were discontinued prior to the B-09 season.

REUNION

ORTF REUNION

ORTF operated a 4 kW shortwave transmitter on Reunion which became inactive in the mid-1970's.

RWANDA

RADIO RWANDA - RADIODIFFUSION DE LA REPUBLIQUE RWANDAISE

Radio Rwanda is the state-operated radio station in Rwanda.

Address: Radio Rwanda, BP 83, Kigali, Rwanda.

Web: www.orinfor.gov.rw/radiorwanda.htm

Transmitter Site: Kigali - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0255-0600	Daily	Kinyarwanda/French/English/Swahili	Domestic	6055
0900-2100	Daily	Kinyarwanda/French/English/Swahili	Domestic	6055

Note: News in English at 0515 and 1830.

Radio Rwanda also broadcasts in DRM 24-hours-a-day on 25740 kHz (.08 kW) in Kigali.

DEUTSCHE WELLE RELAY STATION

The Deutsche Welle relay station at Kigali was established in the late 1960's. The current shortwave transmitters were installed in the early 1990's.

Address: Deutsche Welle, PO Box 100 444, 50968 Cologne, Germany.

Web: www.dw-world.de

Transmitter Site: Kigali - 4 x 250 kW.

Times/UTC	Days	Station	Language	Target	Freq/kHz
0300-0400	Daily	Deutsche Welle	Swahili	East Africa	5925 6175
0400-0500	Daily	Deutsche Welle	English	Africa	6180 7350 9490 9855
0500-0530	Daily	Deutsche Welle	English	Africa	6155 9800 9855 11800
0530-0600	Daily	Deutsche Welle	Portuguese	Southern Africa	9800 12045
0530-0600	Daily	Deutsche Welle	English	Africa	9855 11800
0600-0630	Daily	Deutsche Welle	English	West Africa	12045 13780 17800
0630-0700	Daily	Deutsche Welle	Hausa	West Africa	12045 15440
0630-0700	Daily	Deutsche Welle	English	West Africa	13780 17800
0800-0830	Daily	Deutsche Welle	Pashto	West Asia	17710
1000-1100	Daily	Deutsche Welle	Swahili	East Africa	9800 12045 15440
1200-1300	Daily	Deutsche Welle	French	Africa	9800 15275 15440 21780
1300-1400	Daily	Deutsche Welle	Hausa	West Africa	15440 17800 21780
1300-1315	Fri-Sun	TWR	Afar	Horn of Africa	13660
1330-1400	Daily	Deutsche Welle	Dari	West Asia	15275
1400-1430	Daily	Deutsche Welle	Pashto	West Asia	15275
1430-1500	Daily	Deutsche Welle	Urdu	West Asia	15275
1500-1600	Daily	Deutsche Welle	Swahili	East Africa	7300 9800 12070
1600-1700	Daily	Deutsche Welle	Amharic	Horn of Africa	11895 12070 15275
1600-1630	Daily	FEBA R	Afar	Horn of Africa	11875
1700-1800	Daily	Deutsche Welle	French	Africa	9795 12070 15275
1700-1730	Daily	FEBA R	Orominya	Horn of Africa	9595
1730-1800	Daily	FEBA R	Tigrinya	Horn of Africa	9595
1800-1900	Daily	Deutsche Welle	Hausa	West Africa	9715 12070 21780
1800-1930	Daily	V of Forgiveness	Arabic	Yemen	9550
1900-1930	Daily	Deutsche Welle	English	Africa	7245 9735 12070
1930-2000	Daily	Deutsche Welle	English	Africa	7245 12070
1930-2000	Daily	Deutsche Welle	Portuguese	Southern Africa	6150 9735
2000-2100	Daily	Deutsche Welle	English	Africa	9655 9735 12070
2000-2100	Daily	R Netherlands	English	West Africa	11615
2100-2200	Daily	Deutsche Welle	English	Africa	9655 11865 12070

SAINT HELENA

RADIO ST HELENA DAY

"Radio St Helena Day" was an annual broadcast on shortwave. Transmissions were beamed to different parts of the world on 11092.5 kHz. The last was on 14 November 2009.

The first "Radio St Helena Day" broadcast took place in 1990 when Cable and Wireless allowed their 1 kW shortwave transmitter to be used for special transmissions around the world and the annual event took place until 1999. After a break of seven years, a new 1 kW shortwave transmitter and aerial mast was in place on St Helena by November 2006 thanks to a project run by German DXer, Robert Kipp, and "Radio St Helena Day" once again became a highlight of the DX year.

However, the 2010 event unfortunately had to be cancelled due to severe technical problems with the shortwave antenna tower, and this was followed by damage to the beam antenna, meaning that there were not any broadcasts from RSH in 2011 either.

Address: Radio St. Helena, PO Box 93, Jamestown , St Helena, STHL 1ZZ , South Atlantic Ocean.

Web: www.sthelena.se

SAO TOME E PRINCIPE

RADIO NACIONAL DE SAO TOME E PRINCIPE

Radio Nacional de Sao Tome e Principe is inactive on shortwave. The last WRTH entry was in the 1988 edition which stated that 4807 kHz, 10 kW, was irregular.

IBB RELAY STATION SAO TOME

The IBB Relay Station was opened in 1992 with shortwave transmitters operational in 1996.

Address: IBB Transmitting Station, CP 522, Sao Tome, Sao Tome e Principe.

Transmitter Site: Pinheira - 100 kW.

Times/UTC	Days	Service	Language	Target	Freq/kHz
0300-0330	Daily	Afia Darfur	Arabic	Darfur/Sudan	7275
0300-0600	Daily	VOA	English	West Africa	6080
0330-0400	Daily	VOA	Kinyarwanda	Great Lakes	9540
0330-0430	Daily	VOA	Somali	Horn of Africa	7340
0400-0430	Daily	VOA	Kirundi	Great Lakes	9540
0400-0500	Daily	VOA	English	West Africa	4960
0430-0600	Daily	VOA	English	West/Central Africa	9885
0500-0530	Daily	VOA	Hausa	West Africa	4960 6020 6035
0530-0630	Mon-Fri	VOA	French	West Africa	4960
0600-0700	Daily	VOA	English	West Africa	6080
0700-0730	Daily	VOA	Hausa	West Africa	4960 12070 13780
1100-1130	Sat	VOA	French	West/Central Africa	11915 13735 15620 17850
1400-1500	Daily	VOA	English	East/Central Africa	17650
1400-1530	Daily	VOA	English	West/Central Africa	6080
1500-1530	Daily	VOA	Hausa	West Africa	9780 11860
1500-1600	Daily	VOA	English	West Africa	17895
1600-1615	Sat	VOA	Kinyarwanda	Great Lakes	12010 15730
1600-1700	Daily	VOA	English	Africa	15580
1600-1700	Daily	VOA	Special English	Africa	13600
1615-1630	Sat	VOA	Kirundi	Great Lakes	12010 15730
1630-1700	Daily	VOA	Swahili	East Africa	15265 15730
1700-1720	Fri-Sun	VOA - Studio 7	Shona	Zimbabwe	15775
1700-1730	Mon-Thu	VOA - Studio 7	Shona	Zimbabwe	15775
1700-1800	Daily	VOA	English	Africa	6080 13635
1700-1800	Daily	VOA	Portuguese	Southern Africa	15670
1720-1740	Fri-Sun	VOA - Studio 7	English	Zimbabwe	15775
1730-1800	Mon-Thu	VOA - Studio 7	English	Zimbabwe	15775
1740-1800	Fri-Sun	VOA - Studio 7	Ndebele	Zimbabwe	15775

1800-1810	Fri	VOA - Studio 7	Shona	Zimbabwe	12080 15775
1800-1830	Mon-Thu	VOA - Studio 7	Ndebele	Zimbabwe	12080 15775
1800-2200	Daily	VOA	English	West/Central Africa	6080
1810-1820	Fri	VOA - Studio 7	English	Zimbabwe	12080 15775
1820-1830	Fri	VOA - Studio 7	Ndebele	Zimbabwe	12080 15775
1830-1900	Mon-Fri	VOA - Studio 7	LiveTalk	Zimbabwe	12080 15775
1900-1930	Daily	Afia Darfur	Arabic	Darfur/Sudan	11830
1900-2030	Daily	VOA	English	West Africa	4940
2000-2030	Daily	VOA	French	West/Central Africa	9780 15620
2030-2100	Mon-Fri	VOA	Hausa	West Africa	4940 6035 11885
2100-2130	Mon-Fri	VOA	French	West Africa	9780

SENEGAL

RADIODIFFUSION TÉLÉVISION SÉNÉGALAISE

Radiodiffusion Télévision Sénégalaise (RTS) is the Senegalese public broadcasting company. It no longer broadcasts on shortwave. It was last reported on SW in 1997 on 7170v kHz.

TARGET BROADCAST TO WEST AFRICA

WEST AFRICA DEMOCRACY RADIO

West Africa Democracy Radio (with programming produced in Dakar) had broadcast on shortwave to West Africa via a VT Communications transmitter in the UK until May 2008. They now broadcast on FM in Dakar and via satellite. The station describes itself as a trans-territorial radio station that aims to facilitate the exchange of development information between and among countries of West Africa including Chad and Cameroon.

SEYCHELLES

BBC INDIAN OCEAN RELAY STATION

The BBC Indian Ocean Relay Station was opened in 1988. It is operated by VT Communications.

Address: BBC Indian Ocean Relay Station, PO Box 448, Victoria, Mahe, Seychelles.

Transmitter Site: Mahe - 2 x 250 kW.

Times/UTC	Days	Station	Language	Target	Freqs/kHz
0200-0300	Daily	BBC	English	East Africa	7385
0300-0400	Daily	BBC	English	East Africa	9460 11860
0400-0500	Daily	BBC	English	East Africa	11860
0400-0430	Daily	BBC	Somali	Horn of Africa	15490
0430-0500	Daily	BBC	French	Indian Ocean Isl.	15490
0500-0600	Daily	BBC	English	East Africa	12095
0500-0600	Mon-Fri	BBC	English	East Africa	15420
0500-0600	Sat	BBC	Kinyarwanda/Kirundi	East Africa	15490
0529-0600	Sun	BBC	Kinyarwanda/Kirundi	East Africa	15490
0600-0700	Sat/Sun	BBC	English	East Africa	15420
0700-0800	Sat/Sun	BBC	English	East Africa	17640
0800-1300	Daily	BBC	English	East Africa	17640
0800-1400	Daily	BBC	English	Southern Africa	21470
1300-1400	Daily	BBC	English	East Africa	15420
1400-1500	Daily	BBC	Somali	Horn of Africa	11860 15510
1500-1700	Daily	BBC	English	East Africa	12095
1630-1700	Mon-Fri	BBC	Kinyarwanda/Kirundi	East Africa	15790
1700-1800	Daily	BBC	English	East Africa	12095
1800-1830	Daily	BBC	Somali	Horn of Africa	6095 9410
1830-1900	Mon-Fri	BBC	Kinyarwanda/Kirundi	East Africa	6095
1830-1900	Daily	BBC	English	East Africa	9410
1900-2100	Daily	BBC	English	East Africa	6005 9410
2100-2200	Daily	BBC	English	Southern Africa	5955
2100-2200	Daily	BBC	English	East Africa	9410

FEBA RADIO

FEBA Radio began broadcasting from the Seychelles in the early 1970's with programmes beamed to South Asia, the Middle East, and East Africa. These ended in March 2003 and FEBA Radio now has a contract agreement with Babcock to air its programmes via transmitters in various countries.

SIERRA LEONE

SIERRA LEONE BROADCASTING CORPORATION

The Sierra Leone Broadcasting Corporation was established in 2009, replacing the previous state-owned broadcasting service called the Sierra Leone Broadcasting Service. SLBS was last heard on shortwave in 2002 on 3316 kHz.

RADIO AL-KORAN

Radio Al-Koran used to operate on shortwave with programming in Arabic, English, French, and several African languages (scheduled on 9630 kHz, 1500-1900) but appears to have gone off air during the civil war in the country in the 1990's. Radio Al-Koran's address of PMB 668, Freetown, is currently used by the Africa Muslims Agency (Sierra Leone).

RADIO UNAMSIL

Radio UNAMSIL (UN Assistance Mission in Sierra Leone) began a shortwave service in Sierra Leone in April 2002. UNAMSIL successfully completed its mandate in December 2005, by which time the shortwave service from a 1 kW transmitter (on 6139.1 kHz) had been discontinued.

DEVELOPMENT OF SHORTWAVE BROADCASTING IN SIERRA LEONE

Broadcasting in Sierra Leone dates back to 1934 when a rediffusion system was introduced in Freetown, the first in British West Africa. In the years that followed, the wire system flourished and by 1952 had approximately 2,300 subscribers. As a result of this popularity, a grant was given from Colonial Development and Welfare Funds for £23,000 for the construction of a new studio building and shortwave transmitter. These were inaugurated in October 1955. The Sierra Leone Broadcasting Service (SLBS) was subsequently established in January 1958 as an autonomous department within the government.

The first entry for SLBS in the World Radio Television Handbook was in the 1957 edition, which showed them as being located in the Public Relations Office, 26A, Westmoreland Street, Freetown. The frequency was listed as 3116 kc/s (5 kW), although this should have read 3316, which was to be used for many years to come. The schedule was: Weekdays 0645-0800, 1200-1400, 1600-2245 (Sat 1200-2245); Sundays 0645-0800, 1030-1400, 1600-2245. Programmes consisted of relays of the BBC's General Overseas or West African Services, with local news at 2100. The station identification was "This is Freetown Calling" or "You are tuned to Freetown, the Sierra Leone Broadcasting Service".

TARGET BROADCAST TO SIERRA LEONE

COTTON TREE NEWS

Cotton Tree News is an independent radio production studio which started a daily FM service of live news and information broadcasts on 19 February 2007. Until late 2010 broadcasts were additionally relayed on shortwave for half hour each day via a transmitter either in the UK or Ascension Island. Directed by Fondation Hirondelle, Media for Peace and Human Dignity, Cotton Tree News is funded by DFID, the European Commission, Irish Aid and the Swiss Agency for Development and Cooperation.

SOMALIA

SOMALI BROADCASTING SERVICE - RADIO MOGADISHU

Somali Broadcasting Service - Radio Mogadishu, representing the last fully functioning government in Somalia, was last reported on shortwave in August 1991 on 7198v kHz. Since then there have been several shortwave radio stations in Somalia broadcasting in support of various clans and factions, peacekeeping operations, and more recently, the Transitional Federal Government.

The last shortwave stations heard from Somalia, with the exception of Radio Hage in Puntland (see below), were **Radio Shabelle** in Mogadishu and **Radio Baay** in Baidoa which were last reported in July 2006 and April 2007 respectively.

PUNTLAND

Puntland is a self-declared autonomous state in northeast Somalia. Unlike neighbouring Somaliland, it does not seek outright independence from Somalia.

RADIO HAGE (Radio Leader)

Radio Hage was established in 2007 in Galkayo with a format of news, music and education, with programmes produced independently. Radio Hage forbids the use of radio for promoting human hatred. In September 2010, Radio Hage had a test transmission on 6915 kHz that was heard by at least two DXers in Finland, Jari Savolainen and Mauno Ritola.

Transmitter Site: Galkayo - 1.25 kW.

Times/UTC	Language	Target	Frequencies/kHz
unconfirmed	Somali	Domestic	3980 6915

RADIO GALKAYO

Radio Galkayo is no longer heard on shortwave (last reported frequency 6980v kHz). Sam Voron says that in 2008 shortwave failed and was not repairable, leaving only a 1 kW FM transmitter.

TARGET BROADCASTS TO SOMALIA

RADIO DAMAL (VOICE OF THE SOMALI PEOPLE)

Radio Damal is a service for Somalia that was launched in November 2010. Its programmes are produced from the studios of KBC in Nairobi, Kenya, and it hires airtime on Babcock transmitters.

Transmitter Site: Dhabbaya, UAE - 250 kW; Woofferton, UK - 300 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0400-0700	Daily	Somali	Somalia and Somali-speaking region	15700-dha
1830-1930	Daily	Somali	Somalia and Somali-speaking region	11740-wof
1930-2130	Daily	Somali	Somalia and Somali-speaking region	11970-dha

RADIO HIRAD

Radio Hirad is operated by the Dutch-based Free Press Unlimited organisation.

Web: www.radiohirad.so

Transmitter Site: Talata-Volondry, Madagascar - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0430-0500	Daily	Somali	Somalia and Somali-speaking region	13750-mdg
1700-1730	Daily	Somali	Somalia and Somali-speaking region	11850-mdg

Note: shortwave transmissions will commence in March 2012

RADIO ERGO

Radio ERGO is the new name for the IRIN radio service that took effect on 1 July 2011 when the service was taken over by IMS Productions Aps, a non-profit organization with headquarters in Copenhagen, Denmark. A branch office of IMS Productions Aps has been opened in Nairobi, Kenya, to support and administer Radio ERGO. The service continues to broadcast daily humanitarian news and information in Somali. The word Ergo has great significance in the Somali language. It carries the essential meaning of mediators or envoys in the interest of people in need, and can also refer to those who mediate in conflicts.

(Source: IRIN, IMS Productions Aps via Media Network)

Web: www.irinnews.org (until the new Radio ERGO website is up and running)

Transmitter Site: Dhabbaya, UAE - 250 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0830-0930	Daily	Somali	Somalia and Somali-speaking region	17680-dha

RADIO FREEDOM

Radio Freedom is a programme produced in support of the Alliance for the Re-Liberation of Somalia.

Transmitter Site: via Eritrean radio, Asmara/Selea Daro - 100 kW.

Times/UTC Days Language Target Freq/kHz

1330-1400 Tue/Fri Somali Somalia see VOBME schedule under Eritrea for latest freqs

1730-1800 Tue/Fri Somali Somalia see VOBME schedule under Eritrea for latest freqs

RADIO BAR-KULAN

Radio Bar-Kulan ("Radio Meeting Place") was launched on 1 March 2010. It is a public service radio station broadcasting non-partisan news, information, culture, entertainment and development programmes to Somalia and the Somali Diaspora. It had broadcast on shortwave at 0500-0600 and 1600-1700 in Somali via transmitters in the UAE and South Africa, but these were discontinued from 1 January 2012. Per RBK, this follows a continuing reduction of audience and the need to expand their FM network within Somalia. Outside the country RBK is still available on Thaicom 5 satellite, and web streaming on the RBK website. **Web:** www.bar-kulan.com

SOMALILAND

RADIO HARGEISA

Radio Hargeisa is the national broadcasting station of the Republic of Somaliland. Radio Hargeisa was established in 1948, but in 1988 it was destroyed by the forces of Siyad Bare. In the years that followed it reportedly operated on various low-powered transmitters until a new shortwave transmitter was installed in early 2008 and regular transmissions commenced in March 2009 on 7145 kHz. However, since late 2009 it has not been heard on shortwave and is presumably inactive (see a separate feature about Radio Hargeisa on the website of the British DX Club, www.bdx.org.uk)

TARGET BROADCAST TO SOMALILAND

RADIO HORYAAL

Radio Horyaal is opposed to the Somaliland leadership and said to sympathise with Somaliland's main opposition party, Kulmiye. Radio Horyaal was brokered during 2005/06 by TDP and broadcast from a transmitter located in Russia. These broadcasts ended in October 2006. The next series of shortwave broadcasts from Dhabbaya, UAE (and later Meyerton, South Africa) were first mentioned in the WRTH May 2009 update, although the horyaal.net archives mention shortwave broadcasts having resumed as early as October 2008. Radio Horyaal appears to have been discontinued at the end of the A-10 season.

SOUTH AFRICA

SOUTH AFRICA BROADCASTING CORPORATION

The South African Broadcasting Corporation (SABC) is the state-owned broadcaster in South Africa. The SABC was established by an Act of Parliament in 1936 taking over from the African Broadcasting Company which had been responsible for some of the first radio broadcasts in South Africa in the 1920s. The SABC established services in what were then the country's official languages, English and Afrikaans, with broadcasts in ethnic languages such as Zulu, Xhosa, Sesotho and Tswana following later. The SABC's first commercial service, started in 1950, was known as Springbok Radio, broadcasting in English and Afrikaans. In 1966 the SABC also established an external service, known as Radio RSA. It is now known as Channel Africa. (Wikipedia)

RADIO SONDER GRENSE

Radio Sonder Grense (RSG), i.e. Radio Without Borders, is an Afrikaans language radio service run by the South African Broadcasting Corporation.

Address: Radio Sonder Grense, Private Bag X1, Auckland Park 2006, South Africa.

Web: www.rsg.co.za

Transmitter Site: Meyerton - 100 kW

Times/UTC	Days	Language	Target	Freq/kHz
0500-0700	Daily	Afrikaans	Domestic (Northern Cape)	7285
0700-1800	Daily	Afrikaans	Domestic (Northern Cape)	9650
1800-0500	Daily	Afrikaans	Domestic (Northern Cape)	3320

CHANNEL AFRICA

Channel Africa is the international radio service of the SABC. Channel Africa evolved out of Radio RSA. Radio RSA broadcast news and opinion programming, which was often propaganda aimed at defending the apartheid regime. In 1992, following the fall of apartheid, the service was renamed Channel Africa.

Address: Channel Africa, PO Box 91313, Auckland Park 2006, South Africa.

Web: www.channelafrica.org

Transmitter Site: Meyerton - 100/250/500 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0300-0400	Mon-Fri	English	East & Central Africa	6155
0300-0500	Mon-Fri	English	Southern Africa	3345
0500-0800	Mon-Fri	English	Southern Africa	7230
0600-0700	Mon-Fri	English	West Africa	15255
0800-1200	Mon-Fri	English	Southern Africa	9625
1200-1300	Mon-Fri	Nyanja	Southern Africa	9625
1300-1400	Mon-Fri	Lozi	Southern Africa	9625
1400-1500	Mon-Fri	Portuguese	Southern Africa	9625
1500-1600	Mon-Fri	English	Southern Africa	9625
1500-1600	Mon-Fri	Swahili	East Africa	17770
1600-1700	Mon-Fri	French	West Africa	15235
1700-1800	Mon-Fri	English	West Africa	15235

MEYERTON TRANSMITTING STATION

Operated by Sentech, the signal distributor for the South African broadcasting sector. The organisation began operations in 1992 as the signal distributor of the South African Broadcasting Corporation. Sentech's mandate also included providing services to M-Net, Radio 702, Radio Ciskei, Radio Transkei and the Bophuthatswana Broadcasting Corporation. However, in its Triple Inquiry report that was published in August 1995, the Independent Broadcasting Authority (IBA) recommended that Sentech should be split from the SABC and that Sentech become a public company. This report was approved by the South African Parliament in March 1996 and the Sentech Act to implement these measures was adopted by Parliament in November of the same year. Sentech now operates as a commercial enterprise that is owned by the Government of South Africa via the South African Ministry of Communications and has its own board of directors. (Wikipedia)

Address: Sentech, Private Bag X06, Honeydew, 2040

Web: www.sentech.co.za

Transmitter Site: Meyerton - 100/250/500 kW

Times/UTC	Days	Station	Language	Target	Freq/kHz
0300-0400	Daily	BBC	English	Central Africa	6140
0300-0600	Daily	BBC	English	Southern Africa	3255 6190
0330-0345	Fri-Mon	TWR-Africa	Amharic	Horn of Africa	7215
0330-0345	Tue	TWR-Africa	Oromo	Horn of Africa	7215
0330-0345	Wed/Thu	TWR-Africa	Sidamo	Horn of Africa	7215
0400-0600	Daily	Adventist World R	Arabic	N Africa/Midde East	15480
0400-0500	Daily	BBC	English	Central Africa	11860
0400-0500	Daily	R Okapi	French	DR Congo	11690
0430-0500	Daily	R France Int	Swahili	East Africa	7215 9835
0500-0700	Daily	BBC	English	Central Africa	15400
0500-0559	Sat	BBC	Kirundi/Kinyarw.	Great Lakes	11925
0500-0700	Daily	R France Int	French	West Africa	11605
0529-0559	Sun	BBC	Kirundi/Kinyarw.	Great Lakes	11925
0530-0600	Daily	R France Int	Swahili	East Africa	9835 11790
0600-1500	Daily	BBC	English	Southern Africa	6190 12095
0600-0700	Daily	R France Int	Portuguese	West Africa	15170
0600-0700	Daily	Voice of America	English	West/Central Africa	9885
0700-0800	Daily	BBC	English	Central Africa	17830
0700-0729	Daily	BBC	French	Central Africa	17780
0700-0800	Daily	R France Int	French	West Africa	15170
0800-0900	Sun	SA Radio League	English	Southern Africa	7205
0800-0900	Sun	SA Radio League	English	East Africa	17760
1200-1300	Daily	R France Int	French	Central Africa	17660

1400-1500	Daily	Voice of America	English	West/Centrel Africa	15580
1500-1600	Daily	BBC	English	Southern Africa	6190 9490
1500-1600	Daily	R France Int	Swahili	East Africa	12015 15310
1530-1700	Daily	Voice of America	English	West/Central Africa	6080
1557-1627	Mon-Fri	TWR-Africa	Kirundi	Great Lakes	9675
1600-2200	Daily	BBC	English	Southern Africa	3255 6190
1600-1700	Daily	Family R	Malagasy	Madagascar	6175
1600-1630	Sat	Voice of America	Kirundi/Kinyarw.	Great Lakes	11750
1600-1700	Daily	Zimbabwe CR	English	Southern Africa	5890
1625-1640	Sun	TWR-Africa	Somali	Horn of Africa	9660
1625-1655	Mon-Fri	TWR-Africa	Somali	Horn of Africa	9660
1630-1700	Mon-Fri	BBC	Kirundi/Kinyarw.	Great Lakes	11860
1630-1700	Fri	Voice of America	Portuguese	Southern Africa	9880
1630-1730	Mon	SA Radio League	English	Southern Africa	4895
1700-1730	Daily	Adventist World R	Swahili	East Africa	11925
1700-1900	Daily	BBC	English	East Africa	17640
1700-1800	Daily	Family R	French	Madagascar	5925
1700-1900	Daily	SW Radio Africa	English	Southern Africa	4880
1718-1733	Daily	TWR-Africa	Yao	Southern Africa	7265
1730-1800	Daily	Adventist World R	Masai	East Africa	11925
1730-1800	Daily	IBRA R	Somali	Horn of Africa	11740
1800-1830	Daily	Adventist World R	English	Southern Africa	3215 3345
1800-1830	Daily	BBC	French	Indian Ocean Is.	7465
1800-1900	Daily	Family R	English	Southern Africa	5890
1800-1900	Daily	Voice of America	Amharic	Horn of Africa	11905
1830-1900	Daily	Adventist World R	English	East Africa	11830
1830-1900	Mon-Fri	BBC	Kirundi/Kinyarw.	Great Lakes	7425
1900-1930	Daily	Adventist World R	Fulani	West Africa	15240
1900-2100	Daily	Adventist World R	Arabic	N Africa/Middle East	15480
1900-1930	Daily	R France Int	Portuguese	West Africa	5945
1900-2000	Daily	Family R	Portuguese	Southern Africa	3955 5935
1900-2000	Daily	Family R	English	Southern Africa	3230
1900-2000	Daily	Family R	English	West/Central Africa	9885
1900-2000	Daily	Family R	Swahili	East Africa	5850
1930-2000	Daily	Adventist World R	Ibo	West Africa	11750
1930-2030	Daily	RTE	English	Central Africa	5820
1930-2000	Daily	Deutsche Welle	Portuguese	Southern Africa	12045
2000-2030	Daily	Adventist World R	French	West Africa	11755
2000-2030	Fri	BBC	Hausa	West Africa	15105
2030-2100	Daily	Adventist World R	Yoruba	West Africa	11755
2030-2100	Mon-Fri	Voice of America	Hausa	West Africa	11860
2200-2300	Daily	BBC	English	West Africa	6190

SOUTH SUDAN

RADIO PEACE

Radio Peace's lead organisations are Educational Media Corporation and the Persecution Project Foundation, along with various other support groups.

Address: Educational Media Corporation, PO Box 905, Spotsylvania, VA 22553, USA, and Persecution Project Foundation, PO Box 1327, Culpeper, VA 22701-6327, USA.

Web: www.edmedia.org and www.persecutionproject.org

Transmitter Site: Southern Sudan - 1 kW on 4740 kHz and 4 kW on 5895 kHz.

Note: at the time of editing both 4740 kHz (Service for Southern Sudan and Southern Darfur) and 5895 kHz (Service for the Nuba Mountains and Northern Sudan) are believed to be inactive. This may be partly explained by an item from October 2009 that Jari Savolainen found at www.globalendeavor.org which said that a move was under way to relocate Radio Peace from a border area in the arid bush where it has operated since 2003 to Juba. This involved moving three radio transmitters, antenna systems, towers, generators, and studio equipment. It appears that Radio Peace has not been heard on shortwave since this proposed relocation began.

TARGET BROADCASTS TO SOUTH SUDAN

VOICE OF AMERICA - SOUTH SUDAN IN FOCUS

Voice of America's "Sudan in Focus" programme (now called "South Sudan in Focus") was first aired on 23 September 2010 and VOA's expansion of its Sudan programming reflects growing US interest in South Sudan.

Web: www.voanews.com/sudan

Transmitter Sites: Moepeng Hill - 100 kW; Wertachtal, Germany - 250 kW.

Times/UTC Days Language Target Freq/kHz

1630-1700 Mon-Fri Sudanese English Sudan 9790-bot 11905-wer 13635-wer

Past target broadcast to South Sudan:

The Southern Sudan Interactive Radio Instruction (SSIRI) Project was launched in 2005. SSIRI was an integrated programme of the Ministry of Education, Science & Technology, Southern Sudan and was funded by USAID, the United States Agency for International Development, and administered by EDC, Education Development Center. SSIRI focused on the effective use of radio for delivering high-quality education programmes to children, youth and adults. Programmes were relayed via Dhabbaya (UAE), Kigali (Rwanda) and Meyerton (South Africa). Broadcasts on shortwave were discontinued during the B-08 season.

SUDAN

SUDAN RADIO AND TELEVISION CORPORATION - SUDAN RADIO

SRTC is the state-controlled broadcasting service in Sudan with main studios in Omdurman.

Address: SRTC, PO Box 572, Omdurman, Sudan.

Web: sudanradio.info (audio available at sudanradio.info/media)

Transmitter Site: Omdurman (Al-Aitahab) - 100 kW.

Times/UTC Days Programme Language Target Freq/kHz

0200-1300 Daily General Programme Arabic Domestic 7200

1300-2100 Daily Radio As-Salam (Peace) Arabic Domestic 7200

Note: schedule as per WRTH 2012. Observations by DXers indicates that Sudan Radio has been heard between 0235v-0430 and 1500-2100.

Radio Omdurman, the external service from Sudan which included programmes in English and French, has not been heard on shortwave since late 2000/early 2001.

TARGET BROADCASTS TO SUDAN

SUDAN RADIO SERVICE

Sudan Radio Service (SRS) was developed by the Education Development Center (EDC), a US non-governmental organization that specialises in distance learning. SRS is supported by the USAID. The project duration is 2003-2011. Sudan Radio Service (SRS) is Sudan's first independent broadcast provider of news and information. SRS works in English, Arabic, and several other Sudanese languages, and focuses exclusively on issues and events in Sudan.

Address: Sudan Radio Service, PO Box 4392, 00100 Nairobi, Kenya.

Web: www.sudanradio.org

Transmitter Sites: Dhabbaya, UAE - 250 kW; Wofferton, UK - 300 kW.

Times/UTC Days Language Target Freq/kHz

0400-0500 Daily English/Arabic/local languages South Sudan 13720-dha

1500-1700 Daily English/Arabic/local languages South Sudan 17745-wof

SUDAN RADIO SERVICE - DARFUR PROGRAMME

This is separate from the main Sudan Radio Service and is for the troubled Darfur region of Sudan.

Transmitter Sites: Meyerton, South Africa - 100 kW; Ascension - 250 kW.

Times/UTC Days Language Target Freq/kHz

0400-0500 Sat-Thu Arabic/Vernaculars Darfur/Sudan 11800-dha

1600-1700 Sat-Thu Arabic/vernaculars Darfur/Sudan 15500-wof

MIRAYA FM

Miraya FM (Mirror FM) was launched on 30 June 2006 and is operated in partnership between the United Nations Mission in Sudan and Swiss journalists' organisation Fondation Hirondelle. They have studios in Juba and Khartoum and broadcast on 101 FM for Juba with several FM relay transmitters across Southern Sudan. As a result of the Sudanese government's reluctance to grant a licence to operate elsewhere in Sudan, Miraya FM started a regular shortwave service on 25 October 2007 via an IRRS-brokered transmitter believed to be located in Slovakia. As of A-11 transmissions are brokered by TDP via a transmitter at Simferopol in Ukraine.

Address: Miraya FM, PO Box 69, Khartoum, Sudan.

Web: www.mirayafm.org

Transmitter Site: Simferopol, Ukraine - 250 kW(0300-0600)

Times/UTC	Days	Language	Target	Freq/kHz
0300-0600	Daily	Arabic/English/Sudanese languages	Sudan	11560-smf

RADIO AFIA DARFUR

Afia Darfur, an all-news and information programme, is operated from the MBN (Middle East Broadcast Network) facility in Virginia and is funded by a grant from the US State Department to the BBG (Broadcasting Board of Governors - U.S. Congress). It began broadcasting to Darfur and eastern Chad on 29 September 2008 and focuses on the latest news from Darfur and the plight of its internally displaced people and Darfuri refugees in eastern Chad and the diaspora. The daily programme includes interviews with American officials, human rights experts, analysts, Sudanese experts, rebel representatives, refugees, IDPs and NGO representatives, as well as internally displaced people living in Darfur, providing them with an opportunity to speak out about the humanitarian crisis, and granting a forum for those with no voice. Additionally, the programme addresses how the Western press is covering Darfur; as well as examining the rich history and cultural background of Darfur.

Web: afiadarfur.com

Transmitter Site: Iranawila, Sri Lanka - 250 kW; Moepeng Hill, Botswana - 100 kW;

Pinheira Sao Tome - 100 kW; Santa Maria di Galeria, Vatican - 250 kW; Wertachtal, Germany - 250 kW

Times/UTC	Days	Language	Target	Freq/kHz
0300-0330	Daily	Arabic	Darfur/Sudan	5885-smg 7275-sao 9845-bot
1800-1830	Daily	Arabic	Darfur/Sudan	9805-wer 11615-smg 11975-ira
1900-1930	Daily	Arabic	Darfur/Sudan	9780-smg 9815-wer 11975-sao

RADIO DABANGA

Radio Dabanga is part of the Radio Darfur Network, an initiative of Darfur Journalists to provide independent news and relevant information to the population of Darfur. It is led by Press Now, which aims to promote the development of open and democratic societies, by supporting independent media in regions of conflict and countries in transition. It commenced shortwave transmissions in November 2008.

Address: Press Now, Witte Kruislaan 55, 1217 AM Hilversum, The Netherlands.

Web: www.radiodabanga.org

Transmitter Sites: Talata Volondy, Madagascar - 250 kW; Dhabbaya, UAE - 500 kW; Issoudun, France - 500 kW.

Times/UTC	Days	Languages	Target	Freq/kHz
0430-0600	Daily	Arabic/Darfur Arabic/Fur/Massalit/Zaghawa	Sudan	7315-iss 11940-iss 13800-dha
1530-1630	Daily	Arabic/Darfur Arabic/Fur/Massalit/Zaghawa	Sudan	13800-mdc 15535-wer

RADIO TAMAZUJ

Radio Tamazuj is an initiative of Free Press Unlimited and produces a special programme for people in the conflict areas between North and South Sudan, such as Abyei, Blue Nile and South Kordofan. Tamazuj means "across the border". Since November 2011 they have produced half an hour per week within the Radio Dabanga time slot, which from 5 January 2012 became a separate programme under the name of Radio Tamazuj for half an hour a day from 0400 to 0430 before the existing Radio Dabanga transmissions.

Web: www.radiotamazuj.org

Times/UTC	Days	Languages	Target	Freq/kHz
0400-0430	Daily	Arabic/Darfur Arabic/Fur/Massalit/Zaghawa	Sudan	7315-iss 11940-iss 13800-dha

Note: test transmissions started on 29 December 2011.

VOICE OF SUDAN - VOICE OF DEMOCRACY AND PEACE (operated by the National Democratic Alliance) began broadcasting from Eritrea in August 1995 (there had been a previous series of broadcasts by the NDA from Ethiopia in 1990-91). Transmissions appeared to be suspended or at least reduced for a while when relations between Sudan and Eritrea improved in 1999 and 2000. The station was again heard briefly in 2003. It was thought that the transmitter originally used by the NDA for broadcasts to Sudan was the same one heard on 8000 kHz during 2008 for Eritrean radio broadcasts hostile to Ethiopia. This frequency had also been used by the Voice of Sudan.

VOICE OF FREEDOM AND RENEWAL, VOICE OF NEW SUDAN broadcasts were last heard in 2003. Having started in April 1998 as the "Voice of Freedom and Renewal, voice of the Sudan Alliance Forces, voice of the popular armed uprising", transmissions were intermittent until 2003 when the station had a run on 6985 kHz before presumably being closed.

SWAZILAND

TWR SWAZILAND

TWR Swaziland went on air on 1 November 1974 and broadcasts Christian programming to Africa.

Address: TWR, PO Box 64, Manzini, Swaziland or TWR-Africa, PO Box 4232, 1620 Kempton Park,

Web: www.twr.org.za and www.twrafrica.org

South Africa.

Transmitter Site: Mpangela Range - 25/50/100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0255-0310	Sat	Ndebele	Southern Africa	3200
0255-0325	Daily	Shona	Southern Africa	3240
0255-0325	Mon-Fri	Ndebele	Southern Africa	3200
0255-0325	Sun	English	Southern Africa	3200
0325-0340	Daily	Ndau	Southern Africa	3240
0330-0400	Daily	English	Southern Africa	3200
0342-0357	Daily	Lomwe	Southern Africa	4775
0400-0430	Daily	Chewa	Southern Africa	5995
0400-0430	Daily	German	Southern Africa	3200 4775
0430-0445	Sat/Sun	Chewa	Southern Africa	5995
0430-0500	Mon-Fri	English	Southern Africa	3200 4775
0430-0500	Sat/Sun	German	Southern Africa	3200 4775
0500-0800	Daily	English	Southern Africa	4775 6120
1355-1425	Sat	Makhuwa	Southern Africa	7315
1355-1425	Sun	Portuguese	Southern Africa	7315
1400-1415	Daily	Urdu	South-West Asia	15360
1425-1455	Daily	Portuguese	Southern Africa	7315
1425-1455	Daily	English	Southern Africa	6025
1440-1525	Sat	French	Indian Ocean Islands	9585
1455-1510	Sun	Makhuwa	Southern Africa	7315
1455-1525	Daily	Ndebele	Southern Africa	6025
1455-1525	Sun-Fri	Malagasy	Madagascar	9585
1510-1555	Sun	Chuwabu	Southern Africa	7315
1525-1555	Mon-Fri	Ndebele	Southern Africa	6025
1525-1625	Sat/Sun	English	Southern Africa	6025
1545-1615	Sun	Shangaan	Southern Africa	4760
1555-1625	Daily	Shona	Southern Africa	6025
1557-1627	Mon-Fri	Kirundi	Great Lakes	15105
1600-1615	Mon-Fri	ChiChewa	Southern Africa	6130
1600-1630	Mon-Fri	Tshwa	Southern Africa	4760
1600-1630	Sat	Ndau	Southern Africa	4760
1600-1630	Sun/Mon	ChiChewa	Southern Africa	6130
1615-1630	Tue	Bemba	Southern Africa	6130
1615-1645	Sun	Ndau	Southern Africa	4760
1630-1645	Mon/Thu	Portuguese	Southern Africa	4760
1630-1645	Tu/We/Fr/Sa	Shangaan	Southern Africa	4760
1630-1645	Fri/Sat	Kambaata	Horn of Africa	9500
1630-1700	Sun-Tue	Oromo/Borana	Horn of Africa	9500

1630-1745	Wed/Thu	Oromo	Horn of Africa	9500
1645-1700	Fri/Sat	Hadiya	Horn of Africa	9500
1645-1700	Daily	Ndau	Southern Africa	3200
1700-1715	Sun	Amharic	Horn of Africa	9500
1700-1730	Mon-Sat	Amharic	Horn of Africa	9500
1700-1745	Daily	Swahili	East Africa	9475
1700-2000	Daily	English	Southern Africa	3200
1715-1745	Sun	Oromo	Horn of Africa	9500
1730-1800	Mon-Fri	Oromo	Horn of Africa	9500
1730-1800	Sat	Amharic	Horn of Africa	9500
1745-1815	Sat/Sun	Swahili	East Africa	9475
1750-1820	Mon-Fri	Umbundu	Southern Africa	6130
1800-1830	Daily	English	East Africa	9500
1820-1835	Daily	Chokwe	Southern Africa	6130
1830-1900	Mon	Swahili	East Africa	9500
1830-1900	Tue-Sun	English	East Africa	9500
1835-1850	Daily	Umbundu	Southern Africa	6130
1850-1905	Mon	Luvale	Southern Africa	6130
1850-1905	Sat	Portuguese	Southern Africa	6130
1850-1905	Tue-Fri/Sun	KiKongo	Southern Africa	6130
1905-1920	Mon/Tue	Portuguese	Southern Africa	6130
1905-1920	Wed	Luchazi	Southern Africa	6130
1905-1920	Thu	Luvale	Southern Africa	6130
1905-1920	Fri	Fiote	Southern Africa	6130
1905-1920	Sat	Lunyaneka	Southern Africa	6130
1905-1920	Sun	Kwanyama	Southern Africa	6130
1905-1935	Daily	Lingala	Central Africa	9450
1920-1950	Daily	Portuguese	Southern Africa	6130
1935-1950	Daily	French	Central Africa	9450
1950-2005	Daily	Kimbundo	Southern Africa	6130
1950-2020	Sat	French	Central Africa	9450
2000-2030	Sat	English	Southern Africa	3200
2005-2020	Sun	Portuguese	Southern Africa	6130

SWAZI COMMERCIAL RADIO

Swazi Commercial Radio was a radio station that was set up by an American firm, Intermedia, that went on air in 1972 with studios in Johannesburg and mediumwave/shortwave transmitters at Sandlane in Swaziland. It initially had a commercial format broadcasting American contemporary music to South Africa and Mozambique, but was soon sold to South African entrepreneurs, Issie and Natie Kirsch, who changed the name to **Swazi Music Radio** and went into competition with Mozambique-based commercial station, LM Radio. SMR continued to broadcast until 1978 before becoming **Swaziland Commercial Radio (Pty) Ltd** and operating several services on mediumwave and shortwave, including **Radio SR** (African Service), **Radio Truro** (Indian), and **Radio Paralelo 27** (Portuguese), as well as hiring airtime for religious and music services. The station continued to use shortwave throughout the 1990's. In January 2001, Hans Johnson of Cumbre DX quoted Dario Bettencourt, station director of Radio Lusofonia, a Portuguese-language Christian broadcaster, as saying that Radio Cidade (a previous user of the shortwave transmitter) and SCR had been sold to the Universal Church of the Kingdom of God, a Brazil-based organisation that owned radio and TV stations in several countries. However, by then the shortwave transmitter was already silent and has not been heard of since. SCR was last on 6155 kHz.

TANZANIA

RADIO TANZANIA

Radio Tanzania (now known as TBC), Dar-es-Salaam, is inactive on shortwave. The last shortwave frequencies reported were 5050v and 6105v kHz. In the late 1980's, for example, shortwave transmitters had carried both the domestic National and Commercial services, as well as a special Schools Service.

Radio Tanzania External Service was discontinued in the early 1990's. This had also at one time or another carried programming on behalf of South Africa's ANC and Namibia's SWAPO movements.

TOGO

RADIODIFFUSION TOGOLAISE

Radiodiffusion Togolaise (Radio Lome) is inactive on shortwave. It's last reported frequencies were 5047 kHz (morning and evening) and 7265 kHz (daytime). The station was last reported in 2003.

RADIO KARA

The regional station Radio Kara is also inactive (3222/6155 kHz).

Togo acquired its first broadcast transmitter in 1954, which went on the air 10 hours a week with 200 w. of power. By 1961, the year following independence, Togo's strongest transmitter had a power of 4 kw., but it could still reach only a fifth of the population. A license fee of about \$4 a year imposed in 1961 did nothing to encourage set buying, and an attempt to develop a wired rediffusion system in Lome, the capital, attracted only 150 customers at a subscription rate of over \$16 a year. Later, West Germany donated a 100 kW mediumwave transmitter, in keeping with its policy of assisting former colonies. It went on the air in 1964. (Broadcasting in Africa, Sydney W Head)

TARGET BROADCAST TO TOGO

RADIO TOGO LIBRE

For a short time in 2003, Radio Togo Libre was heard on shortwave as a target station in support of Togolese opposition groups with transmissions via Meyerton, South Africa.

TRISTAN DA CUNHA

Tristan da Cunha was served by a 40 watt shortwave transmitter, but **Radio Tristan da Cunha** left shortwave in 1991 in favour of FM only. The local radio station on the island is now called **Atlantic FM** (see www.tristandc.com/newscommunications.php)

TUNISIA

RADIO TUNISIENNE

Radio Tunisienne is the state-controlled broadcasting service in Tunisia. The shortwave service consists of a relay of the National Channel in Arabic.

Address: RTT, 71 Avenue de la Liberte, 1070 Tunis, Tunisia.

Web: www.radiotunisienne.tn

Transmitter Site: Sfax - 250/500 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0300-0506	Daily	Arabic	North Africa/Middle East	9725 12005
0400-0626	Daily	Arabic	Europe	7275
0600-0806	Daily	Arabic	North Africa	7335
1600-2006	Daily	Arabic	North Africa/Middle East	9725 12005
1700-2106	Daily	Arabic	Europe	7225
1900-2306	Daily	Arabic	North Africa	7345

UGANDA

UBC RADIO

UBC (Uganda Broadcasting Corporation) Radio is the public broadcaster of Uganda.

Address: Radio Uganda, PO Box 7145, Kampala, Uganda.

Transmitter Site: Kampala - 10 kW.

Red Channel

Times/UTC	Days	Language	Target	Freq/kHz
0215-0600	Daily	English/Vernaculars	Domestic	4976
0600-1300	Daily	English/Vernaculars	Domestic	7195
1300-2105	Daily	English/Vernaculars	Domestic	4976

UBC Radio Blue Channel on shortwave is inactive (ex-5026/7110 kHz).

Radio Uganda operated an external service in the early 1980's using two 250 kW shortwave transmitters located at Soroti. However, this service was inactive by the end of the decade.

DUNAMIS SHORTWAVE

Dunamis Shortwave was constructed in 1996 and broadcasts Christian programming to Uganda and Southern Sudan.

Address: High Adventure Gospel Communications Ministries, PO Box 425, Station "E", Toronto,

Web: www.biblevoice.org/stations/east-africa

Canada, M6H 4E3

Transmitter Site: Mukono - 1 kW.

Times/UTC	Days	Language	Target	Freq/kHz
1500-1900	Daily	English/Vernaculars	Uganda/Southern Sudan	4750

PAST TARGET BROADCASTS TO UGANDA

RADIO RHINO INTERNATIONAL-AFRICA

Radio Rhino was a Ugandan-opposition radio station broadcasting to Uganda from a hired-transmitter in Germany, has not been heard since the end of March 2006. The station's website at www.rdiorhino.org was last updated on 10 February 2007.

RADIO NDIWULIRA

Radio Ndiwulira had a twice weekly (Tue/Sat at 1700-1730) broadcast in Luganda to Uganda that was brokered by TDP from a shortwave transmitter at Samara, Russia. The first broadcast was on 21 May 2011 and was cancelled in September 2011.

NGOMA RADIO

Ngoma Radio was a programme in Luganda of the Canadian-based Bible Voice Broadcasting Network. A broadcast at 1900 began on 30 April 2011, and one at 1700 was added on 14 May 2011, both from Issoudun, France.

REDIYO Y'ABAGANDA (ABABAKA)

The Ababaka website at www.ababaka.com describes itself as the "Website of the Brothers and Sisters of God" and supports the Baganda people "to achieve a peaceful stable territory, that, according to all laws of nature, will bond readily with others to build a strong Africa". Rediyo Y'abaganda launched its shortwave service in April 2010, with transmissions brokered by Media Broadcast from Issoudun in France, and they were cancelled in the early part of 2012, although the last one may have been sometime in October/November 2011.

WESTERN SAHARA

NATIONAL RADIO OF THE SAHARAN ARAB DEMOCRATIC REPUBLIC

Operated by the Polisario Front in support of independence for Western Sahara. National Radio of the Saharan Arab Democratic Republic began shortwave transmissions in 1993. The shortwave transmitter is located in the south-western Algerian town of Tindouf, near to the border with Western Sahara.

Address: Polisario Front, BP 10, El Mouradia, Algiers, Algeria.

Web web.jet.es/rasd

Transmitter Site: Tindouf, Algeria.

Shortwave transmissions were last heard on 6297 kHz have not been reported since June 2011, presumably due to a transmitter problem. The station continues to be heard on mediumwave 1550 kHz with the following schedule:

Times/UTC	Days	Language	Target	Freq/kHz
0600-1300	Daily	Arabic	North-West Africa	1550
1700-2300	Daily	Arabic	North-West Africa	1550
2300-2330	Daily	Spanish	North-West Africa	1550

ZAMBIA

ZAMBIA NATIONAL BROADCASTING CORPORATION - RADIO ZAMBIA

ZNBC is the state-controlled broadcasting service of Zambia. The Zambia National Broadcasting Corporation was reported back on air in December 2010 after several months off due to a technical problems with the transmitters.

Address: ZNBC, Mass Media Complex, Alick Nkhata Road, PO Box 50015, Lusaka, Zambia.

Web: www.znbc.co.zm

Transmitter Site: Lusaka - 50/100 kW.

Radio 1

Times/UTC	Days	Language	Target	Freq/kHz
0245-2205	Daily	Vernaculars	Domestic	5915

Note: News in English (relay of Radio 2) at 0500, 0600(Mon-Sat), 1115 and 1800.

Radio 2

Times/UTC	Days	Language	Target	Freq/kHz
0245-2205	Daily	English	Domestic	6165

Radio Zambia External Service was discontinued in the early 1990's due to lack of funds.

RADIO CHRISTIAN VOICE - THE VOICE AFRICA

Radio Christian Voice began broadcasting on 1 December 1994. The station carries Christian teachings and programmes on farming, education, health and children's affairs. Programming is mainly in English. The station operates from a farm 35 km outside Lusaka

Address: Christian Voice, Private Bag E606, Lusaka, Zambia, or
Christian Vision, PO Box 3040, West Bromwich, West Midlands, B70 0EJ, UK.

Web: www.christianvision.com or www.voiceafrica.net

Transmitter Site: Lusaka - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0500-1700	Daily	English	Southern Africa	6065
1700-2200	Daily	English	Southern Africa	4965 - 1Africa broadcast at this time (see below)
2200-0500	Daily	English	Southern Africa	4965

1AFRICA - CVC AFRICA

1Africa Radio is a Christian radio station that broadcasts live via shortwave, satellite and FM/community radio stations over the continent of Africa. Shortwave broadcasts from Zambia commenced in late 2008.

Address: 1Africa, PO Box 3933, Tygervalley 7536, South Africa, or
Christian Vision, PO Box 3040, West Bromwich, West Midlands, B70 0EJ, UK

Web: www.1africa.tv

Transmitter Site: Lusaka - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
0600-2000	Daily	English	West Africa	17695
1700-2200	Daily	English	Southern Africa	4965
2000-2200	Daily	English	West Africa	13590

ZANZIBAR

VOICE OF TANZANIA-ZANZIBAR

Voice of Tanzania-Zanzibar is the state-run broadcasting station of Zanzibar.

Transmitter Site: Dole - 50 kW.

UTC	Days	Language	Target	Freq/kHz
0300-0600	Daily	Swahili	Domestic	6015 - irregular
1500-2100	Daily	Swahili	Domestic	11735 - inactive

Note: Shortwave transmissions are currently irregular/inactive. Until heard by Dan Sheedy and Ron Howard on 15 September 2010 during the morning transmission on 6015 kHz, Voice of Tanzania-Zanzibar had been off-air on shortwave since early December 2009 due to problems with the power supply system on Zanzibar. Since then the morning transmission has been reported only irregularly.

ZIMBABWE

ZIMBABWE BROADCASTING CORPORATION - RADIO ZIMBABWE

The Zimbabwe Broadcasting Corporation (ZBC) is the state-controlled broadcaster in Zimbabwe. It succeeded the Zimbabwe Rhodesia Broadcasting Corporation (ZRBC) in 1980, which in turn had succeeded the Rhodesian Broadcasting Corporation (RBC) in 1979.

Address: ZBC, Broadcasting Centre, Pockets Hill, PO Box HG444, Highlands, Harare, Zimbabwe.

Web: www.zbc.co.zw

Transmitter Site: Gwelo - 100 kW.

Radio Zimbabwe

Times/UTC	Days	Language	Target	Freq/kHz
daytime	Daily	Shona/Ndebele/English	Domestic	6045
nighttime	Daily	Shona/Ndebele/English	Domestic	3396

VOICE OF ZIMBABWE

Voice of Zimbabwe is the official external service from Zimbabwe first heard during 2007. However, it was officially launched on 30 July 2010. It is described by the government as a service to provide "news, music, sports, Zimbabwe's cultural heritage, political and economic debates", "would cater for all Zimbabweans within the country and abroad" and "would give the Zimbabwean story as it is". Voice of Zimbabwe news programming has in the past been observed Monday-Friday at 1600-2000 UTC only, with the remainder of the time filled with continuous music.

Address: Voice of Zimbabwe, 24 Seven Steet, Gweru, Zimbabwe.

Transmitter Site: Gwelo - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
daytime	Daily	English	Southern Africa	5975
nighttime	Daily	English	Southern Africa	4828

TARGET BROADCASTS TO ZIMBABWE

RADIO VOICE OF THE PEOPLE

Independent station financed by Soros Foundation, USIA Zimbabwe Forum, and Dutch foundation HIVOS

Address: Radio Voice of the People, PO Box 5750, Harare, Zimbabwe.

Web: www.vopradio.co.zw

Transmitter Site: Talata-Volondry, Madagascar - 50 kW

Times/UTC	Days	Language	Target	Freq/kHz
0400-0500	Daily	English/Shona/Ndebele	Zimbabwe	11610
1600-1630	Daily	English/Shona/Ndebele	Zimbabwe	9345
1800-1900	Daily	English/Shona/Ndebele	Zimbabwe	9345

SW RADIO AFRICA

Independent radio station financed by London-based Zimbabwean exiles.
2001.

Address: SW Radio Africa Ltd, PO Box 243 Borehamwood, Herts, WD6 4WA, UK.

Web: www.swradioafrica.com

Transmitter Sites: Meyerton, South Africa - 100 kW.

Times/UTC	Days	Language	Target	Freq/kHz
1700-1900	Daily	English	Zimbabwe	4880

ZIMBABWE COMMUNITY RADIO

Zimbabwe Community Radio aims to provide a channel for communication on economic, political, social, cultural, and developmental issues that confront the Zimbabwean community.

Transmitter Site: Meyerton, South Africa - 100 kW

Times/UTC	Days	Language	Target	Freq/kHz
1600-1700	Daily	English/Ndebele/Shona	Zimbabwe	5890

Note: the current schedule replaced 1755-1855 on 4895 kHz from 1 January 2011.

VOICE OF AMERICA - STUDIO 7

Studio 7 has been providing Zimbabwe with objective and balanced radio news since 2003. It broadcasts up-to-the-minute reports on Zimbabwean politics, the economy, health, society, sports and the best Zimbabwean music.

Address: Studio 7, VOA Africa Division, 330 Independence Ave., SW, Washington, DC 20237, USA.

Web: www.voanews.com/english/africa/zimbabwe

Transmitter Sites: Moepeng Hill , Botswana - 100 kW; Talata Volondry, Madagascar - 250 kW; Pinheira, Sao Tome - 100 kW

Days	Times/UTC	Language	Target	Freq/kHz
Mon-Thu	1700-1730	Shona	Zimbabwe	4930-bot 12080-mdg 15775-sao
	1730-1800	English	Zimbabwe	4930-bot 12080-mdg 15775-sao
	1800-1830	Ndebele	Zimbabwe	4930-bot 12080-sao 15775-sao
Fri-Sun	1700-1720	Shona	Zimbabwe	4930-bot 12080-mdg 15775-sao
	1720-1740	English	Zimbabwe	4930-bot 12080-mdg 15775-sao
	1740-1800	Ndebele	Zimbabwe	4930-bot 12080-mdg 15775-sao
Fri	1800-1810	Shona	Zimbabwe	4930-bot 12080-sao 15775-sao
	1810-1820	English	Zimbabwe	4930-bot 12080-sao 15775-sao
	1820-1830	Ndebele	Zimbabwe	4930-bot 12080-sao 15775-sao
Mon-Fri	1830-1900	English - LiveTalk	Zimbabwe	4930-bot 12080-sao 15775-sao

BRITISH DX CLUB

AFRICA ON SHORTWAVE

FEBRUARY 2012

Compiled by Tony Rogers with thanks to Dave Kenny, Chris Greenway, Alan Pennington and members of the British DX Club.

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Please send corrections and up-dates by email to: tony@bdxc.org.uk

AFRICALIST

For a complete and up-to-date frequency-order list of Sub-Saharan African radio stations broadcasting on shortwave, see Thorsten Hallman's highly recommended "africalist" at www.africalist.de.ms

DX LISTENING DIGEST

For the very latest shortwave news visit Glenn Hauser's World of Radio at www.worldofradio.com

BC-DX - WORLDWIDE DX CLUB TOP NEWS

Another excellent source for the very latest shortwave news is Wolfgang Büschel's BC-DX Top News which can be found on the website of the Worldwide DX Club at www.wwdx.com