

## International Broadcasting on Medium and Long Wave in Europe

After dark, medium- and long-wave signals reflect off the ionosphere, enabling them to travel much further. Until relatively recently, medium-wave radio was used to broadcast from one European country to another in the evenings and, in some cases, early mornings. In general, frequencies in the upper half of the medium-wave band were used because they reflect off the ionosphere from sunset to sunrise, whereas lower frequencies are reflected over a shorter period. Lower frequencies are also more useful for domestic broadcasting because the ground waves propagate further. A few countries used lower frequencies, including long wave, for broadcasting to their neighbours throughout the day.

Most international broadcasting was either programming for countries' expatriate communities or news and cultural programmes targeted at citizens of other countries, often as part of the cold war. However, there was also commercial and religious broadcasting. Most international broadcasting used short-wave, which enabled long-distance broadcasting at any time of day. However, this required a special radio receiver, whereas medium-wave broadcasts could be received on almost any radio until recently.

Most international broadcasting to Europe and other developed countries on both medium wave and short wave has now ceased. Operating the transmitters is expensive and reception is due to fading and distortion because signals received via different parts of the ionosphere can distort. The internet now enables citizens abroad to access the full range of domestic radio services from their home country more reliably and with better sound quality than AM radio permits. Thus, there is little need for international broadcasting to reach citizens abroad. Most countries have been cutting back on broadcasting to foreign citizens since the end of the cold war and tend to target listeners in less stable countries. Those broadcasters targeting advanced countries have largely moved to the internet. An exception is China Radio International, which has taken up a lot of spare broadcasting capacity within Europe over the past 10 years.

The table below lists foreign stations receivable in the UK and Ireland on long- and medium-wave since 1978, when the present frequency plan was implemented. Also listed are stations from the UK and Ireland that are widely receivable abroad. Bold frequencies are still active at high power in 2020. Station names in bold are intended for reception abroad.

*Paul Groves. Last updated January 2020*

Frequency	Country	Station(s)	Closure
153	Germany (W)	Deutschlandfunk	2014
<b>153</b>	Algeria	Radio Algerienne Chaîne 1	<b>Continues</b>
162	France	France Inter	2016
<b>171</b>	Morocco	<b>Medi 1</b>	<b>Continues</b>
177	Germany (E)	Stimme der DDR → DS Kultur → Deutschland Radio Berlin	2014
183	Germany (W)	<b>Europe 1</b> (Commercial service for France)	2019
189	Sweden	Sveriges Riksradio Program 1	1990-92
<b>189</b>	Iceland	Ríkistúvarpíð 1/2 (from 1997-99)	<b>Continues</b>
<b>198</b>	UK	BBC Radio 4 Long Wave ( <b>BBC World Service</b> 0100-0530)	<b>Continues</b>
207	Germany (W)	Deutschlandfunk	2014
<b>207</b>	Iceland	Ríkistúvarpíð 1/2	<b>Continues</b>
<b>207</b>	Morocco	Radio Maracaine	<b>Continues</b>
216	Norway	NRK 1	1993-96
<b>216</b>	Monaco	<b>Radio Monte Carlo</b> → <b>RMC Info</b> (Commercial service for France)	<b>Continues</b>
<b>225</b>	Poland	Radio 1	<b>Continues</b>
<b>234</b>	Luxembourg	<b>RTL</b> (Commercial service for France)	<b>Continues</b>
<b>243</b>	Denmark	Danmarks Radio 1 (until 2007) → DR Langbølge (part time from 2011)	<b>Continues</b>
<b>252</b>	Ireland	<b>Atlantic 252</b> → <b>Teamtalk</b> (Both commercial services for UK) → RTE Radio 1	<b>Continues</b>
261	Germany (E)	Radio Volga (Russian Forces) → Radioropa	2000
<b>270</b>	Czech Republic	Hvezda → Československo → CRo 1	<b>Continues</b>
279	USSR/ Belarus	Belaruskaje Radyjo 1	2016
<b>531</b>	Faroës	Útvaro Føroya	<b>Continues</b>
531	Germany (E)	Radio DDR → MDR Info	2000-2
531	Switzerland	Radio DRS 1 → Musigwaelle (closed 2008) → <b>Voice of Russia</b> (from 2011)	2012
<b>531</b>	Algeria	Radio Algerienne Chaîne 1 → Jil FM	<b>Continues</b>
540	Belgium	BRT 2 → VRT 2	2008
549	Germany (W)	Deutschlandfunk	2015
558	Switzerland	RSI Rete 1	2006-9
567	Ireland	RTE Radio 1	2008
576	Germany (W)	Sueddeutscher Rundfunk 1 → Suedwestrundfunk 1 → SWR cont.ra	2011
576	Germany (E)	Radio DDR → NDR 4 → Mega Radio	2003
<b>576</b>	Spain	Radio Cadena Espana → RNE Radio 5	<b>Continues</b>
585	Austria	Österreich 1	1993-96
<b>585</b>	Spain	RNE Radio 1	<b>Continues</b>
594	Germany (W)	Hessischer Rundfunk 1 → HR Plus → HR Info	2009
603	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info	2015
<b>603</b>	Spain	Radio Cadena Espana → RNE Radio 5	<b>Continues</b>
612	Ireland	RTE Radio 2	2004

Frequency	Country	Station(s)	Closure
621	Belgium	RTBF Radio 1 → RTBF La Premiere → RTBF International	2018
630	Germany (W)	Sender Freies Berlin 3/ NDR → Voice of Russia	2013
639	Czech Republic	Praha → CRo2 → CRo2/ CRo6 → CRo2/ CRo Plus → CRo2	Continues
639	Spain	RNE Radio 1	Continues
648	UK	<b>BBC World Service</b> (Included programmes in French until 1995 and in German until 1999)	2011
657	Germany (E)	Jugnedradio DT64 → NDR 4	2000-2
657	Spain	Radio Cadena Espana → RNE Radio 5	Continues
666	Germany (W)	Suedwestfunk 1 → Suedwestrundfunk 4 → SWR cont.ra	2011
666	Spain	SER Radio Barcelona	Continues
675	Netherlands	Hilversum III → NOS Radio 3 → Radio 10 Gold → Arrow Classic Rock → Radio Maria	2015
675	France	France Inter (until 1996) → Superloustic (from 2004)	2006
684	Spain	RNE Radio 1	Continues
693	UK	BBC Radio 2 → BBC Radio 5 → BBC Radio Five Live	Continues
693	Germany (E)	Berliner Rundfunk → Antenne Brandenburg → Voice of Russia	2014
702	Slovakia	Bratislava → Slovensko 1 → Radio Regina → Radio Patria	2009
702	Andorra	<b>Radio Andorra</b>	1981
711	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info	2015
720	Germany	Radio Free Europe / Radio Liberty → Westdeutscher Rundfunk 1 → WDR2/VERA	2015
729	Spain	RNE Radio 1	Continues
738	Spain	RNE Radio 1	Continues
738	Poland	Czworka → Radio Bis	1997-99
747	Netherlands	Hilversum II → NOS Radio 1 → 747 AM → NPO Radio 5	2015
756	Germany (W)	Deutschlandfunk	2015
765	Switzerland	RSR – La Premiere → Option Musique	2010
774	Spain	RNE Radio 1	Continues
783	Germany (E)	Stimme der DDR → MDR Info	2013
792	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info	2014
792	Spain	SER Radio Sevilla	Continues
801	Germany (W)	Bayerischer Rundfunk 1 → Bayern 1 → on3radio → Bayern Plus	2015
801	Spain	RNE Radio 1	Continues
810	UK	BBC Radio Scotland	Continues
819	Andorra/ France	Sud Radio	2011-14
819	Poland	Czworka → Radio Bis	1997-99
828	Germany (W)	Nordeutscher Rundfunk 2 → NDR 4 → NDR Info Spezial	2015
828	Netherlands	Arrow Classic Rock (2000-2003, 2008-2009) → Radio 10 Gold (from 2010)	2013
837	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info	2014
846	Italy	RAI Radio 2	2004
855	Germany (W)	RIAS 2 → DRM Tests	2012
855	Spain	RNE Radio 1	Continues
864	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Bleu	2015
873	Germany (W)	American Forces Network	2013
882	UK	BBC Radio Wales	Continues
882	Germany (E)	Stimme der DDR → MDR Info	2011
891	Algeria	Radio Algerienne Chaîne 1	Continues
900	Italy	RAI Radio 1	Continues
909	UK	BBC Radio 2 → BBC Radio 5 → BBC Radio Five Live	Continues
918	Slovenia	Radio Ljubljana 1 → Radio Slovenija 1	2017
927	Belgium	BRT 1 → VRT 1 → <b>Radio Vlaanderen International</b>	2011
936	Germany (W)	Radio Bremen 1	2010
936	Spain	Radio Cadena Espana → RNE Radio 5	Continues
945	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info	2014
954	Czech Republic	Praha → CRo2 → CRo2/ CRo6 → CRo2/ CRo Plus → CRo2	Continues
963	Finland	YLE Radio 1/2 → YLE Radio 1/ Radio Suomi → <b>Radio 86</b> (part-time)	2013
972	Germany (W)	Nordeutscher Rundfunk 2 → NDR 4 → NDR Info Spezial	2015
981	Algeria	Radio Algerienne Chaîne 2	Continues
990	Germany (W)	RIAS 1 → Deutschland Radio Berlin	2013
999	Spain	COPE Madrid	Continues
1008	Netherlands	Hilversum I → NOS Radio 5 → NOS Radio 1 → Radio 10 Gold → Groot Nieuws Radio	2018
1017	Germany (W)	Suedwestfunk 1 → Suedwestrundfunk 1 → SWR cont.ra	2011
1026	Austria	Österreich 1	1993-96
1035	Portugal	Radio Comercial → Radio Club → Star FM (low power)	Continues
1044	Germany (E)	Radio DDR → DT64 → MDR Info	2013
1053	UK	BBC Radio 1 → Talk Radio → Talk Sport	Continues
1062	Denmark	Danmarks Radio 3 → DR P3/P4 → DR P5 (part-time)	2011
1071	France	France Inter (licensed to La Radio de la Mer in 2003, but they did not launch)	1996
1080	Poland	Czworka → Radio Bis	1997-99
1089	UK	BBC Radio 1 → Talk Radio → Talk Sport	Continues
1098	Slovakia	Bratislava → Slovensko 1 → Radio Regina → Radio Patria	2009
1107	Germany (W)	American Forces Network	2016
1107	Serbia	Radio Novi Sad 1 → Radio Beograd 1 (now low power)	2015-19
1116	Italy	RAI Radio 2 → RAI Radio 1 (low power)	Continues
1125	Croatia	Radio Zagreb 1 → Hrvatski Radio 1	2006-9
1134	Croatia	Radio Zagreb 1 → Hrvatski Radio 1 → Glas Hrvatski	2014
1143	Croatia	Radio Zagreb 1 → Hrvatski Radio 1	1993-96
1143	Germany (W)	American Forces Network	2014
1152	UK	LBC → London Talkback R → London Newstalk R → LBC → LBC News	Continues
1161	France	France Inter (licensed to Ciel AM in 2003, but they did not launch)	1996
1170		<i>No high-power night-time transmissions to Western Europe</i>	-
1179	Sweden	<b>Radio Sweden</b>	2010
1188	Hungary	Petofi Radio → Nemzetiségi	Continues
1197	Germany	<b>Voice of America</b>	2005
1206	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info	2015
1215	UK	BBC Radio 3 → Virgin Radio → Absolute Radio	Continues
1224	Bulgaria	Horizont/ <b>International</b>	2010-13
1233	Czech Republic	Hvezda → CRo2/ CRo6 → Radio Dechovka	Continues

Frequency	Country	Station(s)	Closure
1242	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info	2015
<b>1251</b>	Hungary	Petofi Radio → Kossuth → Danko Radio	<b>Continues</b>
1260	Greece	<b>Voice of America</b> → <b>ERA5</b> → ERA	2015-19
1269	Germany	<b>Deutschlandfunk Foreign Service</b> (W Europe) → Deutschlandfunk	2015
1278	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Bleu	2015
1287	Czech Republic	<b>Radio Prague International</b> → CRo2/ CRo6	2003-5
1296	UK	<b>BBC Eastern European Services</b> → <b>Radio Nationaal</b> (Netherlands commercial service) → Various	2012
1305	Poland	Czworka → Radio Bis	1997-99
1314	Norway	<b>Radio Norway International</b>	2006
1323	Germany (E)	<b>Radio Moscow</b> → <b>Voice of Russia</b>	2013
1332	Italy	RAI Radio 1	2004
<b>1341</b>	UK	BBC Radio Ulster	<b>Continues</b>
1350	France	France Inter ( <i>until 1996</i> ) → Radio Orient ( <i>from 2004</i> )	2013
1359	Germany (E)	<b>Radio Berlin International</b> → Deutschlandfunk	1993-96
1359	Spain	RNE Radio 1 ( <i>starting 1993-96</i> )	2010-14
1368	Poland	Czworka → Radio Bis	1997-99
1377	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info	2015
1386	USSR/Russia	<b>Radio Moscow</b> → <b>Voice of Russia</b>	2014
1395	Albania	<b>Radio Tirana</b> → <b>Transworld Radio</b>	2016
1395	Netherlands	<b>Big L</b> (2005 only) → <b>KBC Radio/ Big L</b> (2009-11)	2011
1404	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info / France Bleu	2015
1413	Serbia	Radio Pristina 1	2000-2
1422	Germany (W)	Saarlaendischer Rundfunk 1c Deutschlandfunk	2015
1431	Germany (E)	Radio DDR → (closed for most of 1990s) → Megaradio → <b>Voice of Russia</b>	2013
1431	USSR/Ukraine	<b>Radio Moscow</b> → <b>Voice of Russia</b>	2013
1440	Luxembourg	<b>Radio Luxembourg</b> → <b>RTL Radio</b> → <b>R Netherlands International</b> → <b>China Radio International</b>	2015
1449	Italy	RAI Radio 2 → RAI Radio 1	2010-14
<b>1458</b>	UK	BBC Radio London → Sunrise Radio → Lyca Radio 1458	<b>Continues</b>
<b>1467</b>	Monaco	<b>Transworld Radio</b>	<b>Continues</b>
1476	Austria	Österreich 1 → Radio 1476/ <b>Radio Austria International</b>	2006-9
1485		<i>International low-power channel</i>	-
1494	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info / France Bleu	2015
1494	USSR/Russia	<b>Radio Moscow</b> → <b>Voice of Russia</b>	2013
1503	Poland	<b>Radio Polonia</b>	1993-96
1512	Belgium	<b>BRT International</b> → <b>R Vlaanderen International (RVI)</b> → <b>RVI/ R Netherlands International</b> → <b>RVI</b>	2008
1521	Slovakia	Hvezda	1993-96
1530	Vatican	<b>Vatican Radio</b>	2012
1539	Germany	<b>Deutschlandfunk Foreign Service</b> (W Europe) → Evangeliums Rundfunk	2010-15
<b>1548</b>	UK	Capital Radio → Capital Gold → Gold	<b>Continues</b>
1557	France	France Culture → Resau Ondes Moyennes → Radio Bleue → France Info	2015
1566	Switzerland	Radio DRS 1	1993-96
1575	Germany (E)	Stimme der DDR → Deutschlandfunk → Mega Radio	2003
1584		<i>International low-power channel</i>	-
1593	Germany (W)	Westdeutscher Rundfunk 1 → <b>Radio Free Europe / Radio Liberty</b>	1993-96
1602		<i>International low-power channel</i>	-

Note that for closures during the night of 31 December and 1 January, the old year is listed.