

Wat horen we op Walcheren?



BAND	CW	SSB	FM
160	1.810 – 1.840	1.843 – 1.880	
80	3.500 – 3.570	3.600 – 3.800	
60	5.350 – 5.354	5.354 – 5.366	
40	7.000 – 7.040	7.060 – 7.200	
30	10.100 – 10.130	---	
20	14.000 – 14.070	14.100 – 14.350	
17	18.068 – 18.095	18.111 – 18.168	
15	21.000 – 21.070	21.150 – 21.450	
12	24.890 – 24.915	24.931 – 24.990	
10	28.000 – 28.070	28.320 – 29.000	29.100 – 29.700
6	50.000 – 50.100	50.100 – 50.500	50.500 – 52.000
4	70.000 – 70.050	70.050 – 70.250	70.250 – 70.500
2	144.000 – 144.150	144.180 – 144.400	145.000 – 145.975
0,7	432.000 – 432.100	432.100 – 432.400	433.400 – 433.575

PD4AVO / PA1FZH, september 2022
V 2.9

RUW FREQUENTIESPECTRUM

VAN – TOT		GEBRUIK	OPMERKING
0,3 – 3	kHz		Defensie, onderzeeboten
3 – 130	kHz		Tijdsignalen, Defensie, bakens
135,7 – 137,8	kHz	Amateur	2200 meter
138 – 153	kHz	Luchtvaart	Bakens
153 – 280	kHz	Omroep	Lange golf
280 – 434	kHz	Luchtvaart	Bakens
434 – 472	kHz		
472 – 479	kHz	Amateur	630 meter
479 – 531			NAVTEX
531 – 1600	kHz	Omroep	Middengolf
1,60 – 1,80	MHz	Scheepvaart	
1,80 – 2,00	MHz	Amateur	160 meter
2,00 – 2,80	MHz	Scheepvaart	
2,30 – 2,50	MHz	Omroep	120 meter tropenband
2,80 – 3,20	MHz	Luchtvaart	
3,20 – 3,40	MHz	Omroep	90 meter tropenband
3,30 – 3,40	MHz	Scheepvaart	
3,40 – 3,50	MHz	Luchtvaart	
3,50 – 3,80	MHz	Amateur	80 meter
3,80 – 3,95	MHz	Luchtvaart	
3,95 – 4,00	MHz	Omroep	75 meter tropenband
4,10 – 4,44	MHz	Scheepvaart	
4,44 – 5,80	MHz	Diversen	Luchtvaart , scheepvaart, Defensie
4,75 – 5,07	MHz	Omroep	60 meter
5,35 – 5,37	MHz	Amateur	60 meter
5,95 – 6,20	MHz	Omroep	49 meter
6,20 – 6,52	MHz	Scheepvaart	Maar ook nog omroep
6,52 – 7,00	MHz	Luchtvaart	Ook Defensie
7,00 – 7,20	MHz	Amateur	40 meter
7,20 – 7,50	MHz	Omroep	41 meter
7,50 – 8,20	MHz	Luchtvaart	Ook Defensie
8,20 – 8,80	MHz	Scheepvaart	
8,80 – 9,40	MHz	Luchtvaart	
9,40 – 9,90	MHz	Omroep	31 meter
9,90 – 10,1	MHz	Luchtvaart	
10,10 – 10,15	MHz	Amateur	30 meter
10,15 – 11,60	MHz	Luchtvaart	

11,60 – 12,10	MHz	Omroep	25 meter
12,20 – 13,20	MHz	Scheepvaart	
13,20 – 13,36	MHz	Luchtvaart	
13,60 – 13,87	MHz	Omroep	21 meter
13,87 – 14:00	MHz	Rode Kruis	Internationaal
14,00 – 14,35	MHz	Amateur	20 meter
14,60 – 15,10	MHz	Luchtvaart	Ook Defensie
15,10 – 15,80	MHz	Omroep	19 meter
15,80 – 16,36	MHz	Diversen	
16,36 – 17,40	MHz	Scheepvaart	
17,50 – 17,90	MHz	Omroep	16 meter
17,90 – 18,00	MHz	Luchtvaart	Ook Defensie
18,068 – 18,168	MHz	Amateur	17 meter
18,20 – 18,80	MHz	??	
18,80 – 20,00	MHz	Scheepvaart	
20,00 – 21,00	MHz	Luchtvaart	Ook Defensie en rode Kruis
21,00 – 21,45	MHz	Amateur	15 meter
21,45 – 21,75	MHz	Omroep	13 meter
21,85 – 22,00	MHz	Luchtvaart	
22,00 – 22,85	MHz	Scheepvaart	
23,20 – 24,89	MHz	Luchtvaart	Ook Defensie
24,89 – 24,99	MHz	Amateur	12 meter
25,00 – 26,20	MHz	Scheepvaart	
25,60 – 26,10	MHz	Omroep	11 meter
26,10 – 26,50	MHz	Scheepvaart	
26,60 – 26,96	MHz	CB	27 Mc uitbreiding Duitsland
26,96 – 27,40	MHz	CB	27 Mc, ook modelbesturing
27,40 – 28,00	MHz	CB	27 Mc, uitbreiding Engeland
28,00 – 29,70	MHz	Amateur	10 meter
31,00 – 40,00	MHz		Telefonie, modelbesturing, audioverbindingen, oproepsystemen
43,30 – 50,00	MHz		Telefonie, Italiaanse LPD, Defensie Heli
50,0 – 52,0	MHz	Amateur	6 meter
52,00 – 55,00	MHz		
55,00 – 70,00	MHz	Luchtvaart	Alleen Defensie
70,0 – 70,5	MHz	Amateur	4 meter
70,50 – 72,00	MHz	Luchtvaart	Alleen Defensie
72,00 – 79,80	MHz		Draadloze microfoons en Defensie
72,62 – 87,50	MHz		Rode Kruis, Defensie

76,0 – 87,5	MHz	Omroep	FM band buiten Europa
87,5 – 107,9	MHz	Omroep	FM band Europa
108 – 118	MHz	Luchtvaart	Bakens
118 – 137	MHz	Luchtvaart	Communicatie
137 – 144	MHz	Luchtvaart	Defensie
144 – 146	MHz	Amateur	2 meter
146 – 149	MHz		Kerkradio en commercieel
150 – 156	MHz		Verhuur, bedrijven, taxi, kerkradio
156 – 158	MHz	Scheepvaart	Marifoon & Maritieme private kanalen
158 – 160	MHz	Scheepvaart	Marifoon & Maritieme private kanalen
160 – 162	MHz	Commercieel	Verhuur, bedrijven, taxi
162 – 163	MHz	Scheepvaart	Marifoon
163 – 174	MHz	Commercieel	Verhuur, bedrijven, Rode Kruis, RedNet
174 – 230	MHz	Omroep	DAB radio en analoge reporter-studio
233 – 388	MHz	Luchtvaart	Ook Defensie en satcom
330 – 334	MHz	Luchtvaart	Bakens
385 – 425	MHz	C-2000	Politie, Brandweer, Ambulance
417 – 430	MHz		Regionale Omroep, diversen, commercieel
430 – 440	MHz	Amateur	70 cm
433 – 435	MHz	LPD	
441 – 442	MHz	Defensie	Natres
442 – 446	MHz		RWS-DGPS, commercieel
446 – 447	MHz	PMR	
447 – 450	MHz	Defensie	Onderling verkeer fregatten
450 – 474	MHz		Commercieel, NOB, schepen on-board
690 – 865	MHz		Digitenne, draadloze microfoons
880 – 960	MHz	Telefonie	GSM, DECT, short range device, telemetrie
962 – 1213	MHz	Luchtvaart	Bakens
1240 – 1300	MHz	Amateur	23 cm
1452 – 1492	MHz		Broadcast?
1626 – 1645	MHz	Telefonie	Inmarsat
1700 – 1900	MHz	Telefonie	GSM
1900 – 2200	MHz	Telefonie	UMTS
2300 – 2450	MHz	Amateur	13 cm
2400 – 2480	MHz		Bluetooth en WiFi
2450	MHz		Magnetron oven
2500 – 2700	MHz	Telefonie	UMTS

Flora – Fauna:

PAFF-0080 – Kapelse en Yerseke Moer
 PAFF-0113 – Kop van Schouwen
 PAFF-0114 - Manteling van Walcheren
 PAFF-0015 - Oosterschelde

JO21AL
 JO11OQ
 JO11SO

Voorkeurfrequenties:

Phone:	3.744	7.144	14.244	18.144	21.244	24.944	28.444
CW:	3.544	7.024	14.044	18.084	21.044	24.894	28.044
			10.124				

SOTA en POTA:

Geen vaste voorkeurs-frequenties

QRP:**Voorkeurfrequenties:**

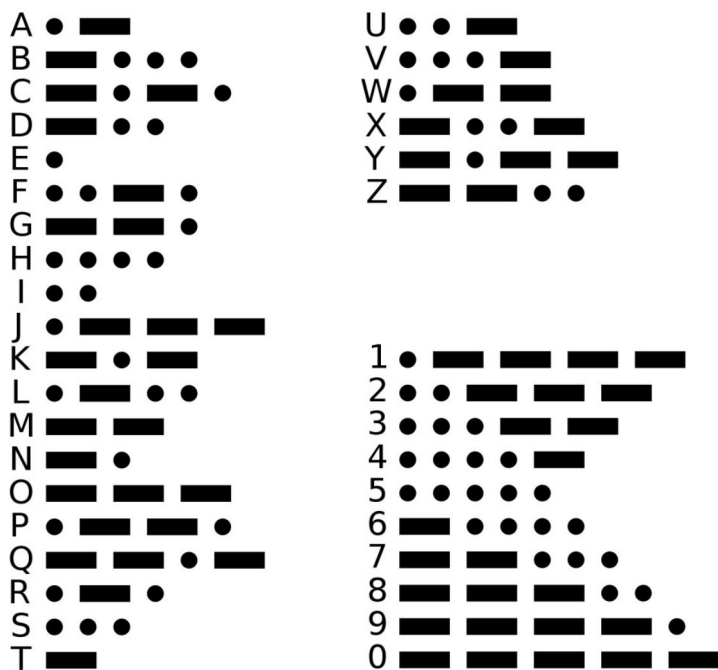
Phone:	3.690	7.090	14.285	18.130	21.285	24.950	28.360
CW:	3.560	7.030	14.060	18.096	21.060	24.906	28.060

Bakens die we in Zeeland meestal wel kunnen horen

Band	Call	Locatie	Locator	Hoogte	Vermogen	Frequentie
6 m	PI7SIX	Rotterdam	JO21fv	105	50	50,0050
6 m	PI7SIX	Rotterdam	JO21fv	105	50	50,4250
4 m	PI7RTD	Rotterdam	JO21fv	105	10	70,0700
2 m	PI7CIS	Scheveningen	JO22dc	40	45	144,4160
2 m	GB3VHF	Fairseat	JO01eh	205	30	144,4300
2 m	PI7BRG	Zevenbergen	JO21hp	8	10	144,4310
2 m	ON0VHF	Louvain la Neuve	JO20hp	141	20	144,4180
2 m	F5ZAM	Blaringhem	JO10eq	99	10	144,4250
70 cm	PI7CIS	Scheveningen	JO22dc	42	75	432,4160
70 cm	PI7HVN	Heerenveen	JO22ww	52	1	432,4230
70 cm	GB3UHF	Fairseat	JO01eh	242	30	432,4300
70 cm	ON0VHF	Louvain la Neuve	JO20hp	141	20	432,4500
70 cm	F5ZSG	Quistinic	JO10uh	165	20	432,4590
23 cm	PI7GHZ	Wemeldinge	JO11wm	13	1	1296,8150
23 cm	GB3MHZ	Martlesham	JO02pb	80	50	1296,8300
23 cm	ON0VHF	Louvain la Neuve	JO20hp	141	8	1296,8750
23 cm	PI7ALK	Alkmaar	JO22ip	38	5.0	1296,9180
23 cm	PI7QHN	Zandvoort	JO22gj	4	*	1296,9100
13 cm	GB3MHZ	Martlesham	JO02pb	85	25	2320,8300
13 cm	PI7RTD	Rotterdam	JO21fv	105	15.0	2320,8570
13 cm	F5ZNI	Belleuse	JN19bq	140	10	2320,9000
13 cm	PI7ALK	Alkmaar	JO22ip	38	5.0	2320,9200

Lange golfbakens die we in Zeeland meestal wel kunnen horen

Freq. kHz	Call	Locatie
17.2	SAQ	Grimeton (S)
060	MSF	Tijdsein in Cumbria (GB)
077,5	DCF	Tijdsein in Mainflingen (D)
290	OB	Brussel (B)
307	DIK	Diekirch (LX)
310	LMA	Lima (D)
314	OZ	Brussel (B)
321	ABY	Abbeville (F)
327	MVC	Merville (F)
352	OO	Oostende (B)
355	ONW	Antwerpen (B)
360	MAK	Machel (B)
362,5	SND	Southend on Sea (GB)
375	OO	Oostende (B)
398	ONO	Oostende (B)
402	OP	Brussel (B)
404	MRV	Merville (F)
418	MK	Calais (F)



Marifoonfrequenties op Walcheren:

156.000	Privaat	KNRM onderling
156.375	VHF 67	Search And Rescue / Kustwacht
156.400	VHF 08	Sleepdiensten
156.425	VHF 68	Post Wemeldinge (Oosterschelde)
156.450	VHF 09	Havendienst Sloehaven
156.475	VHF 69	Traffic Centre Zeebrugge
156.500	VHF 10	Veerse Meer
156.700	VHF 14	Centrale Vlissingen
156.800	VHF 16	Nederlandse Kustwacht
157.600	Privaat	Boluda Towage Westerschelde
157.650	Privaat	Rederij Dijkhuizen Walcheren
158.000	Privaat	Loodswezen Rededienst Vlissingen
160.750	VHF 03	Centrale Terneuzen
160.825	VHF 64	Traffic Centre Steenbank
161.300	P1	Zeevisserij
161.400	P2	Zeesportvisserij
161.500	VHF 18	Sluis Veere & Vlissingen, Zeelandbrug
161.575	VHF 79	Loodswezen Pilot Steenbank
161.650	VHF 21	Radar Vlissingen
161.700	VHF 22	Bruggen kanaal door Walcheren
161.750	VHF 23	Nederlandse Kustwacht (Renesse/Woensdrecht)
161.775	VHF 83	Nederlandse Kustwacht (Westkapelle)
161.850	VHF 25	Kustwacht Ouddorp (vuurtoren)
161.950	VHF 27	Oostende Radio
162.150	VHF 31	Jachthavens Breskens, Kamperland, Cadzand
162.475	Privaat	Nederlandse Kustwacht (onderling)

Luchtvaartfrequenties op Walcheren:

118.200	EHRD Vliegveld Rotterdam	(Tower)
119.250	EHMZ Vliegveld Midden-Zeeland	(Tower)
120.425	EHWO Vliegveld Woensdrecht	(Tower)
121.500	Noodfrequentie	
122.200	Ballonvaart	
122.800	EHMZ Skydive Midden-Zeeland	
123.100	Search And Rescue / Kustwacht	
123.575	EHWO Vliegveld Woensdrecht	(Approach)
123.850	Amsterdam Radar South	FL 055 – FL 245
124.300	Amsterdam Info	tot FL 055
125.750	Amsterdam Radar West	FL 055 – FL 245
126.900	Brussel Info	
132.083	DELTA Sector	FL 365 – FL 660
132.200	KOKSY Sector (Z-Vlaanderen + BEL)	FL 245 – FL 355
132.350	Dutch Mill	tot FL 055
132.750	KOKSY Sector (Z-Vlaanderen + BEL)	FL 355 +
135.516	DELTA Sector	FL 335 – FL 365
135.958	DELTA Sector	FL 245 – FL 335
136.140	NHV helikopters	
444.1375	EHMZ Vliegveld Midden-Zeeland	(lokaal)

DRCO:

144.700
432.700

Marifoonfrequenties:

Kanaal	Freq. schip	Freq. wal	Kanaal	Freq. schip	Freq. wal
00	156.000	156.000	20	157.000	161.600
60	156.025	160.625	80	157.025	161.625
01	156.050	160.650	21	157.050	161.650
61	156.075	160.675	81	157.075	161.675
02	156.100	160.700	22	157.100	161.700
62	156.125	160.725	82	157.125	161.725
03	156.150	160.750	23	157.150	161.750
63	156.175	160.775	83	157.175	161.775
04	156.200	160.800	24	157.200	161.800
64	156.225	160.825	84	157.225	161.825
05	156.250	160.850	25	157.250	161.850
65	156.275	160.875	85	157.275	161.875
06	156.300	156.300	26	157.300	161.900
66	156.325	160.925	86	157.325	161.925
07	156.350	160.950	27	157.350	161.950
67	156.375	156.375	87	157.375	161.975
08	156.400	156.400	28	157.400	162.000
68	156.425	156.425	88	157.425	157.425
09	156.450	156.450	29	157.450	162.050
69	156.475	156.475	89	157.475	162.075
10	156.500	156.500	30	157.500	162.100
70	156.525	156.525	90	157.525	162.125
11	156.550	156.550	31	157.550	162.150
71	156.575	156.575	91	157.575	162.175
12	156.600	156.600	32	157.600	162.200
72	156.625	156.625	92	157.625	162.225
13	156.650	165.560	33	157.650	162.250
73	156.675	156.675	93	157.675	162.275
14	156.700	156.700	34	157.700	162.300
74	156.725	156.725	94	157.725	162.325
15	156.750	156.750	35	157.750	162.350
75	156.775	156.775	95	157.775	162.375
16	156.800	156.800	36	157.800	162.400
76	156.825	156.825	96	157.825	157.825
17	156.850	156.850	37	157.850	157.850
77	156.875	156.875	97	157.875	162.475
18	156.900	161.500	38	157.900	162.500
78	156.925	161.525	98	157.925	162.525
19	156.950	161.550	39	157.950	157.950
79	156.975	161.575	99	157.975	157.975

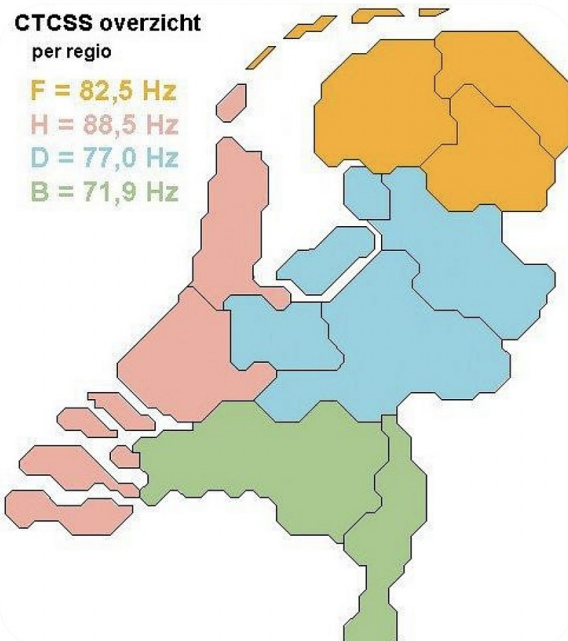
Repeaters rondom Walcheren

Frequentie	Call	TQ	Type	Shift	Zender(s)
145.5750	PI3UTR	77,0	Boven-Reg.	-0,6	Goes, Utrecht, IJsselstein
145.6000	PI3ZVL	88,5	Regionaal	-0,6	Overslag
145.6125	ON0GB	79,7	Regionaal	-0,6	Brakel
145.6250	PI3BOZ	88,5	Regionaal	-0,6	Bergen op Zoom
145.6500	ON0WV		Regionaal	-0,6	Brugge
145.6500	PI3BRD	71,9	Regionaal	-0,6	Breda
145.6750	PI3RTD	88,5	Regionaal	-0,6	Rotterdam
145.7000	ON0OV	79,7	Regionaal	-0,6	Gent
145.7625	ON0ANR	131,8	Regionaal	-0,6	Antwerpen
145.7750	PI3GOE	88,5	Regionaal	-0,6	Goes
145.7875	ON0DP		Regionaal	-0,6	Boom (Antwerpen-Zuid)

Frequentie	Call	TQ	Type	Shift	Zender(s)
430.0250	PI2BOZ	88,5	Regionaal	+1,6	Bergen op Zoom
430.1250	PI2NOS	geen	Boven-Reg.	+1,6	Goes, Lelystad, Sittard
430.3000	PI2RTD	88,5	Regionaal	+1,6	Rotterdam
430.3625	PI1DEC	88,5	Regionaal	+1,6	Dordrecht
438.0375	PI2VLI	DMR	Regionaal	+7,6	Vlissingen CC1
438.1250	PI1BOZ	DSTAR	Regionaal		Bergen op Zoom
438.4000	PI1ZLD	88,5	Regionaal	-7,6	Zierikzee
438.4375	PI2VLI	88,5	Regionaal	-7,6	Vlissingen
438.5000	PI1ZWN	C4FM	Regionaal	-7,6	Bergen op Zoom
438.7250	ON0ONZ	79,7	Regionaal	-7,6	Knokke-Heist
438.7750	ON0WLD	79,7	Regionaal	-7,6	Sint-Niklaas
438.9875	ON0AND	DMR	Regionaal	-7,6	Antwerpen CC 1
439.2500	ON0GRC	79,7	Regionaal	-7,6	Gent
439.3000	ON0OST	79,7	Regionaal	-7,6	Oostende
439.3500	ON0AN	131,8	Regionaal	-7,6	Antwerpen

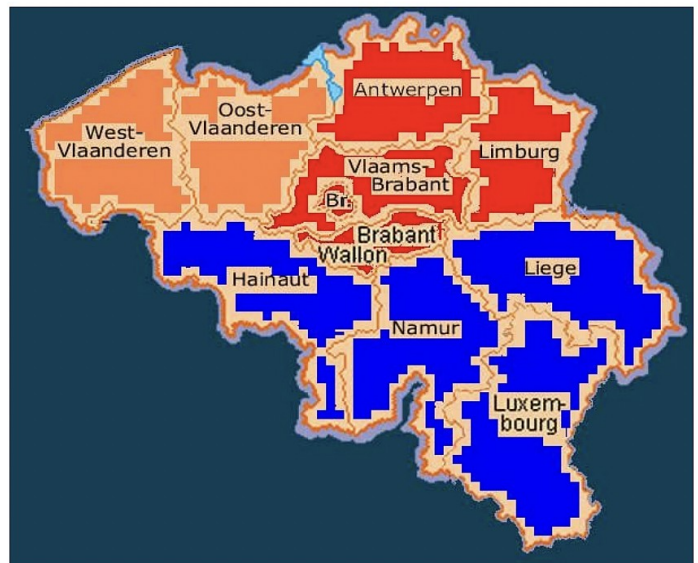
CTCSS overzicht per regio

F = 82,5 Hz
H = 88,5 Hz
D = 77,0 Hz
B = 71,9 Hz



Zone 1: A 131.8 Hz Antwerpen, Limburg, Vlaams-Brabant, Waals-Brabant
Zone 2: C 74.4 Hz Henegouwen, Namen, Luik en Luxemburg.
Zone 3: E 79.7 Hz West-Vlaanderen en Oost-Vlaanderen.

(1): Sommige repeaters gebruiken nog de CTCSS-frequentie 67.0 Hz.



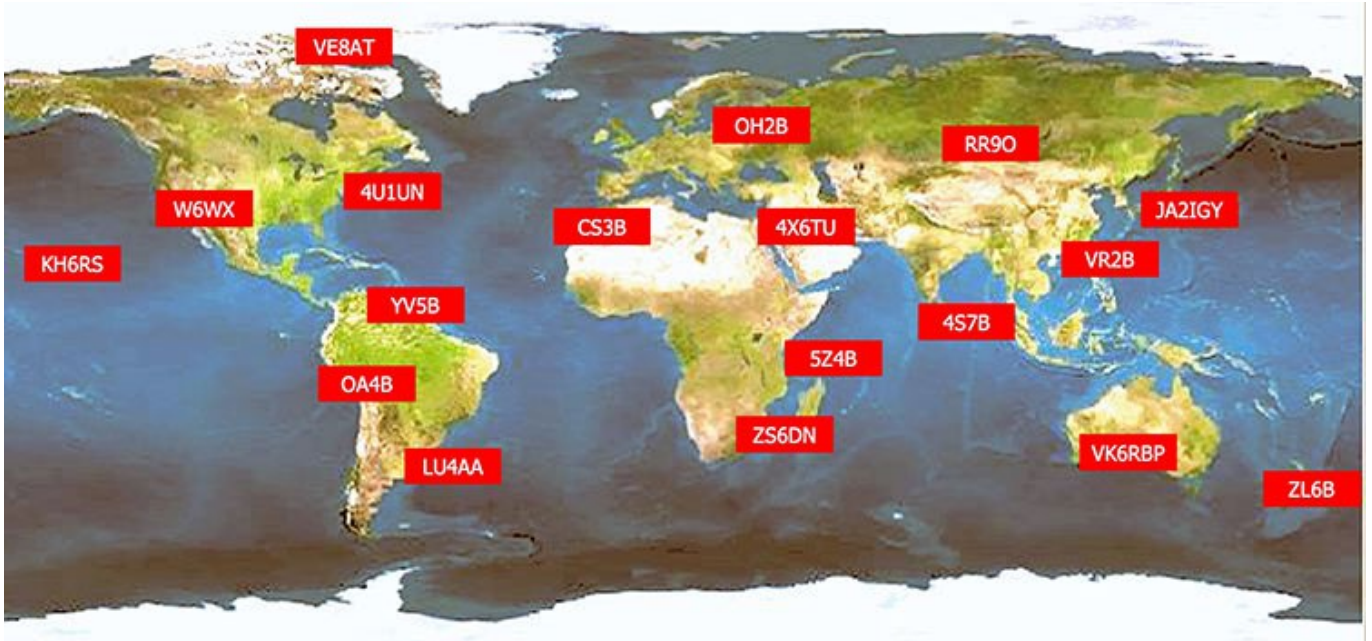
Number stations:

- The Buzzer UVB-76 : 4.625
- The Squeaky Wheel : 5.473 – 3.828 (avond)
- The Pip : 5.448 – 3.756 (avond)
- Weerbericht luchtvaart London : 5.450
- Weerbericht luchtvaart Ierland : 5.505

Zie ook: <https://priyom.org/>

- E : English language voice broadcasts
- G : German language voice broadcasts
- S : Slavic language voice broadcasts
- V : Voice broadcasts in all other languages
- M : Morse code
- F : Frequency-shift keying digital modes
- P : Phase-shift keying digital modes
- XP : Russian 7 digital modes
- HM : Hybrids of analog and digital modes

Amateur Beacon network:



Frequencies:

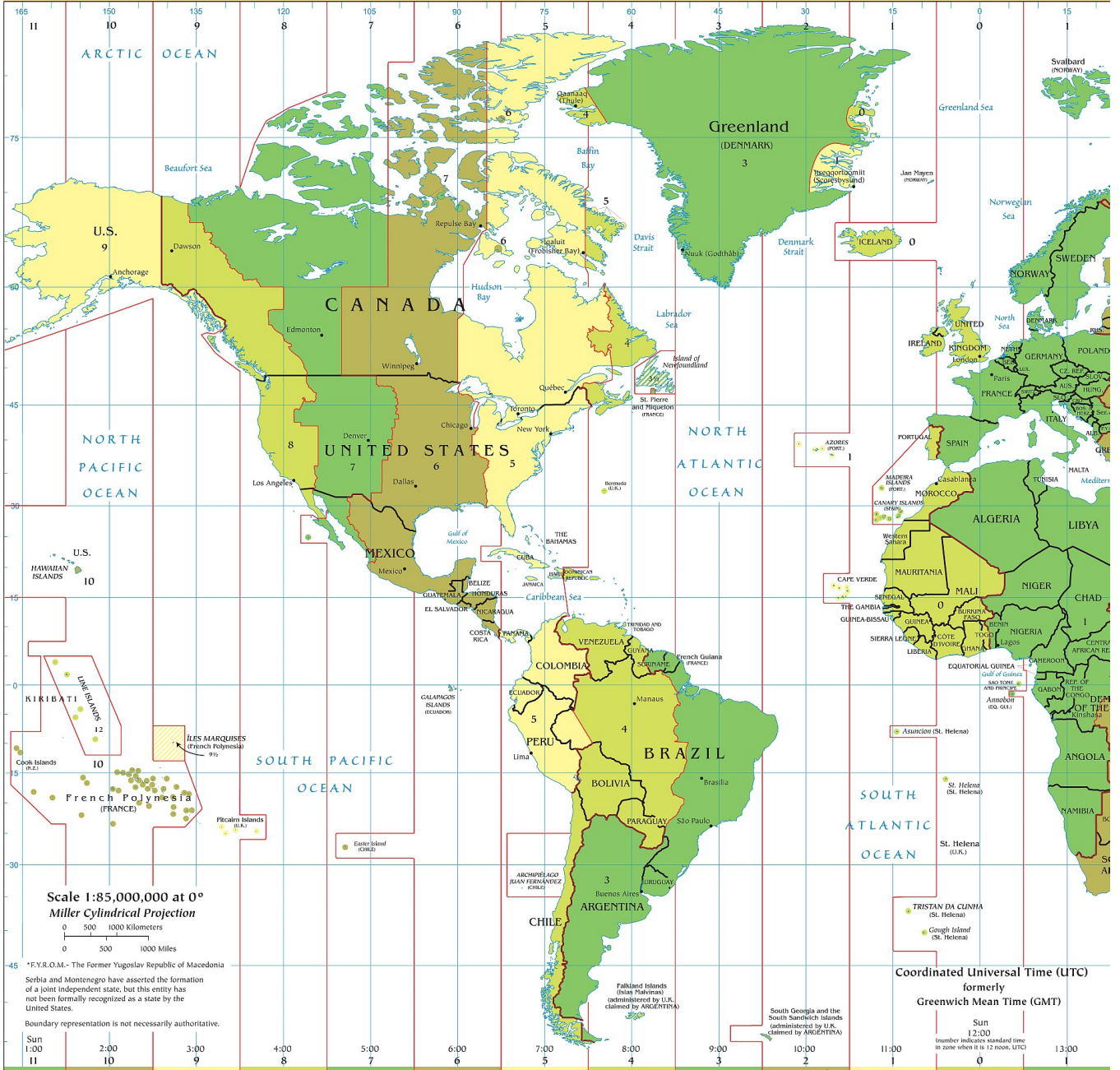
14.100 18.110 21.150 24.930 28.200

Each beacon transmits once on each band once every three minutes, 24 hours a day. A transmission consists of the callsign of the beacon sent at 22 words per minute followed by four one-second dashes. The callsign and the first dash are sent at 100 watts. The remaining dashes are sent at 10 watts, 1 watt and 100 milliwatts. At the end of each 10 second transmission, the beacon steps to the next higher band and the next beacon in the sequence begins transmitting.

World Time Zone Table		
Name of Time Zone	UTC Time	City
Dateline Standard Time	UTC-12:00	International Date Line West
Samoa Standard Time	UTC-11:00	Midway Island, Samoa
Hawaiian Standard Time	UTC-10:00	Hawaii
Alaskan Standard Time	UTC-09:00	Alaska
Pacific Standard Time	UTC-08:00	Pacific Time (US and Canada); Tijuana
Mountain Standard Time	UTC-07:00	Mountain Time (US and Canada)
Mexico Standard Time 2	UTC-07:00	Chihuahua, La Paz, Mazatlan
U.S. Mountain Standard Time	UTC-07:00	Arizona
Central Standard Time	UTC-06:00	Central Time (US and Canada)
Canada Central Standard Time	UTC-06:00	Saskatchewan
Mexico Standard Time	UTC-06:00	Guadalajara, Mexico City, Monterrey
Central America Standard Time	UTC-06:00	Central America
Eastern Standard Time	UTC-05:00	Eastern Time (US and Canada)
U.S. Eastern Standard Time	UTC-05:00	Indiana (East)
S.A. Pacific Standard Time	UTC-05:00	Bogota, Lima, Quito
Atlantic Standard Time	UTC-04:00	Atlantic Time (Canada)
S.A. Western Standard Time	UTC-04:00	Caracas, La Paz
Pacific S.A. Standard Time	UTC-04:00	Santiago
E. South America Standard Time	UTC-03:00	Brasilia
S.A. Eastern Standard Time	UTC-03:00	Buenos Aires, Georgetown
Greenland Standard Time	UTC-03:00	Greenland
Mid-Atlantic Standard Time	UTC-02:00	Mid-Atlantic
Azores Standard Time	UTC-01:00	Azores
Cape Verde Standard Time	UTC-01:00	Cape Verde Islands
GMT Standard Time	UTC	Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London
Greenwich Standard Time	UTC	Casablanca, Monrovia
Central Europe Standard Time	UTC+01:00	Belgrade, Bratislava, Budapest, Ljubljana, Prague
Central European Standard Time	UTC+01:00	Sarajevo, Skopje, Warsaw, Zagreb
Romance Standard Time	UTC+01:00	Brussels, Copenhagen, Madrid, Paris
W. Europe Standard Time	UTC+01:00	Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
W. Central Africa Standard Time	UTC+01:00	West Central Africa
E. Europe Standard Time	UTC+02:00	Bucharest
Egypt Standard Time	UTC+02:00	Cairo
FLE Standard Time	UTC+02:00	Helsinki, Kiev, Riga, Sofia, Tallinn, Vilnius
GTB Standard Time	UTC+02:00	Athens, Istanbul, Minsk
Israel Standard Time	UTC+02:00	Jerusalem
South Africa Standard Time	UTC+02:00	Harare, Pretoria
Russian Standard Time	UTC+03:00	Moscow, St. Petersburg, Volgograd
Arab Standard Time	UTC+03:00	Kuwait, Riyadh
E. Africa Standard Time	UTC+03:00	Nairobi
Arabic Standard Time	UTC+03:00	Baghdad
Arabian Standard Time	UTC+04:00	Abu Dhabi, Muscat
Caucasus Standard Time	UTC+04:00	Baku, Tbilisi, Yerevan
Ekaterinburg Standard Time	UTC+05:00	Ekaterinburg
West Asia Standard Time	UTC+05:00	Islamabad, Karachi, Tashkent
Central Asia Standard Time	UTC+06:00	Astana, Dhaka
Sri Lanka Standard Time	UTC+06:00	Sri Jayawardenepura
N. Central Asia Standard Time	UTC+06:00	Almaty, Novosibirsk
S.E. Asia Standard Time	UTC+07:00	Bangkok, Hanoi, Jakarta
North Asia Standard Time	UTC+07:00	Krasnoyarsk
China Standard Time	UTC+08:00	Beijing, Chongqing, Hong Kong SAR, Urumqi
Singapore Standard Time	UTC+08:00	Kuala Lumpur, Singapore
Taipei Standard Time	UTC+08:00	Taipei
W. Australia Standard Time	UTC+08:00	Perth
North Asia East Standard Time	UTC+08:00	Irkutsk, Ulaanbaatar
Korea Standard Time	UTC+09:00	Seoul
Tokyo Standard Time	UTC+09:00	Osaka, Sapporo, Tokyo
Yakutsk Standard Time	UTC+09:00	Yakutsk
A.U.S. Eastern Standard Time	UTC+10:00	Canberra, Melbourne, Sydney
E. Australia Standard Time	UTC+10:00	Brisbane
Tasmania Standard Time	UTC+10:00	Hobart
Vladivostok Standard Time	UTC+10:00	Vladivostok
West Pacific Standard Time	UTC+10:00	Guam, Port Moresby
Central Pacific Standard Time	UTC+11:00	Magadan, Solomon Islands, New Caledonia
Fiji Islands Standard Time	UTC+12:00	Fiji Islands, Kamchatka, Marshall Islands
New Zealand Standard Time	UTC+12:00	Auckland, Wellington

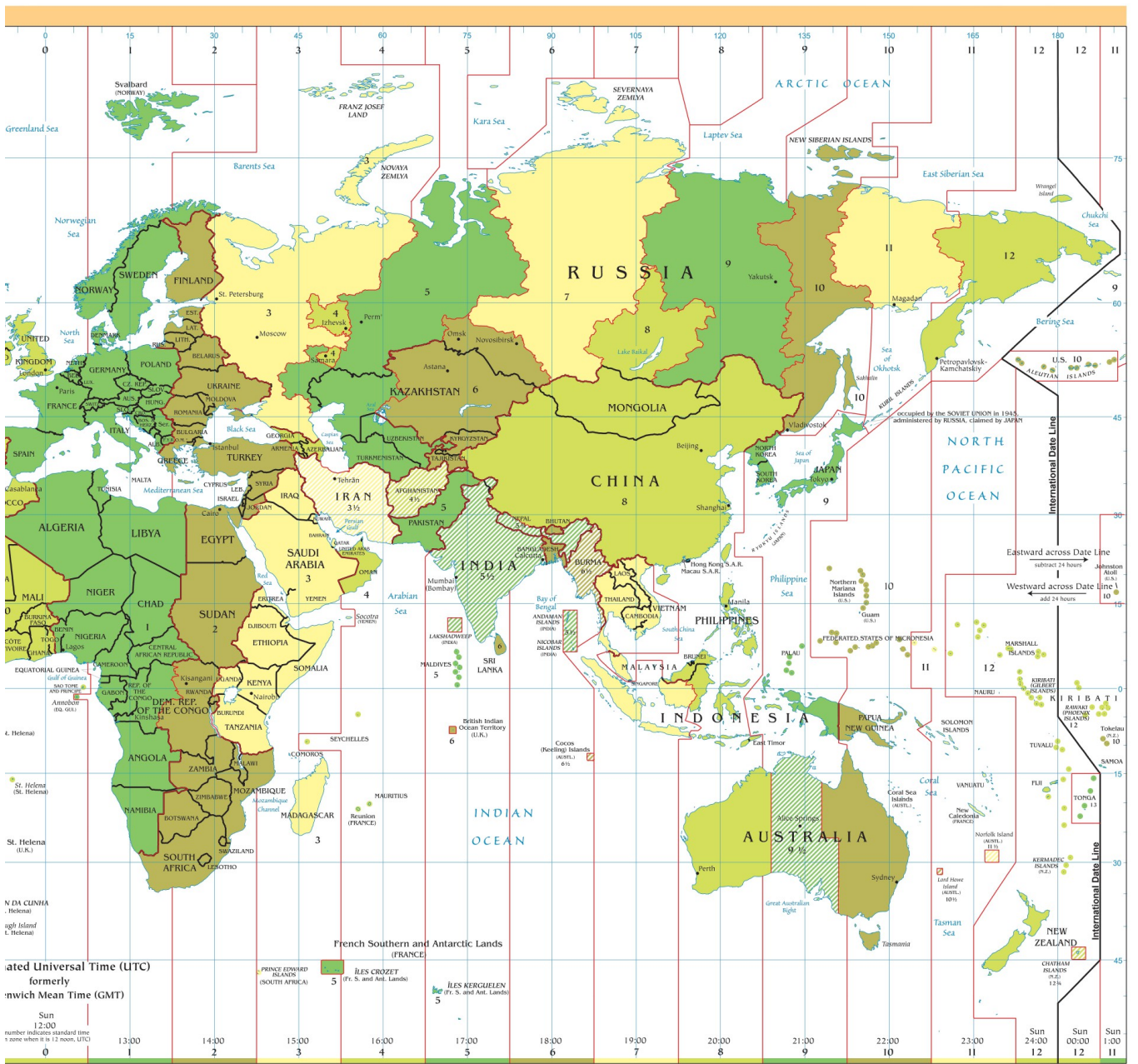
Source:Microsoft Time Zone

STANDARD TIME ZONES OF THE WORLD



Add time zone number to local time to obtain UTC.
 Subtract time zone number from UTC to obtain local time.

WEST EAST Subtract time zone number from UTC to obtain local time

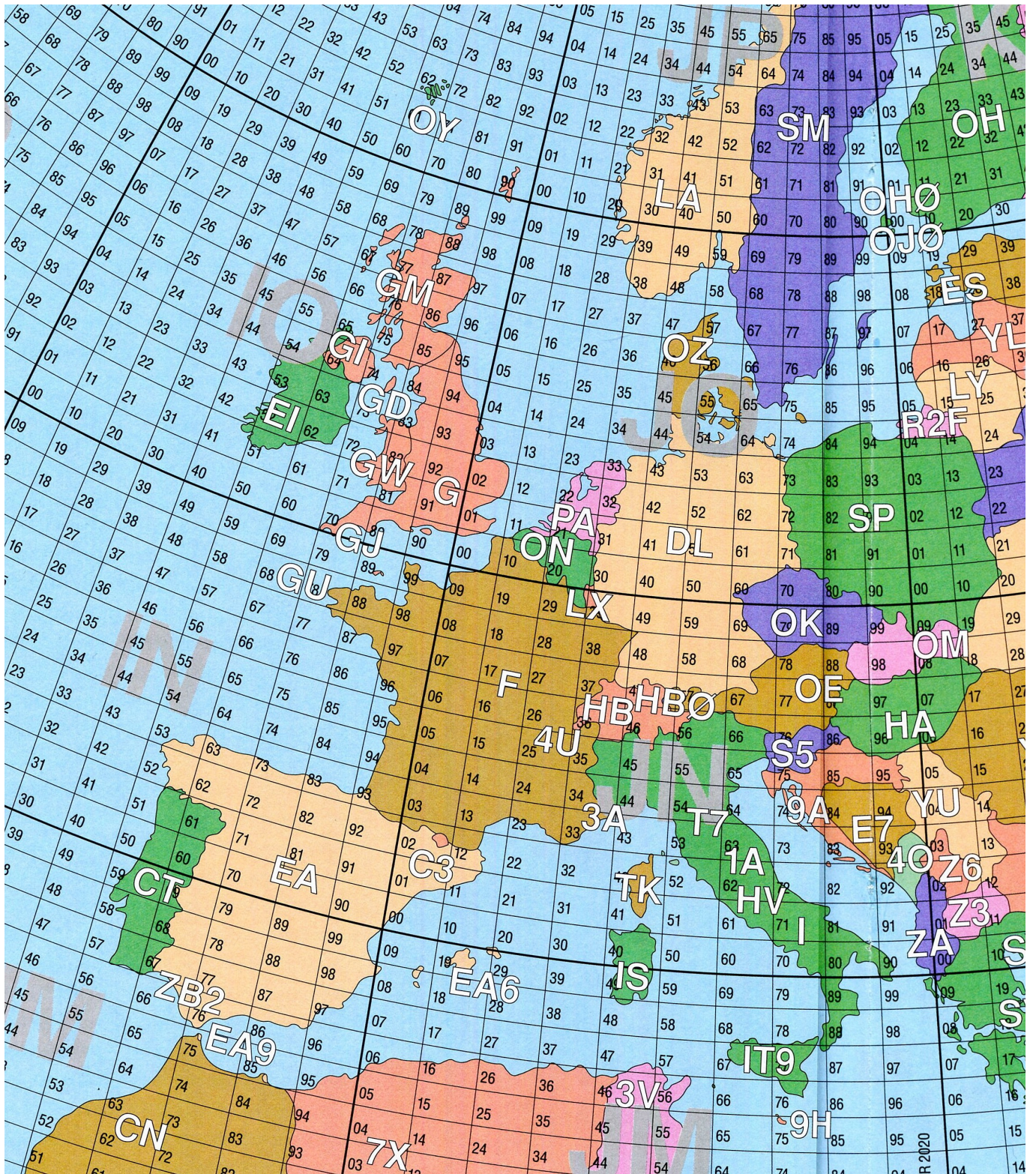


Prefix	Entity	Cnt.	Prefix	Entity	Cnt.
1A0	Sov.Mil.Order of Malta	EU	6T	Sudan	AF
1B	Cyprus	EU	6V, 6W	Senegal	AF
1S	Spraty Is.	AS	6Y	Jamaica	NA
2E, 2D, 2I, 2J,2M, 2U, 2W	England	EU	7J, 7K, 7L, 7M, 7N	Japan	AS
3A	Monaco	EU	7O	Yemen	AS
3B6, 7	Agalega & St. Brandon	AF	7P	Lesotho	AF
3B8	Mauritius	AF	7Q	Malawi	AF
3B9	Rodriguez I.	AF	7T, 7U, 7V, 7W, 7X, 7Y	Algeria	AF
3C	Equatorial Guinea	AF	8A - 8I	Indonesia	AS
3C0	Pagalu I.	AF	8J	Japan	AS
3D2/F	Fiji	OC	8O	Botswana	AF
3D2/C	Conway Reef	OC	8P	Barbados	NA
3D2/R	Rotuma I.	OC	8Q	Maldives	AS/AF
3DA0	Swaziland	AF	8R	Guyana	SA
3V	Tunisia	AF	8S	Sweden	EU
3W	Vietnam	AS	8T, 8U, 8V, 8W	India	AS
3X	Guinea	AF	8Z	Saudi Arabia	AS
3Y	Bouvet Isl., Peter Isl.	AF	9A	Croatia	EU
3Z	Poland	EU	9D	Iran	AS
4A, 4B, 4C	Mexico	SA	9E, 9F	Ethiopia	AF
4D, 4F, 4I	Philippines	AS	9G	Ghana	AF
4J,4K	Azerbaijan	AS	9H	Malta	EU
4J1	Malyj Vysotskij	EU	9I-9J	Zambia	AF
4L	Georgia	AS	9K	Kuwait	AS
4M	Venezuela	SA	9L	Sierra Leone	AF
4N1, 4N6 - 4N9	Yugoslavia	EU	9M2, 4	West Malaysia	AS
4N4	Bosnia Herzegovina	EU	9M6, 8	East Malaysia	OC
4N5	Macedonia	EU	9N	Nepal	AS
4O1	Yugoslavia	EU	9Q, 9R, 9S, 9T	Dem.Rep. Of Congo	AF
4O1, 4O6 - 4O9	Bosnia Herzegovina	EU	9U	Burundi	AF
4O5	Macedonia	EU	9V	Singapore	AS
4P, 4Q, 4R, 4S	Sri Lanka	AS	9X	Rwanda	AF
4T	Peru	SA	9Y-9Z	Trinidad & Tobago	SA
4U_ITU	ITU HQ Geneva	EU	A15	Abu Ail	AS
4U_UN	United Nations HQ	NA	A2	Botswana	AF
4V	Haiti	NA	A3	Tonga	OC
4W6	East Timor	OC	A4	Oman	AS
4X, 4Z	Israel	AS	A5	Bhutan	AS
5A	Libya	AF	A6	United Arab Emirates	AS
5B	Cyprus	AS	A7	Qatar	AS
5C, 5D, 5E	Libya	AF	A8	Leberia	
5H-5I	Tanzania	AF	A9	Bahrain	AS
5J, 5K	Columbia	SA	AA	United States of America	NA
5L	Liberia	AF	AM, AN, AO	Spain	EU
5N-5O	Nigeria	AF	AP-AS	Pakistan	AS
5R-5S	Madagascar	AF	AT, AU, AV, AW	India	AS
5T	Mauritania	AF	AX	Australia	OC
5U	Niger	AF	AY, AZ	Argentina	SA
5V	Togo	AF	BA BU	China	AS
5W	Western Samoa	OC	BS7	Scarborough Reef	AS
5X	Uganda	AF	BV	Taiwan	AS
5Y-5Z	Kenya	AF	BV9P	Pratas	AS
6D, 6E, 6F	Mexico	SA	BW - BZ	China	AS
6K	South Korea	AS	C2	Nauru	OC
6O	Somalia	AF	C3	Andorra	EU

Prefix	Entity	Cnt.	Prefix	Entity	Cnt.
C4	Cyprus	EU	FO	Marquesas I.	OC
C5	The Gambia	AF	FP	St. Pierre & Miquelon	NA
C6	Bahamas	NA	FR/G	Glorioso Is.	AF
C8-9	Mozambique	AF	FR/J, E	Juan de Nova, Europa	AF
CA-CE	Chile	SA	FR	Reunion	AF
CE0	Easter I.	SA	FR/T	Tromelin I.	AF
CE0	Juan Fernandez Is.	SA	FS	Saint Martin	NA
CE0	San Felix & San Ambrosio	SA	FT8W	Crozet I.	AF
CE9/KC4	Antarctica	AN	FT8X	Kerguelen Is.	AF
CF, CG, CH, CI, CK	Canada	NA	FT8Y	Antarctica	
CL, CM, CO	Cuba	NA	FT8Z	Amsterdam & St. Paul Is.	AF
CN	Morocco	AF	FW	Wallis & Futuna Is.	OC
CP	Bolivia	SA	FY	French Guiana	SA
CQ, CR, CS, CT	Portugal	EU	G, GX	England	EU
CT3	Madeira Is.	AF	GD, GT	Isle of Man	EU
CU	Azores	EU	GI, GN	Northern Ireland	EU
CV-CX	Uruguay	SA	GJ, GH	Jersey	EU
CY, CX	Canada	NA	GM, GS	Scotland	EU
CY0	Sable I.	NA	GU, GP	Guernsey	EU
CY9	St. Paul I.	NA	GW, GC	Wales	EU
D2, D3	Angola	AF	H2	Cyprus	EU
D4	Cape Verde	AF	H3	Panama	NA
D6	Comoros	AF	H4	Solomon Is.	OC
D7, D8, D9	South Korea	AS	H40	Temotu Province	OC
DA-DL	Fed. Rep. of Germany	EU	H5	South Africa	AF
DS, DT	South Korea	AS	H6, H7	Nicaragua	SA
DU-DZ	Philippines	OC	H8, H9	Panama	SA
E2	Thailand	AS	HA, HG	Hungary	EU
E3	Eritrea	AF	HB	Switzerland	EU
E4	Palestine	AS	HB0	Liechtenstein	EU
EA-EH	Spain	EU	HC-HD	Ecuador	SA
EA6-EH6	Balearic Is.	EU	HC8-HD8	Galapagos Is.	SA
EA8-EH8	Canary Is.	AF	HH	Haiti	NA
EA9-EH9	Ceuta & Melilla	AF	HI	Dominican Republic	NA
EI-EJ	Ireland	EU	HJ-HK	Colombia	SA
EK	Armenia	AS	HK0	Malpelo I.	SA
EL	Liberia	AF	HK0	San Andres & Providencia	NA
EM, EN, EO	Ukraine	EU	HL, HM	South Korea	AS
EP-EQ	Iran	AS	HN	Iraq	AS
ER	Moldovia	EU	HO-HP	Panama	NA
ES	Estonia	EU	HQ-HR	Honduras	NA
ET	Ethiopia	AF	HS	Thailand	AS
EU, EV, EW	Belarus	EU	HU	El Salvador	SA
EX	Kyrgystan	AS	HV	Vatican	EU
EY	Tajikistan	AS	HW, ZX, HY	France	EU
EZ	Turkmenistan	AS	HZ	Saudi Arabia	AS
F, FB, FD, FE, FF, FU, FW	France	EU	I, IA - IZ	Italy	EU
FG	Guadeloupe	NA	IS, IM	Sardinia	EU
FJ	Saint Barthelemy	NA	J2	Djibouti	AF
FH	Mayotte	AF	J3	Grenada	NA
FK	New Caledonia	OC	J4	Greece	EU
FM	Martinique	NA	J5	Guinea-Bissau	AF
FO	Austral I.	OC	J6	St. Lucia	NA
FO	Clipperton I.	NA	J7	Dominica	NA
FO	French Polynesia	OC	J8	St. Vincent	NA

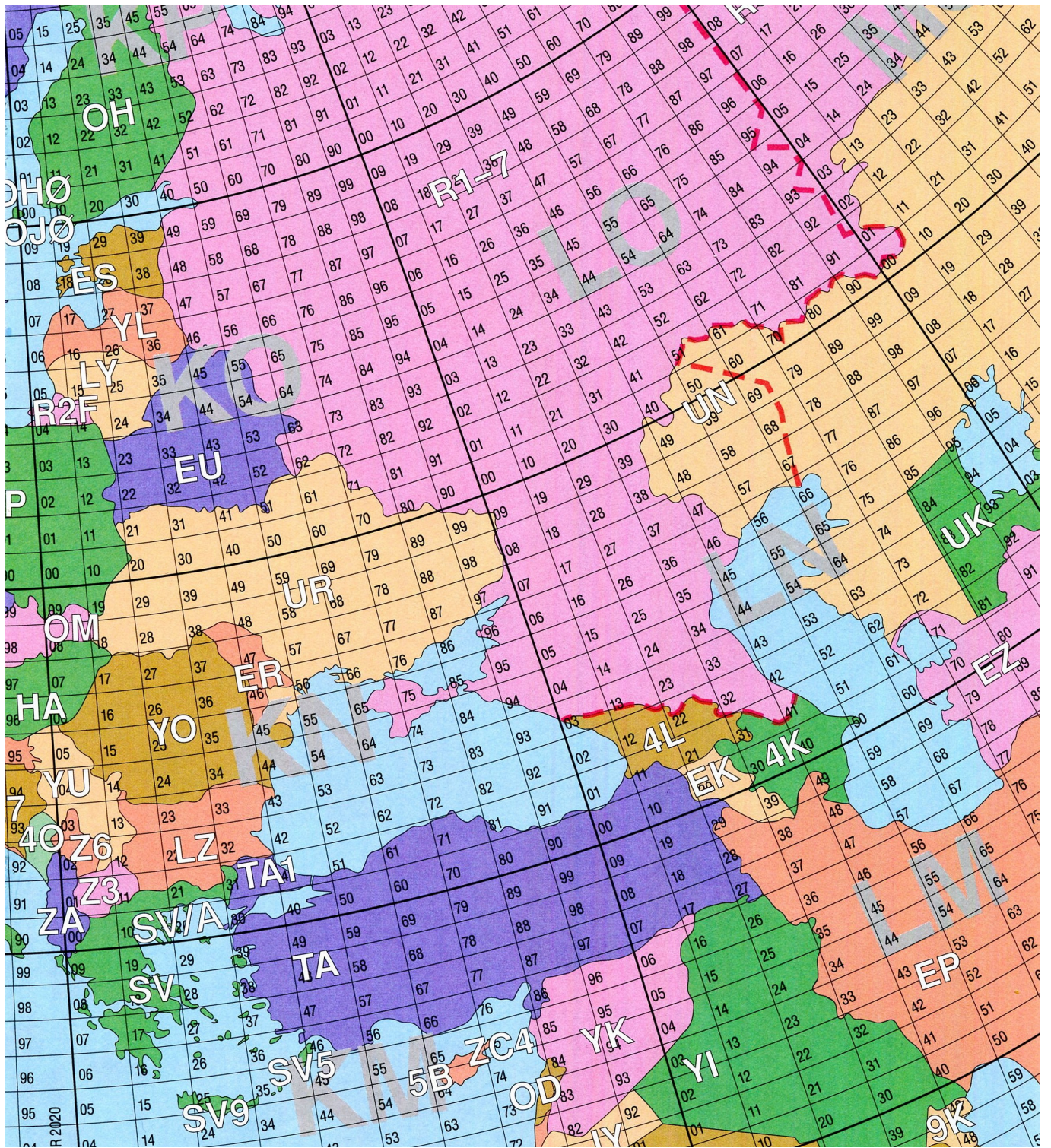
Prefix	Entity	Cnt.	Prefix	Entity	Cnt.
JA-JS	Japan	AS	PK, PO	Indonesia	AS
JD1	Minami Torishima	OC	PP-PY	Brazil	SA
JD1	Ogasawara	AS	PP0-PY0	Fernando de Noronha	SA
JT-JV	Mongolia	AS	PP0-PY0	St. Peter & St. Paul Rock	SA
JW	Svalbard	EU	PP0-PY0	Trindade & Martim Vaz Is.	SA
JX	Jan Mayen	EU	PZ	Suriname	SA
JY	Jordan	AS	R1FJ	Franz Josef Land	EU
K,W,N, AA-AK	United States of America	NA	R, RA - RZ	Russia	EU
KG4	Guantanamo Bay	NA	R9, RA9 - RZ9	Asiatic Russia	AS
KH0	Mariana Is.	OC	S0	Western Sahara	AF
KH1	Baker & Howland Is.	OC	S2, S3	Bangladesh	AS
KH2	Guam	OC	S4, S8	South Africa	AF
KH3	Johnston I.	OC	S5, YU3	Slovenia	EU
KH4	Midway I.	OC	S7	Seychelles	AF
KH5	Palmyra & Jarvis Is.	OC	S9	Sao Tome & Principe	AF
KH5K	Kingman Reef	OC	SA-SM	Sweden	EU
KH6	Hawaii	OC	SN-SR	Poland	EU
KH7	Kure I.	OC	ST	Sudan	AF
KH8	American Samoa	OC	SU	Egypt	AF
KH8SI	Swain's I.	OC	SV-SZ	Greece	EU
KH9	Wake I.	OC	SV/A	Mount Athos	EU
KL7	Alaska	NA	SV5	Dodecanese	EU
KP1	Navassa I.	NA	SV9	Crete	EU
KP2	Virgin Is.	NA	T2	Tuvalu	OC
KP4	Puerto Rico	NA	T3	Centr. East Kiribati	
KP5	Desecheo I.	NA	T30	W. Kiribati (Gilbert Is.)	OC
L1 - L9	Argentina	SA	T31	C. Kiribati (Brit. Phoenix Is.)	OC
LA-LN	Norway	EU	T32	E. Kiribati (Line Is.)	OC
LO-LW	Argentina	SA	T33	Banaba I. (Ocean I.)	OC
LX	Luxembourg	EU	T4	Cuba	SA
LY	Lithuania	EU	T5	Somalia	AF
LZ	Bulgaria	EU	T6	Afghanistan	AS
M, MC - MX	England	EU	T7	San Marino	EU
N	United States of America	NA	T8	South Africa	AF
OA-OC	Peru	SA	T88	Belau (W. Caroline Is.)	OC
OD	Lebanon	AS	T9	Bosnia-Herzegovina	EU
OE	Austria	EU	TA-TC	Turkey	EU/AS
OF-OI	Finland	EU	TF	Iceland	EU
OF0, OGO, OH0	Aland Is.	EU	TG, TD	Guatemala	NA
OJ0, OH0M	Market Reef	EU	TH, TM, TO, TQ, TV - TX	France	EU
OK-OL	Czech Republic	EU	TI, TE	Costa Rica	NA
OM	Slovak Republic	EU	TI9	Cocos I.	NA
ON-OT	Belgium	EU	TJ	Cameroon	AF
OX	Greenland	NA	TK	Corsica	EU
OY	Faroe Is.	EU	TL	Central Africa Rep.	AF
OZ	Denmark	EU	TN	Congo	AF
P2	Papua New Guinea	OC	TR	Gabon	AF
P3	Cyprus	EU	TT	Chad	AF
P4	Aruba	SA	TU	Cote d'Ivoire	AF
P5 - P9	North Korea	AS	TX0	Chesterfield Is.	OC
PA - PI	Netherlands	EU	TY	Benin	AF
PJ2	Curaçao	SA	TZ	Mali	AF
PJ4	Bonaire	SA	UA-UI1,3,4,6	European Russia	EU
PJ5,6	Saba & St.Eustatius	NA	UA2	Kaliningrad	EU

Prefix	Entity	Cnt.	Prefix	Entity	Cnt.
UJ-UM	Uzbekistan	AS	YI	Iraq	AS
UN-UQ	Kazakhstan	AS	YJ	Vanuatu	OC
UR-UZ, EM-EO	Ukraine	EU	YK	Syria	AS
V2	Antigua & Barbuda	NA	YL	Latvia	EU
V3	Belize	NA	YM	Turkey	EU
V4	St.Kitts & Nevis	NA	YN	Nicaragua	NA
V51, V52	Namibia	AF	YO-YR	Romania	EU
V6	Micronesia (E.Caroline Is.)	OC	YS	El Salvador	NA
V7	Marshall Is.	OC	YT-YU, YZ	Serbia	EU
V8	Brunei	OC	YV-YY	Venezuela	SA
VA - VE, VO, VY	Canada	NA	YV0	Aves I.	NA
VK, VL, VM, VN	Australia	OC	Z2	Zimbabwe	AF
VK0	Heard I.	AF	Z3	Macedonia	EU
VK0	Macquarie I.	OC	Z8	South Sudan (Rep.Of)	AF
VK9C	Cocos-Keeling Is.	OC	ZA	Albania	EU
VK9L	Lord Howe I.	OC	ZB2	Gibraltar	EU
VK9M	Mellish Reef	OC	ZC4	UK Sov. Base Areas on Cyprus	AS
VK9N	Norfolk I.	OC	ZD7	St. Helena	AF
VK9W	Willis I.	OC	ZD8	Ascension I.	AF
VK9X	Christmas I.	OC	ZD9	Tristan da Cunha & Gough I.	AF
VP2E	Anguilla	NA	ZE	Zimbabwe	AF
VP2M	Montserrat	NA	ZF	Cayman Is.	NA
VP2V	British Virgin Is.	NA	ZK1	N. Cook Is.	OC
VP5	Turks & Caicos Is.	NA	ZK1	S. Cook Is.	OC
VP6	Pitcairn I.	OC	ZK2	Niue	OC
VP6	Ducie I.	OC	ZK3	Tokelau Is.	OC
VP8	Falkland Is.	SA	ZL-ZM	New Zealand	OC
VP8, LU	South Georgia I.	SA	ZL7	Chatham Is.	OC
VP8, LU	South Orkney Is.	SA	ZL8	Kermadec Is.	OC
VP8, LU	South Sandwich Is.	SA	ZL9	Auckland & Campbell Is.	OC
VP8, LU,CE9, HF0, 4K1	South Shetland Is.	SA	ZP	Paraguay	SA
VP9	Bermuda	NA	ZR-ZU	South Africa	AF
VQ9	Chagos Is.	AF	ZS8	Prince Edward & Marion Is	AF
VS6, VR2	Hong Kong	AS	ZS, ZU	South Africa	AF
VT, VU, VV, VW	India	AS	ZV - ZZ	Brazil	SA
VU	Andaman & Nicobar Is.	AS			
VU	Laccadive Is.	AS			
VX, VY	Canada	NA			
VZ	Australia	OC			
W, WA - WZ	United States of America	NA			
XA-XH	Mexico	NA			
XJ, XO	Canada	NA			
XA4-XI4	Revilla Ggedo	NA			
XP	Denmark	EU			
XQ, XR	Chile	SA			
XR0Y, XR0R	Easter I.	SA			
XS	China	AS			
XT	Burkina Faso	AF			
XU	Cambodia	AS			
XV	Vietnam	AS			
XW	Laos	AS			
XX9	Macao	AS			
XY-XZ	Myanmar	AS			
YA	Afghanistan	AS			
YB-YH	Indonesia	OC			



Onderverdeling per vak:

ax	bx	wx	xx
aw	bw	ww	xw
ab	bb	wb	xb
aa	ba	wa	xa



WRTH Bargraph Frequency Guide

Geographical Area Codes

Codes assigned by the International Telecommunications Union ITU (except * = WRTH code)

Code	Country	Code	Country	Code	Country
ABW	Aruba	CKH	Cook Islands	GUM	Guam
AFG	Afghanistan	CLM	Colombia	GUY	Guyana
AFS	South Africa	CLN	Sri Lanka	HKG	Hong Kong
AGL	Angola	CME	Cameroon	HND	Honduras
AIA	Anguilla	CNR	Canary Islands	HNG	Hungary
ALB	Albania	COD	Congo (Dem. Rep. of the)	HOL	Netherlands
ALG	Algeria	COG	Congo (Rep. of the)	HRV	Croatia
ALS	Alaska	COM	Comoros	HTI	Haiti
AMS	St Paul & Amsterdam Is	CPV	Cabo Verde	HWA	Hawaii
AND	Andorra	CRO	Crozet Islands	I	Italy
AOE	Western Sahara	CTI	Côte d'Ivoire	ICO	Cocos (Keeling) Islands
ARG	Argentina	CTR	Costa Rica	IND	India
ARM	Armenia	CUB	Cuba	INS	Indonesia
ARS	Saudi Arabia	CUW	Curaçao	IRL	Ireland
ASC	Ascension Island	CVA	Vatican City State	IRN	Iran
ATA	Antarctica	CYM	Cayman Islands	IRQ	Iraq
ATG	Antigua & Barbuda	CYP	Cyprus	ISL	Iceland
AUS	Australia	CZE	Czechia	ISR	Israel
AUT	Austria	D	Germany	J	Japan
AZE	Azerbaijan	DGA	Diego Garcia	JMC	Jamaica
AZR	Azores	DJI	Djibouti	JOR	Jordan
B	Brazil	DMA	Dominica	KAZ	Kazakhstan
BAH	Bahamas	DNK	Denmark	KEN	Kenya
BDI	Burundi	DOM	Dominican Republic	KER	Kerguelen Islands
BEL	Belgium	E	Spain	KGZ	Kyrgyzstan
BEN	Benin	EGY	Egypt	KIR	Kiribati
BER	Bermuda	EQA	Ecuador	KOR	Korea, South
BES	Bonaire / Saba / St Eustatius	ERI	Eritrea	KRE	Korea, North
BFA	Burkina Faso	EST	Estonia	KWT	Kuwait
BGD	Bangladesh	ETH	Ethiopia	LAO	Laos
BHR	Bahrain	F	France	LBN	Lebanon
BIH	Bosnia & Herzegovina	FIN	Finland	LBR	Liberia
BIO	British Indian Ocean Territory	FJI	Fiji	LBY	Libya
BLM	St Barthélemy	FLK	Falkland Islands	LCA	St Lucia
BLR	Belarus	FRO	Faroe Islands	LHW*	Lord Howe Island
BLZ	Belize	FSM	Micronesia	LIE	Liechtenstein
BOL	Bolivia	G	United Kingdom	LSO	Lesotho
BOT	Botswana	GAB	Gabon	LTU	Lithuania
BRB	Barbados	GAL*	Galapagos Islands	LUX	Luxembourg
BRM	Myanmar	GEO	Georgia	LVA	Latvia
BRU	Brunei	GHA	Ghana	MAC	Macao
BTN	Bhutan	GIB	Gibraltar	MAF	St Martin
BUL	Bulgaria	GLP	Guadeloupe	MAU	Mauritius
CAF	Central African Republic	GMB	Gambia	MCO	Monaco
CAN	Canada	GNB	Guinea-Bissau	MDA	Moldova
CBG	Cambodia	GNE	Equatorial Guinea	MDG	Madagascar
CEU*	Ceuta	GRC	Greece	MDR	Madeira
CHL	Chile	GRD	Grenada	MEL*	Melilla
CHN	China (People's Rep. of)	GRL	Greenland	MEX	Mexico
CHR	Christmas Island	GTM	Guatemala	MHL	Marshall Islands
		GUF	French Guiana	MKD	North Macedonia
		GUI	Guinea	MLA	Malaysia

Code	Country
MLD	Maldives
MLI	Mali
MLT	Malta
MNE	Montenegro
MNG	Mongolia
MOZ	Mozambique
MRA	Northern Mariana Is
MRC	Morocco
MRT	Martinique
MSR	Montserrat
MTN	Mauritania
MWI	Malawi
MYT	Mayotte
NCG	Nicaragua
NCL	New Caledonia
NFK	Norfolk Island
NGR	Niger
NIG	Nigeria
NIU	Niue
NMB	Namibia
NOR	Norway
NPL	Nepal
NRU	Nauru
NZL	New Zealand
OCE	French Polynesia
OMA	Oman
PAK	Pakistan
PAQ	Easter Island
PHL	Philippines
PLW	Palau
PNG	Papua New Guinea
PNR	Panama
POL	Poland
POR	Portugal
PRG	Paraguay
PRU	Peru

Code	Country
PSE*	Palestine ¹
PTC	Pitcairn Islands
PTR	Puerto Rico
QAT	Qatar
REU	Réunion
RKS*	Kosovo
ROD	Rodrigues
ROU	Romania
RRW	Rwanda
RUS	Russia
S	Sweden
SCN	St Kitts & Nevis
SDN	Sudan
SEN	Senegal
SEY	Seychelles
SHN	St Helena
SLM	Solomon Islands
SLV	El Salvador
SMA	American Samoa
SMO	Samoa
SMR	San Marino
SNG	Singapore
SOM	Somalia
SPM	St Pierre & Miquelon
SRB	Serbia
SRL	Sierra Leone
SSD	South Sudan
STP	São Tomé & Príncipe
SUI	Switzerland
SUR	Suriname
SVK	Slovakia
SVN	Slovenia
SWZ	Eswatini
SXM	St Maarten
SYR	Syria
TCA	Turks & Caicos Islands

Code	Country
TCD	Chad
TGO	Togo
THA	Thailand
TJK	Tajikistan
TKM	Turkmenistan
TKL	Tokelau
TLS	Timor-Leste
TON	Tonga
TRC	Tristan da Cunha
TRD	Trinidad & Tobago
TUN	Tunisia
TUR	Turkey
TUV	Tuvalu
TWN*	Taiwan (Rep. of China)
TZA	Tanzania
UAE	United Arab Emirates
UGA	Uganda
UKR	Ukraine
URG	Uruguay
USA	United States of America
UZB	Uzbekistan
VCT	St Vincent & the Grenadines
VEN	Venezuela
VIR	Virgin Islands
VRG	British Virgin Islands
VTN	Vietnam
VUT	Vanuatu
WAL	Wallis & Futuna
WAK	Wake Island
XGZ	Gaza Strip ¹
XWB	West Bank ¹
YEM	Yemen
ZMB	Zambia
ZWE	Zimbabwe

Target Area Codes

Code	Target Area
Af	Africa
Af	Africa
Am	Americas
As	Asia
Atl	Atlantic Ocean
BaS	Baltic Sea
CAf	Central Africa
CAM	Central America
Car	Caribbean

Code	Target Area
CAs	Central Asia
Cau	Caucasia
CEu	Central Europe
EAF	Eastern Africa
EAs	Eastern Asia
EEu	Eastern Europe
Eu	Europe
IOc	Indian Ocean
LAM	Latin America

Code	Target Area
ME	Middle East
Med	Mediterranean
NAf	Northern Africa
NAM	North America
NAs	Northern Asia
NEu	Northern Europe
NoS	North Sea
Pac	Pacific
SAf	Southern Africa

Code	Target Area
SAM	South America
SAs	Southern Asia
SEA	South East Asia
SEu	Southern Europe
WAf	Western Africa
WAs	West Asia

Code Site	Ctry	Lat	Long	SW	MW	Code Site	Ctry	Lat	Long	SW	MW
kia	Bandar e-Kiashahr	IRN	37N25	050E01	✓ ✓	rob	Rohrbach, Eja	D	48N36	011E33	✓ ✗
kih	Kish Island	IRN	26N34	053E56	✓ ✓	rou	Roumoules	F	43N48	006E10	✗ ✓
kim	Gimje	KOR	35N49	126E52	✓ ✓	sai	Saipan, Agingan Point	MRA	15N07	145E42	✓ ✓
kkt	Chinsurah	IND	23N02	088E21	✓ ✓	sao	Pinheira	STP	00N18	006E45	✓ ✓
klf	Kall, Krekel	D	50N29	006E31	✓ ✗	sda	Agat, Facpi Point	GUM	13N20	144E39	✓ ✗
kmk	Kimchaek	KRE	40N41	129E12	✗ ✓	seo	Seoul, Daebu Isl (HLKX)	KOR	37N13	126E33	✗ ✓
kng	Kanggye	KRE	41N01	126E39	✓ ✗	sha	Kunming, Shalang (Yunnan prov.)	CHN	25N41	102E41	✓ ✗
knx	Kununurra	AUS	15S49	128E40	✓ ✗	sir	Sirjan	IRN	29N36	055E47	✓ ✗
kou	Kouhu	TWN	23N32	120E10	✓ ✓	sko	Skopje, Sveti Nikole	MKD	41N47	021E53	✗ ✓
kuj	Kujang	KRE	40N05	126E07	✓ ✗	sla	A'Seela	OMA	21N55	059E37	✓ ✓
kun	Kunming, Anning (Yunnan prov.)	CHN	24N53	102E30	✓ ✓	smg	Santa Maria di Galeria	CVA	42N03	012E19	✓ ✗
kwt	Kuwait, Umm Al-Rimam	KWT	29N31	047E40	✓ ✓	sng	Singapore	SNG	01N25	103E43	✓ ✗
lam	Lampertheim	D	49N36	008E32	✓ ✗	snu	Sinuiju	KRE	40N05	124E27	✓ ✓
lha	Lhasa (Chengguan), (Xizang auton. reg.)	CHN	29N39	091E15	✓ ✗	sof	Sofia, Kostinbrod	BUL	42N49	023E11	✓ ✗
lra	Base Antártica Esperanza	ATA	63S24	057W00	✓ ✗	sol	Solec Kujawski (Polskie R1)	POL	53N01	018E30	✗ ✓
luv	Lusaka, Makeni Ranch	ZMB	15S32	028E00	✓ ✗	sw0	Sangwon	KRE	38N53	126E06	✗ ✓
maa	Marslet	DNK	56N06	010E12	✓ ✗	szg	Shijiazhuang, Nanpozhuang (Hebei prov.)	CHN	38N13	114E06	✓ ✗
man	Manzini, Mpangela Ranch	SWZ	26S20	031E36	✓ ✓	tac	Toshkent	UZB	41N13	069E09	✓ ✗
mdc	Talata Volonondry	MDG	18S45	047E37	✓ ✗	tig	Bucuresti	ROU	44N45	026E06	✓ ✗
mia	Miaoli	TWN	24N23	120E42	✓ ✗	tin	Tinian	MRA	15N03	145E36	✓ ✗
min	Minhsiung	TWN	23N34	120E26	✗ ✓	trm	Trincomalee, Perkara	CLN	08N45	081E08	✓ ✓
mos	Moosbrunn	AUT	48N00	016E28	✓ ✗	tsh	Tanshui	TWN	25N11	121E25	✓ ✗
msk	Moskva	RUS	55N45	037E37	✗ ✓	tts	Tartus	SYR	34N57	035E53	✗ ✓
msn	Jeongok, Misan	KOR	38N01	126E59	✗ ✓	twb	Bonaire, Belnem	BES	12N06	068W17	✗ ✓
mth	Marathon Key, FL	USA	24N42	081W05	✗ ✓	twr	Merizo	GUM	13N17	144E40	✓ ✗
mwv	Mahajanga II (Belobaka), Amparemahitsy	MDG	15S43	046E26	✓ ✗	tww	Lebanon, TN	USA	36N17	086W06	✓ ✗
nau	Nauen	D	52N39	012E55	✓ ✗	tyb	Tayebad	IRN	34N44	060E48	✗ ✓
nls	Anchor Point, AK	ALS	59N45	151W44	✓ ✗	uba	Ulaanbaatar, Khonkhor	MNG	47N48	107E11	✓ ✗
nnn	Nanning (Guangxi Zhuang auton. reg.)	CHN	22N48	108E11	✓ ✗	udo	Udon Thani, Ban Dung	THA	17N40	103E12	✓ ✗
nob	Noblejas	E	39N57	003W26	✓ ✗	uru	Ürümqi (Wulumuqi), (Xinjiang Uighur auton. reg.)	CHN	44N09	086E54	✓ ✓
nwn	Seoul, Taereung	KOR	37N38	127E07	✓ ✗	ust	Taiwan (exact site unknown)	TWN	—	—	✓ ✓
omo	Can Tho, Thoi Hung	VTN	10N07	105E34	✗ ✓	vie	Vientiane	LAO	18N00	102E38	✓ ✗
pad	Padua, Villa Estense (AM Italia)	I	45N09	011E42	✗ ✓	vir	Virrat, Liedenpohja	FIN	62N23	023E37	✓ ✓
pao	Paochung	TWN	23N43	120E18	✓ ✗	vni	Son Tay	VTN	21N12	105E22	✓ ✗
par	Parakou	BEN	09N21	002E37	✗ ✓	voh	Rancho Simi, CA	USA	34N15	118W39	✓ ✗
pga	Palangkaraya	INS	02S13	113E55	✓ ✗	vst	Anykšciai, Viešintos	LTU	55N42	024E59	✗ ✓
pht	Tinang	PHL	15N22	120E37	✓ ✗	wcr	Nashville, TN	USA	36N12	086W54	✓ ✗
pin	Pinneberg	D	53N40	009E48	✓ ✗	wis	Winsen an der Aller	D	52N40	009E52	✓ ✗
ptg	Pingtung	TWN	22N23	120E37	✓ ✗	wnm	Weenermoor	D	53N12	007E19	✓ ✗
put	Puttalam	CLN	07N58	079E48	✗ ✓	wof	Woofferton	G	52N19	002W43	✓ ✗
pyo	Pyongyang	KRE	39N03	125E42	✓ ✗	wrb	Morrison, TN	USA	35N37	086W01	✓ ✗
qiq	Qiqihar (Heilongjiang prov.)	CHN	47N02	124E00	✓ ✗	xia	Xi'an, Xianyang (Shaanxi prov.)	CHN	34N22	108E37	✓ ✗
qsh	Qasr-e Shirin	IRN	34N27	045E37	✗ ✓	xuw	Xuanwei (Yunnan prov.)	CHN	26N08	104E01	✓ ✓
qui	Quito, Mount Pichincha	EQU	00S10	078W32	✓ ✗	yam	Tokyo, Yamata	J	36N10	139E49	✓ ✗
qvc	La Habana, Quivicán	CUB	22N49	082W18	✓ ✗	yan	Yangon (Mayangon) (Myanma R.)	BRM	16N52	096E10	✓ ✗
raj	Rajkot	IND	22N30	070E31	✗ ✓	zab	Zabol	IRN	31N02	061E33	✗ ✓
ran	Rangitaiki	NZL	38S51	176E26	✓ ✗	zah	Zahedan	IRN	29N28	060E52	✓ ✗
rbn	Rabouni	ALG	27N33	008W06	✗ ✓	zak	Zakaki, Lady's Mile (Akrotiri Sovereign Base Area)	CYP	34N37	033E00	✗ ✓
riy	Riyadh	ARS	24N49	046E52	✓ ✗	zwo	Zwolle	HOL	52N29	006E06	✓ ✗
rmi	Okeechobee, FL	USA	27N27	080W56	✓ ✗						
rnd	Randers	DNK	56N27	010E02	✓ ✗						
rno	New Orleans, LA	USA	29N50	090W07	✓ ✗						

WRTH TARGET AREA CODES

Code	Target	Code	Target	Code	Target	Code	Target
Af	Africa	CAs	Central Asia	LAm	Latin America	Pac	Pacific Ocean
Am	Americas	Cau	Caucasia	ME	Middle East	SAf	Southern Africa
As	Asia	CEu	Central Europe	Med	Mediterranean	SAm	South America
Atl	Atlantic Ocean	Eaf	Eastern Africa	NAf	Northern Africa	SAs	Southern Asia
BaS	Baltic Sea	EAs	Eastern Asia	NAm	North America	SEA	South East Asia
CAf	Central Africa	EEu	Eastern Europe	NAs	Northern Asia	SEu	Southern Europe
CAm	Central America	Eu	Europe	NEu	Northern Europe	Waf	Western Africa
Car	Caribbean	IOc	Indian Ocean	NoS	North Sea	WAs	West Asia

WRTH Bargraph Frequency Guide

Abbreviations

±	=	variable	ICDI	=	Integrated Community Development International
†	=	irregular	I.F.	=	Independence Front
+	=	DRM	Inst	=	Institute
‡	=	inactive	Int.	=	International/Internacional
AIR	=	All India Radio	IRRS	=	Italian Radio Relay Service
AWR	=	Adventist World Radio	JKashFr	=	Jammu & Kashmir Freedom (Movement)
Bet.	=	Betar	KBS	=	Korean Broadcasting System
Beibu Bay	=	VO Guangxi Beibu Wan	KCBS	=	Korean Central Broadcasting Station
Bey.	=	Beyond	KGR	=	Kyrgyz radiosu
Broadc.	=	Broadcast(ing)	kHz	=	kiloHertz
BBC	=	British Broadcasting Corporation	Kurd.	=	Kurdistan
BBG	=	Broadcasting Board of Governors	Liber.	=	Liberation
BC	=	Broadcasting Corporation/Centre	LR	=	Lokalradio
Bc	=	Broadcasting	LV	=	La Voce/La Voz
BS	=	Broadcasting Station/Service	MC	=	Monte Carlo
BSKSA	=	Broadcasting Service of the Kingdom of Saudi Arabia	Medi 1	=	Radio Méditerranée Internationale
BVB	=	Bible Voice Broadcasting	Met.	=	Meteorologia
C.	=	Coatán	Min.	=	Ministry
CBC	=	Canadian Broadcasting Corporation	Miss.	=	Missionswerk
C.G.	=	Campo Grande	MND	=	Ministry of National Defense
Ch.	=	Channel	Montevid.	=	Montevideo
Co.	=	Company	N.	=	North(ern)
Corp.	=	Corporation	N. Terr.	=	Northern Territories
CRI	=	China Radio International	Nal.	=	Nacional/Nasional/Nasionaly
CRTV	=	Cameroon Radio Television	Nat.	=	National
CTB	=	China Tibet Broadcasting	NBC	=	National Broadcsting Corporation
Cult.	=	Cultural	NCN	=	National Communications Network
CVC	=	Christian Vision	Ndar.	=	Ndarason
Dem	=	Democratic/Democracy	NHK	=	Nippon Hoso Kyokai
Dif.	=	Difusora, Difusão	NIST	=	National Institute of Standards and Technology
Diff.	=	Diffusion	N Kor	=	North Korea
DLSN	=	Đáp Lòì Sông Núi	Nthrn Star	=	Northern Star
D.R.	=	Dimts Radio	ONRT	=	Office National de Radio et TV
DRM	=	Digital Radio Mondiale	ORT	=	Office de Radiodiffusion et TV
DWD	=	Deutscher Wetterdienst	OVR	=	Oromo Voice Radio
EBC	=	Ethiopian Broadcasting Corporation	P&D	=	Peace and Democracy
EMR	=	European Music Radio	Palang.	=	Palangkaraya
ERT	=	Elliniki Radiofonia Teleorassi	PanAm	=	Pan American
ETC R.	=	End Times Coming Radio	PBS	=	People's Broadcasting Station/Public Broadcasting Service
Ev.	=	Evangelische	PMR	=	Radio Pridnestrovskoy Moldavskoy Respubliki
FEBA	=	Far Eastern Broadcasting Associates	P.R.	=	Public Radio
FEBC	=	Far Eastern Broadcasting Company	Pto	=	Puerto
Filazant.	=	Filazantsara	Queb.	=	Quebec
FRCN	=	Federal Radio Corporation of Nigeria	R.	=	Radio, Rádio, Rádío, Radyjo, Radyo
FTB	=	Follow the Bible	Rad.	=	Radio, Radiosu, Radiofonico
G.	=	Guaviare	RAE	=	Radiodifusión Argentina al Exterior
Gem	=	Gemeinden	RAI	=	Radiotelevisione Italiana
GTRK	=	Gosudarstvennaya Televizionnaya i Radioveshchatelnaya	RASD	=	Radio Nacional de la República Arabe Saharaui Democrática
IBC	=	Italian Broadcasting Corporation	RchBeyond	=	Reach Beyond (Australia)
IBRA	=	International Broadcasting Association	RCI	=	Radio Canada international
			Rdif.	=	Radiodiffusion/Radiodifusión

R. Dif.	=	Radio Difusora/Difusão	SLBC	=	Sri Lanka Broadcasting Corporation
REE	=	Radio Exterior de España	SODRE	=	Servicio Oficial de Difusión, Radiotelevisión y Espectáculos
Reg.	=	Regional	Sol.	=	Solano
Rep.	=	Republic/Republique	S.P.	=	São Paulo
RFA	=	Radio Free Asia	SRG-SSR	=	Schweizerische Radio- und Fernsehgesellschaft - Société suisse de radiodiffusion et télévision
RFE	=	Radio Free Europe	SRTC	=	Sudan Radio & TV Corporation
RFI	=	Radio France Internaionale	Sto	=	Santo
RHC	=	Radio Habana Cuba	Sult	=	Sultan
RL	=	Radio Liberty	SW	=	Shortwave
RN	=	Radio Nacional	SWR	=	Scandinavian Weekend Radio
RNZI	=	Radio New Zealand International	Talata V.	=	Talata Volonondry
RRI	=	Radio Rumania International/Radio Republik Indonesia	TDF	=	Télé Diffusion de France
RTB	=	Radiodiffusion Télévision du Burkina	TV	=	Television/Télévision
RTBF	=	Radio-Télévision Belge de la Communaute Francaise	TWR	=	Trans World Radio
RTD	=	Radiodiffusion Télévision de Djibouti	UBC	=	Uganda Broadcasting Corporation
RTÉ	=	Radío Telefís Éireann	UNAM	=	Universidad Nacional Autónoma de México
RTI	=	Radio Taiwan International	Unific.	=	Unification
RTL	=	Radio Télévision Luxembourg	V.	=	Voice
RTM	=	Radio Television Malaysia	VO	=	Voice of
RTV	=	Radio & Television	VOA	=	Voice of America
RUI	=	Radio Ukraine International	VOIRI	=	VO the Islamic Republic of Iran
SABC	=	South African Broadcasting Corporation	VOP	=	Voice of the People
SADR	=	Saharwi Arab Democratic Republic	VORW	=	VO the Report of the Week
San Seb.	=	San Sebastián	VOT	=	Voice of Turkey
SBA	=	Saudi Broadcasting Authority	VOV	=	Voice of Vietnam
Scan.	=	Scandinavian	WOR	=	World of Radio
Sce	=	Service	WS	=	World Service
Sed.	=	Sedayee			

Vakantie skeds:

Tijd (local time)	Frequentie (+ of - QRM)
20:00 – 20:15	7.136
20:15 – 20:30	3.636
20:30 – 20:45	14.136

European, Private Shortwave Stations

September 1st 2022

Only legal stations are included. Most stations use low power, but a few use several kW. Note that UTC is used here - not CET nor CEST!

Abbreviations used: D = Germany, DNK = Denmark, FIN = Finland, NL = Netherlands

A.o. = and others, F.pl.: future plan, Int'l = International, Irr. = irregular, LT = Local time, 24/7 = twenty-four hours a day, seven days a week

Mo = Monday, Tu = Tuesday, We = Wednesday, Th = Thursday, Fr = Friday, Sa = Saturday, Su = Sunday

kHz	Country	Name	Transmitter site	Schedule (UTC)
3955	D	Radio Channel 292	Rohrbach Waal	Daily 0600-2000 & 2100-0500
3975	D	Shortwave Radio	Winsen	
3985	D	Shortwaveservice	Kall-Krekel	Daily 1400-1930 ('Radio Popexpress' a.o.)
3995	D	HCJB	Weenermoor	24/7
5920	D	HCJB	Weenermoor	24/7
5930	DNK	World Music Radio	Bramming	Sa-Su 0600-2100
5940	NL	Radio Piepzender	Zwolle	Irr.
5955	NL	Sunlite	Westdorpe	Daily 0400-1800. From Oct 1 st 0400-1500
5970	DNK	Radio208	Hvidovre	24/7
5980	DNK	Radio OZ-Viola	Hillerød	We 2100-2200
5980	FIN	Scandinavian Weekend Radio	Virrat	1 st Sa of the month (not in September)
6005	D	Shortwaveservice	Kall-Krekel	Daily 0800-1600
6005	NL	Radio Delta International	Elburg	Irr. (Fr or Sa 2100-0300)
6020	NL	Radio Delta International	Elburg	Irr. (Su 0600-1500)
6055	DNK	Radio OZ-Viola	Hillerød	Sa-Su 1100-1300
6070	D	Radio Channel 292	Rohrbach Waal	24/7
6085	D	Shortwaveservice	Kall-Krekel	Daily 0700-1700 ('Radio MiAmigo Int'l')
6115	D	Radio SE-TA 2	Gera	Irr. (Sa or Su 1000-1200)
6130	NL	Radio Europe	Alphen a/d Rijn	24/7
6140	NL	Radio Onda, Belgium	Borculo, NL	Irr. (weekends only)
6150	D	Europa 24	Datteln	
6160	D	Shortwave Radio	Winsen	
6170	FIN	Scandinavian Weekend Radio	Virrat	1 st Sa of the month (not in September)
6185	NL	Radio Piepzender	Zwolle	Irr.
7260	NL	RockPower	Nijmegen	Irr. mornings (approx. 0800-1200)
7270	NL	RockPower	Nijmegen	Irr. afternoons (approx. 1200-1600)
7365	D	HCJB	Weenermoor	24/7
7425	NL	Radio Piepzender	Zwolle	Irr.
7445	NL	Radio Piepzender	Zwolle	Irr. (0800-1800)
9670	D	Radio Channel 292	Rohrbach Waal	24/7
11690	FIN	Scandinavian Weekend Radio	Virrat	1 st Sa of the month (not in September)
11720	FIN	Scandinavian Weekend Radio	Virrat	1 st Sa of the month (not in September)
15700	DNK	World Music Radio	Randers	Sa-Su 0700-2000
15785	D	BitExpress	Erlangen	24/7 DRM-modulation ('Funklust')
25800	DNK	World Music Radio	Mårslet, Aarhus	24/7

This list is published by Hartvig Media ApS each first day of the month – based on details supplied by the radio stations, the stations websites, monitoring observations, HFCC registrations, and some presumptions. The list is not copyrighted and may be published everywhere. Subscription by email is free of charge; write to shn@wmr.dk.

Lokale AM stations middengolf:

- Caroline : 648 Oxfordness
- Kilrock : 1287 's Gravendeel
- Happy AM : 1395 Nieuw en St Joosland
- Vintage Radio : 1485 Vlissingen