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# GENERAL INFORMATION

## Lists annexed to the 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.*

- 669 Five-letter Code Groups for the use of the International Public Telegram Service (According to ITU-T Recommendation F.1 (03/98))
- 691 Service Restrictions (Recapitulatory list of service restrictions in force relating to telecommunications operation) (Position on 1 May 1999)
- 693 List of Telex Destination Codes (TDC) and Telex Network Identification Codes (TNIC) (Complement to ITU-T Recommendations F.69 and F.68) (Position on 31 May 1999)
- 720 List of Data Country or Geographical Area Codes (Complement to ITU-T Recommendation X.121) (Position on 15 July 2000)
- 725 List of Names of Administration Management Domains (ADMD) (In accordance with ITU-T F.400 and X.400 series Recommendations) (Position on 30 September 2000)
- 741 List of Mobile Country or Geographical Area Codes (Complement to ITU-T Recommendation E.212 (11/98)) (Position on 1 June 2001)
- 757 List of Issuer Identifier Numbers for the International Telecommunication Charge Card (in accordance with ITU-T Recommendation E.118) (Position on 1 February 2002)
- 759 Dialling Procedures (International prefix, national (trunk) prefix and national (significant) number) (In accordance with ITU-T Recommendation E.164 (05/97)) (Position on 1 March 2002)
- 761 List of International Signalling Point Codes (ISPC) (According to ITU-T Recommendation Q.708 (03/99)) (Position on 1 April 2002)
- 763 List of ITU-T Recommendation E.164 assigned country codes (Complement to ITU-T Recommendation E.164 (05/1997)) (Position on 1 May 2002)
- 764 List of Telegram Destination Indicators (In accordance with ITU-T Recommendation F.32) (Position on 15 May 2002)
- 765 Access codes/numbers for mobile networks (According to ITU-T Recommendation E.164) (Position on 1 June 2002)
- 766 List of Country or Geographical Area Codes for non-standard facilities in telematic services (Complement to ITU-T Recommendation T.35) (Position on 15 June 2002)
- 767 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 July 2002)
- 767 List of Signalling Area/Network Codes (SANC) (Complement to ITU-T Recommendation Q.708 (03/99)) (Position on 1 July 2002)
- 777 List of Data Network Identification Codes (DNIC) (According to ITU-T Recommendation X.121 (10/00)) (Position on 1 December 2002)
- 779 Mobile Network Code (MNC) for the international identification plan for mobile terminals and mobile users (According to ITU-T Recommendation E.212) (11/98) (Position on 1 January 2003)
- 781 Various tones used in national networks (According to ITU-T Recommendation E.180) (03/1998) (Position on 1 February 2003)

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

List of ITU Carriers Codes

(ITU-T Rec. M.1400 (02/2000))

<http://www.itu.int/ITU-T/inr/icc/index.html>

Bureaufax Table (ITU-T Rec. F.170)

<http://www.itu.int/ITU-T/inr/bureaufax/index.html>

## Approval of ITU-T Recommendations

A. By TSB Circular 140 of 20 December 2002, it was announced that the following new and revised ITU-T Recommendations were approved, in accordance with the procedures outlined in Resolution 1, Section 9, of the WTSA (Montreal, 2000):

- ITU-T Recommendation D.201 (13/12/2002): General principles regarding call-back practices
- ITU-T Recommendation D.602 R (13/12/2002): Application of the "sender pays transit" principle in transit relation
- ITU-T Recommendation D.603 R (13/12/2002): Minimizing collection charges on inter-African calls

The conditions governing the approval of ITU-T Recommendations were met and 57 Member States participating in the last meeting of Study Group 3 approved the text of these Recommendations during the Plenary session held on 13 December 2002.

## Maritime Identification Digits (MID)

In accordance with No. **19.35** of the Radio Regulations, the Maritime Identification Digit (MID) "240" has been allocated to Greece.

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

### Note from TSB

At the request of the Administration of Hungary, the Director of TSB has assigned the following signalling area/network code (SANC) for use in the international part of the signalling systems No. 7 network 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> |
|--------------------------------------------------------|-------------|
| Hungary (Republic of)                                  | 6-251       |

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

## Legal time changes

### Canada

Communication of 22.I.2003:

| Date and hour of change                 | Country or area                                  | + = Advanced<br>by -- minutes<br>- = Retarded<br>by -- minutes | Legal time<br>will be     |
|-----------------------------------------|--------------------------------------------------|----------------------------------------------------------------|---------------------------|
| 6.IV.2003 0700 UTC – 26.X.2003 0600 UTC | Canada / Canadá                                  |                                                                |                           |
| »                                       | – Alberta                                        | + 60                                                           | UTC –6                    |
| »                                       | – British Columbia                               | + 60                                                           | UTC –7                    |
| »                                       | – Manitoba                                       | + 60                                                           | UTC –5                    |
| »                                       | – New Brunswick                                  | + 60                                                           | UTC –3                    |
| »                                       | – Newfoundland                                   | + 60                                                           | Time difference<br>varies |
| »                                       | – Northwest Territories                          | + 60                                                           | Time difference<br>varies |
| »                                       | – Nova Scotia                                    | + 60                                                           | UTC –3                    |
| »                                       | – Ontario                                        | + 60                                                           | UTC –4                    |
| »                                       | – Prince Edward Island                           | + 60                                                           | UTC –3                    |
| »                                       | – Quebec                                         | + 60                                                           | UTC –4                    |
| »                                       | – Yukon                                          | + 60                                                           | Time difference<br>varies |
|                                         | inchangé/no change/sin cambio:<br>– Saskatchewan | –                                                              | UTC –6                    |

### Egypt

Communication of 26.I.2003:

Legal time in Egypt will be advanced by 60 minutes from 24 April 2003 at 0100 hours UTC to 25 September 2003 at 0100 hours UTC and thereby will correspond to UTC +3.

### Hungary

Communication of 30.I.2003:

Legal time in Hungary will be advanced by 60 minutes from 30 March 2003 at 0100 hours UTC to 26 October 2003 at 0100 hours UTC and thereby will correspond to UTC +2.

### Kyrgyzstan

Communication of 27.I.2003:

Legal time in Kyrgyzstan will be advanced by 60 minutes from 29 March 2003 at 2100 hours UTC to 25 October 2003 at 2100 hours UTC and thereby will correspond to UTC +6.

### Lithuania

Communication of 23.I.2003:

Legal time in Lithuania will be advanced by 60 minutes from 30 March 2003 at 0100 hours UTC to 26 October 2003 at 0100 hours UTC and thereby will correspond to UTC +2.

### Malta

Communication of 28.I.2003:

Legal time in Malta will be advanced by 60 minutes from 30 March 2003 at 0100 hours UTC to 26 October 2003 at 0100 hours UTC and thereby will correspond to UTC +2.

## Mexico

Communication of 1.II.2003:

| Date and hour of change                 | Country or area                                      | + = Advanced<br>by - - minutes<br>- = Retarded<br>by - - minutes | Legal time<br>will be |
|-----------------------------------------|------------------------------------------------------|------------------------------------------------------------------|-----------------------|
| 6.IV.2003 0800 UTC – 26.X.2003 0900 UTC | Mexique / Mexico / México                            |                                                                  |                       |
| 6.IV.2003 0700 UTC – 26.X.2003 0800 UTC | – Baja California                                    | +60                                                              | UTC –7                |
| »                                       | – Baja California Sur                                | +60                                                              | UTC –6                |
| »                                       | – Chihuahua                                          | +60                                                              | UTC –6                |
| »                                       | – Nayarit                                            | +60                                                              | UTC –6                |
| »                                       | – Sinaloa                                            | +60                                                              | UTC –6                |
| 6.IV.2003 0600 UTC – 26.X.2003 0700 UTC | – The rest of the country<br>(including Mexico City) | +60                                                              | UTC –5                |
| »                                       | – Sonora ( <i>no change</i> )                        |                                                                  |                       |

## Poland

Communication of 22.I.2003:

Legal time in Poland will be advanced by 60 minutes from 30 March 2003 at 0100 hours UTC to 26 October 2003 at 0100 hours UTC and thereby will correspond to UTC +2.

## Syria

Communication of 13.I.2003:

Legal time in Syria will be advanced by 60 minutes from 1<sup>st</sup> April 2003 to 30 September 2003 and thereby will correspond to UTC +3.

## Telephone Service

### Cuba (country code +53)

Communication of 14.I.2003:

*Empresa de Telecomunicaciones de Cuba S.A. (ETECSA)*, La Habana, announces the following changes in Cuba's National Numbering Plan (NNP):

| Central          | New subscriber numbers                                                                                        | Service | Activation date |
|------------------|---------------------------------------------------------------------------------------------------------------|---------|-----------------|
| Granma           | +53 23 251XX - +53 23 255XX                                                                                   | Fixed   |                 |
| Santiago de Cuba | +53 22 6580XX - +53 22 6581XX<br>+53 22 6590XX - +53 22 6591XX<br>+53 22 6500XX - +53 22 6501XX               | Fixed   | 11.XII.2002     |
| URA Vista Alegre | +53 22 6490XX - +53 22 6491XX                                                                                 | Fixed   | 11.XII.2002     |
| Pinar del Rio    | +53 84 95 1XX - +53 84 95 6XX<br>+53 8 32 1XX - +53 8 32 5XX<br>+53 8 32 8XX<br>+53 8 36 71XX - +53 8 36 73XX |         |                 |

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**Denmark (country code +45)**

Communication of 9.XII.2002:

The *National IT and Telecom Agency (NITA)*, Copenhagen, announces the following changes to the Danish telephone numbering plan:

*New eight-digit subscriber numbers for mobile communications services*

| <i>Network</i> | <i>Subscriber numbers</i> |
|----------------|---------------------------|
| CBB            | 505XXXXX                  |
| Telia          | 601XXXXX                  |

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**Egypt (country code +20)**

Communication of 6.I.2003:

*Telecom Regulatory Authority (TRA)*, Giza, announces the entry into service of the following subscriber number ranges in Egypt and extensions (E):

| <i>Exchange</i>        | <i>Area code</i> | <i>New numbering series</i> | <i>Date of entry into service</i> |
|------------------------|------------------|-----------------------------|-----------------------------------|
| Sa Elhagar             | 40               | 2632000-2634999             | X.2002                            |
| Masged Wasef (E)       | 40               | 5633000-5633999             | 21.XI.2002                        |
| Saft Gadam             | 48               | 704000-706999               | 21.XI.2002                        |
| Behnbai (E)            | 55               | 2184000-2184999             | 21.XI.2002                        |
| El Maadba (E)          | 88               | 526000-527599               | 21.XI.2002                        |
| Shoubra El Khema 2 (E) | 2                | 4761000-4761671             | 30.XII.2002                       |
| Kafr Kala El Bab (E)   | 40               | 5364000-5364999             | 30.XII.2002                       |
| El Gafaria (E)         | 40               | 5384000-5384999             | 30.XII.2002                       |
| Marsa Alm              | 65               | 720000-720299               | 30.XII.2002                       |
| OM Elhoytat            | 65               | 470000-470399               | 30.XII.2002                       |
| El Hamrawain           | 65               | 420000-420399               | 30.XII.2002                       |
| Bahr El Bakr           | 66               | 700000-701599               | 30.XII.2002                       |
| El Awaga               | 68               | 650000-650249               | 30.XII.2002                       |

| <i>Exchange</i>   | <i>Area code</i> | <i>New numbering series</i> | <i>Date of entry into service</i> |
|-------------------|------------------|-----------------------------|-----------------------------------|
| Naga Moatamed (E) | 88               | 908599-908775               | 4.XII.2002                        |
| El Wasta (E)      | 88               | 460000-461999               | 15.XII.2002                       |
| Dashlot           | 88               | 450000-451999               | 18.XII.2002                       |
| El Remaia         | 2                | 3760000-3779999             | 26.XII.2002                       |
| Ain Shams (E)     | 2                | 4970000-4974999             | 26.XII.2002                       |
| Al kalag (E)      | 2                | 4340000-4346999             | 26.XII.2002                       |
| Tokh (E)          | 13               | 473000-475999               | 26.XII.2002                       |
| El Dragel         | 48               | 736000-739999               | 26.XII.2002                       |
| Kafr Damro (E)    | 40               | 2042500-2043499             | 26.XII.2002                       |
| Almoatmadia (E)   | 40               | 2142000-2142999             | 26.XII.2002                       |
| Koom Hamada (E)   | 45               | 3689000-3689999             | 26.XII.2002                       |
| Koom Hamada (E)   | 45               | 3690000-3691999             | 26.XII.2002                       |

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### **Greece (country code +30)**

Communication of 12.XII.2002:

The *National Telecommunications and Posts Commission (EETT)*, Maroussi, announces that on 19 January 2003 all Greek mobile telephony national significant numbers (N(S)Ns) will become ten-digit by inserting the digit '6' (six) just right after the country code (+30). The digit "6" will be inserted as the leading digit of all current mobile access codes (93, 94, 97 and 99).

The following table describes the changes that will be introduced.

#### *Description of Number Change for National Numbering Plan (NNP) for Country Code +30*

| (1)                                           | (2)<br>N(S)N*     | (3)               | (4)<br>Parallel<br>Running   | (5)           | (6)         | (1)             | (2)<br>N(S)N*                                                                                         |
|-----------------------------------------------|-------------------|-------------------|------------------------------|---------------|-------------|-----------------|-------------------------------------------------------------------------------------------------------|
| <i>Communicated Time &amp; Date of Change</i> | <i>Old Number</i> | <i>New Number</i> | <i>Usage of E.164 number</i> | <i>Begins</i> | <i>Ends</i> | <i>Operator</i> | <i>Proposed Wording of Announcement</i>                                                               |
| 19.I.2003<br>0200 hours                       | 93 XXX XXXX       | 693 XXX XXXX      | Mobile telephony numbers     | N/A           | N/A         | Telestet        | Mobile numbers have changed. Please redial, inserting the digit '6' right after the country code +30. |

| (1)                                                   | (2)<br>N(S)N*     | (3)               | (4)<br>Parallel<br>Running           | (5)           | (6)         | (1)                          | (2)<br>N(S)N*                                                                                                                 |
|-------------------------------------------------------|-------------------|-------------------|--------------------------------------|---------------|-------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <i>Communicated<br/>Time &amp; Date of<br/>Change</i> | <i>Old Number</i> | <i>New Number</i> | <i>Usage of<br/>E.164<br/>number</i> | <i>Begins</i> | <i>Ends</i> | <i>Operator</i>              | <i>Proposed<br/>Wording of<br/>Announce-<br/>ment</i>                                                                         |
| 19.I.2003<br>0200 hours                               | 94 XXX XXXX       | 694 XXX XXXX      | Mobil<br>telephone<br>numbers        | N/A           | N/A         | Vodafone                     | Mobile<br>numbers have<br>changed.<br>Please redial,<br>inserting the<br>digit '6' right<br>after the<br>country code<br>+30. |
| 19.I.2003<br>0200 hours                               | 97 XXX XXXX       | 697 XXX XXXX      | Mobil<br>telephony<br>numbers        | N/A           | N/A         | Cosmote                      | Mobile<br>numbers have<br>changed.<br>Please redial,<br>inserting the<br>digit '6' right<br>after the<br>country code<br>30.  |
| 19.I.2003<br>0200 hours                               | 99 XXX XXXX       | 699 XXX XXXX      | Mobil<br>telephony<br>numbers        | N/A           | N/A         | InfoQuest<br>(Q-<br>Telecom) | Mobile<br>numbers have<br>changed.<br>Please redial,<br>inserting the<br>digit '6' right<br>after the<br>country code<br>+30. |

\* National (Significant) Number.

The number changes described above are the final changes during the second and final stage of introduction of the new Greek National Numbering Plan (NNP). The detailed description of the second stage of introduction of the new NNP was presented in ITU Operational Bulletin No. 767 of 1.VII.2002, while the detailed description of the first stage was presented in ITU Operational Bulletin No. 744 of 15.VII.2001.

According to the new NNP, the mobile numbers have ten digit N(S)Ns while, prior to the introduction of the new NNP, they were nine-digit long. The transition is achieved by inserting the digit "6" as the leading digit of all existing mobile access codes.

It is noted that there will be no parallel phase of running between old and new numbers. From 19 January 2003, only calls accessing numbers consistent with the new NNP will be completed. Calls accessing numbers consistent with the previous numbering scheme will be routed to a recorded announcement informing about the changes and the calls will be discontinued.

All Administrations/ROAs are requested to ensure that access is given to the ten-digit mobile numbers according to the new NNP of Greece.



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**Hungary (country code +36)**

Communication of 9.I.2003:

*Communication Authority, Hungary (HIF)*, Budapest, announces its E.164 national numbering plan (NNP) for Hungary.

Overview

Minimum number length (excluding country code) (N(S)N): eight digits.  
Maximum number length (excluding country code) (N(S)N): nine digits.

*Detail of numbering scheme*

| (1)<br>NDC (National<br>Destination Code) | (2)<br>N(S)N (National<br>(Significant) Number)<br>Number Length |                   | (3)<br>Usage of E.164 number | (4)<br>Additional Information   |
|-------------------------------------------|------------------------------------------------------------------|-------------------|------------------------------|---------------------------------|
|                                           | Maximum<br>Length                                                | Minimum<br>Length |                              |                                 |
| 1                                         | eight                                                            | eight             | Geographic number            | Area code for Budapest          |
| 20                                        | nine                                                             | nine              | Non-geographic number        | Mobile                          |
| 21                                        | -                                                                | -                 | -                            |                                 |
| 22                                        | eight                                                            | eight             | Geographic number            | Area code for Székesfehérvár    |
| 23                                        | eight                                                            | eight             | Geographic number            | Area code for Biatorbágy        |
| 24                                        | eight                                                            | eight             | Geographic number            | Area code for Szigetszentmiklós |
| 25                                        | eight                                                            | eight             | Geographic number            | Area code for Dunaújváros       |
| 26                                        | eight                                                            | eight             | Geographic number            | Area code for Szentendre        |
| 27                                        | eight                                                            | eight             | Geographic number            | Area code for Vác               |
| 28                                        | eight                                                            | eight             | Geographic number            | Area code for Gödöll            |
| 29                                        | eight                                                            | eight             | Geographic number            | Area code for Monor             |
| 30                                        | nine                                                             | nine              | Non-geographic number        | Mobile                          |
| 31                                        | -                                                                | -                 | -                            |                                 |
| 32                                        | eight                                                            | eight             | Geographic number            | Area code for Salgótarján       |
| 33                                        | eight                                                            | eight             | Geographic number            | Area code for Esztergom         |
| 34                                        | eight                                                            | eight             | Geographic number            | Area code for Tatabánya         |

| (1)<br>NDC (National<br>Destination Code) | (2)<br>N(S)N (National<br>(Significant) Number)<br>Number Length |                   | (3)<br>Usage of E.164 number | (4)<br>Additional Information  |
|-------------------------------------------|------------------------------------------------------------------|-------------------|------------------------------|--------------------------------|
|                                           | Maximum<br>Length                                                | Minimum<br>Length |                              |                                |
| 35                                        | eight                                                            | eight             | Geographic number            | Area code for Balassagyarmat   |
| 36                                        | eight                                                            | eight             | Geographic number            | Area code for Eger             |
| 37                                        | eight                                                            | eight             | Geographic number            | Area code for Gyöngyös         |
| 38                                        | –                                                                | –                 | –                            |                                |
| 39                                        | –                                                                | –                 | –                            |                                |
| 40                                        | eight                                                            | eight             | Non-geographic number        | Shared-cost service (national) |
| 41                                        | eight                                                            | eight             | Non-geographic number        |                                |
| 42                                        | eight                                                            | eight             | Geographic number            | Area code for Nyíregyháza      |
| 43                                        | –                                                                | –                 | –                            |                                |
| 44                                        | eight                                                            | eight             | Geographic number            | Area code for Mátészalka       |
| 45                                        | eight                                                            | eight             | Geographic number            | Area code for Kisvárd          |
| 46                                        | eight                                                            | eight             | Geographic number            | Area code for Miskolc          |
| 47                                        | eight                                                            | eight             | Geographic number            | Area code for Szerencs         |
| 48                                        | eight                                                            | eight             | Geographic number            | Area code for Ózd              |
| 49                                        | eight                                                            | eight             | Geographic number            | Area code for Mez kövesd       |
| 50                                        | eight                                                            | eight             | Non-geographic number        | Paging                         |
| 51                                        | –                                                                | –                 | –                            |                                |
| 52                                        | eight                                                            | eight             | Geographic number            | Area code for Debrecen         |
| 53                                        | eight                                                            | eight             | Geographic number            | Area code for Cegléd           |
| 54                                        | eight                                                            | eight             | Geographic number            | Area code for Berettyóújfalu   |
| 55                                        | eight                                                            | eight             | Geographic number            | Test number                    |
| 56                                        | eight                                                            | eight             | Geographic number            | Area code for Szolnok          |
| 57                                        | eight                                                            | eight             | Geographic number            | Area code for Jászberény       |
| 58                                        | –                                                                | –                 | –                            |                                |
| 59                                        | eight                                                            | eight             | Geographic number            | Area code for Karcag           |
| 60                                        | eight                                                            | eight             | Non-geographic number        | Mobile                         |
| 61                                        | –                                                                | –                 | –                            |                                |
| 62                                        | eight                                                            | eight             | Geographic number            | Area code for Szeged           |

| (1)<br>NDC (National<br>Destination Code) | (2)<br>N(S)N (National<br>(Significant) Number)<br>Number Length |                   | (3)<br>Usage of E.164 number | (4)<br>Additional Information      |
|-------------------------------------------|------------------------------------------------------------------|-------------------|------------------------------|------------------------------------|
|                                           | Maximum<br>Length                                                | Minimum<br>Length |                              |                                    |
| 63                                        | eight                                                            | eight             | Geographic number            | Area code for Szentes              |
| 64                                        | –                                                                | –                 | –                            |                                    |
| 65                                        | –                                                                | –                 | –                            |                                    |
| 66                                        | eight                                                            | eight             | Geographic number            | Area code for Békéscsaba           |
| 67                                        | –                                                                | –                 | –                            |                                    |
| 68                                        | eight                                                            | eight             | Geographic number            | Area code for Orosháza             |
| 69                                        | eight                                                            | eight             | Geographic number            | Area code for Mohács               |
| 70                                        | nine                                                             | nine              | Non-geographic number        | Mobile                             |
| 71                                        | nine                                                             | nine              | Non-geographic number        | Corporate networks                 |
| 72                                        | eight                                                            | eight             | Geographic number            | Area code for Pécs                 |
| 73                                        | eight                                                            | eight             | Geographic number            | Area code for Szigetvár            |
| 74                                        | eight                                                            | eight             | Geographic number            | Area code for Szekszárd            |
| 75                                        | eight                                                            | eight             | Geographic number            | Area code for Paks                 |
| 76                                        | eight                                                            | eight             | Geographic number            | Area code for Kecskemét            |
| 77                                        | eight                                                            | eight             | Geographic number            | Area code for Kiskunhalas          |
| 78                                        | eight                                                            | eight             | Geographic number            | Area code for Kiskőrös             |
| 79                                        | eight                                                            | eight             | Geographic number            | Area code for Baja                 |
| 80                                        | eight                                                            | eight             | Non-geographic number        | Freephone service (national)       |
| 81                                        | eight                                                            | eight             | Non-geographic number        | IN                                 |
| 82                                        | eight                                                            | eight             | Geographic number            | Area code for Kaposvár             |
| 83                                        | eight                                                            | eight             | Geographic number            | Area code for Keszthely            |
| 84                                        | eight                                                            | eight             | Geographic number            | Area code for Siófok               |
| 85                                        | eight                                                            | eight             | Geographic number            | Area code for Marcali              |
| 86                                        | –                                                                | –                 | –                            |                                    |
| 87                                        | eight                                                            | eight             | Geographic number            | Area code for Tapolca              |
| 88                                        | eight                                                            | eight             | Geographic number            | Area code for Veszprém             |
| 89                                        | eight                                                            | eight             | Geographic number            | Area code for Pápa                 |
| 90                                        | eight                                                            | eight             | Non-geographic number        | Premium-rate service<br>(national) |
| 91                                        | eight                                                            | eight             | Non-geographic number        | IP VPN                             |

| (1)<br>NDC (National<br>Destination Code) | (2)<br>N(S)N (National<br>(Significant) Number<br>Number Length |                   | (3)<br>Usage of E.164 number | (4)<br>Additional Information |
|-------------------------------------------|-----------------------------------------------------------------|-------------------|------------------------------|-------------------------------|
|                                           | Maximum<br>Length                                               | Minimum<br>Length |                              |                               |
| 92                                        | eight                                                           | eight             | Geographic number            | Area code for Zalaegerszeg    |
| 93                                        | eight                                                           | eight             | Geographic number            | Area code for Nagykanizsa     |
| 94                                        | eight                                                           | eight             | Geographic number            | Area code for Szombathely     |
| 95                                        | eight                                                           | eight             | Geographic number            | Area code for Sárvár          |
| 96                                        | eight                                                           | eight             | Geographic number            | Area code for Győr            |
| 97                                        | –                                                               | –                 | –                            |                               |
| 98                                        | –                                                               | –                 | –                            |                               |
| 99                                        | eight                                                           | eight             | Geographic number            | Area code for Sopron          |

Contact:

Mr Alfred Bauer  
 Numbering expert  
 Communication Authority, Hungary (HIF)  
 Ostrom u. 23-25  
 P.O. Box 75  
 1015 BUDAPEST  
 Hungary  
 Tel: +36 1 457 7297  
 Fax: +36 1 457 7366  
 E-mail: bauer@hif.hu

### **Inmarsat (country code +870)**

Communication of 24.XII.2002:

*Inmarsat*, London, announces an addition to its number range to be implemented in mid-2004 when it is planned to introduce a new service-offering currently called BGAN. In accordance with Inmarsat's agreement with the ITU-T, this service-offering will be identified by the E.164 country code +870 (Single Network Access Code). The initial digits of the subscriber numbers will be 77. This combination of E.164 country code +870 and initial subscriber digits 77 will be unique to BGAN.

Service providers who differentiate Inmarsat service offerings on the basis of the initial digits of the subscriber number are asked to create a separate category for BGAN. Operational aspects including commercial and routeing arrangements will be addressed separately.

Service providers and Administrations are asked to make the necessary arrangements to accommodate this new range. Test numbers are expected to become available in late 2003 and additional notifications will be issued.

For further details and queries please contact:

Les Homan  
Inmarsat  
99 City Road  
LONDON EC1Y 1AX  
United Kingdom  
Tel: +44 20 7728 1762  
Fax: +44 20 7728 1778  
E-mail: les\_homan@inmarsat.com

### **Iceland (country code +354)**

Communication of 5.XII.2002:

The *Post and Telecom Administration*, Kopavogur, announces that the following new number series have been taken into use for fixed telephone services in Iceland:

444 XXXX

Contact:

Hörour Halldórsson  
Post and Telecom Administration  
Smidjuvegur 68-70  
200 KOPAVOGUR  
Iceland  
Tel: +354 510 1500  
Fax: +354 510 1509  
E-mail: pta@pta.is

### **Madagascar (country code +261)**

Communication of 17.XII.2002:

L'*Office Malagasy d'Etudes et de Régulation des Télécommunications* (OMERT), Antananarivo, announces that GULFSAT Téléphonie has introduced a new telephone network VSAT since 29 November 2002:

| <i>Operator</i>    | <i>National numbering</i> | <i>International numbering</i> |
|--------------------|---------------------------|--------------------------------|
| GULFSAT Téléphonie | 22 10 XXX XX              | +261 22 10 XXX XX              |

Contact:

GULFSAT Téléphonie  
41, avenue Lénine  
Antanimena  
101 ANTANANARIVO  
Madagascar  
Tél: +261 20 22 37012  
Fax: +261 20 22 37009  
E-mail: info@gulfsat.mg

### **Panama (country code +507)**

Communication of 9.XII.2002:

*Cable & Wireless Panamá, S.A.*, Panamá, announces to all carriers the activation of new number ranges for Panama:

| <i>Area</i> | <i>New number ranges</i> | <i>Service</i> | <i>Activation date</i> |
|-------------|--------------------------|----------------|------------------------|
| Rural areas | 333 0100 – 333 0949      | Basic          | 25 November 2002       |

International dialling format: +507 333 XXXX

Contact:

Mr Eduardo Strachan  
Cable & Wireless Panamá S.A.  
Torre C Internacional, Mezzanine  
Via España  
659 PANAMÁ 9A  
Panamá  
Tel: +507 263 6624  
Fax: +507 263 9390  
E-mail: eduardo.strachan@cwpanama.com

**Saint Lucia (country code +1 758)**

Communication of 9.I.2003\*:

*Cable and Wireless (St. Lucia) Ltd*, Castries, announces that the following new Central Office Codes (NXX) have been assigned to the NPA (Numbering Plan Area) "758":

| <i>Central Office Codes</i> | <i>Service</i>    |
|-----------------------------|-------------------|
| 460 XXXX                    | PSTN              |
| 461 XXXX                    | PSTN              |
| 462 XXXX                    | PSTN              |
| 463 XXXX                    | PSTN              |
| 464 XXXX                    | PSTN              |
| 465 XXXX                    | PSTN              |
| 467 XXXX                    | PSTN              |
| 469 XXXX                    | PSTN              |
| 480 XXXX                    | PSTN              |
| 488 XXXX                    | Mobile services   |
| 489 XXXX                    | Mobile services   |
| 638 XXXX                    | Internet services |
| 758 XXXX                    | Special services  |
| 784 XXXX                    | Special services  |
| 785 XXXX                    | Special services  |
| 932 XXXX                    | Special services  |

Contact:

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Operations Manager  
Tel: +1 758 453 9300  
Fax: +1 758 453 9740  
E-mail: roderick.charles@cwslu.cwplc.com

Elizabeth Gayle St.Cyr - Pamphile  
Cable & Wireless St. Lucia Ltd  
P.O. Box 111  
Bridge Street  
CASTRIES  
St. Lucia, West Indies  
Tel: +1 758 453 9358  
Fax: +1 758 453 9757  
E-mail: elizabeth.stcyr@cwslu.cwplc.com

\* See ITU Operational Bulletin No. 780 of 15.I.2003, page 13.

### Tunisia (country code +216)

Communication of 20.XII.2002:

*Tunisie Télécom*, Tunis, announces the introduction of the new mobile numbering range "2" for the mobile telephone network "Orascom Telecom Tunisie", as from 27 December 2002.

International dialling format: +216 2 XXX XXXX

Contact:

Mr Nouri Khatelli  
International Network Manager  
Tunisie Télécom  
Rue Asdrubal  
1002 TUNIS  
Tunisie  
Tel: +216 7184 3529  
Fax: +216 7184 9031  
E-mail: n.khatteli@ttnet.tn

### Turkey (country code +90)

Communication of 3.XII.2002:

*Türk Telekomünikasyon A.S.*, Ankara, announces the introduction of a new mobile code as follows:

| <i>Mobile service</i> | <i>Subscriber number</i> | <i>Routing to</i>                                                      |
|-----------------------|--------------------------|------------------------------------------------------------------------|
| TURKCELL GSM          | +90 537 XXX XXXX         | First choice: Istanbul<br>Second choice: Ankara<br>Third choice: Izmir |

Contact:

Mrs Semar Tutsak  
Türk Telekomünikasyon A.S.  
International Relations Department  
06103 ANKARA  
Turkey  
Tel: +90 312 555 2970  
Fax: +90 312 313 2940  
E-mail: semra.tutsak@telekom.gov.tr

## Data Transmission Service (ITU-T Recommendation X.121)

### International numbering plan for public data networks

#### Sweden

Communication of 29.I.2003:

*National Post and Telecom Agency (PTS)*, Stockholm, announces that the names of the networks to which data network identification codes (DNIC) 240 1, 240 3 and 240 7 were assigned have been changed to *Datex (Circuit Switched Public Data Network) – TeliaSonera AB*, *Datapak (Packet Switched Public Data Network) – TeliaSonera AB* and *Private X.25 Networks (DNIC allocated for a group of private networks) – TeliaSonera AB*, respectively.

## Changes in the Administrations/ROAs and other entities or Organizations

### Sweden

Communication of 29.I.2003:

#### *Change of name*

*Telia AB*, Stockholm, announces that it has changed its name. It is now called *TeliaSonera AB*. This is not a new entity, but the existing entity which has been re-named.

## Other Communications

### Kyrgyzstan

Communication of 29.I.2003:

Public holidays in 2003 (day, month):

|       |                              |
|-------|------------------------------|
| 1.01  | New Year                     |
| 7.01  | Christmas                    |
| 11.02 | Kurban ait*                  |
| 8.03  | International Women's Day    |
| 21.03 | Nooruz                       |
| 1.05  | Labour Day                   |
| 5.05  | Constitution Day             |
| 9.05  | Victory Day                  |
| 31.08 | Independence Day             |
| 7.11  | Great October Revolution Day |
| 25.11 | Orozo ait*                   |

\* According to the visibility of the Moon.

### Lithuania

Communication of 28.I.2003:

Public holidays in 2003 (day, month):

|                 |                                                        |
|-----------------|--------------------------------------------------------|
| 1.01            | New Year's Day                                         |
| 16.02           | Day of Re-establishment of the State of Lithuania      |
| 11.03           | Day of Re-establishment of Lithuania's<br>Independence |
| 20.04 and 21.04 | Easter and Easter Monday                               |
| 1.05            | Labour Day                                             |
| 4.05            | Mother's Day                                           |
| 6.07            | Day of the State (Coronation of King Mindaugas)        |
| 15.08           | Assumption Day                                         |
| 1.11            | All Saints' Day                                        |
| 25.12 and 26.12 | Christmas                                              |



## Malta

Communication of 28.I.2003:

Public holidays in 2003 (day, month):

|       |                                              |
|-------|----------------------------------------------|
| 1.01  | New Year's Day                               |
| 10.02 | Saint Paul's wreck                           |
| 19.03 | Saint Joseph's Feast                         |
| 31.03 | National Day                                 |
| 18.04 | Good Friday                                  |
| 1.05  | Workers' Day                                 |
| 7.06  | Commemoration of the uprising of 7 June 1919 |
| 29.06 | Saint Peter and Saint Paul                   |
| 15.08 | Assumption Day                               |
| 8.09  | Nativity                                     |
| 21.09 | Independence Day                             |
| 8.12  | Immaculate Conception                        |
| 13.12 | Republic Day                                 |
| 25.12 | Christmas                                    |

## Singapore

Communication of 10.I.2003:

Public holidays in 2003 (day, month):

|                |                  |
|----------------|------------------|
| 1.01           | New Year's Day   |
| 1.02 and 2.02* | Chinese New Year |
| 12.02          | Hari Raya Haji   |
| 18.04          | Good Friday      |
| 1.05           | Labour Day       |
| 15.05          | Vesak Day        |
| 9.08           | National Day     |
| 23.10          | Deepavali        |
| 25.11          | Hari Raya Puasa  |
| 25.12          | Christmas Day    |

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\* The following Monday will be a public holiday.

## Service Restrictions

### Note from TSB

See the recapitulatory List of service restrictions still in force published as an annex to Operational Bulletin (OB) No. 691 of 1.V.1999 and the following subsequent communications concerning new, modified or deleted service restrictions:

| <i>OB No.</i> |                                                                                           | <i>OB No.</i> |                                                                                                                                   |
|---------------|-------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 692           | Canada (p. 4), Morocco (p. 8),<br>Tonga (p. 5).                                           | 741           | Swaziland (p. 17).                                                                                                                |
| 694           | Fiji (p. 5), Morocco (p. 9/10).                                                           | 748           | Kenya (p. 4).                                                                                                                     |
| 697           | Finland (p. 5/6).                                                                         | 749           | Barbados (p. 8).                                                                                                                  |
| 698           | Angola (p. 18).                                                                           | 750           | Cyprus (p. 5-6).                                                                                                                  |
| 699           | Malawi (p. 6), Sweden (p. 9).                                                             | 751           | Norway (p. 6), Singapore (p. 7).                                                                                                  |
| 700           | Slovenia (p. 9).                                                                          | 753           | Peru (p. 9).                                                                                                                      |
| 701           | United Arab Emirates (p. 12),<br>Singapore (p. 5).                                        | 754           | Suriname (p. 4), Papua New<br>Guinea (p. 5).                                                                                      |
| 702           | Samoa (p. 6).                                                                             | 757           | Portugal (p. 4).                                                                                                                  |
| 704           | Finland (p. 13).                                                                          | 758           | Greenland (p. 7), Sweden (p. 7),<br>Vatican (p. 8).                                                                               |
| 707           | Germany (p. 3), Morocco (p. 5).                                                           | 759           | Cyprus (p. 7).                                                                                                                    |
| 709           | Uruguay (p. 8).                                                                           | 762           | Greenland (p. 7).                                                                                                                 |
| 711           | Slovenia (p. 8).                                                                          | 766           | Maldives (p. 19).                                                                                                                 |
| 714           | Germany (p. 6), Malawi (p. 12).                                                           | 770           | Netherlands Antilles (p. 9),<br>Guyana (p. 9), Haiti (p. 9).                                                                      |
| 716           | Norway (p. 17).                                                                           | 772           | Mozambique (p. 4).                                                                                                                |
| 719           | Denmark (p. 5).                                                                           | 773           | Guyana (p. 4), Poland (p. 5).                                                                                                     |
| 722           | Belize (p. 8).                                                                            | 775           | Andorra (p. 5),<br>New Caledonia (p. 6).                                                                                          |
| 724           | Barbados (p. 6),<br>United Arab Emirates (p. 7).                                          | 776           | Aruba (p. 6), Belgium (p. 36),<br>Bosnia and Herzegovina (p. 6),<br>Dominica (p. 27), Gibraltar (p. 5),<br>New Caledonia (p. 31). |
| 726           | Australia (p. 13, 31),<br>Finland (p. 12),<br>Indonesia (p. 16, 31),<br>Malaysia (p. 12). | 777           | Netherlands (p. 6).                                                                                                               |
| 727           | Morocco (p. 5).                                                                           | 778           | Guyana (p. 6-11),<br>Yugoslavia (p. 16).                                                                                          |
| 729           | Uruguay (p. 17/18).                                                                       | 779           | Saint Vincent and the<br>Grenadines (p. 8),<br>Trinidad and Tobago (p. 9).                                                        |
| 737           | Belize (p. 8),<br>Turks and Caicos Islands (p. 12).                                       | 780           | Saint Lucia (p. 13).                                                                                                              |
| 739           | Gibraltar (p. 13).                                                                        |               |                                                                                                                                   |
| 740           | Vanuatu (p. 11).                                                                          |               |                                                                                                                                   |

## **Call-Back and alternative calling procedures (Res. 21 Rev. PP-98)**

### **Note from TSB**

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

Belize, Benin, Botswana, Brazil, Brunei Darussalam, Central African Rep., Costa Rica, Côte d'Ivoire, Fiji, Gambia, Ghana, Greece, Haiti, Hungary, Iran (Islamic Republic of), Ireland, Israel, Lesotho, Lithuania, Macao (China), The Former Yugoslav Republic of Macedonia, Malawi, Mauritius, Moldova, Nicaragua, Oman, Pakistan, Panama, Papua New Guinea, Peru, Philippines, Samoa, Suriname, Syria, Chad, Tunisia, Tuvalu, Vanuatu, Zambia.

This information is the result of a survey made by ITU-T Study Group 3 in accordance with Resolution 21 (Rev. Minneapolis, 1998) of the Plenipotentiary Conference (Minneapolis, 1998) 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: <http://www.itu.int/itudoc/itu-t/com3/callback/position.html>

# AMENDMENTS TO SERVICE DOCUMENTS

## Abbreviations used

|            |         |            |           |
|------------|---------|------------|-----------|
| <b>ADD</b> | insert  | <b>PAR</b> | paragraph |
| <b>COL</b> | column  | <b>REP</b> | replace   |
| <b>LIR</b> | read    | <b>SUP</b> | delete    |
| <b>P</b>   | page(s) |            |           |

**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**

Annex to Operational Bulletin No. 767 – 1.VII.2002

(Amendment No. 3)

**P 8** Slovak Republic **COL** 1- 5 **LIR**

### RADIOCOMMUNICATIONS BETWEEN AMATEUR STATIONS (RR 25.1)

| Administration of the country<br>or geographical area | BETWEEN STATIONS OF<br>DIFFERENT COUNTRIES |           | Remarks and<br>restrictions<br>imposed | Form of<br>call signs |
|-------------------------------------------------------|--------------------------------------------|-----------|----------------------------------------|-----------------------|
|                                                       | Permitted                                  | Forbidden |                                        |                       |
|                                                       | 2                                          | 3         | 4                                      | Pages                 |
| 1                                                     | 2                                          | 3         | 4                                      | 5                     |
| Slovak Republic .....                                 | X                                          |           |                                        | 31                    |

**P 31** **ADD** by alphabetical order

#### Slovak Republic

Amateur stations: OM 0 AA-OM8ZZZ  
OM 0 A-OM9Z\*  
OM9AA-OM9ZZ\*\*  
OM9AAA-OM9SZZ\*\*\*

\* For international amateur contests.

\*\* For special events.

\*\*\* For foreigners transmitting from the Slovak Republic territory.

Experimental stations: OM9TAA-OM9ZZZ

**List of ITU Carrier Codes  
(According to ITU-T Recommendation M.1400)**

<http://www.itu.int/itu-t/inr/icc/index.html>

| Country or area/ISO code<br>Company Name/Address                                                                                                             | Company Code<br>(carrier code) | Contact                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| <b><i>République tchèque / CZE</i></b>                                                                                                                       |                                |                                                                                                           |
| <b><i>Czech Republic / CZE</i></b>                                                                                                                           |                                |                                                                                                           |
| <b><i>República Checa / CZE</i>      <b>ADD</b></b>                                                                                                          |                                |                                                                                                           |
| CE Com Czech, s.r.o.<br>Parizská 22<br>PRAHA 1<br>110 00<br>Czech Republic                                                                                   | CECOM                          | Jaroslav Ondrus<br>Tel: +420 267 198 153<br>Fax: +420 267 198 147<br>E-mail: jo@cecom.cz                  |
| <br>                                                                                                                                                         |                                |                                                                                                           |
| <b><i>Israel (Etat d') / ISR</i></b>                                                                                                                         |                                |                                                                                                           |
| <b><i>Israel (State of) / ISR</i></b>                                                                                                                        |                                |                                                                                                           |
| <b><i>Israel (Estado de) / ISR</i>      <b>ADD</b></b>                                                                                                       |                                |                                                                                                           |
| 012 Golden Lines<br>25 Hasivim Street<br>49170 PETACH TIKVA<br>Israel                                                                                        | GL                             | Moshe Vengel<br>Tel: +972 3 927 4330<br>Fax: +972 3 927 4535<br>E-mail: moshev@012.net                    |
| <br>                                                                                                                                                         |                                |                                                                                                           |
| <b><i>Mexico / MEX</i></b>                                                                                                                                   |                                |                                                                                                           |
| <b><i>Mexique / MEX</i></b>                                                                                                                                  |                                |                                                                                                           |
| <b><i>México / MEX</i>      <b>ADD</b></b>                                                                                                                   |                                |                                                                                                           |
| Pegaso Comunicaciones y Sistemas S.A.<br>de C.V.<br>Paseo de los Tamarindos 400-4, piso 24<br>Col. Bosques de las Lomas<br>MÉXICO 6177, D.E. 05120<br>México | MSTAR                          | Vicente SEOANE<br>Tel: +52 81 8177 3027<br>Fax: +52 55 5806 9080<br>E-mail: vseoane@telefonicamoviles.com |
| <br>                                                                                                                                                         |                                |                                                                                                           |
| <b><i>Royaume-Uni de Grande-Bretagne et d'Irlande du Nord / GBR</i></b>                                                                                      |                                |                                                                                                           |
| <b><i>United Kingdom of Great Britain and Northern Ireland / GBR</i></b>                                                                                     |                                |                                                                                                           |
| <b><i>Reino Unido de Gran Bretaña e Irlanda del Norte / GBR</i>      <b>ADD</b></b>                                                                          |                                |                                                                                                           |
| TELE2 UK Communications Limited<br>1 Mill Street<br>LONDON SE1 2DE<br>United Kingdom                                                                         | TELE2                          | Simon Wellden<br>Tel: +44 207 232 4959<br>Fax: +44 207 232 4029                                           |

**List of International Signalling Point Codes (ISPC)  
(According to ITU-T Recommendation Q.708 (03/99))  
(Position on 1 April 2002)**

(Annex to ITU Operational Bulletin No. 761 – 1.IV.2002)

(Amendment No. 20)

|                | <b>Country/<br/>geographical<br/>area ISPC</b> | <b>Unique name of<br/>the signalling point</b>                                                                                 | <b>Name of the signalling<br/>point operator</b>         |
|----------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| <b>P 5</b>     | <b><i>Australia</i></b>                        | <b>ADD</b>                                                                                                                     |                                                          |
|                | 5-117-5                                        | Telpacific-sydney                                                                                                              | Telpacific Pty Ltd                                       |
| <b>P 48</b>    | <b><i>United States</i></b>                    | <b>ADD</b>                                                                                                                     |                                                          |
|                | 3-055-6                                        | New York, NY                                                                                                                   | Antel Telecom., Inc.                                     |
|                | 3-055-7                                        | Jackson Heights, NY                                                                                                            | Savontel Communications                                  |
| <b>P 21</b>    | <b><i>Ireland</i></b>                          | <b>ADD</b>                                                                                                                     |                                                          |
|                | 2-145-7                                        | Courtyard Business Pk, Blackrock                                                                                               | Budget Telecom                                           |
| <b>P 25</b>    | <b><i>Latvia</i></b>                           | <b>ADD</b>                                                                                                                     |                                                          |
|                | 2-096-3                                        |                                                                                                                                | Latvenergo                                               |
|                | 5-252-0                                        |                                                                                                                                | Telekomunikāciju grupa                                   |
| <b>P 30</b>    | <b><i>Panama</i></b>                           | <b>ADD</b>                                                                                                                     |                                                          |
|                | 7-028-7                                        |                                                                                                                                | Cable Onda                                               |
|                | 7-029-1                                        |                                                                                                                                | Advanced Communication<br>Network, S.A.                  |
|                | 7-029-2                                        |                                                                                                                                | System One World Communication,<br>S.A.                  |
| <b>P 32</b>    | <b><i>Portugal</i></b>                         | <b>ADD</b>                                                                                                                     |                                                          |
|                | 2-137-0                                        | Tele2                                                                                                                          | Tele Milenio, Telecomunicações. Soc.<br>Unipessoal, Lda. |
| <b>P 36/37</b> | <b><i>Sweden</i></b>                           | 2-080-3 / 2-082-7 / 2-192-0 / 2-194-0                                                                                          | <b>LIR</b>                                               |
|                | 2-080-3                                        | Stockholm (MSC 2)                                                                                                              | Tele2 Sverige                                            |
|                | 2-082-7                                        | Stockholm (STHTELINT-1)                                                                                                        | Citylink AB                                              |
|                | 2-192-0                                        | Stockholm (STH-TSC-1)                                                                                                          | Djuice Sverige AS                                        |
|                | 2-193-1                                        | Stockholm (STO/TN1)                                                                                                            | Telenor Business Solutions AB                            |
|                | 2-193-2                                        | Göteborg (GTO/TN1)                                                                                                             | Telenor Business Solutions AB                            |
|                | 2-194-0                                        | Sollefteå (SOLTELINT-1)                                                                                                        | Citylink AB                                              |
| <b>P 36</b>    | <b><i>Sweden</i></b>                           | Telia AB 2-080-0 / 2-080-5 / 2-080-7 / 2-081-0 / 2-081-1 / 2-081-2 / 2-081-3 / 2-082-2 / 2-192-3 / 2-192-4 / 2-082-7 / 2-194-0 | <b>LIR</b>                                               |
|                | 2-080-0                                        | Stockholm (Stockholm UX1)                                                                                                      | TeliaSonera AB                                           |
|                | 2-080-5                                        | Malmö (MKR2 MSC)                                                                                                               | TeliaSonera AB                                           |
|                | 2-080-7                                        | Stockholm (Stockholm UX2)                                                                                                      | TeliaSonera AB                                           |
|                | 2-081-0                                        | Stockholm (Stockholm/UN STX)                                                                                                   | TeliaSonera AB                                           |
|                | 2-081-1                                        | Stockholm (Stockholm/UR STX)                                                                                                   | TeliaSonera AB                                           |
|                | 2-081-2                                        | Malmö (Malmö/UR STX)                                                                                                           | TeliaSonera AB                                           |
|                | 2-081-3                                        | Malmö (MBI MSC)                                                                                                                | TeliaSonera AB                                           |
|                | 2-082-2                                        | Göteborg (VRR2 MSC)                                                                                                            | TeliaSonera AB                                           |
|                | 2-192-3                                        | Stockholm (HY7M MSC)                                                                                                           | TeliaSonera AB                                           |
|                | 2-192-4                                        | Stockholm (SK3M MSC)                                                                                                           | TeliaSonera AB                                           |

**P 36/37 Sweden ADD**

2-192-2 Stockholm (S ML 1)  
2-194-7 Malmö (ISC2)

TeliaSonera AB  
Utfors Bredband AB

**Country/  
geographical area**

**Approving organization for ISPCs**

**Ireland LIR**

Ireland

Mrs Hilary Reynolds  
Commission for Communications Regulation  
(COMREG)  
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Irish Life Centre  
Lower Abbey Street  
DUBLIN 1  
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E-mail: hilary.reynolds@comreg.ie

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

**List of Data Network Identification Codes (DNIC)  
(According to ITU-T Recommendation X.121)  
(Position on 1 December 2002)**

(Annex to ITU Operational Bulletin No. 777 – 1.XII.2002)

(Amendment No. 2)

**P 17 SWEDEN**

DNIC 240 1\* **COL 3**

**REP** Datex (Public Circuit Switched Data Network)  
by Datex (Circuit Switched Public Data Network) – TeliaSonera AB

**P 17 SWEDEN**

DNIC 240 3\* **COL 3**

**REP** Datapak (Public Packet Switched Data Network)  
by Datapak (Packet Switched Public Data Network) – TeliaSonera AB

**P 17 SWEDEN**

DNIC 240 7\* **COL 3**

**REP** Private X.25 Networks (DNIC shared by a number of private networks)  
by Private X.25 Networks (DNIC allocated for a group of private networks) –  
TeliaSonera AB

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\* See the communication from *National Post and Telecom Agency (PTS)* in this Operational Bulletin No. 781 of 1.II.2003, page 15.

**List of Signalling Area/Network Codes (SANC)  
(Complement to ITU-T Recommendation Q.708 (03/99))  
(Position on 1 July 2002)**

(Annex to ITU Operational Bulletin No. 767 – 1.VII.2002)

(Amendment No. 9)

**Numerical order   ADD**

**P 12**   6-251   Hungary (Republic of)

**Alphabetical order   ADD**

**P 17**   6-251   Hungary (Republic of)

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SANC: Signalling Area/Network Codes.

Codes de zone/réseau sémaphore (CZRS).

Códigos de zona/red de señalización (CZRS).

**List of Telex Destination Codes (TDC)  
and Telex Network Identification Codes (TNIC)  
(Complement to ITU-T Recommendations F.69 and F.68)  
(Position on 31 May 1999)**

(Annex to ITU Operational Bulletin No. 693 – 1.VI.1999)

(Amendment No. 7)

**P 11**   **TDC** 785   **TNIC** KZ   **COL** 3

**REP**   Kazakstan (Republic of)   *by*   Kazakhstan (Republic of)

**List of Data Country or Geographical Area Codes (DCC)  
(Complement to ITU-T Recommendation X.121)  
(Position on 15 July 2000)**

(Annex to ITU Operational Bulletin No. 720 – 15.VII.2000)

(Amendment No. 5)

**P 5**   **Zone** 4   **Code** 401   **COL** 3

**REP**   Kazakstan (Republic of)   *by*   Kazakhstan (Republic of)



**Mobile Network Code (MNC) for the international identification plan  
for mobile terminals and mobile users  
(According to ITU-T Recommendation E.212 (11/98))  
(Position on 1 January 2003)**

(Annex to ITU Operation Bulletin No. 779 – 1.I.2003)

(Amendment No. 2)

| <i>Country/area</i> | <i>MCC* + MNC*</i> | <i>Name of Network</i> |
|---------------------|--------------------|------------------------|
|---------------------|--------------------|------------------------|

**P 3 *Argentine Republic* REP** all information by

|                    |         |                                               |
|--------------------|---------|-----------------------------------------------|
| Argentine Republic | 722 010 | Compañía de Radiocomunicaciones Moviles S.A.  |
|                    | 722 020 | Nextel Argentina S.R.L.                       |
|                    | 722 070 | Telefónica Comunicaciones Personales S.A.     |
|                    | 722 310 | CTI PCS S.A.                                  |
|                    | 722 320 | Compañía de Telefonos del Interior Norte S.A. |
|                    | 722 330 | Compañía de Telefonos del Interior S.A.       |
|                    | 722 341 | Telecom Personal S.A.                         |

**P 3 *Austria* SUP**

|         |        |             |
|---------|--------|-------------|
| Austria | 232 09 | Tele2 Mobil |
|---------|--------|-------------|

**P 16/17 *Sweden* 240 01 / 240 09 LIR**

|        |        |                   |
|--------|--------|-------------------|
| Sweden | 240 01 | TeliaSonera AB    |
| Sweden | 240 09 | Djuice Sverige AS |

**P 17 *Sweden* ADD**

|        |        |            |
|--------|--------|------------|
| Sweden | 240 10 | Swefour AB |
|--------|--------|------------|

\* 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









**INTERNATIONAL TELECOMMUNICATION UNION**

**TSB  
TELECOMMUNICATION  
STANDARDIZATION BUREAU  
OF ITU**

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

(POSITION ON 1 FEBRUARY 2003)

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## Various tones used in national networks

### Note by TSB

1. The List of various tones used in national networks has now been updated by replies received from various Administrations to TSB Circular 108 of 19 June 2002.
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 home page ([www.itu.int/itu-t/bulletin/](http://www.itu.int/itu-t/bulletin/)), and can be consulted by subscribers by remote access.
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](mailto: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

| <i>COUNTRY/TONE</i>                              | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                 |
|--------------------------------------------------|------------------------|-------------------------------------------|
| <b>Albania (Republic of)</b>                     |                        |                                           |
| 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             |
| <b>Algeria (People's Democratic Republic of)</b> |                        |                                           |
| Busy tone -                                      | 425                    | 0.5 on 0.5 off                            |
| Ringing tone -                                   | 425                    | 1.5 on 3.5 off                            |
| <b>Andorra (Principality of)</b>                 |                        |                                           |
| 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       |
| <b>Angola (Republic of)</b>                      |                        |                                           |
| 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                            |
| <b>Anguilla</b>                                  |                        |                                           |
| 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)                |
| <b>Antigua and Barbuda</b>                       |                        |                                           |
| 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)                       |
| <b>Argentine Republic</b>                        |                        |                                           |
| 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                           |
| <b>Aruba</b>                                     |                        |                                           |
| 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                          |
| 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             |

| <i>COUNTRY/TONE</i>                      | <i>FREQUENCY in Hz</i>           | <i>CADENCE in seconds</i>             |
|------------------------------------------|----------------------------------|---------------------------------------|
| <b>Ascension</b>                         |                                  |                                       |
| 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)                          |
| <b>Australia</b>                         |                                  |                                       |
| Busy tone -                              | 425                              | 0.375 on 0.375 off                    |
| Congestion tone -                        | 425                              | 0.375 on 0.375 off                    |
| Conference tone -                        | 425//525                         | 1.0 on 15.0 off 0.36 on 15.0 off      |
| Dial tone -                              | 425x25//400+425+450              | continuous                            |
| Facilities tone -                        | 425                              | continuous                            |
| Intrusion tone -                         | 425//525                         | continuous                            |
| Number unobtainable tone -               | 425                              | 2.5 on 0.5 off                        |
| Payphone recognition tone -              | 1209/852                         | 0.2 on 0.2 off 0.2 on 2.0 off         |
| Record tone -                            | 1400                             | 0.425 on 15.0 off                     |
| Ringing tone -                           | 400x25//400+425+450//<br>400+450 | 0.4 on 0.2 off 0.4 on 2.0 off         |
| Warning tone - operator intervening      | 900                              | 0.5 on                                |
| Call waiting tone -                      | 425                              | 0.2 on 0.2 off 0.2 on 4.4 off         |
| <b>Austria</b>                           |                                  |                                       |
| 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                      |
| <b>Bahamas (Commonwealth of the)</b>     |                                  |                                       |
| 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                        |
| <b>Bahrain (Kingdom of)</b>              |                                  |                                       |
| 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         |
| <b>Bangladesh (People's Republic of)</b> |                                  |                                       |
| 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                       |
| <b>Barbados</b>                          |                                  |                                       |
| 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                             |
| Call waiting tone -                      | 440                              | 2x(0.3 on 10.0 off)                   |



| <i>COUNTRY/TONE</i>                    | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>            |
|----------------------------------------|------------------------|--------------------------------------|
| <b>Belarus (Republic of)</b>           |                        |                                      |
| Busy tone -                            | 425                    | 0.4 on 0.4 off                       |
| Ringing tone -                         | 425                    | 0.8 on 3.2 off                       |
| <b>Belgium</b>                         |                        |                                      |
| 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 |
| <b>Benin (Republic of)</b>             |                        |                                      |
| 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                           |
| <b>Bermuda</b>                         |                        |                                      |
| 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                    |                                      |
| <b>Bhutan (Kingdom of)</b>             |                        |                                      |
| 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                      |
| <b>Bosnia and Herzegovina</b>          |                        |                                      |
| 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                      |
| <b>Botswana (Republic of)</b>          |                        |                                      |
| 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                |
| <b>Brazil (Federative Republic of)</b> |                        |                                      |
| 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    |

| <i>COUNTRY/TONE</i>                 | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                          |
|-------------------------------------|------------------------|----------------------------------------------------|
| Pay tone -                          | 300                    | 0.75 on                                            |
| Ringing tone -                      | 425                    | 1.0 on 4.0 off                                     |
| Waiting tone -                      | 425                    | 0.05 on 1.0 off                                    |
| <b>British Virgin Islands</b>       |                        |                                                    |
| 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)                         |
| <b>Brunei Darussalam</b>            |                        |                                                    |
| 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                                    |
| <b>Bulgaria (Republic of)</b>       |                        |                                                    |
| 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 - I                       | 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       | 1.5 on 5.12 off 1.5 on 5.12 off 1.5 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                                     |
| <b>Burkina Faso</b>                 |                        |                                                    |
| Acceptance tone -                   | 425                    | 1.0 on 4.0 off                                     |
| Busy tone -                         | 425//440//620          | 0.5 on 0.5 off                                     |
| Confirmation tone -                 | 350                    | 0.128 on 0.128 off 0.384 on                        |
| Congestion tone -                   | 425//620               | 0.25 on 0.25 off                                   |
| Dial tone -                         | 425//440               | continuous                                         |
| Ringing tone - I                    | 425                    | 1.0 on 4.0 off                                     |
| Ringing tone - II                   | 440                    | 1.7 on 3.3 off                                     |
| Ringing 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                    |
| <b>Burundi (Republic of)</b>        |                        |                                                    |
| Busy tone -                         | 425                    | 0.5 on 0.5 off                                     |
| Congestion tone -                   | 425                    | 0.25 on 0.25 off                                   |
| Dial tone -                         | 425                    | continuous                                         |
| Ringing tone -                      | 425                    | 1.7 on 3.3 off                                     |
| Special information tone -          | 950/1400/1800          | 3x0.33 on 1.0 off                                  |

| <i>COUNTRY/TONE</i>              | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>          |
|----------------------------------|------------------------|------------------------------------|
| <b>Cambodia (Kingdom of)</b>     |                        |                                    |
| 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                   |
| Ringing tone -                   | 425                    | 0.4 on 0.2 off 0.4 on 2.0 off      |
| <b>Cameroon (Republic of)</b>    |                        |                                    |
| 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                         |
| Ringing 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              |
| <b>Canada</b>                    |                        |                                    |
| 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                    | 2x(0.3 on 10.0 off)                |
| <b>Cayman Islands</b>            |                        |                                    |
| 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                   |
| Ringing tone -                   | 425                    | 1.0 on 4.0 off                     |
| <b>Central African Republic</b>  |                        |                                    |
| 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                   |
| Ringing 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               |
| <b>Chad (Republic of)</b>        |                        |                                    |
| Busy tone -                      | 440                    | 0.5 on 0.5 off                     |
| Dial tone -                      | 440                    | continuous                         |
| Second dial tone -               | 330+400                | continuous                         |
| Ringing tone -                   | 440                    | 1.7 on 3.3 off                     |
| Special information tone -       | 950/1400/1800          | (3x0.33 on 2x0.03 off) 1.0 off     |
| <b>Channel Islands: Guernsey</b> |                        |                                    |
| 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                 |
| Ringing tone -                   | 400+450                | 0.4 on 0.2 off                     |
| Special information tone -       | 950/1400/1800          | 3x0.33 on 1.0 off                  |
| Call waiting tone -              | 400                    | 8x(0.1 on 4.9 off)                 |
| <b>Channel Islands: Jersey</b>   |                        |                                    |
| 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                 |
| Ringing 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              |
| <b>Chile</b>                     |                        |                                    |
| 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      |
| Ringing 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                             |

| <i>COUNTRY/TONE</i>                 | <i>FREQUENCY in Hz</i>     | <i>CADENCE in seconds</i>                          |
|-------------------------------------|----------------------------|----------------------------------------------------|
| Warning tone - operator intervening | 1400                       | 0.5 on 15.0 off                                    |
| Waiting tone -                      | 900+1300                   | 0.5 on 0.5 off                                     |
| <b>China (People's Republic of)</b> |                            |                                                    |
| 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                  |
| Ringing 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                                     |
| <b>Colombia (Republic of)</b>       |                            |                                                    |
| 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                                            |
| Ringing tone -                      | 425                        | 1.0 on 4.5 off                                     |
| Special information tone -          | 950/1400/1800              | 3x0.333 on 1.0 off                                 |
| <b>Comoros (Union of the)</b>       |                            |                                                    |
| Busy tone -                         | 440                        | 0.5 on 0.5 off                                     |
| Dial tone -                         | 440                        | continuous                                         |
| Second dial tone -                  | 330+440                    | continuous                                         |
| Ringing 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                                  |
| <b>Cook Islands</b>                 |                            |                                                    |
| Busy tone -                         | 400                        | 0.5 on 0.5 off                                     |
| Congestion tone -                   | 400                        | 0.25 on 0.25 off                                   |
| Dial tone -                         | 400                        | continuous                                         |
| Ringing tone -                      | 400+450                    | 0.4 on 0.2 off                                     |
| Call waiting tone -                 | 400+450                    | 0.5 on                                             |
| <b>Costa Rica</b>                   |                            |                                                    |
| Busy tone -                         | 450                        | 0.33 on 0.33 off                                   |
| Congestion tone -                   | 450                        | 0.33 on 0.33 off                                   |
| Dial tone -                         | 450                        | continuous                                         |
| Ringing 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                   |
| <b>Côte d'Ivoire (Republic of)</b>  |                            |                                                    |
| Busy tone -                         | 425                        | 0.5 on 0.5 off                                     |
| Congestion tone -                   |                            | announcement                                       |
| 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                        |                                                    |
| <b>Croatia (Republic of)</b>        |                            |                                                    |
| 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                                     |
| <b>Cuba</b>                         |                            |                                                    |
| 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                                     |

| <i>COUNTRY/TONE</i>                     | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                           |
|-----------------------------------------|------------------------|-----------------------------------------------------|
| Ringling tone - III                     | 420x40                 | 1.0 on 2.0 off                                      |
| Ringling 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                                      |
| <b>Cyprus (Republic of)</b>             |                        |                                                     |
| 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)                              |
| Ringling 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                       |
| <b>Czech Republic</b>                   |                        |                                                     |
| 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                   |
| Ringling 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                   |
| <b>Denmark</b>                          |                        |                                                     |
| 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                                          |
| Ringling 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 0.2 on |
| Call waiting tone - II (1)              | 425                    | 0.2 on 0.6 off 0.2 on 3.0 off 0.2 on 0.6 off 0.2 on |
| <b>Diego Garcia</b>                     |                        |                                                     |
| Busy tone -                             | 480/620                | Interrupted at 60 ipm                               |
| Dial tone -                             | 350/440                | continuous                                          |
| Number unobtainable tone -              | 480/620                | Interrupted at 120 ipm                              |
| Ringling tone -                         | 440/480                | 1.0 on 3.0 off                                      |
| <b>Djibouti (Republic of)</b>           |                        |                                                     |
| Busy tone -                             | 425                    | 0.5 on 0.5 off                                      |
| Dial tone -                             | 425                    | continuous                                          |
| Ringling tone -                         | 425                    | 1.5 on 3.5 off                                      |
| Route tone -                            | 425                    | 0.05 on 0.05 off                                    |
| <b>Dominica (Commonwealth of)</b>       |                        |                                                     |
| 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                                      |
| 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)                          |
| <b>Dominican Republic</b>               |                        |                                                     |
| 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                                          |
| Ringling tone -                         | 400//450               | 0.4 on 0.2 off 0.4 on 2.2 off                       |
| <b>Ecuador</b>                          |                        |                                                     |
| Busy tone -                             | 425                    | 0.33 on 0.33 off                                    |
| Congestion tone -                       | 425                    | 0.33 on 0.33 off                                    |
| Dial tone -                             | 425                    | continuous                                          |
| Ringling tone -                         | 425                    | 1.2 on 4.65 off                                     |
| Call waiting tone -                     | 425                    | 0.2 on 0.6 off                                      |
| <b>Egypt (Arab Republic of)</b>         |                        |                                                     |
| Busy tone -                             | 425x50                 | 1.0 on 4.0 off                                      |

| <i>COUNTRY/TONE</i>                              | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                          |
|--------------------------------------------------|------------------------|----------------------------------------------------|
| 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 |
| <b>El Salvador (Republic of)</b>                 |                        |                                                    |
| 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                                   |
| <b>Estonia (Republic of)</b>                     |                        |                                                    |
| 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                                  |
| <b>Ethiopia (Federal Democratic Republic of)</b> |                        |                                                    |
| Acceptance tone -                                | 425                    | continuous                                         |
| 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                                     |
| Ringing 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                                     |
| <b>Falkland Islands (Malvinas)</b>               |                        |                                                    |
| 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                                         |
| Ringing 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                                     |
| <b>Faroe Islands</b>                             |                        |                                                    |
| 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                                  |
| Ringing tone -                                   | 425                    | 1.0 on 4.0 off                                     |
| <b>Fiji (Republic of)</b>                        |                        |                                                    |
| 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                                   |
| Ringing tone -                                   | 425x25                 | 0.4 on 0.2 off 0.4 on 2.0 off                      |
| Special ringing 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                                    |
| <b>Finland</b>                                   |                        |                                                    |
| 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                                  |

| <i>COUNTRY/TONE</i>                                       | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                          |
|-----------------------------------------------------------|------------------------|----------------------------------------------------|
| Queue tone -                                              | 950/950/1400           | 0.65 on 0.325 off 0.325 on 1.3 on 2.6 off          |
| Ringing tone -                                            | 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                   |
| <b>France</b>                                             |                        |                                                    |
| 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                                    |
| <b>French Guiana (French Department of)</b>               |                        |                                                    |
| 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                                    |
| <b>French Polynesia (Territoire français d'outre-mer)</b> |                        |                                                    |
| 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                                         |
| Ringing 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                                     |
| <b>Gabonese Republic</b>                                  |                        |                                                    |
| Busy tone -                                               | 440                    | 0.5 on 0.5 off                                     |
| Congestion tone -                                         | 440                    | 0.5 on 0.5 off                                     |
| Dial tone -                                               | 440                    | continuous                                         |
| Ringing 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                                     |
| <b>Gambia (Republic of the)</b>                           |                        |                                                    |
| Busy tone -                                               | 425                    | 0.5 on 0.5 off                                     |
| Congestion tone -                                         | 425                    | 0.5 on 0.5 off                                     |
| Dial tone -                                               | 425                    | continuous                                         |
| Ringing 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                                 |
| <b>Georgia</b>                                            |                        |                                                    |
| Busy tone -                                               | 425                    | 1.0 on 3.0 off                                     |
| Congestion tone -                                         | 425                    | 1.0 on 1.0 off                                     |
| Dial tone -                                               | 425                    | continuous                                         |
| Ringing tone -                                            | 25                     | 1.0 on 4.0 off                                     |
| Call waiting tone -                                       | 425                    | 0.125 on                                           |
| <b>Germany (Federal Republic of)</b>                      |                        |                                                    |
| 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)                  |
| Ringing 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                      |
| <b>Ghana</b>                                              |                        |                                                    |
| 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 |
| Ringing 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       |
| <b>Gibraltar</b>                                          |                        |                                                    |
| Busy tone -                                               | 400                    | 0.375 on 0.375 off                                 |
| Congestion tone -                                         | 400                    | 0.4 on 0.35 off 0.225 on 0.525 off                 |

| <i>COUNTRY/TONE</i>                      | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                                      |
|------------------------------------------|------------------------|----------------------------------------------------------------|
| Dial tone -                              | 350+400                | continuous                                                     |
| Number unobtainable tone -               | 400                    | continuous                                                     |
| Ringing tone -                           | 400+450                | 0.4 on 0.2 off 0.4 on 2.0 off                                  |
| Waiting tone -                           | 400                    | 0.1 on 3.0 off                                                 |
| <b>Greece</b>                            |                        |                                                                |
| 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                                  |
| 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                                |
| <b>Greenland (Denmark)</b>               |                        |                                                                |
| 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                                                 |
| <b>Grenada</b>                           |                        |                                                                |
| Busy tone -                              | 460+620                | 0.5 on 0.5 off                                                 |
| Congestion tone -                        |                        | announcement                                                   |
| Ringing tone -                           | 440+480                | 2.0 on 4.0 off                                                 |
| <b>Guadeloupe (French Department of)</b> |                        |                                                                |
| 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                                                |
| <b>Guinea (Republic of)</b>              |                        |                                                                |
| Busy tone -                              | 450                    | 0.2 on 0.2 off                                                 |
| Ringing tone -                           | 450                    | 0.4 on 0.2 off                                                 |
| <b>Guyana</b>                            |                        |                                                                |
| 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                                                |
| <b>Honduras (Republic of)</b>            |                        |                                                                |
| 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                                  |
| <b>Hongkong, China</b>                   |                        |                                                                |
| 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                                  |
| <b>Hungary (Republic of)</b>             |                        |                                                                |
| 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 +<br>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                                               |



| <i>COUNTRY/TONE</i>               | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                               |
|-----------------------------------|------------------------|---------------------------------------------------------|
| <b>Iceland</b>                    |                        |                                                         |
| Busy tone -                       | 425                    | 0.25 on 0.25 off                                        |
| 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) |
| <b>India (Republic of)</b>        |                        |                                                         |
| 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                           |
| <b>Indonesia (Republic of)</b>    |                        |                                                         |
| 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                       |
| <b>Iran (Islamic Republic of)</b> |                        |                                                         |
| 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                          |
| <b>Iraq (Republic of)</b>         |                        |                                                         |
| 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                                              |
| <b>Ireland</b>                    |                        |                                                         |
| 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                       |
| <b>Israel (State of)</b>          |                        |                                                         |
| 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                                          |
| 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)                              |

| <i>COUNTRY/TONE</i>                  | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                                                                    |
|--------------------------------------|------------------------|----------------------------------------------------------------------------------------------|
| Caller waiting tone -                | 400                    | 2x(0.1 on 0.1 off) 0.6 on 3.0 off                                                            |
| <b>Italy</b>                         |                        |                                                                                              |
| 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                                                    |
| <b>Jamaica</b>                       |                        |                                                                                              |
| 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                                                                             |
| <b>Japan</b>                         |                        |                                                                                              |
| 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       |
| <b>Jordan (Hashemite Kingdom of)</b> |                        |                                                                                              |
| 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                                                                             |
| <b>Kenya (Republic of)</b>           |                        |                                                                                              |
| 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                                                                                   |
| <b>Kiribati (Republic of)</b>        |                        |                                                                                              |
| 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                    | 2.5 on 0.5 off                                                                               |
| Ringing 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                                                                |
| <b>Korea (Republic of)</b>           |                        |                                                                                              |
| 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                                                           |

| <i>COUNTRY/TONE</i>                     | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                               |
|-----------------------------------------|------------------------|---------------------------------------------------------|
| Number unobtainable tone -              | 450                    | 0.2 on 0.1 off 0.2 on 1.5 off                           |
| Ringing 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                       |
| <b>Kuwait (State of)</b>                |                        |                                                         |
| 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                                          |
| Ringing 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                                          |
| <b>Kyrgyz Republic</b>                  |                        |                                                         |
| 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)                                              |
| Ringing 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                                          |
| <b>Lao People's Democratic Republic</b> |                        |                                                         |
| 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                                          |
| Ringing tone -                          | 425                    | 1.0 on 4.0 off                                          |
| Waiting tone -                          | 425                    | 0.4 on 0.4 off                                          |
| <b>Latvia (Republic of)</b>             |                        |                                                         |
| 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                                              |
| Ringing 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                                          |
| <b>Lebanon</b>                          |                        |                                                         |
| Busy tone -                             | 425                    | 0.5 on 0.5 off                                          |
| Congestion tone -                       | 425                    | 0.24 on 0.24 off                                        |
| Dial tone -                             | 425                    | continuous                                              |
| Ringing 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                                          |
| <b>Lesotho (Kingdom of)</b>             |                        |                                                         |
| 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                                          |
| Ringing 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                                        |

| <i>COUNTRY/TONE</i>                    | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>         |
|----------------------------------------|------------------------|-----------------------------------|
| <b>Liberia (Republic of)</b>           |                        |                                   |
| 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) |
| Ringing tone -                         | 425//450               | 1.0 on 4.0 off                    |
| <b>Liechtenstein (Principality of)</b> |                        |                                   |
| 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                    |
| Ringing tone - I                       | 425                    | continuous                        |
| Ringing tone - II                      | 420                    | 1.0 on 5.0 off                    |
| Ringing 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     |
| <b>Lithuania (Republic of)</b>         |                        |                                   |
| Busy tone -                            | 425                    | 0.35 on 0.35 off                  |
| Congestion tone -                      | 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 1.0 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                    |
| <b>Luxembourg</b>                      |                        |                                   |
| 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                        |
| Ringing 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                        |
| <b>Macao, China</b>                    |                        |                                   |
| 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     |
| 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                    |
| <b>Madagascar (Republic of)</b>        |                        |                                   |
| 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                    |
| <b>Malawi</b>                          |                        |                                   |
| 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                    |

| <i>COUNTRY/TONE</i>                                                   | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>        |
|-----------------------------------------------------------------------|------------------------|----------------------------------|
| Special ringing tone -                                                | 425                    | 1.0 on 4.0 off                   |
| Special information tone -                                            | 950/1400/1800          | 3x0.3 on 1.0 off                 |
| <b>Malaysia</b>                                                       |                        |                                  |
| 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    |
| <b>Maldives (Republic of)</b>                                         |                        |                                  |
| 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    |
| <b>Mali (Republic of)</b>                                             |                        |                                  |
| 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                  |
| <b>Malta</b>                                                          |                        |                                  |
| 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                  |
| <b>Martinique (French Department of)</b>                              |                        |                                  |
| 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                  |
| <b>Mauritania (Islamic Republic of)</b>                               |                        |                                  |
| 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                 |
| <b>Mauritius (Republic of)</b>                                        |                        |                                  |
| 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                   |
| <b>Mayotte (Collectivité territoriale de la République française)</b> |                        |                                  |
| 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                  |
| <b>Mexico</b>                                                         |                        |                                  |
| 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 |
| <b>Moldova (Republic of)</b>                                          |                        |                                  |
| Busy tone -                                                           | 425                    | 0.35 on 0.35 off                 |
| Congestion tone -                                                     | 425                    | 0.2 on 0.2 off                   |
| Dial tone -                                                           | 425                    | continuous                       |

| <i>COUNTRY/TONE</i>                                    | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>         |
|--------------------------------------------------------|------------------------|-----------------------------------|
| 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                    |
| <b>Montserrat</b>                                      |                        |                                   |
| 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)        |
| <b>Morocco (Kingdom of)</b>                            |                        |                                   |
| 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                    |
| <b>Mozambique (Republic of)</b>                        |                        |                                   |
| 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                    |
| <b>Myanmar (Union of)</b>                              |                        |                                   |
| 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                    |
| Call waiting tone -                                    | 400                    | 0.3 on 10.0 off                   |
| <b>Namibia (Republic of)</b>                           |                        |                                   |
| Busy tone -                                            | 400                    | 0.5 on 0.5 off                    |
| Congestion tone -                                      | 400                    | 0.25 on 0.25 off                  |
| Dial tone -                                            | 400x33                 | continuous                        |
| Ringing 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                 | continuous                        |
| <b>Nauru (Republic of)</b>                             |                        |                                   |
| 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 |
| Ringing tone -                                         | 400                    | 1.0 on 4.0 off                    |
| Ringing tone - pabx                                    | 425x25                 | 0.4 on 0.2 off 0.4 on 2.0 off     |
| <b>Nepal</b>                                           |                        |                                   |
| 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                   |
| Ringing tone -                                         | 425                    | 1.1 on 3.1 off                    |
| <b>Netherlands (Kingdom of the)</b>                    |                        |                                   |
| 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                   |
| Ringing tone -                                         | 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                    |
| <b>New Caledonia (Territoire français d'outre-mer)</b> |                        |                                   |
| Busy tone -                                            | 440                    | 0.5 on 0.5 off                    |
| Congestion tone -                                      | 950/1400/1800          | 2x[3x0.33 on + announcement]      |

| <i>COUNTRY/TONE</i>                   | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                        |
|---------------------------------------|------------------------|--------------------------------------------------|
| Dial tone -                           | 440//330+440           | continuous                                       |
| Ringing tone -                        | 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)                        |
| <b>New Zealand</b>                    |                        |                                                  |
| 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                                   |
| Ringing tone - I                      | 400+450                | 0.4 on 0.2 off 0.4 on 2.0 off                    |
| Ringing tone - 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) |
| <b>Niger (Republic of the)</b>        |                        |                                                  |
| 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                                       |
| Ringing tone -                        | 440                    | 1.7 on 3.3 off                                   |
| Route tone -                          | 440                    | 0.05 on 0.05 off                                 |
| <b>Nigeria (Federal Republic of)</b>  |                        |                                                  |
| 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                                   |
| Ringing 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                                   |
| <b>Norway</b>                         |                        |                                                  |
| 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)                                       |
| Ringing 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                   |
| <b>Oman (Sultanate of)</b>            |                        |                                                  |
| 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                 |
| Ringing 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                                   |
| <b>Pakistan (Islamic Republic of)</b> |                        |                                                  |
| Busy tone -                           | 400                    | 0.5 on 0.5 off                                   |
| Congestion tone -                     | 400                    | 0.25 on 0.25 off                                 |
| Ringing tone -                        | 400                    | 1.0 on 2.0 off                                   |
| <b>Panama (Republic of)</b>           |                        |                                                  |
| 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                 |
| Ringing 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                         |

| <i>COUNTRY/TONE</i>                      | <i>FREQUENCY in Hz</i>                       | <i>CADENCE in seconds</i>                          |
|------------------------------------------|----------------------------------------------|----------------------------------------------------|
| <b>Papua New Guinea</b>                  |                                              |                                                    |
| 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)             |
| Ringing tone -                           | 425//400x25//400x16 2/3<br>//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 |
| <b>Paraguay (Republic of)</b>            |                                              |                                                    |
| 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                                    |
| 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 10.0 off                                    |
| Caller waiting tone -                    | 950/950/1400                                 | 0.65 on 0.325 off 0.325 on 1.3 off 2.6 on          |
| <b>Peru</b>                              |                                              |                                                    |
| 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                |
| <b>Philippines (Republic of the)</b>     |                                              |                                                    |
| 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                                    |
| <b>Poland (Republic of)</b>              |                                              |                                                    |
| 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                   |
| <b>Portugal</b>                          |                                              |                                                    |
| 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                                     |



| <i>COUNTRY/TONE</i>                     | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>               |
|-----------------------------------------|------------------------|-----------------------------------------|
| Ringling 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           |
| <b>Puerto Rico</b>                      |                        |                                         |
| Payphone recognition tone -             | 1100+1750/750+1450     | 0.2 on 0.2 off 0.2 on 2.0 off           |
| <b>Qatar (State of)</b>                 |                        |                                         |
| 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                          |
| 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                              |
| Ringling tone - I                       | 400+450                | 0.38 on 0.25 off 0.38 on 2.0 off        |
| Ringling 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                         |
| <b>Reunion (French Department of)</b>   |                        |                                         |
| 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                         |
| <b>Romania</b>                          |                        |                                         |
| 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            | 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 |
| Ringling tone - I                       | 450x25                 | 1.85 on 4.15 off                        |
| Ringling tone - II                      | 450                    | 1.5 on 4.5 off                          |
| <b>Russian Federation</b>               |                        |                                         |
| Busy tone -                             | 425                    | 0.4 on 0.4 off                          |
| Ringling tone -                         | 425                    | 0.8 on 3.2 off                          |
| Waiting tone -                          | 950/1400/1800          | 3x0.333 on 1.0 off                      |
| <b>Rwandese Republic</b>                |                        |                                         |
| 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                                |
| Ringling 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                       |
| <b>Saint Helena</b>                     |                        |                                         |
| 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                      |
| Ringling tone -                         | 400+450                | 0.4 on 0.2 off                          |
| <b>Saint Kitts and Nevis</b>            |                        |                                         |
| 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)              |

| <i>COUNTRY/TONE</i>                                                                     | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>           |
|-----------------------------------------------------------------------------------------|------------------------|-------------------------------------|
| <b>Saint Lucia</b>                                                                      |                        |                                     |
| 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       |
| <b>Saint Pierre and Miquelon (Collectivité territoriale de la République française)</b> |                        |                                     |
| 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                     |
| <b>Saint Vincent and the Grenadines</b>                                                 |                        |                                     |
| 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                  |
| Ringing 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                              |
| <b>Samoa (Independent State of)</b>                                                     |                        |                                     |
| 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                      |
| Ringing tone -                                                                          | 425x25                 | 0.4 on 0.2 off                      |
| <b>San Marino (Republic of)</b>                                                         |                        |                                     |
| Busy tone -                                                                             | 425                    | 0.2 on 0.2 off                      |
| Dial tone -                                                                             | 425                    | 0.6 on 1.0 off 0.2 on 0.2 off       |
| Ringing tone -                                                                          | 425                    | 1.0 on 4.0 off                      |
| <b>Sao Tome and Principe (Democratic Republic of)</b>                                   |                        |                                     |
| Busy tone -                                                                             | 425                    | 0.5 on 0.5 off                      |
| Dial tone -                                                                             | 425                    | continuous                          |
| Pay tone -                                                                              | 12000                  | continuous                          |
| Ringing tone -                                                                          | 425                    | 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                      |
| <b>Saudi Arabia (Kingdom of)</b>                                                        |                        |                                     |
| 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       |
| Ringing tone -                                                                          | 425                    | 1.2 on 4.6 off                      |
| Call waiting tone -                                                                     | 425                    | 0.15 on 0.2 off 0.15 on 10.0 off    |
| <b>Senegal (Republic of)</b>                                                            |                        |                                     |
| Busy tone -                                                                             | 440                    | 0.5 on 0.5 off                      |
| Dial tone -                                                                             | 440                    | continuous                          |
| Ringing tone -                                                                          | 400                    | 1.7 on 3.3 off                      |
| Special information tone -                                                              | 900/1380/1860          | 0.35 on 0.30 on 0.35 on             |
| <b>Seychelles (Republic of)</b>                                                         |                        |                                     |
| 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                          |
| Ringing tone -                                                                          | 425                    | 0.4 on 0.2 off 0.4 on 2.0 off       |
| Route tone -                                                                            | 425                    | 0.5 on 0.5 off                      |
| <b>Sierra Leone</b>                                                                     |                        |                                     |
| Busy tone -                                                                             | 425//450               | 0.5 on 0.5 off                      |
| Congestion tone -                                                                       | 425                    | 0.2 on 0.2 off                      |

| <i>COUNTRY/TONE</i>               | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                         |
|-----------------------------------|------------------------|---------------------------------------------------|
| Dial tone -                       | 425//450               | continuous                                        |
| Number unobtainable tone -        | 950//450/150           | 0.33 on 0.03 off                                  |
| Ringing tone -                    | 425//450               | 1.0 on 4.0 off                                    |
| Waiting tone -                    | 425                    | 1x(1.0 on)                                        |
| <b>Singapore (Republic of)</b>    |                        |                                                   |
| 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                                    |
| Ringing 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                     |
| <b>Slovak Republic</b>            |                        |                                                   |
| 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                     |
| Ringing 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                 |
| <b>Slovenia (Republic of)</b>     |                        |                                                   |
| 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                                   |
| Ringing 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                                   |
| <b>Solomon Islands</b>            |                        |                                                   |
| 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                                    |
| Ringing tone -                    | 400+450                | 0.4 on 0.2 off                                    |
| Waiting tone -                    | 400+450/400            | 0.5 on 0.5 off                                    |
| <b>South Africa (Republic of)</b> |                        |                                                   |
| 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                                    |
| Ringing 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                                    |
| <b>Spain</b>                      |                        |                                                   |
| 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                                    |
| Special dial tone - II            | 425                    | 0.5 on 0.05 off                                   |
| Number unobtainable tone - I      | 425                    | 0.2 on 0.2 off 0.2 on 0.6 off                     |
| Number unobtainable tone - II     | 425                    | 0.5 on 2.5 off                                    |
| Payphone recognition tone - I     | 1600                   | 0.05 on 0.05 off 0.05 on 1.5 off                  |
| Payphone recognition tone - II    | 1600                   | 0.05 on 0.05 off 0.05 on 0.05 off 0.05 on 1.5 off |
| Ringing tone - I                  | 425                    | 1.5 on 3.0 off                                    |

| <i>COUNTRY/TONE</i>                                 | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                           |
|-----------------------------------------------------|------------------------|-----------------------------------------------------|
| Ringling tone - II                                  | 425                    | 1.0 on 4.0 off                                      |
| Special information tone -                          | 950/1400/1800          | 3x0.33 on 1.0 off                                   |
| Warning tone - operator intervening                 | 1400                   | 0.4 on 5.0 off                                      |
| Call waiting tone -                                 | 425                    | 0.175 on 0.175 off 0.175 on 3.5 off                 |
| <b>Sri Lanka (Democratic Socialist Republic of)</b> |                        |                                                     |
| Busy tone -                                         | 425                    | 0.75 on 0.75 off                                    |
| Congestion tone -                                   | 425                    | 0.25 on 0.25 off                                    |
| Dial tone -                                         | 425                    | continuous                                          |
| Holding tone -                                      | 425                    | 0.5 on 2.5 off                                      |
| Intrusion tone -                                    | 425                    | 0.5 on 0.75 off                                     |
| Number unobtainable tone -                          | 425+330                | continuous                                          |
| Ringling tone -                                     | 425                    | 0.4 on 0.2 off 0.4 on 2.0 off                       |
| Route tone -                                        | 425                    | 0.05 on 0.05 off                                    |
| Special information tone -                          | 950/1400/1800          | (3x0.33 on 2x 0.03 off)                             |
| Warning tone -                                      | 425                    | 0.5 on 4.5 off                                      |
| Call waiting tone -                                 | 425                    | 0.5 on 2.5 off                                      |
| <b>Sudan (Republic of the)</b>                      |                        |                                                     |
| Busy tone -                                         | 425                    | 1.0 on 1.0 off                                      |
| Congestion tone -                                   | 425                    | 0.375 on 0.375 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 -                                 | 425                    | 0.15 on 0.15 off 0.15 on 4.0 off                    |
| <b>Suriname (Republic of)</b>                       |                        |                                                     |
| Busy tone -                                         | 425                    | 0.25 on 0.25 off                                    |
| Congestion tone -                                   | 425                    | 0.25 on 0.25 off                                    |
| Dial tone -                                         | 425                    | continuous                                          |
| Ringling tone -                                     | 425                    | 1.0 on 1.0 off                                      |
| <b>Swaziland (Kingdom of)</b>                       |                        |                                                     |
| Busy tone - I                                       | 400                    | 0.5 on 0.5 off                                      |
| Busy tone - II                                      | 400                    | 0.4 on 0.4 off                                      |
| Dial tone -                                         | 50                     | continuous                                          |
| Number unobtainable tone -                          | 400                    | 4.8 on 0.2 off                                      |
| Pay tone -                                          | 900                    | 0.25 on 0.25 off                                    |
| Payphone recognition tone - I                       | 1430/943               | 2.0 on 2.0 off                                      |
| Payphone recognition tone - II                      | 1100+1750/750+1450     | 0.2 on 0.2 off 0.2 on 2.0 off                       |
| Ringling tone -                                     | 400                    | 0.4 on 0.2 off 0.4 on 4.0 off                       |
| <b>Sweden</b>                                       |                        |                                                     |
| 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 0.75 off                                    |
| Congestion tone - II (1)                            | 425                    | 0.2 on 0.2 off                                      |
| Dial tone -                                         | 425                    | continuous                                          |
| Special dial tone -                                 | 425                    | 0.32 on 0.02 off                                    |
| Pay tone -                                          | 941                    | 2x(0.2 on 0.2 off 0.2 on 3.6 off)                   |
| Payphone recognition tone -                         | 1477/941               | 11x(0.2 on 0.2 off 0.2 on 2.0 off)                  |
| Ringling tone - I                                   | 425                    | 1.0 on 5.0 off                                      |
| Ringling tone - II (1)                              | 425                    | 1.0 on 4.0 off                                      |
| Special information tone -                          | 950/1400/1800          | 3x0.33 on 1.0 off + announcement                    |
| Warning tone - at time limit barring                | 425                    | 2.0 on 5.0 off + continuous                         |
| Warning tone - operator intervening                 | 1400                   | 0.1 on 1.5 off                                      |
| Warning tone - three party conference               | 1400                   | 0.35 on 15.0 off                                    |
| Call waiting tone - I                               | 425                    | 1x(0.2 on 0.5 off 0.2 on)                           |
| Call waiting tone - II (1)                          | 425                    | 0.2 on 0.6 off 0.2 on 3.0 off 0.2 on 0.6 off 0.2 on |
| <b>Switzerland (Confederation of)</b>               |                        |                                                     |
| Busy tone -                                         | 425                    | 0.5 on 0.5 off                                      |
| Congestion tone -                                   | 425                    | 0.2 on 0.2 off                                      |
| Dial tone -                                         | 425                    | continuous                                          |
| Special dial tone -                                 | 425+340                | 1.1 on 1.1 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                       |
| <b>Syrian Arab Republic</b>                         |                        |                                                     |
| 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                       |

| <i>COUNTRY/TONE</i>                              | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>                           |
|--------------------------------------------------|------------------------|-----------------------------------------------------|
| <b>Tajikistan (Republic of)</b>                  |                        |                                                     |
| Busy tone -                                      | 425                    | 0.4 on 0.4 off                                      |
| Congestion tone -                                | 425                    | 0.4 on 0.4 off                                      |
| Dial tone -                                      | 425                    | continuous                                          |
| Ringing tone -                                   | 25                     | 0.8 on 3.2 off                                      |
| <b>Tanzania (United Republic of)</b>             |                        |                                                     |
| 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                                      |
| Ringing tone - I                                 | 425                    | 1.0 on 4.0 off                                      |
| Ringing 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                                      |
| <b>Thailand</b>                                  |                        |                                                     |
| 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                   |
| Ringing 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                              |
| <b>The Former Yugoslav Republic of Macedonia</b> |                        |                                                     |
| 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                                |
| Ringing 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                                 |
| <b>Tokelau</b>                                   |                        |                                                     |
| Busy tone -                                      | 400                    | 0.5 on 0.5 off                                      |
| Congestion tone -                                | 400                    | 0.5 on 0.5 off                                      |
| Dial tone -                                      | 400                    | continuous                                          |
| Ringing tone -                                   | 400+450                | 0.4 on 0.2 off                                      |
| Special information tone -                       | 400                    | 3x(0.075 on 0.1 off)                                |
| <b>Trinidad and Tobago</b>                       |                        |                                                     |
| Busy tone -                                      | 480+620                | 0.5 on 0.5 off                                      |
| Dial tone -                                      | 350+440                | continuous                                          |
| Ringing 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                                     |
| <b>Tunisia</b>                                   |                        |                                                     |
| 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                                            |
| Ringing 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                                      |
| <b>Turkey</b>                                    |                        |                                                     |
| 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                                          |

| <i>COUNTRY/TONE</i>                                         | <i>FREQUENCY in Hz</i>                         | <i>CADENCE in seconds</i>          |
|-------------------------------------------------------------|------------------------------------------------|------------------------------------|
| 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                     |
| Ringing 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      |
| <b>Turkmenistan</b>                                         |                                                |                                    |
| 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                     |
| Ringing tone -                                              | 25                                             | 0.4 on 4.0 off                     |
| Route tone -                                                | 25                                             | 0.4 on 0.4 off                     |
| <b>Turks and Caicos Islands</b>                             |                                                |                                    |
| 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)         |
| <b>Tuvalu</b>                                               |                                                |                                    |
| Busy tone -                                                 | 425                                            | 0.5 on 0.5 off                     |
| Congestion tone -                                           | 425                                            | 2.5 on (every 10.0 sec.)           |
| Dial tone -                                                 | 425                                            | continuous                         |
| Ringing 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.)           |
| <b>Uganda (Republic of)</b>                                 |                                                |                                    |
| 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                     |
| Ringing tone - I                                            | 425                                            | 1.0 on 4.0 off                     |
| Ringing tone - II                                           | 425//440                                       | 0.4 on 0.2 off 0.4 on 2.0 off      |
| Ringing tone - III                                          | 450                                            | 0.4 on 0.2 off                     |
| 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        |
| <b>United Arab Emirates</b>                                 |                                                |                                    |
| 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                         |
| Ringing tone -                                              | 400+450//425                                   | 0.4 on 0.2 off 0.4 on 2.0 off      |
| <b>United Kingdom of Great Britain and Northern Ireland</b> |                                                |                                    |
| 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      |
| Ringing tone -                                              | 400+450//400x25//400x 16<br>2/3                | 0.4 on 0.2 off 0.4 on 2.0 off      |
| <b>United States of America</b>                             |                                                |                                    |
| Busy tone -                                                 | 600x120//600x133//600<br>x140//600x160//480+62 | 0.5 on 0.5 off                     |
| Confirmation tone -                                         | 350+440                                        | 3x(0.1 on 0.1 off)                 |
| Dial tone -                                                 | 600x120//600x133//600<br>x140//600x160//350+44 | continuous                         |

| <i>COUNTRY/TONE</i>                                        | <i>FREQUENCY in Hz</i>                         | <i>CADENCE in seconds</i>         |
|------------------------------------------------------------|------------------------------------------------|-----------------------------------|
| Recall dial tone -                                         | 350+440                                        | 3x(0.1 on 0.1 off) + continuous   |
| Intrusion tone -                                           | 600x120//600x133//600<br>x140//600x160//480+62 | 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                    |
| Ringing tone -                                             | 420x40//500x40//440+480                        | 2.0 on 4.0 off                    |
| Re-order tone -                                            | 600x120//600x133//600<br>x140//600x160//480+62 | 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)               |
| <b>Uruguay (Eastern Republic of)</b>                       |                                                |                                   |
| 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 |
| Ringing tone -                                             | 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     |
| <b>Vanuatu (Republic of)</b>                               |                                                |                                   |
| 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                   |
| 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 2x0.03 off 1.0 off      |
| Call waiting tone -                                        | 425                                            | 0.3 on 10.0 off                   |
| <b>Venezuela (Bolivarian Republic of)</b>                  |                                                |                                   |
| 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                   |
| Ringing tone -                                             | 425                                            | 1.0 on 4.0 off                    |
| Special information tone -                                 | 950/1440/1800                                  | 3x0.33 on 1.0 off                 |
| Call waiting tone -                                        | 400/450                                        | 0.3 on 6.0 off                    |
| Caller waiting tone -                                      | 425                                            | 1.0 on 4.0 off                    |
| <b>Wallis and Futuna (Territoire français d'outre-mer)</b> |                                                |                                   |
| Busy tone -                                                | 440                                            | 0.5 on 0.5 off                    |
| Dial tone -                                                | 440//330                                       | continuous                        |
| Pay tone -                                                 | 12000                                          | 0.1 on                            |
| Ringing tone -                                             | 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     |
| <b>Yemen (Republic of)</b>                                 |                                                |                                   |
| Busy tone -                                                | 425                                            | 0.5 on 0.5 off                    |
| Congestion tone -                                          | 425                                            | 0.25 on 0.25 off                  |
| Dial tone -                                                | 102                                            | continuous                        |
| Ringing tone -                                             | 425                                            | 1.0 on 4.0 off                    |
| <b>Yugoslavia (Federal Republic of)</b>                    |                                                |                                   |
| Busy tone - I                                              | 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     |
| Ringing tone - I                                           | 450x25                                         | 1.0 on 9.0 off                    |
| Ringing tone - II                                          | 425                                            | 1.0 on 4.0 off                    |
| Special information tone -                                 | 950/1400/1800                                  | 3x0.333 on 1.0 off                |
| <b>Zambia (Republic of)</b>                                |                                                |                                   |
| 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                            |

| <i>COUNTRY/TONE</i>           | <i>FREQUENCY in Hz</i> | <i>CADENCE in seconds</i>     |
|-------------------------------|------------------------|-------------------------------|
| 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                    | 0.1 on 4.9 off                |
| <b>Zimbabwe (Republic of)</b> |                        |                               |
| 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 |
| Ringing tone -                | 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.

## 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         |                                                                                  |