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SERIES Q: SWITCHING AND SIGNALLING

**INFORMATION RECEIVED ON NATIONAL
VOICE-FREQUENCY SIGNALLING SYSTEMS**

Reedition of CCITT Recommendation Q.100
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NOTES

1 CCITT Recommendation Q.100 Supplement No. 3 was published in Fascicle VI.1 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Recommendation Q.100 Supplement No. 3
**INFORMATION RECEIVED ON NATIONAL VOICE-FREQUENCY
SIGNALLING SYSTEMS**

Country	Frequency (Hz)	Tolerance at the generator terminal (Hz)	Frequency variation possible at the entry to the international circuit (Hz)	Splitting time (milliseconds)	Absolute level of the power of signals at the point of zero relative level (decibels)
Algeria	2000	± 6	± 12	15 then 35 with attenuated 18 dB	-5
Saudi Arabia	3825	± 3	± 5	—	-5
Argentina	3825	± 4	± 10	—	-5
Australia	600-750 separate	± 5	± 15	160-210	0
Austria	2280	± 6	± 15	30	-6
Bahamas	2600	± 5	± 10	35 maximum	-8 and after attenuation -20
Bangladesh	3825	± 5	—	28-55	—
Belgium	3825	± 4	± 6	30	-5, and -20, after attenuation
Benin	700-1700 separate 200	± 10	± 10	50	-6
Botswana	3825	± 3	± 10	25	-5
Brazil	3825	± 3	± 6	30 maximum	-5
Brunei	3825 1380-1500 1620-1740 1860-1980 1140-1020 900-780 660-540	± 4 ± 4	± 6 ± 10	— —	In agreement with Recommendations Q.414, Q.415, Q.452, Q.454
Burundi	3825	± 6	± 15	—	-6
Cameroun	3825	± 4	± 15	—	-5 and after attenuation -20
Canada	2600	± 5	± 10	30 maximum	-8 and after attenuation -20
Chile	3825	± 4	± 10	—	-18 or -20
China	2600	± 5	—	30-50	-8
Cyprus	3825	± 3	± 8	—	-6 -18
Colombia	3825	± 4	± 4	40 \pm 10	-20
Comoros	3825	± 5	—	—	-20
Congo	3825	± 4	—	20	-20
Korea (Rep. of)	3825	± 10	± 10	—	-15
Costa Rica	3825	± 4	± 10	—	-20
Cuba	3825	± 6	± 15	25	-5
Denmark	3000 3825	± 6 ± 4	± 10 ± 6	30 à 50 —	-8 -20
Dominican (Rep.)	2600	—	—	—	—

Country	Frequency (Hz)	Tolerance at the generator terminal (Hz)	Frequency variation possible at the entry to the international circuit (Hz)	Splitting time (milliseconds)	Absolute level of the power of signals at the point of zero relative level (decibels)
Egypt	3825	± 3	± 10	20-50	-6 -18 -20
United Arab Emirates	3825 700, 900, 1100, 1300, 1500, 1700, 2400, 2600	± 3 ± 6	± 15	30-50	Regist. sign. -7 Line sign. -9
Ecuador	3825	± 4	± 6	40 \pm 10	-20
Spain	2500	± 3	± 15	10	-6
United States of America	2600	± 5	± 10	30 maximum	-8 and after attenuation -20
Fiji	3825	± 3	—	—	-20
Finland	3825	± 5	± 5	30-50	-18 -20
France	2280	± 3	± 6	35	-6
Gabon	3825	± 4	± 15	15	-8 and -20 after attenuation
Ghana	3825	± 3	—	—	-5
Guatemala	3825	± 4	± 4	—	-20
Guinea-Bissau	3800	± 3	—	15	-6
Hungary	2100 or 2280 3825	± 6 ± 6	± 15 ± 15	25 25	-6 -6 -20
India	2400	± 2	± 10	25 filter loss at 2400 Hz \rightarrow 50 dBm	-10
Indonesia	3825	± 4	± 15	30	-8 \pm 1
Iran	3825	± 4	± 6	35	-5 \pm 1
Iraq	3825	± 5	—	—	-18
Ireland	3825	± 4	—	—	-20
Israel	3850 550-1980	± 4 ± 4	± 6 ± 10	—	-5 -11.5 \pm 1
Italy	2040–2400 separate and compound	± 6	± 15	35	-9
Jamaica	2600	± 5	± 15	35 maximum	-8 and after attenuation -20
Jordan	3825	± 3	—	10	-18 -20
Kenya	3825	± 6	—	—	-6 and after attenuation -20
Lesotho	3825	± 5	± 10	—	-5
Liberia	3825	± 5	—	—	-6
Luxembourg	3825	± 3	± 5	35-40	-5
Madagascar	2280	± 3	± 6	35	-6

Country	Frequency (Hz)	Tolerance at the generator terminal (Hz)	Frequency variation possible at the entry to the international circuit (Hz)	Splitting time (milliseconds)	Absolute level of the power of signals at the point of zero relative level (decibels)
Malta	3825 3825	± 10 ± 1	– –	– –	–18 –18
Morocco	2280	± 3	± 10	25-35	–6
Mexico	2400 2600	± 6 ± 5	± 15 ± 15	35 20	–6 –8 and after attenuation –20
Mozambique	3825	± 4	± 4	40 maximum	–5 and after attenuation –20
New Zealand	600–750 2280 3825	± 3 ± 6 ± 4	± 3 ± 6 ± 4	140 maximum 35 maximum –	–3 –10 –20
Oman	3825	± 5	–	10	–6 and after attenuation –18
Uganda	2040-2400	± 6	–	30-40	–9
Pakistan	3825	± 3	–	–	–5 –20
Panama	3825	± 4	± 10	90	–20
Paraguay	3825	± 4	–	–	–5
Peru	3825 1380-1500 1620-1740 1860 1140-1020 900-780 660	± 4 ± 4 ± 4	± 6 ± 6 ± 10	– – –	In agreement with Recommendations Q.414 [1] Q.415 [2] Q.452 [3] Q.454 [4]
Philippines	2600(*) 3825 (*) This frequency will not be used in the future	± 5 ± 3	± 10 ± 15	40 ± 10 20	–8, –20 –14 and after attenuation +9
Poland	2280 3825 500/20 2100	± 6 ± 3 ± 10 ± 3	± 8 ± 4 ± 20 ± 10	– – – –	–6 –5 –3 –6
Portugal	3825 1380-1500 1620-1740 1860-1920 1140-1020 900-780	± 5 } ± 4 } ± 10	± 15 In agreement with Recommendations Q.451 and Q.455	30-50	–18 In agreement with Recommendations Q.454 and Q.455
Syria	3825	± 3	–	50	–18
Dem. People's Rep. of Korea	2600 3825 2100	± 5 ± 4	± 15	35	–8
Romania	3825 or 2280	± 4	–	–	–6
United Kingdom	2280	± 7	–	20-35	–6 ± 1

Country	Frequency (Hz)	Tolerance at the generator terminal (Hz)	Frequency variation possible at the entry to the international circuit (Hz)	Splitting time (milliseconds)	Absolute level of the power of signals at the point of zero relative level (decibels)
Rwanda	3825	± 4	Between ± 6 and ± 10	30-50	-16 ± 1 et -7 ± 0.5
Sao Tome and Principe	2600 2400	± 30	—	20	-2.2
South Africa (Rep.)	3825 2280	± 1 ± 5	— —	— 35 maximum	-5 -6
Sweden	2400	± 6	± 11	35-40	-6
Switzerland	3000	± 6	± 2	40	-3.5
Surinam	3825 1380-1500 1620-1740 1860-1980 1140-1020 900-780 660-540	± 0.8	± 10	—	-18 after attenuation In agreement with Recommendations Q.452 to Q.454
Swaziland	3825	± 0.5	—	—	-6 and -20 -5 and -18
Tanzania	3825	± 6	—	—	-6 and after attenuation -20
Czechoslovakia	2280	± 6	± 15	150 then 130 with filter	-6
Thailand	3825	± 5	± 6	30-50	-6
Togo	3825 1380-1500 1620-1740 1860-1920 1140-1020 900-780 660-540	+ 5 + 4 + 4 + 4 + 4 + 4 + 4	± 10 ± 10	40-50 40-50	In agreement with Recommendations Q.414 Q.415 Q.452 Q.454
Tunisia	2400	± 6	± 15	40 maximum	-6
USSR	1200-1600 separate and compound 2600	± 5 ± 6	± 15 ± 15	40 maximum before reply, 150 \pm 50 after reply 50-75	-9 -9.5
Uruguay	3825	± 3	± 40	20	-18
Venezuela	3825	± 2	± 2	—	-6 -18
Viet Nam	3825	± 6	± 25	—	-6
Yugoslavia	2280 3825	± 6 ± 6	— —	— —	-6 -5
Zambia	3825	± 3	± 3	30-50	-20

References

- [1] CCITT Recommendation *Signal sender*, Vol. VI, Fascicle VI.4, Rec. Q.414.
- [2] CCITT Recommendation *Signal receiver*, Vol. VI, Fascicle VI.4, Rec. Q.415.
- [3] CCITT Recommendation *Requirements relating to transmission conditions*, Vol. VI, Fascicle VI.4, Rec. Q.452.
- [4] CCITT Recommendation *The sending part of the multifrequency signalling equipment*, Vol. VI, Fascicle VI.4, Rec. Q.454.

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