



THE MONITORING SYSTEM

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IARUMS Region 1 Report 2009

This report gives a general overview of the development of the IARU Monitoring System in Region 1 in 2009, essential material, goals and dependencies for the success of the system.

Member Societies of IARU-Monitoring System-Region 1 and their Intruder Watch Coordinators (December 2009)

Currently there are 87 societies in Region 1 with 19 active in the Monitoring System. That is a roughly 22 % of the societies. It is very important to stay updated with the various societies' board members changes and maintain as updated as possible a list of such personnel. Our aim is to recruit more member societies from countries in Region 1 for the Monitoring System.

In 2009 the member societies of the IARU-MS Region 1 and their MS coordinators are as follows:

ARI (DH7SA, Italy), **ARSK** (5Z4NU, Kenya), **DARC** (DJ9KR, Germany), **EARA** (SU1SA, Egypt), **IRTS** (EI4GXB, Ireland), **KARS** (9K2RR, Kuwait), **MARL** (9H1M, Malta), **MRASZ** (HA7PL, Hungary), **NARS** (5N9AYM, Nigeria), **OeVSV** (OE3DMA, Austria), **PZK** (SP3SUZ, Poland), **RAL** (OD5RI, Lebanon), **REP** (CT4AN, Portugal), **RSGB** (G4BOH, Great Britain), **SARL** (ZS6SM, South Africa), **SRAL** (OH2BLU, Finland), **USKA** (HB9CET, Switzerland), **VERON** (PA0GRU, The Netherlands), **ZRS** (S56ZDB, Slovenia).

IARU-MS-R1 has very close contacts with the coordinators of the IARU MONITORING SYSTEMS for Region 2 and 3. These coordinators are exchanging views and sound files with Wolf and Ulrich by email. As Wolf uses a very expensive and sophisticated software of the Swiss WAVECOM Company he has become a perfect expert for the detection and evaluation of digital signals. His advice is estimated very much in all three IARU Regions. We would wish that each Regional Coordinator had the same equipment as Wolf Hadel DK2OM to compare the results.

IARU-MS-R1 Newsletters and Publications in Amateur Radio Magazines


The internet is the most important media for the Monitoring System. It allows to communicate very quickly with the relevant Amateur Radio organizations. Also it is very helpful to stay in contact with the member societies and contributing amateurs. By means of an email reflector "Intruder Alert" an intruder report can be spread over the whole IARU MONITORING SYSTEM of Regions 1, 2, and 3 within seconds.

In 2009 Wolf DK2OM and Ulrich DJ9KR edited and published 12 monthly newsletters in English language for IARU-MS-R1 homepage. All these newsletters (and the newsletters of previous years) can be found on the homepage of IARU-MS. DARC, the German Amateur Radio Club, is sponsoring this homepage. Also regular intruder reports can be found every second month in CQ-DL-magazine (one full page), the official DARC pamphlet. The author is Ulrich. Besides this written monthly report a short version of this monthly report is aired by the DARC club broadcast "Deutschland-Rundspruch" on various SW, VHF and UHF frequencies. Furthermore Wolf is a regular editor in "Funkamateuer", a commercial German amateur radio magazine to report about the situation of intruders in our ham bands.

The Homepage of DARC-MS is <http://www.iarums-r1.org>

Wolf is the Sysop of the DARC-MS homepage. He is regularly updating the German and the English version on one server. This makes the home page very much up-to-date.

There is a new homepage of **Region 1 of IARU**: <http://www.iaru-r1.org> . Please hit "Monitoring System"!



The left side of the homepage of IARU Monitoring System-Region 1:

The "**Soundfiles**" help to classify and identify the emissions. The folder "**Fishery Buoys on 10 m**" informs about illegal fishery buoys on 10 metres.

"**Latest Intruder News**" is regularly updated by Wolf. It reports the daily changes of the intruder scene. The "**Monitoring Manual**" is very helpful especially to newcomers to get started in the system. The "**Newsletter**" is a compilation of all monthly reports of the participating societies in Region 1. The "**Monitoring Template**" is prepared to fill in intruder reports online and send these to the coordinator. The "**Coordinator's Corner**" from time to time brings comments and explanations on the development of the intruder scene. "**Successful Actions**" highlights the activity of the Monitoring System Region 1, and the "**Image Gallery**" shows pictures of participant people of the System.

The right side of the homepage of IARU Monitoring System Region 1:

The right side is reserved to the **DARC Monitoring System**. Most articles are from the desk of Uli DJ9KR. The reports dealing with intruders are to inform the German Telecommunications Authorities "Bundesnetzagentur" as well as contributors of DARC-MS, amateur radio societies abroad, and persons interested in the intruder watch.

Excellent Cooperation of DARC-MS with the German Telecommunications Authorities "Bundesnetzagentur"

The cooperation of the Coordinator (DK2OM) and the Vice Coordinator (DJ9KR) of the Monitoring System of DARC and Region 1 with the German telecommunications authorities "Bundesnetzagentur" is excellent: The engineers and technicians of the "German Government Monitoring and Receiving Station" of Bundesnetzagentur at Konstanz are very obliging and are handling the Reports of Harmful Interference of IARU-MS-R1 very quickly and effectively. Cooperation is on a very friendly basis. During the year 2009 Wolfgang Hadel had telephone contacts with Bundesnetzagentur almost every day reporting harmful intruders to the officers.

In 2009 German Bundesnetzagentur filed 24 **International Complaints of Harmful Interference** to various telecommunications authorities abroad:

BC interferences by intermodulation, spurious and harmonic transmissions, radar systems, illegal private traffic, embassy traffic, and illegal digital emissions.

Successful Actions in 2009 (Highlights)

DARC member Wolf Büschel DF5XS has found out the “knitting pattern” of an Intermodulation Product on **14000,0 kHz**: At the transmitter site of “**Radio Kashi**” (**Kashgar**), **Xinjiang Autonomous Republic, CHN**, from 1300 – 1400 UTC the tx-ers 13710 and 13855 kHz are mixing. An International Complaint by German telecoms. authorities “Bundesnetzagentur” is on the way. (December 2009 - January 2010)

A combined action of IARU-MS Regions 1 and 3 stopped the rattling and bubbling **TIGER Ionospheric Radar** on Bruny Island, Tasmania, AUS. This radar had occupied the range 10100 – 10150 kHz from October to December 2009. The **Cyprus OTH Radar** disturbed the 10 MHz-band sometimes daily.

DARC-MS detected the “knitting pattern” of an **Intermodulation Product of RTV Tunisia on 7105 kHz**. A complaint was filed by the German telecoms. authorities “Bundesnetzagentur” (= Federal Net Agency) in Juli 2009.

A complaint of Harmful Interference led to the **removal of Slovak Radio (SVK)** from **7200 kHz** to 6080 kHz.

A complaint of Harmful Interference led to the removal of Trans World Radio, transmitting from German soil, from **7170 kHz** to 7315 kHz.

A complaint of Harmful Interference led to the removal of “**Gospel for Asia**”, transmitting from Issoudun, F, off 7200 kHz.

A complaint of Harmful Interference led to the frequency change of teleprinter station “**MGJ**” transmitting in mode F1B from **HMNB Clyde (Faslane)**, in Scotland, G off the frequency 7101,7 kHz.

A complaint of Harmful Interference led to the removal of **US weather fax station “NIK**”, location Boston, Mass. USA, off the frequency **14001,9 kHz**.

A complaint of Harmful Interference stopped the rattling pulses of **French OTH “Nostradamus”**, located near Chartres, F, in the **20 m band**.

Still Harmful Interference by Single-Letter-Beacons, Broadcasters, Teleprinters, Multiplex Stations, Fishnet Beacons, BC Sound of Hope (TWN), the Firedragon Jammer (CHN), and private Intruders

It is deplorable that, since many years, the so called **Single-Letter-Beacons** C (Moscow, RUS), D (Sevastopol, UKR), M (Magadan, RUS), P (Kaliningrad, RUS), V (Tashkent, UZB) have been transmitting their ID without interrupt around 7039 kHz. Also BC stations like **Voice of Korea (North)** (KOR) on 3560 and 7100 kHz, and **Voice of the Broad Masses of Eritrea** on 7100 kHz (ERI) have been abusing Amateur Radio frequencies for many years.

After some BC stations having left the range 7100 kHz to 7200 kHz immediately **military stations** from RUS have occupied their frequencies. In November 2009 DK2OM found digital transmissions from Russian military on **43** frequencies between 7000 and 7200 kHz (bearing support by the German PTT). There are still about 15 BC stations still working in this range.

Also the **British Over-The Horizon-Radar** from Akrotiri, CYP, in 2009 has caused very harmful interference by transmitting in Bands 10, 14, 18 and 21 MHz. Obviously they have changed their transmitting pattern, as the bandwidth as increased sometimes up to **80 kHz**. Parameters: 25 and 50 pulses/sec. Besides that we found OTH Radars from China and the East Coast of the USA on 7 MHz. Codar HF Radars from Italy and Croatia disturbed 24 MHz. After complaints of DK2OM the Codar Radars left 24 MHz. The Russian OTH Radar “**ABM2**” (NATO name: **STEELYARD**) was found several times between 14150 and 14350 kHz (50 pulses/sec – stretching over 10 kHz).

If you carefully monitor the exclusive bands you can find dozens of intruders in spoken voice (SSB, FM) on various frequencies. These intruders are **fishermen, lorry drivers and CIS taxi cabs** and just “**private illicit**”.

Also during Sporadic-E-conditions you can hear hundreds of **fishnet buoys** with their one- or two letter calls in the 10-m-band. Their location is possibly the Mediterranean Sea or the Atlantic Ocean.

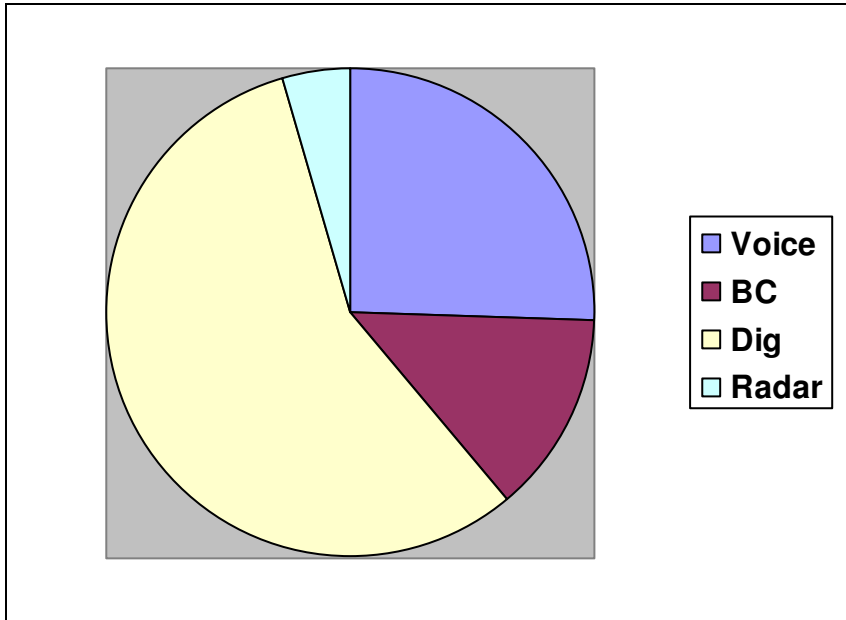
The intruder situation in Region 1 in December 2009

- exclusive bands only (7, 14, 21) - compiled by DK2OM

Voice traffic: More than 50 % from Africa.

Digital intrusions are including CW, F1B, MFSK, PSK and F1C (Fax).
BC only on 7 and 14 MHz.

Voice: 26 % - BC: 13 % - Digital: 58 % - Radar: 5 %



Region 1 - December 2009 – only Digital Intrusions on 7, 14 and 21 MHz compiled by DK2OM

A1A (CW) = 12 %

F1B = 29 %

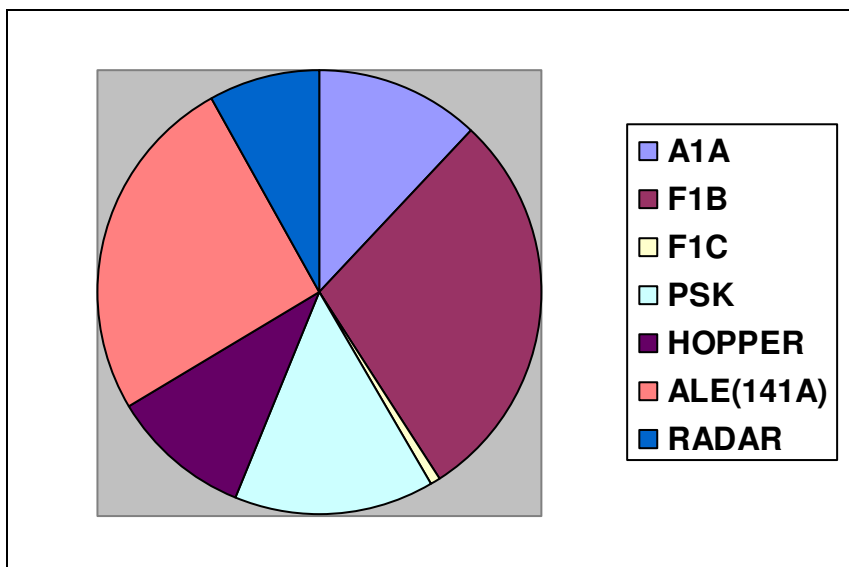
F1C (FAX) = 0.008 %

PSK = 14.4 %

HOPPER (frequency hopper) = 10.4 %

ALE (MIL188-141A) = 25.6 %

RADAR = 8 % (OTH Cyprus, OTH China, OTH Russia, Codar)



**Illegal BC transmissions on 7100 – 7200 kHz
compiled by DJ9KR (Uli) – Vice Co-ordinator IARUMS Region 1**

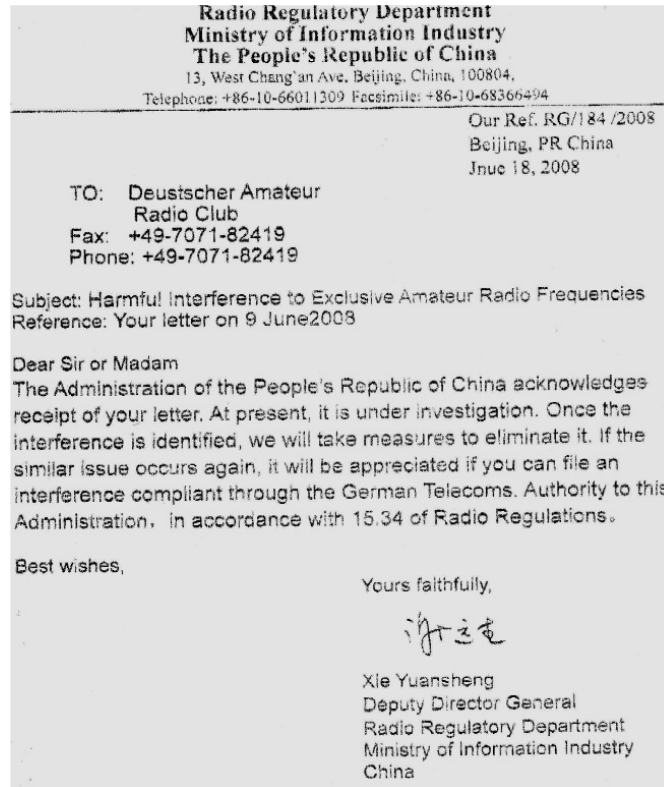
BC Stations transmitting in the 40-m-Band, Range 7100 – 7200 kHz

7100	Voice of Korea (North), KRE
<i>7100</i>	<i>Radio Eritrea, ERI, has moved to 7210 / 7220</i>
7105	Radio China , Nei Menggu PBS, CHN
7105	Sound of Hope, TWN
7105	unid BC, px in Arabic
<i>7105</i>	<i>AIR Lucknow, IND, has moved to 7440</i>
7110	Radio Ethiopia, ETH
<i>7110</i>	<i>Radio Belarus (Hrodna), BLR, has moved to 7280</i>
7115	Radio China , Nei Menggu PBS, CHN
<i>7115</i>	<i>AIR Port Blair, IND, has moved to 7390</i>
<i>7120</i>	<i>Radio China, Xinjian PBS, CHN, starting at 0320 – has moved to 11975</i>
7120	Radio Tchad, TCD
<i>7120</i>	<i>AIR Jaipur, IND, has moved to 7325</i>
<i>7125</i>	<i>Radio China, Xizang PBS, CHN effective 8 May Xizang PBS has moved to 7255 kHz (report Olle Alm, Sweden)</i>
7125	Radio Conakry, GUI
7130	China National Radio-1, CHN
7130	RTM Sarawak, MLA
7130	Sound of Hope, TWN
<i>7130</i>	<i>AIR Shillong, IND, has moved to 7315</i>
7135	Belarus Radio 1, Mahiljou Mogilev, BLR
7140	Voice of Korea (North), KRE
7140	Voice of Russia, Iakutsk, RUS
<i>7140</i>	<i>AIR Hyderabad, IND, has moved to 7420</i>
7145	Laos National Radio, LAO
7145	Radio Hargeisa, SOM
7150	Radio China, Huhhot, CHN
<i>7150</i>	<i>AIR Delhi, IND, has moved to 7370</i>
<i>7150</i>	<i>AIR Imphal, IND, has moved to 7335</i>
<i>7155</i>	<i>Radio China, Xinjian PBS, Urumqi, CHN, starting at 0300 – has moved to 7230</i>
<i>7160</i>	<i>AIR Chennai, IND, has moved to 7380</i>
7160	Christian Vision, 0400 – 0600, Lusaka, ZMB
7165	Radio China, Nei Menggu PBS, CHN
7165	Radio Ethiopia, ETH
7165	Voice of Democratic Alliance, via R. Ethiopia
7165	Voice of the Broad Masses, ERI
<i>7170</i>	<i>Radio China, Xizang PBS, CHN effective 8 May Xizang PBS has moved to 7450 kHz (report Olle Alm, Sweden)</i>
7175	Voice of the Broad Masses, ERI
7180	Voice of Korea (North), KRE
7180	Radio China, Program in English voice, CHN
<i>7180</i>	<i>AIR Bhopal, IND, has moved to 7430</i>
<i>7185</i>	<i>Myanma Radio, BRM – effective 1 April moved to 7200</i>
7185	Sound of Hope, TWN
7185	China National Radio-1, CHN
7185	Radio Kuwait, KWT
<i>7185</i>	<i>SABC, AFS, has moved to 7285</i>
7190	SLBC Colombo, Sri Lanka, CLN
7190	Radio Uzbekistan, Tashkent, UZB
7190	Radio Yemen, San'a, YEM
<i>7195</i>	<i>Radio China, Xinjiang PBS, CHN – has moved to 7205</i>
7195	Voice of the Broad Masses, ERI
7195	Radio Bulgaria, BUL
7195	Radio Uganda, UGA
<i>7195</i>	<i>AIR Mumbai, IND, has moved to 7340</i>
7200	Radio Omdurman, SDN
7200	VO Islamic Republic Iran, Ahwaz, 1630 – 1727, IRN
7200	VO Islamic Republic Iran, Kamalabad, 1830 – 1930, IRN
7200	Voice of Russia, Iakutsk, RUS
7200	Voice of Russia, Moscow, RUS - (2000 – 1600)

- 7200 *Radio Myanma, BRM, effective 1 April moved from 7185*
- 7200 AIR Kolkata, heard 30 April 09, from 7210 - sked: 0230 – 0401v, Sat/Sun 0700 – 1000,
Sun: 1030 – report José Jacob, VU2JOS
- 7200 Media Broadcast “Gospel for Asia”, 2330 – 0030, Issoudun, F
- 7200 Radio Slovakia, 0230 – 0300, directed to S.Am, // 9440, SVK

State: December 2009

DJ9KR received this letter after he had complained of the Hainan-Jammer on 14 MHz.



Financial:

The budget plan for 2009/2010 was prepared by DK2OM and accepted by the IARU Region 1.



Wolf

Respectfully submitted by
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