



# **CAMTEL-MOBILE 2023 INTERCONNECTION CATALOGUE**

- Offering for  
**Concession operators**

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## I. Introduction

This CAMEROON TELECOMMUNICATIONS (CAMTEL) interconnection and access catalogue for the operation of the company's Mobile Licence (CAMTEL-Mobile) falls within the framework of the provisions of Law No. 2010/013 of 21 December 2010 governing electronic communications in Cameroon, as amended and supplemented by Law No. 2015/006 of 20 April 2015, and its implementing decrees, in particular:

- Decree No. 2012/1638/PM of 14 June 2012 to lay down conditions for establishing and/or operating networks and providing electronic communication services subject to an authorisation scheme;
- Decree No. 2012/1640/PM of 14 June 2012 to lay down conditions for interconnection, access to public electronic communications networks, and infrastructure sharing;
- Decree No. 2012/1641/PM of 14 June 2012 to lay down conditions for the portability of the numbers of subscribers of operators of public electronic communications networks;
- Decree No. 2022/10902/PM of 7 December 2022 to lay down the conditions for reserving, allocating and using numbering resources.

It is valid for 2023.

This catalogue presents CAMTEL-BUM's technical offering and tariffs for Public Electronic Communications Network Concession Operators (PECNCO) with a view to enabling all users of interconnected networks to communicate freely with each other or access services. It covers the following interconnection and access offers:

1. Traffic routing to telephone numbers;
2. Traffic routing to VAS numbers;
3. Traffic routing to emergency and public utility numbers;
4. Local roaming service
5. Co-location and infrastructure sharing service.

In the context of the implementation of an interconnection between the CAMTEL network and that of an PECNCO, the provisions of this interconnection catalogue shall be used to draw up and sign an interconnection agreement between CAMTEL-BUM and the operator concerned.

## II. Definitions

For the purposes of this catalogue, the following definitions shall apply:

**Board:** Telecommunications Regulatory Board (TRB)

**Customer:** Natural person or legal entity, identified by a number, who uses an electronic communication service for private or professional purposes.

**Application-to-Person (A2P) Communication:** Telephony service between application platforms and natural persons.

**Person-to-Person (P2P) Communication:** Telephone service between natural persons.

**PDB:** Primary Digital Block, refers to the grouping together of several communications on the same physical transmission medium, using a technique known as multiplexing. A PDB thus corresponds to a throughput of 2 Mbps.

**Interconnection catalogue:** Catalogue containing the reference technical and tariff offering for interconnection services, published by each PECNCO and approved by the Board.

**Interconnection agreement:** Agreement between CAMTEL and an PECNCO setting out the contractual relationship between the two parties with reference to the technical and tariff offering in force for interconnection services.

**Circuit:** Transmission equipment permanently interconnecting two interconnection points and enabling unidirectional or bidirectional transmission.

**CLI:** Calling Line Identification.

**Communication Services Provider (CSP):** Operator holding a category 1 licence with virtual fixed numbers acquired from those made available for the provision of A2P communication services to the public.

**Count(s):** Statistical statement(s) summarising the traffic exchanged between two operators and counted in terms of the number and actual duration of calls over a calendar month. Counts are drawn up for all interconnection links, distinguishing between each type of traffic corresponding to a specific tariff valuation.

**Terminal equipment:** Any device, installation or set of installations meant to be connected to a network termination point, and which transmits, receives or processes electronic communications signals.

**Interconnection:** Services offered by CAMTEL to an PECNCO and vice versa, which enable all their customers and those accessible to their respective networks to communicate freely with each other, regardless of the services they use.

**IP interconnection:** Reciprocal services provided by CAMTEL and PECNCOs to establish connectivity links between their networks via Internet exchange points to enable customers of one network and those accessible to their network to communicate with customers of the other network via the available channels: Voice, SMS, USSD.

**Interconnection interface:** All the technical data relating to the throughput and the nature of the transmission media enabling two separate networks to be physically joined.

**Internet Services Provider (ISP):** Operator holding a category 1 licence with frequency resources allocated by the Board for the operation of a public Internet access network.

**Interconnection links:** Circuit enabling the connection between the Third Party Operator's network and a Point of Interconnection (POI) of the CAMTEL network, and which is used for routing interconnection traffic.

**Media Gateway (MGW):** Conversion equipment or service that transforms and converts multimedia streams (voice, text or video) between telecommunications networks using different network standards, communication protocols, coding techniques and physical connections, such that telephone calls work properly between networks that use different technologies.

**Fixed numbers:** These are numbers with the prefix "2" in the national numbering plan, activated on telephone lines identifying the customers of a fixed network operator for the provision of P2P and A2P communication services via Voice, SMS and Data channels.

**Virtual fixed numbers:** These are numbers with the prefix "2" in the national numbering plan, activated on application platforms identifying the customers of a fixed-line network operator or those of a licensed operator for the provision of A2P communication services via Voice, SMS and USSD channels.

**Mobile numbers:** These are numbers with the prefix "6" in the national numbering plan, activated on SIM cards identifying the customers of a mobile network operator for the provision of P2P and A2P communication services via Voice, SMS, USSD and Data channels.

**VAS numbers:** These are short or long numbers with the prefix "8", activated on application platforms identifying a VAS Operator for the provision of value-added services accessible via Voice, SMS or USSD channels.

**Third-party operator:** Any natural person or legal entity holding a concession or licence operating a public electronic communications services network or holding a prior declaration receipt providing public electronic communications services.

**VAS operator:** Any third-party operator using VAS numbers to provide value-added services.

**PECNCO:** Operator running a public electronic communications network, holding a Concession and owning a block of fixed or mobile numbers and frequency resources allocated by the Board.

**Interconnection point:** Place where CAMTEL or a third-party operator sets up the interface equipment enabling interconnection to its network.

**Mobile number portability:** Service involving transferring a network customer from one PECNCO to another while enabling the customer to keep the same telephone number.

**Reconciliation of counts:** Comparison, in a simultaneous exchange, of the counts established by each of the operators with a view to approving, in a report, the amounts to be deducted for the billing of the various respective termination services.

**Session Initiation Protocol (SIP).** This is an IETF protocol described in document RFC3261, which is gradually replacing H.323 and is widely used for all voice over IP transmissions.

**Value-added services:** Content service offered by a VAS operator by means of application platforms accessible to CAMTEL customers via the Voice, SMS and USSD channels in Pull or Push mode.

**Bearer service:** Simple information transport service meant either to transmit, or to transmit and route signals between termination points of an electronic communications network, without subjecting these signals to any processing other than that required for their transmission, routing and the control of these functions.

**Signalling:** Integrated into the Media Gateway, the signalling function ensures the exchange of information within the interconnection link required for routing communications.

**Call termination:** Traffic routing service provided by CAMTEL from one of its points of interconnection to customers on its network and customers accessible from its network.

**Traffic:** Volume of voice, SMS, USSD and data communications carried by any operator.

**Transmission:** Transport of information from one point in the network to another. The transmission media can be copper or optical fibre cables, or microwave links.

**ITU-T:** Telecommunication Standardisation Sector of the International Telecommunication Union (ITU).

**Voice over Internet Protocol (VoIP):** Voice service transported over an IP network.

**Virtual Private Network (VPN):** Virtual Private Network.

Other terms and expressions used in this catalogue shall have the meaning given to them by the law governing electronic communications or any other instrument governing telecommunications in Cameroon or, failing that, the relevant ITU-T definition.

## III. Interconnection Services

### III.1. List and Description of Points of Interconnection

The points of interconnection (POI) CAMTEL offers PECNCOs are as follows:

Description	Sites	Type of Signal
MGW YAOUNDE	CAMTEL building Yaounde, Centre	Code No. 7 ISUP SIP protocol
MGW DOUALA	CAMTEL building Douala-Bepanda	Code No. 7 ISUP SIP protocol

Interconnection with the CAMTEL network can be made via 2 (two) points of interconnection, located in the premises hosting the Media Gateways. These points enable a two-way exchange of traffic.

### III.2. Technical Terms and Conditions of Interconnection

The technical connection offer presented in this catalogue enables all types of traffic (Voice, SMS, USSD) originating from or destined for PECNCOs to be carried under conditions of quality and technical availability identical to those for all communications carried on the CAMTEL network.

The PECNCO must organise its translation, routing and conveyance system in accordance with the technical specifications defined by CAMTEL and the Board's National Numbering Plan.

With regard to local traffic carried by the PECNCO on interconnection links, only numbers duly allocated or declared by the Board shall be routed by CAMTEL.

Two interconnection modes are proposed for routing traffic:

- interconnection in TDM mode via SS7,
- interconnection in IP mode via VPN.

#### III.2.1. Interconnection in TDM Mode

##### Connection interface

The connecting link shall consist of a set of 2Mbps PDB links. The connection interface complies with recommendation ITU-T G.703.

Warning, signalling, fault location and intervention procedures are defined in the interconnection agreement between CAMTEL and PECNCO.

##### Signalling Protocols

The signalling protocol to be used for the interconnection of PECNCOs will be signalling system No. 7 based on ISUP (Recommendation No. ITU-T Q.761-Q.764 1992 Specifications of ISDN User Part) in the POIs in Yaounde and in Douala.

The opening of a link with an PECNCO shall be preceded by a series of validation and compatibility tests in accordance with the regulatory provisions and the interconnection agreement.

### III.2.2. Interconnection in IP Mode

#### Connection interface

CAMTEL has deployed a specific IP infrastructure at its Media Gateways to enable interoperability of services with third-party operators via IP routers, with physical connection interfaces of **4 Gbps (2 Gbps in Douala and 2 Gbps in Yaounde)**.

CAMTEL's service points, generally Interconnection Session Border Controller (I-SBC) platforms, specific to the service, are meant to enable the concentration of Media flows and Signalling flows handed over by the PECNCO in the CAMTEL network. These service points are the only interface points for CAMTEL's infrastructure. Their IP address shall be provided to the third-party operator as part of the service.

CAMTEL and the PECNCO shall each take all measures to ensure the sizing of the number of IP Sessions necessary for the flow of IP traffic from the point of interconnection.

#### Signalling Protocols

The signalling protocols that can be used to interconnect LPENCOs shall be SIP for voice traffic, SMPP for SMS traffic, and SMPP / HTTPS for USSD traffic.

Prior to opening a link with any network, a series of tests shall be conducted to validate the compatibility of the protocol, the list and conditions of which shall be specified in the interconnection agreement.

### III.3. Financial Terms and Conditions of Interconnection

All rates quoted are in CFA francs and exclusive of tax.

#### III.3.1. Interconnection links

Service	Rate
Provision of PDB (2Mbps)	CFAF 800,000 per E1 port per year
Provision of IP sessions	Free of charge

#### III.3.2. Traffic routing to telephone numbers

##### a) Types of traffic routing to telephone numbers

- P2P voice/SMS termination:** This service shall consist, on CAMTEL's part, in routing local P2P voice/SMS traffic originating from an PECNCO to its numbers allocated as CLI, from the point of interconnection to the terminals of customers on its network.
- P2A voice/SMS termination:** This service shall consist, on CAMTEL's part, in routing local P2A voice/SMS traffic originating from an PECNCO to its numbers allocated as CLI, from the point of interconnection to platforms identified by declared virtual fixed numbers of a third-party operator interconnected to its network.



3. **A2P voice/SMS termination:** This service shall consist, on CAMTEL's part, in routing local A2P voice/SMS traffic collected by an PECNCO and originating from platforms to virtual fixed-line numbers declared as CLI, from the point of interconnection to the terminals of customers on its network.
4. **A2P USSD termination:** This service shall consist, on CAMTEL's part, in routing messages exchanged between CAMTEL network subscribers and the USSD platform of a licence holder and/or prior declaration receipt, identified by a virtual fixed number (push mode) during a USSD session.
5. **Unstructured Supplementary Service Data (USSD):** Communication protocol used in a mobile network to exchange data between the client and the Operator's or Value-Added Service Provider's server.
6. **Voice termination for incoming international calls:** This service shall consist, on CAMTEL's part, in routing international voice traffic originating from an PECNCO to international numbers as CLI, from the point of interconnection to the terminals of customers on its network.
7. **Voice termination for outgoing international calls:** This service shall consist, on CAMTEL's part, in routing international voice traffic originating from an PECNCO to its numbers allocated as CLI, from the point of interconnection to the terminals of customers on international networks.

**b) Tariff for terminating traffic on telephone numbers**

Service	in CFAF (T.E.)	
	Peak Hour Rates (7:00 am-8:59 pm)	Off-Peak Hour Rates (9:00 pm-6:59 am)
P2P voice termination	CFAF 12/min	CFAF 12/min
P2P SMS termination	CFAF 5/SMS	CFAF 5/SMS
P2A voice termination	CFAF 8/min	CFAF 8/min
P2A SMS termination	CFAF 2/SMS	CFAF 2/SMS
A2P voice termination	CFAF 8/min	CFAF 8/min
A2P SMS termination	CFAF 1/SMS	CFAF 1/SMS
A2P USSD termination	CFAF 5/USSD session	CFAF 5/USSD session
Voice termination for incoming international calls	CFAF 15/min	CFAF 15/min
Voice termination for outgoing international calls	To be negotiated	To be negotiated

**Billing Terms and Conditions:**

CAMTEL shall bill PECNCO for all completed communications (Voice, SMS, USSD) on the basis of the termination rate in force and corresponding to each type of traffic.

A monthly bill shall be issued once traffic counts are reconciled.

**Note on the volume of communications:**

The volume of communications shall be calculated at the end of each month of the calendar year, on the last day of the month at 12:00 am.

For voice calls, call duration shall be calculated per second. The monthly sum of calls, by type and in seconds, shall be rounded to the nearest minute. The call volume to be billed shall then be the total duration in minutes. The chargeable duration of each call shall be “the duration of the conversation” in accordance with ITU-T Recommendation No. D150, in particular section 1.2.2.

For SMS messages, the volume to be billed shall be the number of messages with a Delivery Receipt (DLR) message

### III.3.3. Traffic routing to VAS numbers

#### a) Types of traffic routing to VAS numbers

1. **P2A voice/SMS termination:** This service shall consist, on CAMTEL’s part, in routing local P2A voice traffic originating from an PECNCO to its numbers allocated as CLI, from the point of interconnection to platforms identified by VAS numbers used by CAMTEL or a VAS operator interconnected to its network.
2. **A2P voice/SMS termination:** This service shall consist, on CAMTEL’s part, in routing local A2P Voice/SMS traffic originating from an PECNCO on VAS numbers or sender names (in the case of A2P SMS) as CLI, from the point of interconnection to the customer terminals on its network. Where advertising SMS messages are sent using sender names, the content of the message shall include the sender’s identification number so that any receiving customer may reply free of charge with the keyword “STOP” if they no longer wish to receive that type of message from the company concerned.

#### b) Types of traffic routing to VAS numbers

Service	Rate (in CFAF, T.E.)
P2A voice termination on VAS short numbers as recipient	CFAF 8/min
P2A SMS termination on VAS short numbers as recipient	CFAF 2/SMS
A2P voice termination on VAS short numbers as CLI	CFAF 8/min
A2P SMS termination on VAS short numbers as CLI	CFAF 2/SMS
A2P SMS termination on pre-registered sender names	CFAF 6/SMS

#### Billing Terms and Conditions

CAMTEL shall bill PECNCO for all completed communications (Voice, SMS) on the basis of the termination rate in force and corresponding to each type of traffic.

The monthly bill shall be issued once traffic counts are reconciled.

#### Note on the volume of communications:

The volume of communications shall be calculated at the end of each month of the calendar year, on the last day of the month at 12:00 am.

For voice calls, call duration shall be calculated per second. The monthly sum of calls, by type and in seconds, shall be rounded to the nearest minute. The call volume to be billed shall then be the total duration in minutes.

The chargeable duration of each call shall be “the duration of the conversation” in accordance with ITU-T Recommendation No. D150, in particular section 1.2.2.

For SMS messages, the volume to be billed shall be the number of messages with DLR.

### III.3.4. Traffic routing to emergency and public utility numbers

These shall be A2P voice-type services operated by public bodies on special dedicated short numbers allocated by the Board, which shall be accessible free of charge in Pull or Push mode to all customers on all telephone networks.

#### a) Types of traffic routing to emergency and public utility numbers

- 1) **P2A voice termination:** This service shall consist, on CAMTEL’s part, in routing local P2A voice traffic originating from an PECNCO to its numbers allocated as CLI, from the point of interconnection to the emergency or public utility service platforms identified by short numbers and accessible from its network.
- 2) **A2P voice termination:** This service shall consist, on CAMTEL’s part, in routing local A2P voice traffic collected by an PECNCO and originating from short numbers as CLI, from the point of interconnection to the terminals of customers on its network.

All P2A voice traffic of emergency and public utility services shall be routed free of charge from the CAMTEL point of interconnection to the call centre management platform operated by the public body.

All A2P voice traffic of emergency and public utility services shall be routed free of charge from CAMTEL’s point of interconnection to customers on its network.

#### b) List of emergency and public utility services

Emergency services	Short toll-free number
Police	117
Fire Brigade	118
Gendarmerie	172

Public utility services	Short toll-free number
Report acts of corruption	1517
Combating illegal trade	1502
Abuse in hospitals	1506

## IV. Local Roaming Services

Local Roaming is a service that enables customers of an PECNCO to continue to access telecommunications services by connecting to CAMTEL's network, while keeping the same telephone number, in areas covered by CAMTEL and in which the PECNCO would also like to have access to CAMTEL's services.

### Pricing

	per unit	Fixed rate (in CFAF T.E.)
Data base rate	per MB	To be negotiated
Voice base rate (MO)	per Min	CFAF 10
Voice base rate (MT)	per Min	CFAF 5
SMS base rate (MO)	per SMS	CFAF 2
SMS base rate (MT)	per SMS	CFAF 1

- **Voice billing**

The base rate shall be charged for each minute that passes through the CAMTEL network.

- **SMS billing**

The base rate for SMS messages shall be charged for each SMS sent and each SMS received while roaming on the CAMTEL network, regardless of the type of SMS (A2P or P2P).

- **USSD billing**

USSD traffic shall be free of charge

- **Data billing**

The base rate for data shall be charged for each MB that passes through the CAMTEL network.

## V. Co-location and infrastructure sharing services

### V.1. Technical Terms and Conditions for Co-location

CAMTEL shall offer the co-location service to PECNCOs that want to implement the interconnection link themselves. Where the equipment is located on its premises, CAMTEL shall be notified of any intervention thereupon.

To implement an interconnection link up to a point of interconnection, the service provider may use CAMTEL's infrastructure, within the limits of the site's available hosting capacities (land, power supply, building, tower, conduits, etc.), to install the transmission link's support.

#### V.1.1. Terminal Equipment Hosting

Where possible, the terminal equipment used for transmission may be installed in a room reserved for the PECNCO and located in CAMTEL's building or in a room built by the PECNCO on CAMTEL's site. In both cases, the PECNCO shall be responsible for the operation and maintenance of their equipment. The connection of

the PECNCO's equipment to CAMTEL's PCM distribution frame shall be implemented by a joint CAMTEL/PECNCO team. Equipment installers shall be accredited and the equipment must be type-approved. In exceptional cases, terminal equipment used for transmission may be installed in a CAMTEL transmission room. The said equipment must be installed in a watertight cabinet that also contains the secondary power supply equipment and air conditioning. CAMTEL may, under terms to be negotiated, handle the first level operation and maintenance of the equipment housed in its rooms.

The terms under which the PECNCO shall access the room the said equipment is installed shall be specified in an infrastructure sharing agreement.

### V.1.2. Towers

With regard to towers, the requesting PECNCO shall provide, in particular:

- the characteristics (radio and mechanical) of the antenna;
- the installation height on the tower, the weight and size of the antenna.

The hosted equipment must comply with the latest ITU-T and ITU-R technical standards, as well as any other technical standards set by CAMTEL in the interconnection agreement, including those related to environmental compliance.

The list of towers proposed for sharing by CAMTEL is provided in the appendices.

### V.1.3. Power Supply

The infrastructure sharing agreement shall specify the terms for the provision of power by CAMTEL, the terms of access to the equipment, the terms and conditions of maintenance, the documentation, the material to be provided by the service provider and additional services.

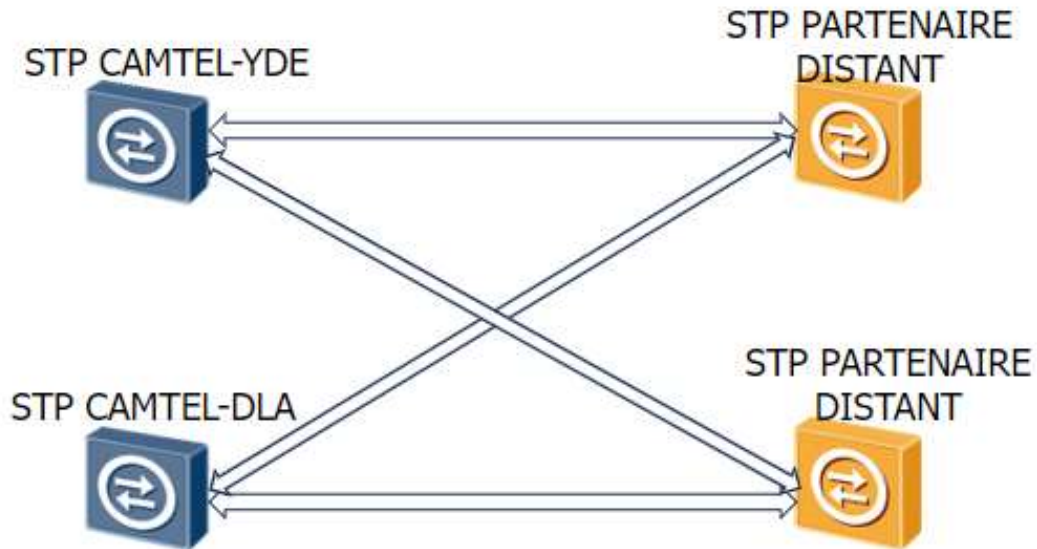
## V.2. Pricing

Type of Service	Rate (in CFAF, T.E.)
Towers	<p>Based on a cost estimate according to the calculation formula below.</p> $C = a_i(R_j * M_k + E_n)$ <p><math>a_i</math>: coefficient pertaining to the category of the tower.  <math>R_j</math>: radio characteristics of the antenna  <math>M_k</math>: mechanical characteristics of the antenna  <math>E_n</math> = Characteristics of the footprint on the tower</p>
Land	<p>Based on a cost estimate according to regions, price per m<sup>2</sup>, surface area required (surveys, surveys, miscellaneous research).</p> <p>Undeveloped land:</p> <ul style="list-style-type: none"> <li>- Yaounde, Douala, Kribi, Limbe: CFAF 7,000/m<sup>2</sup>/yr</li> </ul>

	<ul style="list-style-type: none"> <li>- Other towns: CFAF 5,000/m2/yr</li> <li>- Rural areas: CFAF 3,000/m2/yr</li> </ul>
Building	<p>Douala, Yaounde, Kribi, Limbe: CFAF 90,000/m2/yr</p> <p>Other urban areas: CFAF 60,000/m2/yr</p> <p>Rural areas: CFAF 40,000/m2/yr</p>
Back-up power supply	<p>CFAF 500 /KWH/month</p> <p>+ fixed premium of CFAF 2,865/KW/month</p>
Air-conditioning	On the basis of equipment installed and capacity requested.

## VI. Appendices

- **Appendix 1:** Global architecture of interconnection services



- **Appendix 2:** List of CAMTEL towers (Open for infrastructure sharing)

No.	Region	Location of site	Height (m)	Type of tower
1	Centre	Odza, 11 Arrêt	40	S
2	Centre	Carrière	40	S
3	Centre	Obala nouveau	60	S
4	Centre	Akono	33	G
5	Centre	Akonolinga	72	G
6	Centre	Bafia	60	S
7	Centre	Bokito	60	G
8	Centre	Boumnyebel	30	G
9	Centre	Eseka passif	60	G
10	Centre	Eseka PT	15	S
11	Centre	Evodoula	60	S
12	Centre	Lembe Yezoum	54	G
13	Centre	Matomb	125	G
14	Centre	Mbalmayo	70	S
15	Centre	Mbandjock	90	G
16	Centre	Mengangme	91	G
17	Centre	Mengbwa	100	G
18	Centre	Mfou	30	G
19	Centre	Monatele	35	S
20	Centre	Nanga Eboko	110	G
21	Centre	Ndick	60	G
22	Centre	Ndji	96	G
23	Centre	Ngah	102	G
24	Centre	Nkometou	12	S
25	Centre	Nkondjock	128	G
26	Centre	Nkoteng usine	15	S
27	Centre	Nkoteng ADM	18	S
28	Centre	Nsimalen	30	S



29	Centre	Ntui	115	G
30	Centre	Obala Ancien	30	S
31	Centre	Okola	30	S
32	Centre	Ombessa	70	G
33	Centre	Sa'a	30	G
34	Centre	Sikway	30	S
35	Centre	Zamengoe	53	S
36	Centre	Awae	50	S
37	Centre	Assie	70	S
38	Centre	Ngomezap	60	S
39	Centre	Akoeman	40	S
40	Centre	Dzeng	60	S
41	Centre	Nkoladjap	60	S
42	Centre	Nkometou	50	S
43	Centre	Essos, Masso Palace	12	S
44	Centre	Mimboman Village	40	S
45	Centre	Etoug-Ebe, Collège Esp.	40	S
46	Centre	Oyomabang Nkolsoo	40	S
47	Centre	Ahala, Chefferie	40	S
48	Centre	Obili, IRIC	40	S
49	Centre	Texaco Omnisport	12	S
50	Centre	Briqueterie	12	S
51	Centre	Marche Central	12	S
52	Centre	Mvog-Ada	12	S
53	Centre	Ekie	40	S
54	Centre	Nkoldobo	40	S
55	Centre	Ngouso, HG	12	S
56	Centre	Emana	40	S
57	Centre	Koweit City	40	S
58	Centre	Bastos, SIC	40	S
59	Centre	Simbock Village	40	S
60	Centre	Ngoa Ekelle PTT	40	S

61	Centre	Bastos, ARMP	12	S
62...	Centre	Nkolndongo	40	S
63	Centre	Mendong, SIC	40	S
64	Centre	Bastos ANOR	30	S
65	Centre	Biyem-Assi	50	S
66	Centre	CAMTEL HQ	15	S
67	Centre	Iccnet		S
68	Centre	Jamot	50	S
69	Centre	Mbankolo	25	S
70	Centre		60	G
71	Centre		100	G
72	Centre	Ministry of P&T	40	S
73	Centre	Nkolbisson	40	S
74	Centre	Nkomo	40	S
75	Centre	Soa	80	G
76	Centre	Université PTT	30	S
77	Centre	OLEMBE	72	S
78	Centre	Yde Centre	60	S
79	Centre	Zamengoe	53	S
80	Littoral	Bali, Kayo Elie	12	S
81	Littoral	Bonapriso, Chococho	12	S
82	Littoral	Yassa Village	40	S
83	Littoral	Ndogpassi 2	40	S
84	Littoral	Bonamouang, Sable	12	S
85	Littoral	Kotto Bangue	12	S
86	Littoral	Bepanda, Yong Yong	40	S
87	Littoral	Palmiers, Lycée	40	S
88	Littoral	Malangue face HG	40	S
89	Littoral	PK5, Carrefour Canyon	12	S
90	Littoral	Bonamoussadi Village	40	S
91	Littoral	Bepanda Petit Wouri	12	S
92	Littoral	Akwa, Bybloss Bibloss	12	S

93	Littoral	Loum	168	G
94	Littoral	Njombe	50	G
95	Littoral	Nkongsamba central	24	S
96	Littoral	Nkongsamba radio	115	G
97	Littoral	Yabassi	50	S
98	Littoral	Manjo	50	S
99	Littoral	Ndougue	45	S
100	Littoral	Melong	50	S
101	Littoral	Mbanga	168	G
102	Littoral	Edea palmeraie	162	G
103	Littoral	Bomono	22	G
104	Littoral	Pouma	40	S
105	Littoral	Omnisport DGSN	40	S
106	Littoral	Akwa, Laquintine	40	S
107	Littoral	Bonaloka	40	S
108	Littoral	Deido, Bonateki	12	S
109	Littoral	Ndogpassi	42	S
110	Littoral	Newbell	60	G
111	Littoral	Akwa Centre	84	S
112	Littoral	Akwa Nord	28	S
113	Littoral	Bassa	42	S
114	Littoral	Bepanda	40	S
115	Littoral	Bepanda terrasse	25	S
116	Littoral	Bonaberi	34	S
117	Littoral	Bonanjo	15	S
118	Littoral	Japoma	72	S
119	Littoral	PK21, Ngoma	40	G
120	Adamawa	Bandal	29	G
121	Adamawa	Banyo	84	G
122	Adamawa	Bembara	108	G
123	Adamawa	Dang	40	S
124	Adamawa	Gangui	72	G

125	Adamawa	Lere	64	G
126	Adamawa	Libong	150	G
127	Adamawa	Mayo Tolere	155	G
128	Adamawa	Meiganga PT	40	S
129	Adamawa	Ngaoundere PT	40	G
130	Adamawa	Pang	155	G
131	Adamawa	Tibati PT	24	S
132	Adamawa	Tignere	20	S
133	Adamawa	Mbe	60	S
134	East	Badzere	72	G
135	East	Bambouti	96	G
136	East	Batouri	23	G
137	East	Betare Oya	60	S
138	East	Bertoua Central	45	G
139	East	Boulembe	108	G
140	East	Disso Patere	160	G
141	East	Garoua-Boulai	10	S
142	East	Konga	108	G
143	East	Meba	96	G
144	East	Ndem	98	G
145	East	Ndokayo	96	G
146	East	Nkoumbent	110	G
147	East	Tikondi	67	G
148	East	Yanda	108	G
149	East	Mboma		S
150	East	Lycee Bilingue Bertoua	45	S
151	Far-North	Fotokol	90	G
152	Far-North	Gaban-lara	15	S
153	Far-North	Goundai	15	S
154	Far-North	Guidiguis 1	25	G
155	Far-North	Guidiguis 2	70	G
156	Far-North	Kaele	36	G

157	Far-North	Katare	120	G
158	Far-North	Kolofata	18	G
159	Far-North	Kousseri PT	80	S
160	Far-North	Labado	108	G
161	Far-North	Laf	96	G
162	Far-North	Lara	55	G
163	Far-North	Maga	90	G
164	Far-North	Mandassak	130	G
165	Far-North	Maroua	42	S
166	Far-North	Maroua Radio	90	G
167	Far-North	Maroua Pitoare	55	S
168	Far-North	Mindif	18	G
169	Far-North	Mindil	20	G
170	Far-North	Mokolo	55	S
171	Far-North	Mora	18	G
172	Far-North	Pette	90	G
173	Far-North	Salak	4	S
174	Far-North	Tchatibali	55	S
175	Far-North	Waza	108	G
176	Far-North	Yagoua	91	G
177	North	Banda	29	S
178	North	Banda	96	G
179	North	Bardout	90	G
180	North	Bascheo	24	S
181	North	Bidzar	97	G
182	North	Figuil relais	90	G
183	North	Figuil ville	50	G
184	North	Garoua Central	25	S
185	North	Garoua radio	50	G
186	North	Gouna	96	G
187	North	Guider	31	S
188	North	Mayo Oulo	25	S

189	North	Ngong	96	G
190	North	NGOUDJEL(Fadil Ranch)	70	G
191	North	Tchollire	24	S
192	North	Waguri	96	G
193	North	Yett	45	G
194	North West	Akum	90	G
195	North West	Ashong	65, 11	S
196	North West	Bafut	9	S
197	North West	Bali	24	S
198	North West	CAMTEL Bambili	9	S
199	North West	Bamenda ptt	30	S
200	North West	Chuboh	10	S
201	North West	Batibo	38	S
202	North West	Emo	140	G
203	North West	Kumbo	110	G
204	North West	Mbengwi PTT	45	S
205	North West	Ndop	9	S
206	North West	Nkambe	65	G
207	North West	Santa relay	9	S
208	North West	Santa Town	9	S
209	North West	Wum	31	S
210	North West	Chinde	40	S
211	North West	Ndamukong	40	S
212	North West	Mbengwi	60	G
213	North West	Sabga Camtel		S
214	West	Bafang ancien	12	S
215	West	Bafang Nouveau	50	S
216	West	Bafoussam Central	40	S
217	West	Bafoussam radio	123	S
218	West	Baham ancien	15	S
219	West	Badionzou	32	S
220	West	Baham nouveau	50	S

221	West	Bakong	30	G
222	West	Bambit	18	S
223	West	Bamena	36	G
224	West	Bamendjou	30	G
225	West	Bandjoun	36	S
226	West	Bangangte	33	S
227	West	Bangoua nouveau	50	S
228	West	Bangoua ancien	12	S
229	West	Batié	12	S
230	West	Bazou	12	S
231	West	Col Bana	74	G
232	West	Dschang	25	S
233	West	Foumban	91	G
234	West	Foumbot	25	S
235	West	Kekem	12	S
236	West	Mayo Djinga	70	G
237	West	Mbouda	31	S
238	West	KOUM	50	S
239	West	Mfengou	8	S
240	West	Ntoula	18	S
241	West	Tonga	30	S
242	South	Ambam	50	S
243	South	Aloum	175	G
244	South	Bengbis	45	S
245	South	Biwong-Bulu	70	G
246	South	Djourn	82	G
247	South	Ebanga Ngoulou	100	G
248	South	Ebanga passif	38	S
249	South	Ebolowa Central	10	S
250	South	Ebolowa comice	40	S
251	South	Ebolowa radio	100	S
252	South	Meyomessala (SUDCAM)	50	S

253	South	Efoulan	82	G
254	South	Elom	51	G
255	South	Akom II nouveau	50	G
256	South	Akom II ancien	30	G
257	South	Kribi Mpalla	56	G
258	South	Kribi PT	45	S
259	South	Lolodorf passif	60	G
260	South	Nkolyop	62	G
261	South	Nkongmezap	102	G
262	South	Nyete Central office	40	G
263	South	Nyete V11	60	G
264	South	BISSIANG	50	S
265	South	Nyete V13	50	S
266	South	Kye-Ossi	90	G
267	South	Mekin	85	G
268	South	Memve'ele	65	G
269	South	Mengbwa	118	G
270	South	Mengong	72	G
271	South	Meyomessala	100	G
272	South	Mvangane	15	G
273	South	Moneko'o	60	G
274	South	Mvangane colline	50	G
275	South	Ndikoum	75	G
276	South	Mvoula	70	G
277	South	NGOASSE1		S
278	South	Ngoasse 2	78	G
279	South	Nkilzock	72	G
280	South	Nkolfong	34	G
281	South	Olamze	30	S
282	South	Oveng	80	G
283	South	Sangmelima PT	69	S
284	South	Tatching	50	S



285	South	Zoetele	72	G
286	South West	Asu Hill	125	G
287	South West	Akiriba	40	S
288	South West	Buea	41	S
289	South West	Diongo	60	G
290	South West	Ekona	56	S
291	South West	Eshobi	6	S
292	South West	Ewonda	8	S
293	South West	Kumba	39	S
294	South West	Kumba Hill	22	S
295	South West	Kurume	118	G
296	South West	Mamfe	41	S
297	South West		24	S
298	South West	Muyuka	31	S
299	South West	Nguti town	37	G
300	South West	Limbe	33	G
301	South West	Limbe Kie	40	S
302	South West	Tiko	38	S
303	South West	Signal Hill	40	S
304	South West	Soppo Ridge	7	S
305	South West	Tinto	37	S
306	South West	University of Buea	40	S
307	South West	Tombel	60	G