

ITU Operational Bulletin

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Annex

Various tones used in national networks (according to ITU-T Recommendation E.180 (03/1998))
(Position on 1 May 2010)

<i>Dates of publication of the next Operational Bulletins</i>		<i>Including information received by:</i>
956	14.V.2010	03.V.2010
957	1.VI.2010	20.V.2010
958	15.VI.2010	03.VI.2010
959	1.VII.2010	21.VI.2010
960	15.VII.2010	05.VII.2010
961	30.VII.2010	20.VII.2010
962	13.VIII.2010	03.VIII.2010
963	1.IX.2010	20.VIII.2010
964	15.IX.2010	03.IX.2010
965	1.X.2010	21.IX.2010
966	15.X.2010	05.X.2010
967	1.XI.2010	20.X.2010
968	15.XI.2010	03.XI.2010
969	1.XII.2010	19.XI.2010
970	15.XII.2010	03.XII.2010

GENERAL INFORMATION

Lists annexed to the ITU Operational Bulletin

Note from TSB

A. The following Lists have been published by TSB or BR as Annexes to the ITU Operational Bulletin (OB):

OB No.

- 955 Various tones used in national networks (According to ITU-T Recommendation E.180 (03/98)) (Position on 1 May 2010)
- 954 Legal time 2010
- 953 List of mobile country or geographical area codes (Complement to ITU-T Recommendation E.212 (05/2008)) (Position on 1 April 2010).
- 952 List of the national authorities designated to assign ITU-T Recommendation T.35 terminal provider codes (Position on 15 March 2010)
- 951 Dialling Procedures (International prefix, national (trunk) prefix and national (significant) number) (In accordance with ITU-T Recommendation E.164 (02/2005)) (Position on 1 March 2010)
- 940 List of Signalling Area/Network Codes (SANC) (Complement to ITU-T Recommendation Q.708 (03/99)) (Position on 15 September 2009)
- 937 Access codes/numbers for mobile networks (According to ITU-T Recommendation E.164 (02/2005)) (Position on 1 August 2009)
- 935 List of International Signalling Point Codes (ISPC) (According to ITU-T Recommendation Q.708 (03/99)) (Position on 1 July 2009)
- 932 Mobile Network Code (MNC) for the international identification plan for public networks and subscriptions (According to ITU-T Recommendation E.212 (05/2008)) (Position on 15 May 2009)
- 930 List of ITU-T Recommendation E.164 assigned country codes (Complement to ITU-T Recommendation E.164 (02/2005)) (Position on 15 April 2009)
- 919 List of Issuer Identifier Numbers for the International Telecommunication Charge Card (In accordance with ITU-T Recommendation E.118 (05/2006)) (Position on 1 November 2008)
- 899 List of terrestrial trunk radio mobile country codes (Complement to ITU-T Recommendation E.218 (05/2004)) (Position on 1 January 2008)
- 883 Status of Radiocommunications between Amateur Stations of Different Countries (In accordance with optional provision No. 25.1 of the Radio Regulations) and Form of Call Signs assigned by each Administration to its Amateur and Experimental Stations (Position on 1 May 2007)
- 880 List of Names of Administration Management Domains (ADMD) (In accordance with ITU-T F.400 and X.400 series Recommendations) (Position on 15 March 2007)
- 879 List of Telegram Destination Indicators (In accordance with ITU-T Recommendation F.32 (10/1995)) (Position on 1 March 2007)
- 878 List of Telex Destination Codes (TDC) and Telex Network Identification Codes (TNIC) (Complement to ITU-T Recommendations F.69 and F.68) (Position on 15 February 2007)
- 877 List of Country or Geographical Area Codes for non-standard facilities in telematic services (Complement to ITU-T Recommendation T.35 (02/2000)) (Position on 1 February 2007)
- 876 List of Data Network Identification Codes (DNIC) (According to ITU-T Recommendation X.121 (10/2000)) (Position on 15 January 2007)
- 875 List of Data Country or Geographical Area Codes (Complement to ITU-T Recommendation X.121 (10/2000)) (Position on 1 January 2007)
- 669 Five-letter Code Groups for the use of the International Public Telegram Service (According to ITU-T Recommendation F.1 (03/1998))

B. The following Lists are available online from the ITU-T website:

- | | |
|---|--|
| List of ITU Carrier Codes (ITU-T Rec. M.1400 (07/2006)) | www.itu.int/ITU-T/inr/icc/index.html |
| Bureaufax Table (ITU-T Rec. F.170) | www.itu.int/ITU-T/inr/bureaufax/index.html |
| List of recognized operating agencies (ROAs) | www.itu.int/ITU-T/inr/roa/index.html |

Approval of ITU-T Recommendations

By AAP-34, it was announced that the following ITU-T Recommendations were approved, in accordance with the procedures outlined in Recommendation ITU-T A.8:

- Recommendation ITU-T H.264.1 (13/04/2010): Conformance specification for H.264 advanced video coding
- Recommendation ITU-T H.740 (22/03/2010): Application event handling for IPTV services

Assignment of Signalling Area/Network Codes (SANC) (ITU-T Recommendation Q.708 (03/99))

Note from TSB

At the request of the Administration of Cuba, the Director of the TSB has assigned the following signalling area/network code (SANC) for use in the international part of the signalling system No. 7 networks of this country/geographical area, in accordance with ITU-T Recommendation Q.708 (03/99):

<i>Country/geographical area or signalling network</i>	<i>SANC</i>
Cuba	3-137

SANC: Signalling Area/Network Code.
Code de zone/réseau sémaphore.
Código de zona/red de señalización.

Maritime Identification Digits (MID)

The Administration of France has requested that the MID “329” allocated to Guadeloupe be considered as allocated to France.

Telephone Service

Web: <http://www.itu.int/ITU-T/inr/nnp/>

Croatia (country code +385)

Communication of 16.III.2010:

Croatian Post and Electronic Communications Agency (HAKOM), Zagreb, announces that the new numbering plan for the Republic of Croatia has been assigned.

Pursuant to Article 12, paragraph 1, item 9 and Article 69, paragraph 3 of the Electronic Communications Act (“Official Gazette”, No. 73/08), the Council of the Croatian Post and Electronic Communications Agency adopted the following telephone numbering plan for Croatia.

I STRUCTURE OF NUMBERS

1 International number

An international number shall contain a Country Code (CC) followed by a National Significant Number (NSN), as illustrated in image 1. In accordance with ITU-T Recommendation E.164 the maximum length of the international number is 15 digits. The maximum length of an international number in the Republic of Croatia is 12 digits. International numbers exceeding 12 digits may be used only upon prior approval of the Croatian Post and Electronic Communications Agency (hereinafter: HAKOM). When dialling an international number the international prefix "00" must be dialled first followed by the destination country code and the national significant number. The international prefix is not part of the international number. The international number of the Republic of Croatia "385".

International number

<i>National Number</i>	
Country code	National (Significant) Number
CC	N(S)N

Image 1. Structure of International Numbers

2 National number

The Republic of Croatia uses the open Numbering Plan. A National Number contains the National Destination Code (NDC) followed by the Subscriber Number (SN), as illustrated in image 2. Depending on the area of use, an National Destination Code may specify:

- geographical numbering area (county) – Trunk Code (TC), or
- non-geographical numbering area (SDN – Service or Destination Network code) (value added services or mobile electronic communications networks), – Service or Destination Network code.

The maximum length of a national number in the Republic of Croatia is 9 digits. Exceptionally, the length of the national number may be more than 9 digits, which requires obtaining a prior approval from HAKOM. When calling a subscriber from a different geographic numbering area (county) or a mobile electronic communications network, or when using value added services, the national prefix "0" must be dialled first followed by a National Destination Code and a Subscriber Number.

National number

<i>National Number</i>	
National Destination Code	Subscriber Number
NDC	SN

Image 2. Structure of National Numbers

2.1 National number in the fixed electronic communications network

2.1.1 Geographical number

A national number in the fixed electronic communications network consists of the Trunk Code (TC) and a Subscriber Number (SN), as illustrated in image 3. The Trunk Code may be a one- or two-digit code. The length of the Subscriber Number is 7 digits in areas with a single-digit Trunk Code or 6 digits in areas with two-digit Trunk Codes, except in case of provision of universal services. The first digit of a Subscriber Number may not be "0", "1" or "9". When calling a subscriber from the same county (a local call) his or her Subscriber Number must be dialled.

Subscriber numbers starting with digits „519XXX(X)“, „589XXX(X)“, „598XXX(X)“ and „594XXX(X)“ are reserved for new services.

<i>National Number</i>	
Trunk Code	Subscriber Number
TC	SN

Image 3. Structure of a national number in fixed electronic communications network

2.1.2 Non-geographical number

2.1.2.1 National number for value added services

The National Number for Value Added Services shall consist of a Service or Destination Network code (SDN) and a Subscriber Number (SN), as illustrated in image 4. The length of the Service or Destination Network code is two or three digits. The length of a Subscriber Number for value added services is 4, 6 or 7 digits.

HAKOM may approve the use of the first digit in the subscriber number as a Tariff Identifier, as illustrated in image 4a. The Tariff Identifier shall consist of only one digit.

In case of Internet access services, the first digit of the of a Subscriber Number represents a Tariff Identifier (TI), and the second and third digits of the subscriber number represent the Operator Identifier, as illustrated in image 4b.

When allocating numbers for value added services, HAKOM must take into account that there is no overlap between digits of Subscriber Numbers.

Procedure described in item 2 of this Plan shall apply to the use of value added services.

In accordance with ITU-T Recommendations E.168, E.168.1, and F.850 personal („nomadic“) number is a number that uniquely identifies the user of “nomadic” services used by the calling subscriber to access the user of “nomadic” services. The user of “nomadic” services may have more than one „nomadic“ number (business “nomadic” number for business calls and private “nomadic” number for private calls). The expression “nomadic” services also refers to services where the user connects its VoIP (Voice over Internet Protocol) telephone to any network termination point and places/receives calls by using that same number. “Nomadic” services are also provided regardless of the physical location of the user.

<i>National Number</i>	
Service or Destination Network Code	Subscriber Number
SDN	SN
2 or 3 digits	4, 6 or 7 digits

Image 4. Structure of the national number for value added services without tariff identifier in the subscriber number

<i>National Number</i>		
Service or Destination Network Code	Subscriber Number	
SDN	SN	
2 or 3 digits	TI	Remaining SN
	1 digit	3 or 5 digits

Image 4a. Structure of the national number for value added services with tariff identifier in the subscriber number

<i>National Number</i>			
Service or Destination Network Code	Tariff identifier	Operator identifier	Subscriber Number
SDN	TI		SN
2 or 3 digits	1 digit	2 digits (2 and 3 digits)	3 digits

Image 4b. Structure of the national number for Internet access service

The dialling procedure described under item 2 of this Plan shall apply to the use of value added services.

2.2 National number in the mobile electronic communications network

The national number in the mobile electronic communications network consists of the Service or Destination Network code (SDN) and the Subscriber Number (SN), as illustrated in image 5. The length of the Service or Destination Network Code may be two or three digits. The length of the Subscriber Number in mobile electronic communications networks is 6 or 7 digits. In case of a three-digit Service or Destination Network Code the length of the Subscriber Number may be six digits at the most. Subscriber Numbers exceeding 7 digits may be used only with prior approval of HAKOM. The dialling procedure described under item 2 of this Plan shall apply to the placing of calls from mobile electronic communications networks, except for calls placed to emergency and directory enquiry services.

<i>National Number</i>	
Service or Destination Network Code	Subscriber Number
SDN	SN

Image 5. Structure of the national number in the public mobile electronic communications network

3 Short codes

Short Codes are used for access to emergency services, services of social value, directory enquiry services, special services of public interest, and for access to competitive services of operators. A Short Code may consist of one part (Service Identifier) or of two parts (Service Identifier and Operator Code), as illustrated in image 6.

The length of Short Codes is three to five digits, and, in special circumstances (insufficient capacity) it may even be six digits.

The first digit of a Short Code is „1“ or „9“, with „9“ as the first digit being reserved for future needs (data services and the similar) and „1“ being used as the first digit for other types of services. The Short Code is selected on the basis of the following formula: 1ABCD, where: A=2,4,6,7,8; B,C,D=0,...,9.

Short Codes are established by this Plan implemented by the operators directly into their network and may not be used for any other purpose except in the manner provided for in this Plan.

In addition, operators may use Short Codes without a decision adopted by the competent regulatory authority provided that such codes are used exclusively in the operator's network and for services available only to this operator's users, and that they are used in accordance with the Numbering Plan, that is, with the codes established in this Plan.

Access to emergency services and directory enquiry services as part of the universal services package must be ensured from all geographical numbering areas of all public telephone networks and from the numbering areas of mobile electronic communications networks by means of local dialling procedure.

The access to the directory enquiry service must be ensured from all numbering areas of public telephone networks of those operators who have been allocated the Short Code for the provision of this service.

When using carrier selection service, service identifier, operator code and the desired national, or international number must be dialled (for example, 1021 023 XX XX XX). Service identifier and operator code do not form a part of the international number.

<i>National Number</i>	
Trunk Code	Subscriber Number

Image 6. Structure of Short Codes

II LIST OF NATIONAL NUMBERS

General information:

<i>Country code (CC)</i>	<i>National destination code (NDC)</i>	<i>Subscriber Number</i>
385	1 or 2 digits	6 or 7 digits

Fixed network

1.1 Geographical area codes:

<i>Administrative centre of the County/Locality Geographical area</i>	<i>Area code/ National Destination Code</i>
County of Zagreb and the City of Zagreb	1 XXXXXX
Dubrovačko-neretvanska County and the City of Dubrovnik	20 XXXXXX
Splitsko-dalmatinska County and the City of Split	21 XXXXXX
Šibensko-kninska County and the City of Šibenik	22 XXXXXX
Zadarska County and the City of Zadar	23 XXXXXX
Osječko-baranjska County and the City of Osijek	31 XXXXXX

<i>Administrative centre of the County/Locality Geographical area</i>	<i>Area code/ National Destination Code</i>
Vukovarsko-srijemska County and the City of Vinkovci	32 XXXXXX
Virovitičko-podravska County and the City of Virovitica	33 XXXXXX
Požeško-slavonska County and the City of Požega	34 XXXXXX
Brodsko-posavska County and the City of Slavonski Brod	35 XXXXXX
Međimurska County and the City of Čakovec	40 XXXXXX
Varaždinska County and the City of Varaždin	42 XXXXXX
Bjelovarsko-bilogorska County and the City of Bjelovar	43 XXXXXX
Sisačko-moslavačka County and the City of Sisak	44 XXXXXX
Karlovačka County and the City of Karlovac	47 XXXXXX
Koprivničko-križevačka County and the City of Koprivnica	48 XXXXXX
Krapinsko-zagorska County and the City of Krapina	49 XXXXXX
Primorsko-goranska County and the City of Rijeka	51 XXXXXX
Istarska County and the City of Pazin	52 XXXXXX
Ličko-senjska County and the City of Gospić	53 XXXXXX

Mobile Networks:

Services in mobile electronic communications network	9XX
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<i>National Destination Code (NDC)</i>	<i>Mobile cellular network (GSM)</i>	<i>Maximum number length</i>
91	VIPnet	15 (including CC and NDC)
92	VIPnet	
95	TELE2	
98	T-Mobile	
99	T-Mobile	

Other Non-Geographical codes:

Value Added Services	
General Service (blocked for incoming international calls)	60
Humanitarian Services (blocked for incoming international calls)	609
Televoting service (blocked for incoming international calls)	61
Universal Access Number – Common Access Code Service	62
Children Service (blocked for incoming international calls)	69

Adult Services (blocked for incoming international calls)	64
Games of Fortune Services (blocked for incoming international calls)	65
Personal Number Service	74, 75
Internet Access Service (dial-up) ISPs and HINET	76, 77
Freephone service (blocked for incoming international calls)	800, 801

4 Short Numbers in Croatia

Short Codes (blocked for incoming international calls)	1ABCD
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Note: A = 2, 4, 6, 7 or 8
B, C, D = 0,...,9

Emergency Services	
State Directorate for Protection and Rescue (Single European Emergency Service Number)	112
Emergency call/Police	192*
Emergency call/Fire-fighters	193*
Emergency call/Emergency medical assistance	194*
Emergency call/Central office for Search and Rescue at Sea	155*
Road Assistance	1987*

* Until the beginning of activation of new short codes 192, 193, 194, 155 and 1987, former short codes 92, 93, 94, 9155 and 987 will still remain active. After the activation of new short codes, a transitional period for co-existence of new and former short codes will be defined.

Services of social value	
Services of social value (Harmonised European Short Code)	116XXX
Hotline for missing children	116000
Hotline for Victims of Crime	116006
Child Helpline	116111
Non-Emergency Medical Services	116117
Emotional support helpline	116123

Directory Enquiry Service	
Directory Enquiry Service	118XX**

** The transitional period for co-existence of 988 and 118XX codes is 6 months from 1 July 2010, that is, from the date of implementation of 118XX number.

Competitive services	
Carrier selection	10XX
SMS service activation in mobile network	133XX

Note: X = 0,...,9

Termination of validity

The Numbering Plan (Official Gazette No.154/08) ceases to be valid after the entry into force of this Plan.

Entry into force

This Plan shall enter into force on the eighth day from its publication (23.12.2009.) in the „Official Gazette“ (01.01.2010).

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Communication of 29.III.2010:

The *Autorité de Régulation des Communications électroniques et des Postes (ARCEP)*, Paris, announces that the technical and commercial opening of numbers in the format +33 7 5B PQ MC DU, +33 7 6B PQ MC DU, +33 7 7B PQ MC DU, +33 7 8B PQ MC DU and +33 7 9B PQ MC DU, the purpose of which is to serve users of mobile networks on French territory, will commence on 1 May 2010. They will be accessible from all other countries as are current mobile numbers with the format +33 6 AB PQ MC DU. At a later stage, a part of the resources with the format +33 7 9B PQ MC DU may be used for implementing numbers with the format +[CC of the Overseas Departments] 7 9B PQ MC DU, in which case a further announcement will be made.

Reminders

The numbering plan in metropolitan France is a closed plan with the following format:

CC + N(S)N (nine digits), where:

CC = country code,

N(S)N = National (Significant) Number.

And, more specifically: +33 ZAB PQ MC DU in metropolitan France or +262 ZAB PQ MC DU, for example, for French Departments and Territories in the Indian Ocean.

(It is customary practice in France for the sequence of digits of a national (significant) number (N(S)N) to be designated by the following letters: 1st digit: Z, 2nd digit: A, 3rd digit: B, 4th digit: P, 5th digit: Q, 6th digit: M, 7th digit: C, 8th digit: D, 9th digit: U.)

For further details

The number blocks (in the internal format for France) are described on the website of the *Autorité de Régulation des Communications Électroniques et des Postes (ARCEP)*:

<http://www.arcep.fr/index.php?id=interactivenumeros>

This brings up a page displaying either:

- a list of operators with the PQ digits assigned to them; their addresses may then be obtained by clicking on the “adresse” (address) link; or
- the message “il y a plus de 50 réponses, veuillez préciser par un chiffre supplémentaire” (there are over 50 replies, please specify further by indicating an additional digit). The sequences of values OZAB0, OZAB1, OZAB2, etc. should then be entered into the search engine in order to obtain the operators’ names, and subsequently their addresses by clicking on the “adresse” link.

ARCEP updates the numbering information each week. Numbers recently assigned to operators are therefore readily obtainable and can be taken into account by operators from other countries.

For further information, please contact (in English or French):

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75 730 PARIS CEDEX 15
France
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E-mail: catherine.gallet-rybak@arcep.fr

Georgia (country code +995)

Communication of 30.III.2010:

The *Georgian National Communications Commission (GNCC)*, Tbilisi, announces the updated national numbering plan for Georgia:

PSTN numbering

E.164 country code = +995

Fixed network

Locality	National (Significant) Number N(S)N	
	National Destination Code (NDC)	Length of Subscriber Number (SN)
Batumi	222	Five
Tbilisi	32	Six
Rustavi	34	Six
Kobuleti	236	Five
Qobuleti	236	Five
Grigoleti	310	Five
Samtredia	311	Five
Abasha	312	Five

<i>Locality</i>	<i>National (Significant) Number N(S)N</i>	
	<i>National Destination Code (NDC)</i>	<i>Length of Subscriber Number (SN)</i>
Senaki	313	Five
Zugdidi	315	Five
Tsalendjikha	316	Five
Chkhorotskhu	317	Five
Martvili	318	Five
Kutaisi	331	Five
Vani	332	Five
Kharagauli	333	Five
Sachkhere	335	Five
Mestia	336	Five
Lentekhi	337	Five
Ambrolauri	339	Five
Tskaltubo	340	Five
Akhalgori	342	Five
Tskhinvali	344	Five
Kazbegi	345	Five
Dusheti	346	Five
Djava	347	Five
Akhmeta	349	Five
Telavi	350	Five
Sagaredjo	351	Five
Kvareli	352	Five
Gurdjaani	353	Five
Velistsikhe	353	Five
Lagodekhi	354	Five
Signagi	355	Five
DedoplisTskaro	356	Five
Marneuli	357	Five
Bolnisi	358	Five
TetriTskaro	359	Five
Dmanisi	360	Five
Ninotsminda	361	Five

<i>Locality</i>	<i>National (Significant) Number N(S)N</i>	
	<i>National Destination Code (NDC)</i>	<i>Length of Subscriber Number (SN)</i>
Akhalkalaki	362	Five
Tsalka	363	Five
Aspindza	364	Five
Akhaltzikhe	365	Five
Adigeni	366	Five
Bakuriani	367	Five
Bordjomi	367	Five
Khashuri	368	Five
Kareli	369	Five
Gori	370	Five
Kaspi	371	Five
Gardabani	372	Five
Mtskheta	373	Five
Chiatura	379	Five
Terdjola	391	Five
Zestafoni	392	Five
Poti	393	Five
Khoni	395	Five
Ozurgeti	396	Five
Tkibuli	397	Five
Gulripshi	44252	three
Gulripshi	44254	three
Gulripshi	44255	three
Sukhumi	4422	Four
Sukhumi	4423	Four
Sukhumi	44253	three
Sukhumi	4426	Four
Sukhumi	44275	three
Sukhumi	44276	three
Sukhumi	44277	three
Sukhumi	44278	three
Sukhumi	44279	three
Sukhumi	4429	Four

<i>Locality</i>	<i>National (Significant) Number N(S)N</i>	
	<i>National Destination Code (NDC)</i>	<i>Length of Subscriber Number (SN)</i>
Bichvinta	4432	Four
Gagra	4434	Four
Axaliatoni	4442	Four
Gudauta	4445	Four
Gali	4455	Four
Ochamchire	4452	Four
Tkvarcheli	446	Five

Mobile network

<i>Operator</i>	<i>National (Significant) Number N(S)N</i>	
	<i>National Destination Code (NDC)</i>	<i>Length of Subscriber Number (SN)</i>
Magti	51	Six
	90 (CDMA)	Six
	91	Six
	95	Six
	96	Six
	98	Six
	99	Six
	Geo Cell	55
57		Six
58		Six
77		Six
93		Six
Mobitel	71	Six
	68	Six
	74	Six
	79	Six
	97	Six
Silqnet	70 (CDMA)	Six
	78 (CDMA)	Six

Contact:

Mr. Mzia Gogilashvili
International Affairs Coordinator
Georgian National Communications Commission
(GNCC)
50/18 Bochorma Street/Ketevan Tsamebuli Avenue
TBILISI 0144
GEORGIA
Tel/Fax: +995 32 311699
E-mail: mgogilashvili@gncc.ge
http: www.gncc.ge

Serbia (country code +381)

Communication of 10.III.2010:

The *Republic Telecommunication Agency (RATEL)*, Beograd, announces that Telekom Srbija will terminate the provisioning of the International Operator Assistance Service for semi-automatic calls, effective 10 March 2010.

Consequently, as from this date, the Operator-Assisted Call Service for semi-automatic calls (inbound and outbound) will cease, and all the existing arrangements with regard to this service will be terminated.

Contact:

Dr Milan Jankovic
Executive Director
Republic Telecommunication Agency (RATEL)
Visnjiceva 8
11000 Beograd
Serbia (Republic of)
Tel: +381 11 202 6828
Fax: +381 11 324 2673
http: www.ratel.rs

Vanuatu (country code +678)

Communication of 15.IV.2010:

The *Vanuatu Telecommunications Regulator*, Vanuatu, announces the following new mobile number ranges assigned to Digicel Vanuatu Ltd:

<i>Operator</i>	<i>Service</i>	<i>Number ranges</i>
Digicel Vanuatu Ltd	Mobile	+678 572 XXXX +678 573 XXXX +678 574 XXXX +678 575 XXXX

Contact:

Mr John Crook
Vanuatu Telecommunications Regulator
P.O. Box 3547
PORT VILA
Vanuatu
Tel: +678 27621
Fax: +678 27440
E-mail: enquiries@telecomregulator.gov.vu

Changes in Administrations/ROAs and other entities or Organizations

Albania

Communication of 12.IV.2010:

Changes in telephone telefax numbers and URL

The *Ministry of State for Reforms and Relation with the Parliament*, Tirana, announces that its telephone, fax numbers and URL have changed. These are now the following:

Ministry of State for Reforms and Relation with the Parliament
Blv 'Dëshmorët e Kombit', Nr. 1
TIRANA
Albania
Tel: +355 4 227 7599
Fax: +355 4 224 8298
URL: www.km.gov.al

Algeria

Communication of 16.IV.2010:

Change in address

Orascom Telecom Algérie, Alger, announces that it has changed its address. Its new address is the following:

Orascom Telecom Algérie
Lot. No 8^a
RN No 5, Avenue Mouloud Feraoun
ALGER, Dar El Beida 16000
Algeria
Tel: +213 70 851004
Fax: +213 70 851007
E-mail: yasmine.debbouz@otalgerie.com
URL: www.otalgerie.com Orascom Telecom Algérie

Cameroon

Communication of 19.IV.2010:

Changes in telephone and fax numbers and new e-mail address

The *Ministère des Postes et Télécommunications*, Yaoundé, announces that its telephone and fax numbers have changed and that it has a new e-mail address. These are now the following:

Ministère des Postes et Télécommunications
YAOUNDÉ
Cameroon
Tel: +237 22 230615/+237 22 233610
Fax: +237 22 226630
E-mail: calvin.banga@ties.itu.int
URL: www.minpostel.gov.cm

Chad

Communication of 8.IV.2010:

New telephone number and e-mail address

The *Ministère des Postes et des Technologies de l'Information et de la Communication (MPTIC)*, N'djamena, announces that it has a new telephone number and a new address. These are now the following:

Ministère des Postes et des Technologies de l'Information et de la Communication (MPTIC)
B.P. 154
N'DJAMENA
Chad
Tel: + 235 2252 1521
Fax: +235 2252 1531
Fax: +235 2252 1577
email: nndjerabe@yahoo.fr

Comoros

Communication of 14.IV.2010:

Change of name

The *Ministère des Postes et Télécommunications, chargé de la Communication et de la Promotion des Nouvelles Technologies de l'Information*, Moroni, announces that it has changed its name. It is now called «*Ministère des Postes et Télécommunications, chargé de la Promotion des Nouvelles Technologies de l'Information et de la Communication*».

Ministère des Postes et Télécommunications, chargé de la Promotion des Nouvelles Technologies de l'Information et de la Communication
B.P. 744
MORONI
Comoros
Tel: +269 7 644240/+269 7 750015
Fax: +269 7 734241/+269 7 750019

Communication of 20.IV.2010:

Changes in telephone and fax numbers and new e-mail address

The, *Autorité Nationale de Régulation des Technologies de l'Information et de la Communication (ANRTIC)*, Moroni, announces that its telephone and fax numbers have changed and that it has a new e-mail address. These are now the following:

Autorité Nationale de Régulation des Technologies de l'Information et de la Communication (ANRTIC)
MORONI
Comores
Tel: +269 7 738761
Fax: +269 7 738762
email: ibrahim.mzemohamed@gmail.com

Czech Republic

Communication of 7.IV.2010

*List of telecommunication operators and service providers in Czech Republic
to which the status of Recognized Operating Agency (ROA) has been granted*

Czech Telecommunication Office, Praha, announces that the following telecommunication operators and service providers have been granted the status of Recognized Operating Agency (ROA), in accordance with Article 6 of, and Nos. 1007 and 1008 of Annex to, the Constitution of ITU as contained in the Final Acts of the Additional Plenipotentiary Conference (Geneva, 1992).

The names of the operators and service providers in Czech Republic to which the status of recognized Operating Agency (ROA) has been granted are:

REP all information by:

<i>Company's (ROAs) name and address</i>	<i>Contact</i>
Ceske Radiokomunikace a.s. U Nakladoveho nadrazi 3144 130 00 PRAHA 3	Tel: +420 242 417 125 / +420 242 411 111 Fax: +420 242 417 595 E-mail: j.vopalecky@radiokomunikace.cz URL: www.radiokomunikace.cz
CZ.NIC, z.s.p.o. Americka 23 120 00 PRAHA 2	Tel: +420 222 745 111 Fax: +420 222 745 112 E-mail: kontakt@nic.cz
GTS NOVERA s.r.o. Premyslovska 43 130 00 PRAHA 3	Tel: +420 225 253 384 Fax: +420 225 251 122 E-mail: pavel.henke@gtsce.com URL: www.gtsnovera.cz
Telefónica O2 Czech Republic, a.s. Za Brumlovkou 266/2 140 22 PRAHA 4 – Michle	Tel: +420 271 462 087 Fax: +420 271 469 834 E-mail: petr.dedek@o2.com URL: www.cz.o2.com
T-Mobile Czech Republic a.s. Tomickova 1 14900 Praha 4	Tel: +420 603 601 111 Fax: +420 272 941 926 E-mail: richard.stonavsky@t-mobile.cz
Vodafone Czech Republic a.s. Vinohradská 167 100 00 Praha 10	Tel: +420 776 971 720 Fax: +420 776 971 951 E-mail: petr.piskula@vodafone.com

Egypte

Communication of 14.IV.2010:

New fax number and new e-mail address

Telecom Egypt, Le Caire, announces that it has a new fax number and a new e-mail address. They are now the following:

Telecom Egypt
Smart Village
km 28 Cairo-Alexandria Desert Road
P.O. Box 795
GIZA
Egypte
Tel: +20 2 3131 6071
Fax: +20 2 3131 5198
E-mail: naglaa.mounir@telecomegypt.com.eg
URL: www.telecomegypt.com.eg

France

Communication of 16.IV.2010:

Changes in address

France Télécom Orange, Paris, announces that it has changed its address. Its new address is the following

France Télécom Orange
6, Place d'Alleray
75505 PARIS, Cédex 15
France
Tel: +33 1 4444 2222
Tel: +33 1 5736 2024
Fax: +33 1 4645 0167
E-mail: dominique.wurges@orange-ftgroup.com
URL: www.francetelecom.com

French Polynesia

Communication of 7.IV.2010:

Change of name, new e-mail address

The *Office des Postes et Télécommunications (OPTI)*, Papeete, announces that it has changed its name. It is now called «Office des Postes et Télécommunications de Polynésie française (OPT)». It has a new e-mail address. Its new address is now the following:

Office des Postes et Télécommunications de Polynésie française (OPT)
BP 605
98713 PAPEETE, Tahiti
French Polynesia
Tel: +689 417502
Fax: +689 417575
E-mail: poste.dirposte@pa.sm
URL: www.opt.pf

New Zealand

Communication of 30.III.2010

List of telecommunication operators and service providers in New Zealand to which the status of Recognized Operating Agency (ROA) has been granted

The *Ministry of Economic Development*, Wellington, announces that the following telecommunication operators and service providers have been granted the status of Recognized Operating Agency (ROA), in accordance with Article 6 of, and Nos. 1007 and 1008 of Annex to, the Constitution of ITU as contained in the Final Acts of the Additional Plenipotentiary Conference (Geneva, 1992).

The names of the operators and service providers in New Zealand to which the status of recognized Operating Agency (ROA) has been granted are:

REP all information by:

<i>Nom de la compagnie (ER):et Adresse</i>	<i>Contact</i>
Telecom Corporation of New Zealand Ltd (Attention : Brendan Dempsey) Telecom Centre, 49-55 Tory Street Wellington, New Zealand	Tél: +64 4 382 5748 Fax: Courriel: brendan.dempsey@telecom.co.nz
TelstraClear Ltd (Attention Richard Horrell) Corner of Taharoto and Northcote Roads, North Shore, Auckland, New Zealand	Tél: +64 9 912 5180 Fax: +64 9 912 4455 Courriel: richard.horrell@team.telstraclear.co.nz
Vodafone New Zealand Ltd (Attention Hayden Glass) 20 Viaduct Harbour Avenue, Auckland, New Zealand	Tél: +64 21 689176 Fax: +64 9 355 2006 Courriel: hayden.glass@vodafone.com
Telco64 Limited 200 Willis Street, Wellington, New Zealand	Tél: +64 21 361063 Fax: Courriel: Liz.reid@telco64.com

Turkey

Communication of 20.IV.2010:

Change in name

Türk Telekom, Istanbul announces that it has changed its name . It is now called «Türk Telekom Group»

Türk Telekom Group
Akadlar Mah. Cebeci Cad. No. 2
Etiler
34335 ISTANBUL
Turkey
Tel: +90 212 306 8180
Fax: +90 212 352 9650
E-mail: mustafa.aykut@turktelekom.com.tr
URL: www.turktelekom.com.tr

Legal Time Changes

Syria

Communication of 11.IV.2010:

Legal time in Syria will be advanced by 60 minutes from 2 April 2010 to 29 October 2010 and thereby will correspond to UTC* +3.

* UTC = Universal Time Coordinated

Service Restrictions

Note from TSB

The communications from the following countries concerning the Service Restrictions relating to the various international Telecommunication services offered to the public have been published individually in the ITU Operational Bulletin (OB):

<i>Country/geographical area</i>	<i>OB</i>	<i>Country/geographical area</i>	<i>OB</i>
Antigua and Barbuda	798 (p.5)	Netherlands	939 (p.8)
Aruba	776 (p.6)	Netherlands Antilles	786 (p.7)
Australia	726 (p.13, p.31)	New Caledonia	896 (p.18)
Barbados	783 (p.5-6)	Nigeria	829 (p.18)
Belgium	776 (p.36)	Norway	682 (p.5), 716 (p.17)
Belize	845 (p.12)	Pakistan	827 (p.14), 852 (p.13)
Bulgaria	826 (p.13)	Panama	839 (p.6)
Cayman Islands	829 (p.7)	Peru	753 (p.9)
Colombia	835 (p.8)	Romania	829 (p.18)
Cyprus	802 (p.5), 825 (p.15), 828 (p.36), 871 (p.5), 889 (p.6)	Russian Federation	635 (p.4)
Denmark	835 (p.5), 840 (p.4)	Saint Lucia	853 (p.12)
Dominica	796 (p.4-5)	Saint Vincent and the Grenadines	797 (p.21)
Fiji	824 (p.10)	San Marino	834 (p.18)
Finland	704 (p.13)	Saudi Arabia	826 (p.13)
France	924 (p.12)	Serbia	804 (p.8), 955 (p.16)
Germany	788 (p.18)	Singapore	829 (p.19)
Gibraltar	739 (p.13)	Slovakia	790 (p.4), 798 (p.12), 853 (p.15)
Greenland	762 (p.7)	Slovenia	609 (p.15), 711 (p.8)
Guyana	778 (p.6-11)	South Africa	667 (p.11)
Honduras	799 (p.19)	Sri Lanka	865 (p.11)
Hungary	911 (p.21)	Sudan	827 (p.14)
Iceland	802 (p.10)	Swaziland	877 (p.16)
Indonesia	726 (p.16, p.31), 844 (p.9)	Sweden	818 (p.11)
Japan	846 (p.16)	Syrian Arab Republic	828 (p.38)
Kenya	748 (p.4)	Trinidad and Tobago	894 (p.15)
Kuwait	826 (p.13)	Turkey	828 (p.38)
Lebanon	824 (p.10)	Turks and Caicos Islands	841 (p.18)
Malawi	699 (p.6)	United Arab Emirates	724 (p.7), 825 (p.15)
Maldives	766 (p.19)	Uruguay	841 (p.20)
Mauritius	610 (p.6)	Vanuatu	740 (p.11)
Morocco	692 (p.8), 727 (p.5)	Yemen	828 (p.38)

Call-Back and alternative calling procedures (Res. 21 Rev. PP-2002)

Note from TSB

Countries/geographical areas for which information regarding “Call-Back and certain alternative calling procedures not in accordance with the relevant regulations” has been published in the ITU Operational Bulletin (No. ...):

Algeria (621), Azerbaijan (663), Bahrain (611), Belarus (616), Bosnia and Herzegovina (772), Bulgaria (665), Burkina Faso (631), Burundi (607), Cameroon (671), China (599), Colombia (602), Cook Islands (681), Cuba (632), Cyprus (626), Dem. Rep. of the Congo (672), Djibouti (614), Ecuador (619), Egypt (599, 690), Ethiopia (657), Gabon (631), Guinea (681), Honduras (613), India (627), Jamaica (648), Japan (649), Jordan (652), Kazakhstan (619), Kenya (605), Kyrgyzstan (616), Kuwait (610), Latvia (617), Lebanon (642), Madagascar (639), Malaysia (603), Malta (688), Mexico (697), Monaco (749), Morocco (619), Netherlands Antilles (627), Niger (618), Nigeria (647), Qatar (593), Saudi Arabia (629), Seychelles (631), South Africa (655), Sudan (686), Tanzania (624), Thailand (611), Turkey (612), Uganda (603), United Arab Emirates (627), Viet Nam (619), Wallis and Futuna (649), Yemen (622).

In addition, the following countries/geographical areas stated that the practice of “Call-back” is prohibited on their territory:

Albania, Armenia, Bahamas, Belize, Benin, Brazil, Brunei Darussalam, Cambodia, Central African Rep., Chad, Comoros, Costa Rica, Côte d'Ivoire, Dominica, Eritrea, Fiji, Gambia, Ghana, Greece, Guyana, Haiti, Hungary, Indonesia, Iran (Islamic Republic of), Ireland, Israel, Kiribati, Korea (Rep. of), Lesotho, Macao (China), Malawi, Mali, Mauritius, Mauritania, Moldova, Mozambique, New Caledonia, Nicaragua, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Romania, Samoa, San Marino, Slovakia, Sri Lanka, Suriname, Syrian Arab Republic, The Former Yugoslav Republic of Macedonia, Tonga, Trinidad and Tobago, Tunisia, Tuvalu, Vanuatu, Venezuela, Zambia, Zimbabwe.

This information is the result of a survey made by ITU-T Study Group 3 in accordance with Resolution 21 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference (Marrakesh, 2002) and Resolution 29 of the World Telecommunication Standardization Assembly, WTSA-2000 (Montreal, 2000).

All the countries/geographical areas which prohibit or allow the practice of “Call-Back” are listed on the ITU website at the following address:

www.itu.int/itu-t/special-projects/callback/index.html

AMENDMENTS TO SERVICE PUBLICATIONS

Abbreviations used

ADD	insert	PAR	paragraph
COL	column	REP	replace
LIR	read	SUP	delete
P	page(s)		

List of Ship Stations (List V) 50th Edition, March 2010

Section IV

Sub-section 2A

ADD

KZ02 "Tarlan Telecom" LLP, 050000, Tole bi st., 73-60, Almaty, Kazakhstan.
(Fax: +7 727 2 503 461, E-mail: sales@ttcom.kz, Url: www.ttcom.kz)
Contact Person: Akmaral Turlybayeva, Tel: +7 727 2 503 897, +7 701 245 09 36,
E-mail: akmaral.t@ttcom.kz

Access codes/numbers for mobile networks (According to ITU-T Recommendation E.164 (02/2005) (Position on 1 August 2009)

(Annex to ITU Operational Bulletin No. 937 – 1.VIII.2009)
(Amendment No. 14)

<i>Country/geographical area</i>	<i>E.164 Country Code</i>	<i>Mobile telephone numbers, first digits after country code</i>
P 7 Solomon Islands LIR		
Solomon Islands	677	74, 75

**Mobile Network Code (MNC) for the international identification plan
for public networks and subscriptions
(According to ITU-T Recommendation E.212 (05/2008))
(Position on 15 May 2009)**

(Annex to ITU Operational Bulletin No. 932 – 15.V.2009)
(Amendment No. 20)

P 8 Falkland Islands (Malvinas) ADD

<i>Country/geographical area</i>	<i>MCC + MNC*</i>	<i>Name of Operator/Network</i>
Falkland Islands (Malvinas)	750 001	Touch

* MCC: Mobile Country Code / Indicatif de pays du mobile / Indicativo de país para el servicio móvil
MNC: Mobile Network Code / Code de réseau mobile / Indicativo de red para el servicio móvil

**List of International Signalling Point Codes (ISPC)
(According to Recommendation ITU-T Q.708 (03/1999))
(Position on 1 July 2009)**

(Annex to ITU Operational Bulletin No. 935 – 1.VII.2009)
(Amendment No. 20)

<i>Country/ Geographical Area ISPC/DEC</i>	<i>Unique name of the signalling point</i>	<i>Name of the signalling point operator</i>
--	--	--

Cambodia P 12 REP all information by:

4-112-0	9088	Bayon G1	Telecom Cambodia
4-112-1	9089	Bayon G2	Telecom Cambodia
4-112-2	9090	RT11	Royal Telecom International (RTI1)
4-112-3	9091	RT12	Royal Telecom International (RTI2)
4-112-5	9093	RTI 3	Royal Telecom International (RTI)
4-112-6	9094	RTI 4	Royal Telecom International (RTI)
4-112-7	9095	TCT1	Telcotech Gateway
4-113-1	9097	VTC1	Viettel Company (VTC)

Cuba P 17 REP all information by:

3-136-1	7233		ETECSA
3-136-2	7234	Varadero	ETECSA
3-136-3	7235	La Habana	ETECSA
3-136-4	7236	La Habana	ETECSA
3-136-5	7237	Camaguey	ETECSA
3-136-6	7238	La Habana	ETECSA

ADD Falkland Islands (Malvinas) P 20

7-099-1	15129	ISCFalklands	Cable & Wireless
7-099-2	15130	TOUCH	Cable & Wireless

United States P 88 SUP

3-027-3	6363	New York, NY	Star Telecommunications Inc
---------	------	--------------	-----------------------------

United States P 88 ADD

3-027-3	6363	Los Angeles (2),CA	China Telecom (Americas) Corporation
---------	------	--------------------	--------------------------------------

Yemen P 97 ADD

4-042-3	8531	IGW4	TeleYemen
4-046-2	8562	IGW5	TeleYemen

ISPC: International Signalling Point Codes.
Codes de points sémaphores internationaux.
Códigos de puntos de señalización internacional.

**List of Signalling Area/Network Codes (SANC)
(Complement to Recommendation ITU-T Q.708 (03/1999))
(Position on 15 September 2009)**

(Annex to ITU Operational Bulletin No. 940 – 15.IX.2009)
(Amendment No. 12)

Numerical Order ADD

P 8	3-137	Cuba
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Alphabetical Order ADD

P 21	3-137	Cuba
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SANC: Signalling Area/Network Codes.
Codes de zone/réseau sémaphore.
Códigos de zona/red de señalización.

National Numbering Plan (According to ITU-T Recommendation E.129 (11/2009))

Web: www.itu.int/itu-t/inr/nnp/index.html

Administrations are requested to notify ITU about their national numbering plan changes, or to give an explanation on their webpage concerning the national numbering plan as well as their contact points, so that the information, which will be made available freely to all administrations/ROAs and service providers, can be posted on the ITU-T website.

For their numbering website, or when sending their information to ITU/TSB (e-mail: tsbtson@itu.int), administrations are kindly requested to use the format as explained in Recommendation ITU-T E.129. They are reminded that they will be responsible for the timely update of this information.

From 15.IV.2010 to 30.IV.2010 the following countries have updated their national numbering plan on our site:

<i>Country</i>	<i>Country Code (CC)</i>
Bahrain	+973
Solomon Islands	+677



INTERNATIONAL TELECOMMUNICATION UNION

**TSB
TELECOMMUNICATION
STANDARDIZATION BUREAU
OF ITU**

**VARIOUS TONES USED IN NATIONAL
NETWORKS (ACCORDING TO ITU-T
RECOMMENDATION E.180(03/1998))**

(POSITION ON 1 MAY 2010)

Various tones used in national networks

Note by TSB

1. The List of various tones used in national networks has now been updated by amendments published in ITU Operational Bulletin..
2. Administrations are reminded of the advantages of standardizing audible tones as far as possible so that subscribers and operators may quickly recognize any tone transmitted of whatever origin.
3. In order to have current information and to keep the List up-to-date, Administrations are strongly requested to submit a concise technical description of any new or changed network tones to the ITU/TSB whenever such tones are introduced, by using the attached Notification form.
4. For your information, this list will be updated by numbered series of amendments published in the ITU Operational Bulletin. Furthermore, the information contained in this Annex is also available on the ITU web page www.itu.int/itu-t/bulletin/annex.html .
5. Please address any comments or any modifications concerning this List to the Director of the TSB:

International Telecommunication Union
Director of the TSB
Place des Nations
CH-1211 GENEVA 20
Switzerland
Tel: +41 22 730 5211
Fax: +41 22 730 5853
E-mail: tsbtson@itu.int

6. The designations employed and the presentation of material in this List do not imply the expression of any opinion whatsoever on the part of the ITU concerning the legal status of any country or geographical area, or of its authorities.

Various tones used in national networks

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Albania (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	continuous
Ringing tone -	425	1.0 on 4.0 off
Call waiting tone -	425	0.2 on 0.2 off 0.2 on 1.4 off
Algeria (People's Democratic Republic of)		
Busy tone -	425	0.5 on 0.5 off
Ringing tone -	425	1.5 on 3.5 off
Andorra (Principality of)		
Busy tone -	425	0.2 on 0.2 off
Congestion tone -	425	2x(0.2 on 0.2 off) 0.2 on 0.2 off
Dial tone -	425	continuous
Second dial tone -	425	continuous
Pay tone -	1600	0.05 on 0.05 off 0.05 on 0.05 off 1.5 off
Ringing tone -	425	1.5 on 3.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Call waiting tone -	425	0.175 on 0.175 off 0.175 on 3.5 off
Angola (Republic of)		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.5 on 0.5 off
Dial tone -	400	continuous
Number unobtainable tone -	400	0.2 on 0.2 off
Ringing tone -	25	1.0 on 5.0 off
Waiting tone -	400	1.0 on 5.0 off
Anguilla		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Recall dial tone -	350+440	3x(0.1 on 0.1 off) + continuous
Number unobtainable tone -	480+620	0.25 on 0.25 off
Payphone recognition tone -	1600/1143	0.2 on 0.2 off 0.2 on 2.0 off
Ringing tone -	440+480	2.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - operator intervening	450	0.2 on 0.2 off 0.65 on 0.2 off
Waiting tone -	440	1x(0.5 on 10.0 off 0.5 on)
Antigua and Barbuda		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Pay tone -	622	0.136 on 0.136 off
Ringing tone -	440+480	2.0 on 4.0 off
Special information tone -		announcement
Call waiting tone -	480	1x(0.6 on 10.0 off)
Argentine Republic		
Busy tone -	425	0.3 on 0.2 off
Congestion tone -	425	0.3 on 0.4 off
Dial tone -	425	continuous
End of three party service tone -	950/1400/1800	1x(3x0.33 on)
Ringing tone -	425	1.0 on 4.0 off
Service activated tone -	425	1.0 on 0.25 off
Warning tone - operator intervening	1400	5x0.1 on 1.9 off
Waiting tone -	425	0.4 on 0.2 off 0.4 on 4.0 off
Call waiting tone -	425	0.3 on 10.0 off
Aruba		
Busy tone -	425	0.5 on 0.5 off
Confirmation tone -	425	continuous
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Refusal tone -	425	0.06 on 0.06 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Ringing tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	425	0.2 on 0.2 off 0.2 on 4.4 off
Ascension		
Busy tone -	400	0.384 on 0.384 off
Congestion tone -	400	continuous
Dial tone -	350+450	continuous
Number unobtainable tone -	400	continuous
Ringing tone -	400+450	0.384 on 0.192 off 0.384 on 2.016 off
Call waiting tone -	1400	1x(0.384 on)
Australia		
Busy tone -	425//400	0.375 on 0.375 off
Congestion tone -	425//400	0.375 on 0.375 off
Conference tone -	425//525//1400	1.0 on 15.0 off 0.36 on 15.0 off
Dial tone -	425x25//400+425+450//400+425//425	continuous
Facilities tone -	425	continuous
Intrusion tone -	425//525	continuous
Number unobtainable tone -	425//400	2.5 on 0.5 off
Ringing tone -	400x425//400+425+450//400+450	0.4 on 0.2 off 0.4 on 2.0 off
Call waiting tone -	425	0.2 on 0.2 off 0.2 on 4.4 off
Austria		
Busy tone - I	420	0.4 on 0.4 off
Busy tone - II (5)	450	0.3 on 0.3 off
Congestion tone - I	420	0.2 on 0.2 off
Congestion tone - II (5)	450	0.3 on 0.3 off
Dial tone -	420//450	continuous
Recall dial tone -	420	continuous
Special dial tone -	380+420	continuous
Negative indication tone -	380+420	0.4 on 0.4 off
Number unobtainable tone -	950/1400/1800	3x0.33 on 1.0 off
Pay tone -	852	1.5 on
Positive indication tone -	380+420	1.0 on 5.0 off
Payphone recognition tone -	1633/1336	0.2 on 0.2 off 0.2 on 2.0 off
Ringing tone -	420//450	1.0 on 5.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - operator intervening	420//450	0.15 on 0.15 off 0.15 on 1.95 off
Waiting tone -	420	0.04 on 1.95 off
Bahamas (Commonwealth of the)		
Busy tone -	480//620/120	0.5 on 0.5 off
Congestion tone -	480//620/120	0.25 on 0.2 off
Ringing tone -	480//620	2.0 on 4.0 off
Bahrain (Kingdom of)		
Acceptance tone -	425	0.06 on 0.06 off
Busy tone -	425	0.375 on 0.375 off
Congestion tone -	425	0.40 on 0.35 off 0.225 on 0.525 off
Dial tone -	330x440	continuous
Number unobtainable tone -	425	continuous
Pay tone -	816/1209	0.125 on 1.5 off
Ringing tone -	425	0.4 on 0.2 off 0.4 on 2.0 off
Route tone -	425	0.06 on 0.06 off
Call waiting tone -	425	0.2 on 0.6 off 0.2 on 5.0 off
Bangladesh (People's Republic of)		
Busy tone -	450	0.2 on 0.3 off 0.7 on 0.8 off
Congestion tone -	450	0.25 on 0.25 off
Dial tone -	450	continuous
Special dial tone -	450	0.4 on 0.4 off
Howler tone -	3000	continuous
Pay tone -	800/1900	continuous
Ringing tone -	450	1.0 on 4.0 off
Warning tone - operator intervening	450	0.20 on 0.02 off 0.20 on 1.40 off
Call waiting tone -	450	3.0 on 10.0 off
Barbados		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Ringing tone -	440+480	2.0 on 4.0 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Special information tone -	950/1400/1800	3x0.33 on
Call waiting tone -	440	2x(0.3 on 10.0 off)
Belarus (Republic of)		
Busy tone -	425	0.4 on 0.4 off
Ringing tone -	425	0.8 on 3.2 off
Belgium		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.167 on 0.167 off
Dial tone -	425	continuous
Special dial tone -	425	1.0 on 0.25 off
Holding tone -	1400	0.4 on 15.0 off
Ringing tone -	425	1.0 on 3.0 off
Special information tone -	900/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	1400	0.175 on 0.175 off 0.175 on 3.50 off
Benin (Republic of)		
Busy tone -	440//425	0.5 on 0.5 off
Congestion tone -		announcement
Dial tone -	440//425	continuous
Special dial tone -	330+440	continuous
Pay tone -		announcement
Ringing tone -	440//425	1.7 on 3.3 off
Route tone -	440//425	0.05 on 0.05 off
Special information tone -		announcement
Call waiting tone -	440	continuous
Bermuda		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Ringing tone -	440+480	2.0 on 4.0 off
Special information tone -	913/1428/1776	0.27 on 0.38 on 0.38 on
Call waiting tone - (6)	440	
Bhutan (Kingdom of)		
Busy tone -	400	0.6 on 0.6 off
Dial tone -	400+25	continuous
Number unobtainable tone -	400	continuous
Offering tone, trunk -	450	0.2 on 0.2 off 0.2 on 0.6 off
Ringing tone -	400+25	0.4 on 0.2 off 0.4 on 2.6 off
Waiting tone -	400	0.5 on 0.25 off
Bosnia and Herzegovina		
Busy tone -	425	0.5 on 0.5 off
Confirmation tone -	425	continuous
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	0.2 on 0.3 off 0.7 on 0.8 off
Second dial tone -	425	continuous
Special dial tone -	425	0.4 on 0.04 off
Offering tone, trunk -	425	0.2 on 0.3 off 0.7 on 0.8 off
Pay tone -	425	0.5 on 15.0 off
Payphone recognition tone -	1100+1750	0.2 on 0.2 off 0.2 on 2.0 off
Ringing tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	425	0.3 on 10.0 off
Botswana (Republic of)		
Acceptance tone -	425	0.06 on 0.06 off
Busy tone -	425	0.38 on 0.38 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	350+450	continuous
Special dial tone -	350+450	0.40 on 0.04 off
Holding tone -	425	5.0 on 5.0 off
Intrusion tone -	425	0.16 on 2.0 off
Line lock-out tone -	425	5.0 on 1.0 off
Refusal tone -	425	5.0 on 1.0 off
Ringing tone -	425	0.4 on 0.2 off 0.4 on 2.0 off
Waiting tone -	425	1.0 on 1.0 off
Call waiting tone -	425	0.2 on 0.6 off 0.2 on

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Brazil (Federative Republic of)		
Busy tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Dial tone - pabx	425	0.975 on 0.05 off
Executive override tone -	750	0.02 on 1.0 off
Function acknowledge tone -	425	0.1 on 0.1 off 0.1 on 2.0 off
Number unobtainable tone -	425	0.75 on 0.25 off 0.25 on 0.25 off
Pay tone -	300	0.75 on
Ringing tone -	425	1.0 on 4.0 off
Waiting tone -	425	0.05 on 1.0 off
British Virgin Islands		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Recall dial tone -	350+440	3x(0.1 on 0.1 off) + continuous
Number unobtainable tone -	480+620	0.25 on 0.25 off
Payphone recognition tone -	1600/1143	0.2 on 0.2 off 0.2 on 2.0 off
Ringing tone -	440+480	2.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - operator intervening	450	0.2 on 0.2 off 0.65 on 0.2 off
Call waiting tone -	440	1x(0.5 on 10.0 off 0.5 on)
Brunei Darussalam		
Busy tone -	400	0.375 on 0.375 off
Confirmation tone -	400x24	0.1 on 0.1 off 0.3 on 0.3 off
Congestion tone -	400	0.375 on 0.375 off
Dial tone -	400x50	continuous
Special dial tone -	400x24	0.1 on 0.1 off
Holding tone -	400x24	0.5 on 2.5 off
Number unobtainable tone -	400	continuous
Ringing tone -	400+450	0.4 on 0.2 off 0.4 on 0.2 off
Warning tone - end of period	400	0.624 on 4.376 off
Warning tone - operator intervening	400	0.25 on 2.0 off
Warning tone - pip tone	900	0.25 on 0.25 off
Waiting tone -	400	0.3 on 0.25 off
Call waiting tone -	400x24	0.5 on 0.25 off
Bulgaria (Republic of)		
Busy tone - I	425	0.5 on 0.5 off
Busy tone - II	425	0.2 on 0.5 off
Busy tone - III	425	0.25 on 0.25 off
Busy tone - IV	425	0.3 on 0.3 off
Congestion tone - I	425	0.25 on 0.25 off
Congestion tone - II	425	0.22 on 0.22 off
Congestion tone - III	425	0.5 on 0.5 off
Dial tone - I	425	continuous
Dial tone - II	425	0.25 on 0.75 off 0.75 on 1.0 off
Dial tone - III	425	0.25 on 0.3 off 0.7 on 0.8 off
Dial tone - IV	425	0.25 on 0.25 off 0.25 on 1.0 off
Special dial tone -	425	1.5 on 0.1 off
Holding tone - I	950/950/1400	0.65 on 0.32 off 0.32 on 0.32 off 1.30 on 2.60 off
Holding tone - II	425/950/950/1400	1.50 on 5.12 off 1.50 on 5.12 off 1.50 on 5.12 off
Intrusion tone - I	425	0.24 on 0.24 off 0.24 on 1.20 off
Intrusion tone - II	425	2.0 on 0.5 off 2.0 on 0.5 off
Intrusion tone - III	425	0.25 on 0.25 off 0.25 on 1.5 off
Payphone recognition tone -	1100+1750/750+1450	0.2 on 0.2 off 0.2 on 2.0 off
Ringing tone - I	425	1.0 on 4.0 off
Ringing tone - II	425	1.0 on 9.0 off
Ringing tone - III	425	1.5 on 3.5 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - I	1400	0.35 on 0.50 off
Warning tone - II	425/1400	0.5 on 0.5 off
Call waiting tone - I	425	0.15 on 0.15 off 0.15 on 4.0 off
Call waiting tone - II	425	2x(0.3 on)
Call waiting tone - III	425	0.2 on 0.6 off
Burkina Faso		
Acceptance tone -	425	1.0 on 4.0 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Busy tone -	425//440//620	0.5 on 0.5 off
Confirmation tone -	350	0128 on 0.128 off 0.384 on
Congestion tone -	425//620	0.25 on 0.25 off
Dial tone -	425//440	continuous
Ringling tone - I	425	1.0 on 4.0 off
Ringling tone - II	440	1.7 on 3.3 off
Ringling tone - III	480	2.0 on 4.0 off
Route tone -	425	0.05 on 0.05 off
Special information tone -	900/1380/1860	0.35 on 0.30 on 0.35 on 1.0 off
Burundi (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Ringling tone -	425	1.7 on 3.3 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Cambodia (Kingdom of)		
Busy tone -	425	0.375 on 0.375 off
Congestion tone -	425	0.375 on 0.375 off
Dial tone -	425	continuous
Number unobtainable tone -	425	0.25 on 0.25 off
Ringling tone -	425	0.4 on 0.2 off 0.4 on 2.0 off
Cameroon (Republic of)		
Busy tone -	440	0.5 on 0.5 off
Congestion tone -	440	0.25 on 0.25 off
Dial tone -	440	continuous
Second dial tone -	330+440	continuous
Pay tone -	12000	continuous
Ringling tone -	440	1.7 on 3.3 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	440	0.2 on 0.6 off 0.2 on
Canada		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Ringling tone -	440+480	2.0 on 4.0 off
Call waiting tone -	440	2x(0.3 on 10.0 off)
Cayman Islands		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Number unobtainable tone -	425	0.25 on 0.25 off
Ringling tone -	425	1.0 on 4.0 off
Central African Republic		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.5 on 0.5 off
Dial tone -	425	continuous
Second dial tone -	425+330	continuous
Number unobtainable tone -	425	0.5 on 0.5 off
Pay tone -	12000	0.15 on 0.15 off
Ringling tone -	425	1.7 on 3.3 off
Route tone -	425	0.05 on 0.05 off
Special information tone -	950/1400/1800	3x0.33 on 2x0.30 off
Chad (Republic of)		
Busy tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Second dial tone -	330+400	continuous
Ringling tone -	440	1.7 on 3.3 off
Special information tone -	950/1400/1800	(3x0.33 on 2x0.03 off) 1.0 off
Channel Islands: Guernsey		
Busy tone -	400	0.375 on 0.375 off
Congestion tone -	400	0.40 on 0.35 off 0.25 on 0.52 off
Dial tone -	350+450	continuous
Special dial tone -	350+450	0.75 on 0.75 off
Pay tone -	400	0.125 on 0.125 off
Ringling tone -	400+450	0.4 on 0.2 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	400	8x(0.1 on 4.9 off)
Channel Islands: Jersey		
Busy tone -	400	0.375 on 0.375 off
Congestion tone -	400	0.4 on 0.35 off 0.225 on 0.525 off
Dial tone -	350+450	continuous
Number unobtainable tone -	400	continuous
Pay tone -	400	0.125 on 0.125 off
Ringling tone -	400+450	0.4 on 0.2 off 0.4 on 2.0 off
Waiting tone -	400	0.1 on 2.5 off 0.1 on
Chile		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.2 on 0.2 off
Dial tone -	400	continuous
Second dial tone -	330+440	continuous
Identification tone -	800/1200	0.6 on 2.0 off 0.6 on 2.0 off
Payphone recognition tone -	1100+1750/750+1450	0.2 on 0.2 off 0.2 on 2.0 off
Ringling tone -	400	1.0 on 3.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Warning tone - end of period	800	2.0 on
Warning tone - operator intervening	1400	0.5 on 15.0 off
Waiting tone -	900+1300	0.5 on 0.5 off
China (People's Republic of)		
Busy tone -	450	0.35 on 0.35 off
Congestion tone -	450	0.7 on 0.7 off
Dial tone -	450	continuous
Second dial tone -	450	continuous
Intrusion tone -	450	0.2 on 0.2 off 0.2 on 0.6 off
Number unobtainable tone -	450	3x(0.1 on 0.1 off) 0.4 on 0.4 off
Ringling tone -	450	1.0 on 4.0 off
Special information tone - I	450	0.4 on 0.04 off
Special information tone - II	950	0.4 on 10.0 off
Waiting tone -	450	0.4 on 4.0 off
Colombia (Republic of)		
Busy tone -	425	0.25 on 0.25 off
Congestion tone -	425	0.10 on 0.25 off 0.35 on 0.25 off 0.65 on 0.25 off
Dial tone -	425	continuous
Number unobtainable tone -	425	0.65 on 0.25 off 0.20 on 0.60 off
Pay tone -	50/12000/16000	0.15 on
Ringling tone -	425	1.0 on 4.5 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Comoros (Union of the)		
Busy tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Second dial tone -	330+440	continuous
Ringling tone -	440	1.71 on 0.05 off
Route tone -	440	0.05 on 0.05 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Cook Islands		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.25 on 0.25 off
Dial tone -	400	continuous
Ringling tone -	400+450	0.4 on 0.2 off
Call waiting tone -	400+450	0.5 on
Costa Rica		
Busy tone -	450	0.33 on 0.33 off
Congestion tone -	450	0.33 on 0.33 off
Dial tone -	450	continuous
Ringling tone -	450	1.2 on 4.9 off
Warning tone - operator intervening	425	0.17 on 0.17 off 0.5 on 0.17 off
Call waiting tone -	450	0.15 on 0.15 off 0.15 on 8.0 off
Côte d'Ivoire (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -		announcement

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Dial tone -	425	continuous
Second dial tone -	440+330	continuous
Line lock-out tone -	425	0.4 on 0.04 off
Pay tone -	12000	
Ringing tone -	425	1.7 on 3.3 off
Special information tone -		announcement
Call waiting tone - (6)	425	
Croatia (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	0.2 on 0.3 off 0.7 on 0.8 off
Payphone recognition tone -	1206/850	4x(0.2 on 0.2 off 0.2 on 0.2 off)
Ringing tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Call waiting tone -	425	0.3 on 8.0 off
Cuba		
Acceptance tone -	425	continuous
Busy tone -	600x120//620+480//425//400	0.5 on 0.5 off
Congestion tone -	600x120//425//400	0.25 on 0.25 off
Dial tone - I	600x120//425	continuous
Dial tone - II	425	0.75 on 0.75 off 0.25 on 0.25 off
Negative indication tone -	425	0.5 on 0.5 off
Ringing tone - I	425	1.0 on 4.0 off
Ringing tone - II	440+480//440+620//480+620	2.0 on 4.0 off
Ringing tone - III	420x40	1.0 on 2.0 off
Ringing tone - IV	400+450	0.4 on 0.2 off 0.4 on 2.0 off
Special information tone - I	950/1400/1800	(3x0.33 on 2x0.33 off) 1.0 off
Special information tone - II	400	4x(0.075 on 0.10 off) 0.30 off
Warning tone - I, operator intervening	425	0.1 on 4.9 off
Warning tone - II, operator intervening	425	0.5 on 0.2 off
Call waiting tone - I	425	0.2 on 0.6 off 0.2 on
Call waiting tone - II	400	0.5 on 0.5 off
Cyprus (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	350+450	continuous
Number unobtainable tone -	425	2.5 on 0.5 off
Pay tone -	1638/1206/943	3x(0.068 on 0.068 off)
Ringing tone -	425	1.5 on 3.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - operator intervening	1400	0.5 on 14.0 off
Call waiting tone -	425	0.1 on 0.1 off 0.1 on 5.0 off
Czech Republic		
Busy tone -	425	0.33 on 0.33 off
Congestion tone -	425	0.165 on 0.165 off
Dial tone -	425	0.33 on 0.33 off 0.66 on 0.66 off
Ringing tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	(3x0.33 on 2x0.03 off) 1.0 off
Call waiting tone -	425	0.33 on 9.0 off
Caller waiting tone -	425	1.00 on 0.17 off 0.33 on 3.50 off
Democratic Republic of the Congo		
Busy tone -	450	0.5 on 0.5 off
Congestion tone -	450	0.5 on 0.5 off
Dial tone -	450	continuous
Ringing tone -	450	2.0 on 4.0 off
Denmark		
Busy tone - I	425	0.25 on 0.25 off
Busy tone - II (1)	425	0.5 on 0.5 off
Congestion tone - I	425	0.25 on 0.25 off
Congestion tone - II (1)	425	0.2 on 0.2 off
Dial tone -	425	continuous
Ringing tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.00 off
Call waiting tone - I	425	0.2 on 0.2 off 0.2 on 3.6 off 0.2 on 0.2 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Call waiting tone - II (1)	425	0.2 on 0.2 on 0.6 off 0.2 on 3.0 off 0.2 on 0.6 off 0.2 on
Diego Garcia		
Busy tone -	480/620	interrupted at 60 ipm
Dial tone -	350/440	continuous
Number unobtainable tone -	480/620	interrupted at 120 ipm
Ringing tone -	440/480	1.0 on 3.0 off
Djibouti (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Dial tone -	425	continuous
Ringing tone -	425	1.5 on 3.5 off
Route tone -	425	0.05 on 0.05 off
Dominica (Commonwealth of)		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Ringing tone -	440+480	2.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	440	1x(0.5 on 10.0 off 0.5 on)
Dominican Republic		
Busy tone - I	400	0.8 on 0.8 off
Busy tone - II	400	0.375 on 0.375 off
Congestion tone - I	400	0.8 on 0.8 off
Congestion tone - II	400	0.375 on 0.375 off
Dial tone - I	50	continuous
Dial tone - II	33	0.0166 on 0.0166 off
Number unobtainable tone -	400	continuous
Ringing tone -	400//450	0.4 on 0.2 off 0.4 on 2.2 off
Ecuador		
Busy tone -	425	0.33 on 0.33 off
Congestion tone -	425	0.33 on 0.33 off
Dial tone -	425	continuous
Ringing tone -	425	1.2 on 4.65 off
Call waiting tone -	425	0.2 on 0.6 off
Egypt (Arab Republic of)		
Busy tone -	425x50	1.0 on 4.0 off
Congestion tone -	450	0.5 on 0.5 off
Intrusion tone -	450	0.5 on 0.5 off
Payphone recognition tone -	1100+1750/750+1450	0.2 on 0.2 off 0.2 on 2.0 off
Ringing tone -	425x50	2.0 on 1.0 off
Special information tone -	950/1400/1800	0.33 on 0.33 off 0.33 on 0.33 off 0.33 on 0.33 off
El Salvador (Republic of)		
Busy tone -	425	0.32 on 0.32 off
Congestion tone -	425	0.32 on 0.32 off
Dial tone -	425	continuous
Special dial tone -	425	0.40 on 0.04 off
Intrusion tone -	425	0.20 on 0.20 off 0.50 on 0.20 off
Line lock-out tone -	425	0.167 on 0.167 off 0.500 on 0.167 off
Ringing tone -	425	1.2 on 4.6 off
Special information tone -	950/1400/1800	3x0.33 on 1.00 off
Warning tone -	1400	0.20 on 0.60 off
Call waiting tone -	425	0.35 on 15.0 off
Estonia (Republic of)		
Busy tone -	425	0.3 on 0.3 off
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	continuous
Pay tone -	16000	1.15 on 0.35 off
Ringing tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	950/1400/1800	3x0.33 on 0.3 off
Ethiopia (Federal Democratic Republic of)		
Acceptance tone -	425	continuous

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Busy tone -	425	0.4 on 0.4 off
Congestion tone -	425	0.4 on 0.4 off
Dial tone -	425	continuous
Special dial tone -	425	0.4 on 0.04 off
Intrusion tone -	425	0.5 on 0.2 off
Line lock-out tone -	425	0.4 on 0.4 off
Refusal tone -	425	0.4 on 0.4 off
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone -	1400	0.5 on 11.5 off
Call waiting tone -	425	0.2 on 0.6 off
Falkland Islands (Malvinas)		
Busy tone -	400	0.375 on 0.375 off
Congestion tone -	400	0.4 on 0.35 off 0.255 on 0.525 off
Dial tone -	350+450	continuous
Number unobtainable tone -	400	continuous
Ringling tone -	400+450	0.4 on 0.2 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - operator intervening	1000	0.1 on 0.1 off
Faroe Islands		
Busy tone -	425	0.25 on 0.25 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Number unobtainable tone -	950/1400/1800	3x0.33 on 1.0 off
Ringling tone -	425	1.0 on 4.0 off
Fiji (Republic of)		
Acceptance tone -	425	continuous
Busy tone -	425	0.75 on 0.75 off
Congestion tone -	425	0.37 on 0.37 off 0.37 on 0.37 off
Dial tone -	400+450	continuous
Second dial tone -	425	continuous
Special dial tone -	400+450	0.40 on 0.04 off
Line lock-out tone -	425	0.2 on 0.6 off 0.2 on 4.0 off
Number unobtainable tone -	400	2.5 on 0.5 off
Offering tone, trunk -	425	0.17 on 0.17 off 0.50 on 0.17 off
Refusal tone -	425	0.24 on 0.76 off
Ringling tone -	425x25	0.4 on 0.2 off 0.4 on 2.0 off
Special ringling tone -	425x25	1.0 on 5.0 off 1.0 on 5.0 off
Special information tone -	925/1400/1800	3x0.38 on 1.00 off
Warning tone -	1400	0.5 on 12.0 off
Finland		
Busy tone -	425	0.3 on 0.3 off
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	continuous
Special dial tone -	425	0.65 on 0.025 off
Queue tone -	950/950/1400	0.65 on 0.325 off 0.325 on 1.3 on 2.6 off
Ringling tone – (11)	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Warning tone - operator intervening	425	0.2 on 0.3 off 0.2 on 1.3 off
Call waiting tone -	425	0.15 on 0.15 off 0.15 on 8.0 off
France		
Busy tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Ringling tone -	440	1.5 on 3.5 off
Special information tone -	950/1400/1800	3x(0.3 on 0.03 off) 1.0 off
Call waiting tone -	440	0.3 on 10.0 off
French Departments and Territories in the Indian Ocean		
Busy tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Ringling tone -	440	1.5 on 3.5 off
Special information tone -	950/1400/1800	3x(0.3 on 0.03 off) 1.0 off
Call waiting tone -	440	0.3 on 10.0 off
French Guiana (French Department of)		
Busy tone -	440	0.5 on 0.5 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Dial tone -	440	continuous
Ringling tone -	440	1.5 on 3.5 off
Special information tone -	950/1400/1800	3x(0.3 on 0.03 off) 1.0 off
Call waiting tone -	440	0.3 on 10.0 off
French Polynesia (Territoire français d'outre-mer)		
Acceptance tone -	440	1.7 on 3.3 off
Busy tone -	440	0.5 on 0.5 off
Congestion tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Second dial tone -	440+330	continuous
Howler tone -	3000	continuous
Pay tone -	440	continuous
Ringling tone -	440	1.7 on 3.3 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	440	1.7 on 3.3 off
Gabonese Republic		
Busy tone -	440	0.5 on 0.5 off
Congestion tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Ringling tone -	440	1.7 on 3.3 off
Special information tone -	950/1400/1800	0.30 on 0.33 off
Call waiting tone -	1800	0.5 on 2.5 off
Gambia (Republic of the)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.5 on 0.5 off
Dial tone -	425	continuous
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	1400	0.330 on 0.030 off
Call waiting tone -	950	0.330 on 0.030 off
Georgia		
Busy tone -	425	1.0 on 3.0 off
Congestion tone -	425	1.0 on 1.0 off
Dial tone -	425	continuous
Ringling tone -	25	1.0 on 4.0 off
Call waiting tone -	425	0.125 on
Germany (Federal Republic of)		
Busy tone -	425	0.48 on 0.48 off
Congestion tone -	425	0.24 on 0.24 off
Dial tone -	425	continuous
Special dial tone -	425+400	continuous
Payphone recognition tone -	1633/1336	5x(0.2 on 0.2 off 0.2 on 2.0 off)
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	900/1400/1800	3x0.33 on 1.0 off
Warning tone - operator intervening	425	0.24 on 0.24 off 0.24 on 1.28 off
Call waiting tone - (2)	425	0.2 on 0.2 off 0.2 on 5.0 off
Ghana		
Busy tone -	400	0.25 on 0.25 off
Congestion tone -	400	0.5 on 0.5 off
Dial tone -	400	continuous
Holding tone -	400	0.5 on 0.5 off 0.5 on 0.25 off
Number unobtainable tone -	400	0.075 on 0.1 off 0.075 on 0.1 off 0.075 on 0.4 off
Ringling tone -	400	1.0 on 4.0 off
Waiting tone -	400	0.5 on 0.3 on 0.2 off 0.3 on 0.2 off 3.0 off
Gibraltar		
Busy tone -	400	0.375 on 0.375 off
Congestion tone -	400	0.4 on 0.35 off 0.225 on 0.525 off
Dial tone -	350+400	continuous
Number unobtainable tone -	400	continuous
Ringling tone -	400+450	0.4 on 0.2 off 0.4 on 2.0 off
Waiting tone -	400	0.1 on 3.0 off
Greece		
Busy tone -	425	0.3 on 0.3 off
Congestion tone -	425	0.15 on 0.15 off
Dial tone -	425	0.2 on 0.3 off 0.7 on 0.8 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Special dial tone -	400/425//425/450	0.2 on 0.3 off 0.7 on 0.8 off
Holding tone -	900	0.5 on 0.5 off
Intrusion tone -	425	0.15 on 0.25 off 0.15 on 1.45 off
Ringing tone -	425	1.0 on 4.0 off
Special information tone -	950/1450/1800	3x0.33 on 1.0 off
Call waiting tone -	425	0.3 on 10.0 off 0.3 on 10.0 off
Greenland (Denmark)		
Busy tone -	445//425	0.25 on 0.25 off
Congestion tone -	445//425	0.25 on 0.25 off
Dial tone -	445//425	continuous
Second dial tone -	445//425	continuous
Number unobtainable tone - I	950/1400/1800	3x0.33 on 1.0 off
Number unobtainable tone - II	425	0.25 on 0.25 off
Pay tone -	950/1400/1800	3x0.22 on 1.0 off
Ringing tone -	445//425	1.0 on 4.0 off
Grenada		
Busy tone -	460+620	0.5 on 0.5 off
Congestion tone -		announcement
Ringing tone -	440+480	2.0 on 4.0 off
Guadeloupe (French Department of)		
Busy tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Ringing tone -	440	1.5 on 3.5 off
Special information tone -	950/1400/1800	3x(0.3 on 0.03 off) 1.0 off
Call waiting tone -	440	0.3 on 10.0 off
Guinea (Republic of)		
Busy tone -	450	0.2 on 0.2 off
Ringing tone -	450	0.4 on 0.2 off
Guyana		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.5 on 0.5 off
Dial tone -	360/400	1.3 on 0.3 off 0.2 on 0.5 off
Ringing tone -	425	1.75 on 3.25 off
Waiting tone -	480	0.5 on 18.0 off
Honduras (Republic of)		
Busy tone -	440	0.5 on 0.5 off
Congestion tone -	440	0.25 on 0.25 off
Dial tone -	440	continuous
Ringing tone -	440	1.0 on 4.0 off
Call waiting tone -	440	0.5 on 0.5 off 2.0 on 4.0 off
Hong Kong, China		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Number unobtainable tone -	480+620	continuous
Ringing tone -	440+480	0.4 on 0.2 off 0.4 on 3.0 off
Hungary (Republic of)		
Busy tone -	425	0.3 on 0.3 off
Congestion tone -	425	0.3 on 0.3 off
Dial tone -	425	continuous
Second dial tone -	425+450	continuous
Special dial tone -	350+375+400	continuous
Negative indication tone -	300+425	0.2 on 0.2 off 0.2 on 0.2 off 0.2 on 0.2 off + announcement
Offering tone, trunk -	425	0.3 on 0.3 off 0.3 on 1.5 off
Pay tone -	600//1100	(3 or 5)(0.15 on 0.15 off)
Positive indication tone -	300+425	1.0 on 0.2 off + announcement
Payphone recognition tone -	1100+1750//750+1450	0.2 on 0.2 off 0.2 on 2.0 off
Ringing tone -	425	1.25 on 3.75 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone -	425	0.3 on 0.3 off 0.3 on 1.5 off
Call waiting tone -	425	0.04 on 1.96 off
Iceland		
Busy tone -	425	0.25 on 0.25 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Special dial tone - (7)	425	0.4 on 0.04 off
Number unobtainable tone -		announcement
Payphone recognition tone -	1633/1209	0.2 on 0.2 off 0.2 on 2.0 off
Ringing tone -	425	1.0 on 4.0 off
Warning tone -	425	0.4 on 15.0 off
Waiting tone -	425	4x(0.2 on 0.2 off 0.2 on 3.6 off 0.2 on 0.2 off 0.2 on)
India (Republic of)		
Acceptance tone -	400	1.0 on 4.0 off
Busy tone -	400	0.75 on 0.75 off
Congestion tone -	400	0.25 on 0.25 off
Dial tone -	400x25	continuous
Special dial tone -	400	2.8 on 0.2 off
Holding tone -	400	0.25 on 0.25 off 0.25 on 3.25 off
Intrusion tone -	400	0.15 on 4.85 off
Refusal tone -	400	0.25 on 0.25 off
Ringing tone - I (local calls)	400x25	0.4 on 0.2 off 0.4 on 2.0 off
Ringing tone - II (NSD/ISD calls)	400x25	1.0 on 2.0 off
Route tone -	400	0.1 on 0.9 off
Call waiting tone -	400	0.2 on 0.1 off 0.2 on 7.5 off
Indonesia (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Payphone recognition tone -	1200/800	0.2 on 0.2 off 0.2 on 0.2 off
Ringing tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x(0.33 on 0.03 off) 1.0 off
Call waiting tone -	425	0.15 on 0.15 off 0.15 on 10.0 off
Iran (Islamic Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Offering tone, trunk -	425	0.2 on 0.2 off 0.2 on 1.4 off
Preemption tone -	1400	3x(0.1 on) 0.1 off
Ringing tone -	425	1.0 on 4.0 off
Re-order tone -	425	0.25 on 0.25 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Test number tone -	800	continuous
Call waiting tone -	425	0.2 on 0.2 off 0.2 on 10.0 off
Iraq (Republic of)		
Busy tone -	400	1.0 on 1.0 off
Recall dial tone -	133	0.4 on 0.2 off 0.4 on 1.5 off
Ringing tone -	400	continuous
Ireland		
Busy tone -	425	0.5 on 0.5 off
Dial tone -	400//425//450	continuous
Pay tone -	12000	0.12 on
Ringing tone -	400+450//425	0.4 on 0.2 off 0.4 on 2.0 off
Route tone -	425	0.06 on 0.06 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	425	0.18 on 0.20 off 0.20 on 4.50 off
Israel (State of)		
Busy tone -	400	0.5 on 0.5 off
Confirmation tone - I	400	1x(0.17 on 0.14 off 0.34 on)
Confirmation tone - II	400	0.04 on 0.04 off
Dial tone -	400	continuous
Second dial tone -	400	3x(0.1 on 0.1 off) + continuous
Recall dial tone -	400	3x(0.1 on 0.1 off) + continuous
Special dial tone -	400	1.0 on 0.25 off
Holding tone -	400	0.05 on 2.0 off
Number unobtainable tone -	1000/1400/1800	3x0.333 on 1.0 off +announcement
Pay tone -	16000	0.18 on
Payphone recognition tone -	1209/852	5x(0.2 on 0.2 off 0.2 on 2.0 off)
Ringing tone -	400	1.0 on 3.0 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Search tone - mobile	1004	0.01 on 1.0 off
Special information tone -	1000/1400/1800	3x0.333 on 1.0 off + announcement
Waiting tone - message	400	10x(0.16 on 0.16 off) + continuous
Call waiting tone -	400	1x(0.5 on 10.0 off 0.5 on)
Caller waiting tone -	400	2x(0.1 on 0.1 off) 0.6 on 3.0 off
Italy		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	0.2 on 0.2 off 0.6 on 1.0 off
Special dial tone -	425	continuous
Ringing tone -	425	1.0 on 4.0 off
Special information tone -		announcement
Call waiting tone - (4)	425	0.40 on 0.10 off 0.25 on 0.10 off 0.15 on
Jamaica		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Ringing tone -	440+480	2.0 on 4.0 off
Call waiting tone -	440	0.25 on 0.25 off
Japan		
Busy tone - (3)	400	0.5 on 0.5 off
Dial tone - I	400	continuous
Dial tone - II, pabx	400	0.25 on 0.25 off
Dial tone - III	400	0.125 on 0.125 off 0.125 on 0.125 off 0.125 on 0.125 off 0.125 on 0.125 off 0.75 on 0.25 off
Second dial tone - (3)	400	0.125~0.15 on 0.1~0.125 off
Pay tone -	250	0.5 on
Positive indication tone - I	400	0.125 on 0.125 off 0.125 on 0.625 off
Positive indication tone - II	400	0.125 on 0.125 off 0.625 on 0.125 off
Ringing tone - I	400x(15~20)	1.0 on 2.0 off
Ringing tone - II, pabx	400x20	1.0 on 2.0 off
Call waiting tone - I	400x16/400	0.5 on 0.0~4.0 off 0.05 on 0.45 off 0.05 on 3.45 off
Call waiting tone - II	400x16/400	0.1 on 0.1 off 0.1 on 3.0 off
Call waiting tone - III	400x16/400	0.064 on 0.436 off 0.064 on 3.436 off
Call waiting tone - IV	400x16/400	0.25 on 0.25 off 0.25 on 3.25 off
Call waiting tone - V	400x16/400	0.5 on 0.5 off 0.5 on 2.5 off
Call waiting tone - VI	400x16/400	0.5 on 0.0~4.0 off 0.05 on 0.45 off 0.05 on 0.45 off 0.05 on 0.45 off 0.05 on 2.45 off
Jordan (Hashemite Kingdom of)		
Busy tone -	420x40	0.5 on 0.5 off
Congestion tone -	420x40	0.25 on 0.25 off
Dial tone -	420x40	continuous
Holding tone -	420x40	0.5 on 8.0 off
Howler tone -	950	continuous
Intrusion tone -	420x40	0.2 on 0.2 off 0.2 on 1.3 off
Number unobtainable tone -	420x40	0.12 on 0.12 off
Ringing tone -	420x40	1.0 on 4.0 off
Special information tone -	(950/1400/1800)x40	1.0 on 1.0 off
Call waiting tone -	420x40	0.15 on 0.15 off
Kenya (Republic of)		
Busy tone -	425	0.2 on 0.6 off 0.2 on 0.6 off
Congestion tone -	425	0.2 on 0.6 off
Dial tone -	425	continuous
Pay tone - I	941	0.2 on 0.2 off
Pay tone - II	800/1600	0.08 on 0.08 off
Payphone recognition tone -	1633	0.08 on 1.5 off
Ringing tone -	425	0.67 on 3.0 off 1.5 on 5.0 off
Special information tone -	900/1400/1800	3x0.75 on 1.25 off
Warning tone - operator intervening	425	0.2 on 0.2 off
Call waiting tone -	425	continuous
Kiribati (Republic of)		
Busy tone -	425	0.375 on 0.375 off
Congestion tone -	425	0.375 on 0.375 off
Dial tone -	425	continuous

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Number unobtainable tone -	425	2.5 on 0.5 off
Ringling tone -	425	0.4 on 0.2 off 0.4 on 2.0 off
Call waiting tone -	425	0.1 on 0.2 off 0.1 on 4.7 off
Korea (Republic of)		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.3 on 0.2 off
Dial tone -	350+440	continuous
Recall dial tone - I	400//450	1.0 on 4.0 off
Recall dial tone - II	400//450	1.0 on 2.0 off
Intercept tone -	350+440	0.125 on 0.25 off 0.125 on 1.5 off
Number unobtainable tone -	450	0.2 on 0.1 off 0.2 on 1.5 off
Ringling tone -	440+480	1.0 on 2.0 off
Warning tone - operator intervening	392/494/587	2x(0.5 on 0.5 on 1.5 on)
Waiting tone -	350+440	0.25 on 0.25 off 0.25 on 3.25 off
Kuwait (State of)		
Acceptance tone -	425	continuous
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Second dial tone -	425	continuous
Special dial tone -	425	0.40 on 0.04 off
Line lock-out tone -	425	0.32 on 0.32 off
Refusal tone -	425	0.1 on 0.4 off
Ringling tone -	425	1.0 on 4.0 off
Route tone -	425	0.1 on 0.1 off
Special information tone -	950/1400/1800	3x0.33 on 1.00 off
Warning tone -	425	0.34 on 5.0 off
Call waiting tone -	425	1.0 on 4.0 off
Kyrgyz Republic		
Busy tone -	425	0.4 on 0.4 off
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	continuous
Second dial tone -	425	continuous
Special dial tone -	425	1.0 on 0.2 off
Howler tone -	1000	continuous
Negative indication tone -	425	1x(0.2 on 0.2 off 0.2 on 0.2 off 0.2 on)
Number unobtainable tone -	950/1400/1800	3x0.33 on 1.0 off
Positive indication tone -	425	1x(0.2 on)
Ringling tone -	425	0.8 on 3.2 off
Route tone -	50	0.1 on 1.5 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - voice mail	425	1x(0.2 on 0.6 off 0.2 on 0.6 off 0.2 on)
Call waiting tone -	425	1x(0.2 on 0.6 off 0.2 on 3.0 off 0.2 on 0.6 off 0.2 on)
Caller waiting tone -	425	0.2 on 5.0 off
Lao People's Democratic Republic		
Busy tone -	425	1.0 on 1.0 off
Confirmation tone -	950	continuous
Congestion tone -	425	0.375 on 0.375 off
Dial tone -	425	continuous
Special dial tone -	425	0.4 on 0.04 off
Number unobtainable tone -	425	2.5 on 0.5 off
Ringling tone -	425	1.0 on 4.0 off
Waiting tone -	425	0.4 on 0.4 off
Latvia (Republic of)		
Busy tone -	425	0.3 on 0.3 off
Confirmation tone -	425	0.4 on 0.4 off
Congestion tone -	425	0.15 on 0.15 off
Dial tone -	425	continuous
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1600	3x0.33 on 1.0 off
Call waiting tone -	425	0.2 on 5.0 off
Lebanon		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.24 on 0.24 off
Dial tone -	425	continuous

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	425	0.2 on 0.2 off
Call waiting tone -	425	0.2 on 0.6 off
Lesotho (Kingdom of)		
Busy tone - I	425	1.0 on 1.0 off
Busy tone - II	425	0.5 on 0.5 off
Congestion tone - I	425	0.5 on 0.5 off
Congestion tone - II	425	0.2 on 0.2 off
Dial tone -	425	continuous
Pay tone -	16000	0.7 on 3.0 off
Ringling tone -	400/425	1.0 on 4.0 off
Special information tone - I	425	0.16 on 2.0 off
Special information tone - II	900/1400/1800	3x0.3 on 1.0 off
Call waiting tone - I	425	1.0 on 3.0 off
Call waiting tone - II	425	0.15 on 0.15 off
Liberia (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Dial tone -	425	continuous
Number unobtainable tone -	425	0.6 on 0.2 off 3x(0.2 on 0.2 off)
Ringling tone -	425//450	1.0 on 4.0 off
Liechtenstein (Principality of)		
Busy tone - I	425	0.3 on 0.3 off
Busy tone - II	420	0.4 on 0.4 off
Busy tone - III	400	0.36 on 0.36 off
Busy tone - IV	425	0.5 on 0.5 off
Congestion tone -	425//420	0.2 on 0.2 off
Dial tone -	420	continuous
Recall dial tone -	420	continuous
Special dial tone -	380+420	continuous
Negative indication tone -	380+420	0.4 on 0.4 off
Number unobtainable tone -	950/1400/1800	3x0.33 on 1.0 off
Pay tone - I	1336/1633	0.2 on 0.2 off 0.2 on 0.2 off
Pay tone - II	800	0.2 on 0.2 off
Pay tone - III	1200	0.2 on 2.0 off
Positive indication tone -	380+420	1.0 on 5.0 off
Ringling tone - I	425	continuous
Ringling tone - II	420	1.0 on 5.0 off
Ringling tone - III	400//425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone -	420	0.15 on 0.15 off 0.15 on 1.95 off
Call waiting tone - I	425	0.15 on 8.0 off
Call waiting tone - II	420	0.04 on 1.95 off
Call waiting tone - III	425	0.2 on 0.2 off 0.2 on 4.0 off
Lithuania (Republic of)		
Busy tone -	425	0.35 on 0.35 off
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	continuous
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone - I	425	0.15 on 0.15 off 0.15 on 4.0 off
Call waiting tone - II	425	0.2 on 5.0 off
Luxembourg		
Busy tone -	425//2125	0.48 on 0.48 off
Congestion tone -	425//2125	0.24 on 0.24 off
Dial tone -	425//2125	continuous
Special dial tone -	400//425	continuous
Ringling tone -	425//2125	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Test number tone -	1000	continuous
Call waiting tone -	425	continuous
Macao, China		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Special dial tone -	425	1.8 on 0.2 off
Payphone recognition tone -	1100+1750/750+1450	0.2 on 0.2 off 0.2 on 0.2 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Ringing tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Call waiting tone -	425	0.2 on 0.6 off
Madagascar (Republic of)		
Busy tone -	440//425	0.5 on 0.5 off
Congestion tone -		announcement
Dial tone -	440//425	continuous
Special dial tone -	330+440	continuous
Facilities tone -	950	continuous
Pay tone -		announcement
Ringing tone -	440//425	1.7 on 3.3 off
Route tone -	440//425	0.05 on 0.05 off
Special information tone -	440	0.40 on 0.04 off
Call waiting tone -	440	0.1 on 1.9 off
Malawi		
Busy tone -	425	0.5 on 0.5 off
Dial tone -	425	continuous
Intrusion tone - (4)	1400	0.35 on 0.5 off
Payphone recognition tone -	1100+1750/750+1450	2x(0.2 on 0.2 off)
Ringing tone -	425	1.0 on 4.0 off
Special ringing tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.3 on 1.0 off
Malaysia		
Busy tone -	425	0.5 on 0.5 off
Congestion tone - I	425	0.50 on 0.25 off
Congestion tone - II	425	0.5 on 0.5 off
Dial tone -	425	continuous
Ringing tone - I	425	0.4 on 0.2 off 0.4 on 2.0 off
Ringing tone - II	425	1.0 on 3.0 off 1.0 on 5.0 off
Maldives (Republic of)		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.25 on 0.25 off
Dial tone -	400/50	continuous
Ringing tone -	400	0.4 on 0.2 off 0.4 on 2.0 off
Call waiting tone -	400	0.2 on 0.6 off 0.2 on 4.0 off
Mali (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -		announcement
Dial tone -	425	continuous
Pay tone -		announcement
Ringing tone -	425	1.5 on 3.0 off
Route tone -	425	0.05 on 0.05 off
Special information tone -	900/1400/1800	0.35 on 0.30 on 0.35 on 1.0 off
Call waiting tone -	425	0.3 on 10.0 off
Malta		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.5 on 0.5 off
Dial tone -	425	0.2 on 0.2 off 0.6 on 1.0 off
Special dial tone -	425	0.4 on 0.04 off
Intercept tone -	950/1400/1800	3x0.24 on 1.0 off
Ringing tone -	425	1.0 on 4.0 off
Special information tone -		announcement
Call waiting tone -	1400	0.34 on 1.5 off
Martinique (French Department of)		
Busy tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Ringing tone -	440	1.5 on 3.5 off
Special information tone -	950/1400/1800	3x(0.3 on 0.03 off) 1.0 off
Call waiting tone -	440	0.3 on 10.0 off
Mauritania (Islamic Republic of)		
Busy tone -	425	0.5 on 0.5 off
Dial tone -	425	continuous
Ringing tone -	425	1.5 on 3.5 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Route tone -	425	0.05 on 0.05 off
Mauritius (Republic of)		
Busy tone -	425	0.75 on 0.75 off
Dial tone -	425	continuous
Special dial tone -	425	0.4 on 0.04 off
Ringing tone -	425	1.0 on 4.0 off
Route tone -	425	0.05 on 0.05 off
Call waiting tone -	425	1.0 on 3.0 off
Mayotte		
Busy tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Ringing tone -	440	1.5 on 3.5 off
Special information tone -	950/1400/1800	3x(0.3 on 0.03 off) 1.0 off
Call waiting tone -	440	0.3 on 10.0 off
Mexico		
Busy tone -	425	0.25 on 0.25 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Ringing tone -	425	1.0 on 4.0 off
Warning tone - operator intervening	425	0.5 on 0.17 off 0.17 on 0.17 off
Moldova (Republic of)		
Busy tone -	425	0.35 on 0.35 off
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	continuous
Pay tone -	1400	3x1.0 on 1.0 off
Ringing tone - I	425	0.8 on 3.2 off
Ringing tone - II	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.00 off
Call waiting tone -	425	0.2 on 5.0 off
Monaco (Principality of)		
Busy tone -	440	0.5 on 0.5 off
Congestion tone -		announcement
Dial tone -	440	continuous
Ringing tone -	440	1.7 on 3.3 off
Call waiting tone -	440	0.3 on 10.0 off
Montserrat		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Recall dial tone -	350+440	3x(0.1 on 0.1 off) + continuous
Number unobtainable tone -	480+620	0.25 on 0.25 off
Payphone recognition tone -	1600/1143	0.2 on 0.2 off 0.2 on 2.0 off
Ringing tone -	440+480	2.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - operator intervening	450	0.2 on 0.2 off 0.65 on 0.2 off
Waiting tone -	440	1x(0.5 on 10.0 off 0.5 on)
Morocco (Kingdom of)		
Busy tone - I	425	0.5 on 0.5 off
Busy tone - II	425	0.4 on 0.4 off
Congestion tone - I	425	0.5 on 0.5 off
Congestion tone - II	425	0.4 on 0.4 off
Dial tone -	425	continuous
Ringing tone - I	425	1.7 on 3.3 off
Ringing tone - II	425	1.0 on 4.0 off
Ringing tone - III	425	2.0 on 2.0 off
Mozambique (Republic of)		
Busy tone -	400	0.5 on 0.5 off
Number unobtainable tone -	400	0.2 on 0.2 off
Ringing tone -	400	1.0 on 5.0 off
Myanmar (Union of)		
Busy tone -	450	0.25 on 0.25 off
Congestion tone -	480	0.5 on 0.5 off
Dial tone -	400+450	continuous
Ringing tone -	400	2.0 on 4.0 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Call waiting tone -	400	0.3 on 10.0 off
Namibia (Republic of)		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.25 on 0.25 off
Dial tone -	400x33	continuous
Ringtone -	400x33	0.4 on 0.2 off 0.4 on 2.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	400x33	continuous
Nauru (Republic of)		
Busy tone -	400	0.5 on 0.5 off
Busy tone - pabx	425	0.375 on 0.375 off
Congestion tone - pabx	425	0.375 on 0.375 off
Dial tone -	400	continuous
Dial tone - pabx	33	continuous
Recall dial tone - pabx	33	continuous
Number unobtainable tone -	400	0.75 on 0.25 off 0.25 on 0.25 off
Ringtone -	400	1.0 on 4.0 off
Ringtone - pabx	425x25	0.4 on 0.2 off 0.4 on 2.0 off
Nepal (Federal Democratic Republic of)		
Busy tone -	425	0.25 on 0.25 off
Congestion tone -	425	0.175 on 0.175 off
Dial tone -	425	continuous
Number unobtainable tone -	425	0.25 on 0.5 off
Ringtone -	425	1.1 on 3.1 off
Netherlands (Kingdom of the)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Special dial tone -	425	0.5 on 0.05 off
Ringtone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Waiting tone -	425	0.5 on 9.5 off
New Caledonia (Territoire français d'outre-mer)		
Busy tone -	440	0.5 on 0.5 off
Congestion tone -	950/1400/1800	2x[3x0.33 on + announcement]
Dial tone -	440//330+440	continuous
Ringtone -	440	1.7 on 3.3 off
Special information tone -	950/1400/1800	2x[3x0.33 on + announcement]
Call waiting tone -	440	4x(0.5 on 0.5 off 0.5 on)
New Zealand		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.25 on 0.25 off
Dial tone - I (3)	400	continuous
Dial tone - II (message waiting)	400	12x(0.1 on 0.1 off) + continuous
Recall dial tone -	400	3x(0.1 on 0.1 off) + continuous
Holding tone -	400+450	0.5 on 0.5 off 0.5 on 2.5 off
Number unobtainable tone -	400	3x(0.75 on 0.1 off) 0.75 on 0.4 off
Pay tone -	1209/852	0.2 on 0.2 off
Ringtone - I	400+450	0.4 on 0.2 off 0.4 on 2.0 off
Ringtone - II (call waiting)	400+450	0.4 on 0.2 off 0.4 on 0.2 off 0.4 on 1.2 off
Call waiting tone - I	400	3x(0.2 on 3.0 off) 0.2 on
Call waiting tone - II	400	3x(0.1 on 0.1 off 0.1 on 3.0 off)
Call waiting tone - III	400	3x(0.1 on 0.1 off 0.1 on 0.1 off 0.1 on 3.0 off)
Niger (Republic of the)		
Busy tone -	440	0.5 on 0.5 off
Congestion tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Second dial tone -	330//440	continuous
Ringtone -	440	1.7 on 3.3 off
Route tone -	440	0.05 on 0.05 off
Nigeria (Federal Republic of)		

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.25 on 0.25 off
Dial tone -	400//450	continuous
Recall dial tone -	400//425	continuous
Special dial tone -	425	0.5 on 0.5 off
Holding tone -	950/950/1400	0.65 on 0.325 off 0.325 on 1.3 on 2.6 off
Number unobtainable tone -	450	0.5 on 0.5 off
Ringling tone -	400//450	2.0 on 4.0 off
Special information tone -	400//33	0.2 on 1.5 off
Warning tone - operator intervening	400	0.15 on 0.25 off 0.15 on 1.45 off
Call waiting tone -	400	0.2 on 0.2 off
Norway		
Busy tone -	425	0.5 on 0.5 off
Confirmation tone - (10)	470/425	continuous
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	continuous
Special dial tone - (10)	470/425	continuous
Intrusion tone -	1400	1x(2.0 on)
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - I	1400	0.4 on 15.0 off
Warning tone - II	1400	1x(0.4 on)
Call waiting tone -	425	0.2 on 0.6 off 0.2 on 10.0 off
Oman (Sultanate of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.5 on 0.5 off
Dial tone -	425	continuous
Intrusion tone -	425	0.5 on 0.17 off 0.17 on 0.17 off
Ringling tone -	425	0.4 on 0.2 off 0.4 on 2.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	425	0.3 on 1.0 off
Pakistan (Islamic Republic of)		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.25 on 0.25 off
Ringling tone -	400	1.0 on 2.0 off
Panama (Republic of)		
Busy tone -	425	0.32 on 0.32 off
Congestion tone -	425	0.32 on 0.32 off
Dial tone -	425	continuous
Number unobtainable tone -	425	0.18 on 0.18 off 0.5 on 0.18 off
Ringling tone -	425	1.2 on 4.65 off
Special information tone -	425	0.4 on 0.4 off
Warning tone - operator intervening	425	0.18 on 0.18 off 0.5 on 0.18 off
Call waiting tone -	425	0.18 on 0.18 off 0.18 on
Papua New Guinea		
Busy tone -	425//400	0.375 on 0.375 off
Congestion tone -	425//400	0.375 on 0.375 off
Dial tone -	425//400x25//350+440	continuous
Special dial tone -	425	0.4 on 0.04 off
Number unobtainable tone -	425//400	2.5 on 0.5 off
Payphone recognition tone - I	1209/852	4x(0.2 on 0.2 off 0.2 on 2.0 off)
Payphone recognition tone - II	1336/941	2x(0.2 on 0.2 off 0.2 on 2.0 off)
Payphone recognition tone - III	900	2x(0.075 on 0.15 off 0.075 on 2.7 off)
Ringling tone -	425//400x25//400x16 2/3//400+450//410x20	0.4 on 0.2 off 0.4 on 2.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.01 off
Warning tone - operator intervening	1400	0.5 on 11.5 off
Waiting tone -	425	0.04 on 10.0 off 0.04 on 20.0 off 0.04 on 20.0 off
Paraguay (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Intrusion tone -	425	0.15 on 0.25 off 0.15 on 1.45 off
Number unobtainable tone -	425	2.0 on 0.25 off
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Call waiting tone -	425	0.3 on 10.0 off
Caller waiting tone -	950/950/1400	0.65 on 0.325 off 0.325 on 1.3 off 2.6 on
Peru		
Acceptance tone -		announcement
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.2 on 0.2 off 0.2 on 0.2 off 0.2 on 0.6 off
Dial tone -	425	continuous
Special dial tone -	425	1.0 on 0.1 off
Howler tone -	1500+3200	0.5 on
Number unobtainable tone -		announcement
Refusal tone -		announcement
Ringing tone -	425	0.15 on 0.30 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	425	0.175 on 0.175 off 0.175 on 3.5 off
Philippines (Republic of the)		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Conference tone -	440	0.2 on 15.0 off
Dial tone -	425	continuous
Special dial tone -	400+25	continuous
Holding tone -	950/950/1400	0.65 on 0.325 off 0.325 on 1.3 on 2.0 off
Howler tone -	1400+1800	0.2 on 0.3 off
Number unobtainable tone -	600x120	0.25 on 0.25 off
Ringing tone -	425+480	1.0 on 4.0 off
Call waiting tone -	440	0.3 on 10.0 off
Poland (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.5 on 0.5 off
Dial tone -	425	continuous
Second dial tone -	425+350	continuous
Ringing tone -	425	1.0 on 4.0 off
Route tone -	425	0.05 on 0.05 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Waiting tone -	425	0.15 on 0.15 off 0.15 on 4.0 off
Portugal		
Acceptance tone - I	425	1.0 on 0.2 off
Acceptance tone - II	425	1.0 on 1.0 off 1.0 on 5.0 off
Busy tone - I	425	0.5 on 0.5 off
Busy tone - II (mobile)	400	0.36 on 0.36 off
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	continuous
Special dial tone - (mobile)	425	1.0 on 0.2 off
Holding tone -	425	1.5 on 5.12 off
Intrusion tone -	425	3x(0.2 on 1.4 off)
Refusal tone - I	450/1400/1800	3x0.33 on 1.0 off
Refusal tone - II	950/1400/1800	3x0.33 on 1.0 off
Ringing tone - I	425	1.0 on 5.0 off
Ringing tone - II (two party mobiles)	440	1.0 on 4.0 off
Ringing tone - III (three party mobiles)	425	1.5 on 3.5 off
Ringing tone - IV	425	1.0 on 1.0 off 1.0 on 5.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone - I	425	0.2 on 0.2 off 0.2 on 5.0 off
Call waiting tone - II	425	0.2 on 0.6 off 0.2 on 3.0 off
Call waiting tone - III	425	0.2 on 0.2 off 0.2 on 10.0 off
Call waiting tone - IV	425	0.2 on 0.6 off 0.2 on 0.6 off
Call waiting tone - V	425	0.2 on 1.0 off 0.2 on 3.0 off
Call waiting tone - VI	425	1.0 on 1.0 off 1.0 on 5.0 off
Puerto Rico		
Payphone recognition tone -	1100+1750/750+1450	0.2 on 0.2 off 0.2 on 2.0 off
Qatar (State of)		
Acceptance tone -	400+450	0.38 on 0.25 off 0.38 on 2.00 off
Busy tone - I	400+450	0.8 on 0.8 off
Busy tone - II	400	0.375 on 0.375 off
Busy tone - III	400	0.5 on 0.5 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Congestion tone -	400	0.40 on 0.35 off 0.22 on 0.52 off
Dial tone -	350+440	continuous
Line lock-out tone -	400	0.32 on 0.32 off
Number unobtainable tone -	400	continuous
Refusal tone -	400	continuous
Ringing tone - I	400+450	0.38 on 0.25 off 0.38 on 2.0 off
Ringing tone - II	400+450	0.4 on 0.2 off 0.4 on 2.0 off
Special information tone -	330+440	1.0 on 1.0 off
Call waiting tone -	400	0.3 on 10.0 off
Romania		
Busy tone - I (analogue)	450	0.15 on 0.18 off
Busy tone - II (digital)	450	0.17 on 0.17 off
Dial tone -	450	continuous
Number unobtainable tone - I (analogue)	450	6x(0.11 on 0.092 off) 0.362 on 0.11 off
Number unobtainable tone - II (digital)	450	3x(0.092 on 0.11 off) 0.362 on 0.11 off
Ringing tone - I	450x25	1.85 on 4.15 off
Ringing tone - II	450	1.5 on 4.5 off
Russian Federation		
Busy tone -	425	0.4 on 0.4 off
Ringing tone -	425	0.8 on 3.2 off
Waiting tone -	950/1400/1800	3x0.333 on 1.0 off
Rwanda (Republic of)		
Busy tone -	440	0.5 on 0.5 off
Congestion tone -		announcement
Dial tone -	440	continuous
Second dial tone -	340	continuous
Pay tone -	12000	0.125 on
Ringing tone -	440	1.7 on 3.3 off
Route tone -	440	0.05 on 0.05 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Saint Helena		
Busy tone -	400	0.375 on 0.375 off
Congestion tone -	400	0.4 on 0.35 off
Dial tone -	350+400	continuous
Number unobtainable tone -	400	continuous
Pay tone -	400	0.125 on 0.125 off
Ringing tone -	400+450	0.4 on 0.2 off
Saint Kitts and Nevis		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Recall dial tone -	350+440	3x(0.1 on 0.1 off) + continuous
Number unobtainable tone -	480+620	0.25 on 0.25 off
Payphone recognition tone -	1600/1143	0.2 on 0.2 off 0.2 on 2.0 off
Ringing tone -	440+480	2.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - operator intervening	450	0.2 on 0.2 off 0.65 on 0.2 off
Waiting tone -	440	1x(0.5 on 10.0 off 0.5 on)
Saint Lucia		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Special dial tone -	425+330	continuous
Pay tone -	622	0.136 on 0.136 off
Ringing tone -	425	0.375 on 0.25 off 0.375 on 2.0 off
Route tone -	425	0.05 on 0.05 off
Warning tone -	425	0.1 on 4.9 off
Call waiting tone -	425	0.2 on 0.2 off 0.2 on 4.0 off
Saint Pierre and Miquelon (Collectivité territoriale de la République française)		
Busy tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Ringing tone -	440	1.5 on 3.5 off
Special information tone -	950/1400/1800	3x(0.3 on 0.03 off) 1.0 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Call waiting tone -	440	0.3 on 10.0 off
Saint Vincent and the Grenadines		
Busy tone -	400	0.375 on 0.375 off
Congestion tone -	400	0.40 on 0.35 off 0.225 on 0.525 off
Dial tone - I	350+450	continuous
Dial tone - II	350+450	0.75 on 0.75 off
Pay tone -	400	0.125 on 0.125 off
Ringling tone -	400+450	0.4 on 0.2 off 0.4 on 2.0 off
Special information tone -	950/1400/1800	3x(0.33 on 1.0 off)
Call waiting tone - (9)	400	0.1 on
Samoa (Independent State of)		
Busy tone -	425x25	0.375 on 0.375 off
Congestion tone -	425x25	0.375 on 0.375 off
Dial tone -	425x25	continuous
Line lock-out tone -	425x25	0.5 on 0.5 off
Ringling tone -	425x25	0.4 on 0.2 off
San Marino (Republic of)		
Busy tone -	425	0.2 on 0.2 off
Dial tone -	425	0.6 on 1.0 off 0.2 on 0.2 off
Ringling tone -	425	1.0 on 4.0 off
Sao Tome and Principe (Democratic Republic of)		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.2 on 0.2 off
Dial tone -	425	continuous
Pay tone -	12000	continuous
Ringling tone -	400	1.0 on 5.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	425	0.2 on 1.0 off
Saudi Arabia (Kingdom of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Conference tone -	425	0.5 on 2.0 off 0.5 on 15.0 off
Dial tone -	425	continuous
Payphone recognition tone -	1600/1200	0.2 on 0.2 off 0.2 on 4.0 off
Ringling tone -	425	1.2 on 4.6 off
Call waiting tone -	425	0.15 on 0.2 off 0.15 on 10.0 off
Senegal (Republic of)		
Busy tone -	440	0.5 on 0.5 off
Dial tone -	440	continuous
Ringling tone -	400	1.7 on 3.3 off
Special information tone -	900/1380/1860	0.35 on 0.30 on 0.35 on
Serbia (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Busy tone - II	425	0.2 on 0.4 off
Dial tone -	425	0.7 on 0.8 off 0.2 on 0.3 off
Ringling tone - I	450x25	1.0 on 9.0 off
Ringling tone - II	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Seychelles (Republic of)		
Busy tone -	425	0.375 on 0.375 off
Congestion tone -	425	0.4 on 0.2 off 0.225 on 0.525 off
Dial tone -	440+350	continuous
Special dial tone -	425	1.0 on 0.1 off
Facilities tone -	425	0.4 on 0.2 off 0.4 on 2.0 off
Howler tone -	3000	continuous
Number unobtainable tone -	425	continuous
Ringling tone -	425	0.4 on 0.2 off 0.4 on 2.0 off
Route tone -	425	0.5 on 0.5 off
Sierra Leone		
Busy tone -	425//450	0.5 on 0.5 off
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425//450	continuous

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Number unobtainable tone -	950//450/150	0.33 on 0.03 off
Ringling tone -	425//450	1.0 on 4.0 off
Waiting tone -	425	1x(1.0 on)
Singapore (Republic of)		
Acceptance tone -	425	0.125 on 0.125 off
Busy tone -	425	0.75 on 0.75 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Second dial tone -	425	4x(0.2 on 0.2 off 0.6 on 0.2 off) + continuous
Holding tone -	425x24//425	0.5 on 0.5 off // 0.5 on 2.5 off
Intrusion tone -	425	0.25 on 2.0 off
Number unobtainable tone -	425	2.5 on 0.5 off
Ringling tone -	425x24	0.4 on 0.2 off 0.4 on 2.0 off
Warning tone -	425	0.624 on 4.376 off
Call waiting tone -	425	0.3 on 0.2 off 0.3 on 3.2 off
Slovak Republic		
Busy tone -	425	0.33 on 0.33 off
Congestion tone -	425	0.165 on 0.165 off
Conference tone -	425	0.66 on
Dial tone - I	425	0.33 on 0.33 off 0.66 on 0.66 off
Dial tone - II (pabx)	425	continuous
Special dial tone -	425	3x(0.165 on 0.165 off) 0.660 on 0.660 off
Offering tone, trunk -	425	0.33 on 0.33 off 0.33 on 1.50 off
Pay tone - I (cards)	622	0.125 on 0.125 off
Pay tone - II (coins)	941	0.2 on 0.2 off 0.2 on 3.6 off
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	(3x0.33 on 2x0.03 off) 1.00 off
Call waiting tone -	425	0.33 on 9.0 off
Caller waiting tone -	425	1.00 on 0.17 off 0.33 on 3.50 off
Slovenia (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	0.2 on 0.3 off 0.7 on 0.8 off
Pay tone -	425	0.5 on 15.0 off
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.00 off
Call waiting tone -	425	0.3 on 10.0 off
Solomon Islands		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.1 on 0.1 off
Dial tone -	400	continuous
Number unobtainable tone -	400	0.075 on 0.1 off
Pay tone -	852	0.2 on 2.0 off
Ringling tone -	400+450	0.4 on 0.2 off
Waiting tone -	400+450/400	0.5 on 0.5 off
South Africa (Republic of)		
Busy tone -	400	0.5 on 0.5 off
Comfort tone -	950/950/1400	0.65 on 0.325 off 0.325 on 1.3 on 2.6 off
Congestion tone -	400	0.25 on 0.25 off
Dial tone -	400x33	continuous
Special dial tone -	400x33	0.25 on 0.25 off + continuous
Function acknowledge tone -	700/1100	0.25 on 0.25 off 0.25 on 0.25 off
Intrusion tone -	400	0.15 on 0.25 off 0.15 on 1.45 off
Notify tone -	900	0.2 on 0.2 off 0.2 on 0.2 off
Number unobtainable tone -	400	2.5 on 0.5 off
Ringling tone -	400x33	0.4 on 0.2 off 0.4 on 2.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	400x33	0.4 on 4.0 off
Spain		
Busy tone - I	425	0.2 on 0.2 off
Busy tone - II	425	0.5 on 0.5 off
Congestion tone - I	425	2x(0.2 on 0.2 off) 0.2 on 0.6 off
Congestion tone - II	425	0.25 on 0.25 off
Dial tone -	425	continuous
Special dial tone - I	425	1.0 on 0.1 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Special dial tone - I	425+340	1.1 on 1.1 off
Special dial tone - II	425	0.5 on 0.05 off
Ringling tone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Call waiting tone -	425	0.2 on 0.2 off 0.2 on 4.0 off
Syrian Arab Republic		
Busy tone -	450	0.5 on 0.5 off
Congestion tone -	450	0.25 on 0.25 off
Dial tone -	450	continuous
Ringling tone -	400//450	1.0 on 0.5 off
Special information tone -	950/1400/1800	(3x0.33 on 2x0.03 off) 1.0 off
Call waiting tone -	450	0.1 on 0.2 off 0.1 on 9.5 off
Tajikistan (Republic of)		
Busy tone -	425	0.4 on 0.4 off
Congestion tone -	425	0.4 on 0.4 off
Dial tone -	425	continuous
Ringling tone -	25	0.8 on 3.2 off
Tanzania (United Republic of)		
Acceptance tone -	425	continuous
Busy tone - I	425	1.0 on 1.0 off
Busy tone - II	400	0.5 on 0.5 off
Congestion tone - I	425	0.375 on 0.375 off
Congestion tone - II	400	0.25 on 0.25 off
Dial tone -	425//400	continuous
Intrusion tone -	425	0.05 on 0.20 off
Pay tone -	1100+1750//750+1450	0.2 on 0.2 off
Refusal tone -	425	1.0 on 1.0 off
Ringling tone - I	425	1.0 on 4.0 off
Ringling tone - II	400	0.4 on 0.2 off 0.4 on 2.0 off
Special information tone - I	950/1400/1800	0.375 on 0.03 off 0.375 on 0.03 off 0.375 on
Special information tone - II	950/1400/1800	3x0.33 on 1.0 off
Test number tone -	2010	continuous
Call waiting tone - I	425	0.05 on 0.20 off
Call waiting tone - II	400	0.4 on 0.2 off
Thailand		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.3 on 0.3 off
Dial tone -	400x50	continuous
Special dial tone -	400x50	0.4 on 0.1 off 0.4 on 0.1 off + continuous
Number unobtainable tone -	400	0.1 on 0.1 off 0.1 on 0.1 off 0.1 on 0.1 off 0.3 on
Offering tone, trunk -	400	0.17 on 0.17 off 0.15 on 0.17 off
Ringling tone -	400	1.0 on 4.0 off
Special information tone -		announcement
Call waiting tone -	400	1.0 on 10.0 off 1.0 on
The Former Yugoslav Republic of Macedonia		
Busy tone -	425	0.5 on 0.5 off
Confirmation tone -	425	continuous
Congestion tone -	425	0.2 on 0.2 off
Dial tone -	425	0.2 on 0.3 off 0.7 on 0.8 off
Special dial tone -	425	0.4 on 0.04 off
Intrusion tone -	425	0.2 on 0.3 off 0.7 on 0.8 off
Pay tone -	425	0.5 on 10.0~15.0 off
Ringling tone -	425	1.0 on 4.0 off
Route tone -	425	0.4 on 1.5 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	425	0.3 on 8.0~10.0 off
Tokelau		
Busy tone -	400	0.5 on 0.5 off
Congestion tone -	400	0.5 on 0.5 off
Dial tone -	400	continuous
Ringling tone -	400+450	0.4 on 0.2 off
Special information tone -	400	3x(0.075 on 0.1 off)

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Trinidad and Tobago		
Busy tone -	480+620	0.5 on 0.5 off
Dial tone -	350+440	continuous
Ringling tone -	440+480	2.0 on 4.0 off
Re-order tone - I	480+620	0.3 on 0.2 off
Re-order tone - II (8)	480+620	0.2 on 0.3 off
Waiting tone -	440	0.3 on 10.0 off
Tunisia		
Busy tone -	425	0.25 on 0.25 off
Congestion tone -	425	0.167 on 0.167 off
Dial tone -	425	continuous
Pay tone -	12000	0.125 on
Ringling tone -	425	1.20 on 4.65 off
Special information tone -	900/1400/1800	(3x0.33 on 2x0.03 off) 1.0 off
Call waiting tone -	425	0.2 on 0.6 off
Turkey		
Busy tone -	450	0.5 on 0.5 off
Confirmation tone -	450	0.04 on 0.04 off
Congestion tone -	450	3x(0.2 on 0.2 off) 0.6 on 0.2 off
Dial tone -	450	continuous
Special dial tone -	450	1.0 on 0.25 off
Howler tone -	1400/2060/2460/2600	0.1 on 0.1 off
Number unobtainable tone -	450	0.2 on 0.2 off
Ringling tone -	450	2.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.3 on 1.0 off
Warning tone - operator intervening	450	0.2 on 0.2 off 0.6 on 0.2 off
Waiting tone - I	350+450	0.5 on 0.5 off
Waiting tone - II	450	0.5 on 2.5 off
Call waiting tone -	450	0.2 on 0.6 off 0.2 on 8.0 off
Turkmenistan		
Busy tone -	425	0.4 on 0.4 off
Congestion tone -	425	0.4 on 0.4 off
Dial tone -	425	continuous
Second dial tone -	425	continuous
Number unobtainable tone -	425	0.8 on 4.0 off
Ringling tone -	25	0.4 on 4.0 off
Route tone -	25	0.4 on 0.4 off
Turks and Caicos Islands		
Busy tone -	480+620	0.5 on 0.5 off
Congestion tone -	480+620	0.25 on 0.25 off
Dial tone -	350+440	continuous
Recall dial tone -	350+440	3x(0.1 on 0.1 off) + continuous
Number unobtainable tone -	480+620	0.25 on 0.25 off
Payphone recognition tone -	1600/1143	0.2 on 0.2 off 0.2 on 2.0 off
Ringling tone -	440+480	2.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Warning tone - operator intervening	450	0.2 on 0.2 off 0.65 on 0.2 off
Waiting tone -	440	1x(0.5 on 10.0 off 0.5 on)
Tuvalu		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	2.5 on (every 10.0 sec.)
Dial tone -	425	continuous
Ringling tone -	425	1.0 on 0.5 off 1.0 on 10.0 off
Call waiting tone -	425	0.3 on (every 10.0 sec.)
Uganda (Republic of)		
Busy tone - I	425	0.5 on 0.5 off
Busy tone - II	400	0.4 on 0.2 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Special dial tone -	900/1400/1800	3x0.33 on 1.0 off
Howler tone -	1400	continuous
Number unobtainable tone -	900/1400/1800	3x0.33 on 1.00 off
Offering tone, trunk -	425	0.1 on 4.9 off
Ringling tone - I	425	1.0 on 4.0 off
Ringling tone - II	425//440	0.4 on 0.2 off 0.4 on 2.0 off
Ringling tone - III	450	0.4 on 0.2 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Route tone -	425//440	0.5 on 0.5 off
Call waiting tone - I	425	0.15 on 0.15 off 0.15 on 8.0 off
Call waiting tone - II	450//440	0.5 on 0.5 off + continuous
United Arab Emirates		
Busy tone -	400//425	0.375 on 0.375 off
Congestion tone -	400//425	0.4 on 0.35 off 0.225 on 0.525 off
Dial tone -	350+440	continuous
Number unobtainable tone -	400//425	continuous
Ringtone -	400+450//425	0.4 on 0.2 off 0.4 on 2.0 off
United Kingdom of Great Britain and Northern Ireland		
Busy tone -	400	0.375 on 0.375 off
Congestion tone -	400	0.4 on 0.35 off 0.225 on 0.525 off
Dial tone -	50//350+440	continuous
Number unobtainable tone -	400	continuous
Pay tone -	400	0.125 on 0.125 off
Payphone recognition tone -	1200/800	0.2 on 0.2 off 0.2 on 2.0 off
Ringtone -	400+450//400x25//400x16 2/3	0.4 on 0.2 off 0.4 on 2.0 off
United States of America		
Busy tone -	600x120//600x133//600x140//600x160//480+620	0.5 on 0.5 off
Confirmation tone -	350+440	3x(0.1 on 0.1 off)
Dial tone -	600x120//600x133//600x140//600x160//350+440	continuous
Recall dial tone -	350+440	3x(0.1 on 0.1 off) + continuous
Intrusion tone -	600x120//600x133//600x140//600x160//480+620	0.5 on 0.5 off
Number unobtainable tone -	200//400	0.5 on 6.0 off
Permanent signal tone -	480//400//500	continuous
Record tone -	440	0.5 on 5.0 off
Ringtone -	420x40//500x40//440+480	2.0 on 4.0 off
Re-order tone -	600x120//600x133//600x140//600x160//480+620	0.3 on 0.2 off
Warning tone - message (4)	1400	0.5 on
Call waiting tone -	440	2x(0.3 on 10.0 off)
Uruguay (Eastern Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone - I	425	continuous
Dial tone - II	450	0.7 on 0.8 off 0.2 on 0.3 off
Negative indication tone -	425	0.5 on 0.5 off
Positive indication tone -	425	2x(0.1 on 0.2 off) 0.1 on 1.3 off
Ringtone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Warning tone - operator intervening	425	0.15 on 0.25 off 0.15 on 1.45 off
Waiting tone -	425	0.2 on 0.2 off 0.2 on 4.4 off
Vanuatu (Republic of)		
Acceptance tone -	950	continuous
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.5 on 0.5 off
Dial tone -	425	continuous
Special dial tone -	425	0.4 on 0.04 off
Howler tone -	3000	continuous
Offering tone, trunk -	425	0.3 on 10.0 off
Ringtone -	425	1.0 on 4.0 off
Route tone -	425	0.05 on 0.05 off
Special information tone -	950/1400/1800	3x0.33 on 2x0.03 off 1.0 off
Call waiting tone -	425	0.3 on 10.0 off
Venezuela (Bolivarian Republic of)		
Busy tone -	425	0.5 on 0.5 off
Confirmation tone -	425	0.1 on 0.1 off 0.3 on 0.1 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Howler tone -	1440	0.5 on 0.5 off
Pay tone -	800	1.0 on 15.0 off
Ringtone -	425	1.0 on 4.0 off
Special information tone -	950/1440/1800	3x0.33 on 1.0 off

COUNTRY/TONE	FREQUENCY in Hz	CADENCE in seconds
Call waiting tone -	400/450	0.3 on 6.0 off
Caller waiting tone -	425	1.0 on 4.0 off
Wallis and Futuna (Territoire français d'outre-mer)		
Busy tone -	440	0.5 on 0.5 off
Dial tone -	440//330	continuous
Pay tone -	12000	0.1 on
Ringtone -	440	1.5 on 3.5 off
Route tone -	440	0.05 on 0.05 off
Special information tone -	950/1400/1800	(3x0.3 on 2x0.03 off) 1.0 off
Yemen (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	102	continuous
Ringtone -	425	1.0 on 4.0 off
Zambia (Republic of)		
Busy tone -	425	0.5 on 0.5 off
Congestion tone -	425	0.25 on 0.25 off
Dial tone -	425	continuous
Pay tone -	800	2.0 on
Payphone recognition tone -	1600	0.1 on
Ringtone -	425	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.333 on 1.0 off
Call waiting tone -	425	0.1 on 4.9 off
Zimbabwe (Republic of)		
Busy tone -	400	0.375 on 0.375 off
Congestion tone -	425	0.167 on 0.167 off
Dial tone -	425	continuous
Pay tone -	1500+1000	0.2 on 0.2 off 0.2 on 2.0 off
Ringtone -	450	1.0 on 4.0 off
Special information tone -	950/1400/1800	3x0.33 on 1.0 off
Call waiting tone -	523//659	1.5 on 1.5 off

- 1 For PLMN/GSM.
- 2 This tone is used within the supplementary service 'Call Waiting' the duration is 30 seconds.
- 3 This tone is also used in private branch exchanges (PABX).
- 4 This tone bursts every 15 seconds.
- 5 Analogue exchanges.
- 6 Two bursts, ten seconds apart.
- 7 Special dial tone is used when call transfer is active.
- 8 Trunk.
- 9 0.1 second of call waiting indication superimposed on speech every 2 to 5 seconds.
- 10 Shifting frequency every 0.4 seconds.
- 11 In a certain service, music can be played in parallel to the ringing tone.

Notification Form for Change of tones used in national networks

Country/Organisation:

Contact-person, Name:

Tel:

Fax:

Email:

<i>Tone</i>	<i>Frequency (Hz)</i>	<i>Cadence (seconds)</i>
Dial tone		
Ringing tone		
Busy tone		
Congestion tone		
Special information tone		
Call waiting tone		
Pay tone		

<i>Other new or changed tones</i>		

Dial Tone: A tone advising that the exchange is ready to receive call information and inviting the user to start sending call information.

Ringing Tone: A tone advising the caller that a connection has been made and that a calling signal is being applied to a telephone number or service point.

Busy Tone: A tone advising the caller that the telephone number is busy.

Congestion Tone: A tone advising the caller that the groups of lines or switching equipment necessary for the setting-up of the required call or for the use of a specific service are temporarily engaged.

Special Information Tone: A tone advising the caller that the called number cannot be reached for reasons other than "subscriber busy" or "congestion".

The tone may also be used in conjunction with recorded announcements to signify that what the caller is about to hear is a recording. It should always be used to precede all call failure announcements.

Call Waiting Tone: A tone advising the user of the call waiting supplementary service who is engaged on a call that someone is attempting to call his number.

Pay Tone: A tone advising users of a payphone that a payment is required.

Explanation of symbols

Frequency in Hz:	$f_1 \times f_2$	f_1 is modulated by f_2
	$f_1 + f_2$	the juxtaposition of two frequencies f_1 and f_2 without modulation
	f_1 / f_2	f_1 is followed by f_2
	$f_1 // f_2$	in some exchanges frequency f_1 is used and in others frequency f_2 is used.
Cadence in seconds:	ON – OFF	