

Digital Radio Mondiale

Global Country Update

(July 2024)

Countries broadcasting domestically using DRM and countries planning the roll-out of the DRM standard

INDIA



- The rollout of DRM in the AM bands for regular domestic broadcasts by the Indian public broadcaster All India Radio (AIR) is ongoing. Currently 37 high power DRM medium wave and 4 DRM shortwave transmitters are installed. Four transmitters (one each in four metro cities) are now carrying pure DRM transmissions round the clock. The remaining 33 transmitters are working in simulcast mode with one hour daily in pure DRM.
- Over 900 million people in India can receive DRM broadcasts.
- Over **6 million new cars fitted with DRM receivers** are on the roads in India by now. Major car brands using DRM for their infotainment systems are: Maruti Suzuki, Hyundai, Tata, Toyota, MG Motors, and Mercedes Benz.
- At the request of the public broadcaster All India Radio, the DRM Consortium conducted a **DRM for FM demonstration** in Delhi and Jaipur some years back. Full features of DRM in pure DRM (single DRM block with up to 4 services – 3 audio and 1 multimedia each), also simulcast (analogue FM and up to 4 DRM blocks), multi-DRM (up to 6 DRM blocks, with 18 programmes) and DRM in white spaces (up to 5 DRM blocks in the white space of 600kHz between 2 analogue FM stations) were successfully demonstrated without any interference.
- In parallel to the AIR measurements, the DRM Consortium also took its own measurements, which showed excellent results. Based on these measurements, the Consortium prepared a full report available at: s.drm.org/8wBg
- A government decision for digitising the FM band in India is still expected.

PAKISTAN



- Pakistan Broadcasting Corporation (PBC) has approved DRM as the radio standard for use in all frequency bands (AM and FM) already in January 2020.
- Approval was given by the Ministry in June 2023 for the acquisition of a 1000 KW DRM medium wave transmitter to be installed in the country.
- The Federal Minister for Information and Broadcasting reconfirmed on 9th July 2023 that the government had approved the DRM project so that future broadcasts can be heard in clear sound in the entire country and beyond.
- After successfully testing DRM for FM from the PBC headquarters some years back, the broadcaster acquired 20 FM (DRM ready) transmitters installed in various cities. Currently they broadcast in analogue with DRM to be switched on during the second phase of the project.

INDONESIA



- The policy for radio digitisation has been issued by the Ministry of Communication and Informatics in August 2023. Indonesia has announced the adoption of DRM for both medium wave (526.5 – 1606.5kHz) and FM (DRM in VHF Band II (87.0 – 108MHz) and DRM in VHF Band III (174 – 202MHz) with the rest of Band III allocated to DAB+.
- The public broadcaster, Radio Republik Indonesia (RRI) have purchased and installed five DRM FM transmitters installed in strategic locations on the main island, Java. The transmitters, also equipped with content servers, are capable of broadcasting emergency alerts by using DRM's Emergency Warning Functionality (EWF), integrated in the national disaster warning infrastructure. Transmissions started in 2020.
- This follows the successful DRM tests/demonstrations carried out by RRI in both the AM and FM bands; reports of some of these demonstrations are now ITU reference documents.
- The Ministry of Communication and Informatics is drafting the comprehensive digital radio policy now.





CHINA

- Three government ministries, NRTA, MIIT and SAMR, officially published a joint document in September 2023, actively guiding the Chinese automotive industry to support DRM in AM band and encouraging province transmission stations to broadcast domestic DRM services.
- The country has installed and uses seven DRM shortwave transmitters for domestic coverage (aimed for the large populous region of eastern China, primarily, but also for the rest of the country). They can also be used for overseas transmissions by China Radio International (CRI).
- Currently DRM transmissions in mediumwave are being tested, too.



RUSSIA

- **Due to the current political circumstances, the DRM activity in the FM band has been suspended there.**

(DRM was endorsed for the AM bands some years ago. Successful demonstrations took place in Siberia for the AM bands and, previously, in St. Petersburg – for DRM in FM).



SOUTH AFRICA

- The SA government has recommended officially both DRM and DAB+ as solutions for the radio digitisation of the country. The double-headed solution is called Digital Sound Broadcasting (DSB). DSB Services Regulations were issued by the South African Regulator (ICASA) in April 2021.
- This follows the DRM successful demonstrations in both AM and FM bands over several years, proving that the standard works very well and without interferences. The DRM FM demonstration showed there was no interference at all to analogue FM broadcasts. It also demonstrated that in the full FM spectrum of Johannesburg up to extra 48 DRM FM stations could be fitted, as well. These DRM demonstration reports are now ITU reference documents.
- The DSB is the recommended solution for the entire African continent.



GERMANY



- The country has demonstrated extensively the features and benefits of DRM in all frequency bands. DRM is being used by the German Navy for distribution of data to ships navigating around the world.
- **SE-TA 2** is a private, German shortwave station broadcasting via DRM from Waldheim, the Saxony region in East Germany since August 2023 on 6195 kHz.
- **“Funklust”**, a campus broadcaster at Friedrich-Alexander-Universität Erlangen-Nürnberg, has been broadcasting in DRM for FM since 2023. Reception reports confirm that the programmes can be received not only in Germany but also in Russia, USA, Norway, Finland, and New Zealand.

Countries broadcasting internationally in shortwave using the DRM standard

UNITED KINGDOM



- The BBC World Service, one of the world's biggest international broadcasters, uses the DRM standard in shortwave targeting both Europe and Asia. The transmissions are facilitated by Encompass, the UK network operator for international broadcasts.

ROMANIA



- Radio Romania International (RRI) is one of the most active international broadcasters using DRM in shortwave with an extensive DRM schedule in several languages, being often listened to and commented on in countries as far apart as India, United States and Brazil.
- Recently Radiocom, the country's network operator of Radio Romania, has upgraded its DRM Content Server to the latest audio codec, xHE-AAC, including the use of Journaline, facilitating multimedia, for their broadcasts.

INDIA



- All India Radio (AIR) uses the DRM shortwave transmitter at Rajkot to broadcast to the neighbouring countries and to South Asia.



NEW ZEALAND

- The country uses DRM in shortwave for rebroadcasting to the Pacific Islands. Radio New Zealand has recently acquired a new state-of-the-art Ampegon shortwave transmitter, which will improve the RNZ long-distance broadcasts to the region: s.drm.org/mU2R



KUWAIT

- Radio Kuwait has regular DRM broadcasts in shortwave targeting Europe.



UNITED STATES OF AMERICA

- Trans World Radio (TWR) have scheduled broadcasts in shortwave from Guam (KTWR) towards Asia.



FRANCE

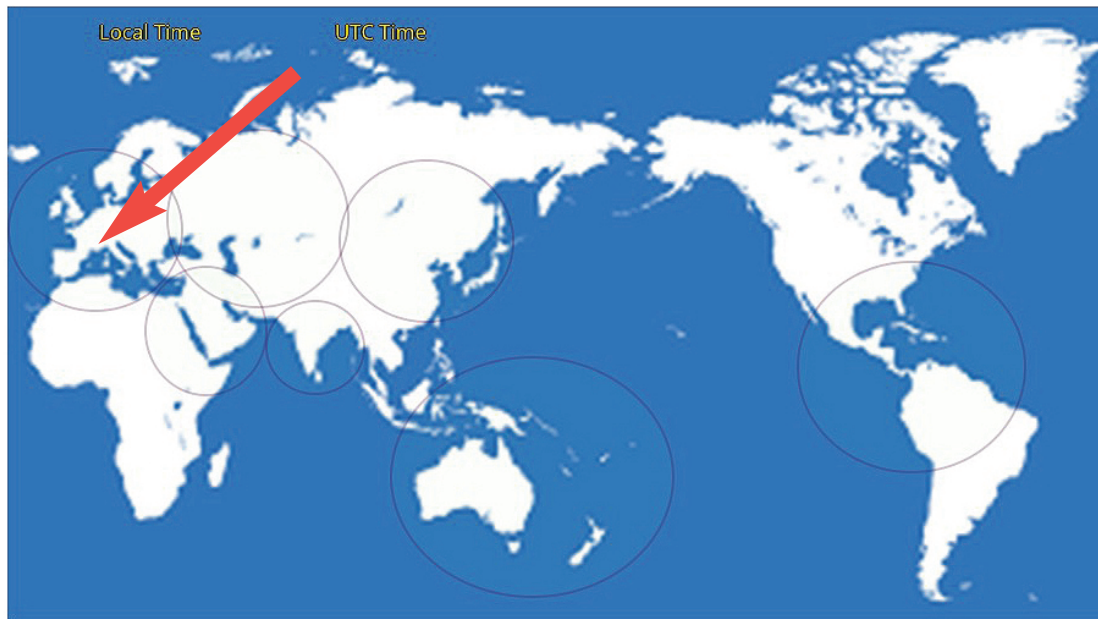
- Telediffusion de France (TDF) has carried out DRM shortwave transmissions and continues to do so, but not on a regular basis.



DRM shortwave transmissions schedules

Broadcasters around the world using the DRM standard in shortwave for international transmissions are listed on the DRM website under the heading '**Broadcast Schedules**': schedule.drm.org/

This complete tool is accessible to both DRM members and non-members and is illustrated in the following picture.



To use the map and the broadcast information, simply click on the circles which cover world regions where transmissions occur and where broadcasts are received. After clicking those circles, the details of shortwave broadcasts to that region will appear in a list below the map.

There is no similar comprehensive list for mediumwave transmissions.

NOTE: The DRM Consortium is grateful for all the information received from broadcasters around the world which use our standard for their regular broadcasts, be they domestic or international. The Consortium can only mention and list those DRM transmissions if we are made aware of them by their broadcasters around the world.

If you have such relevant information, please let our Project Office know of these DRM transmissions by writing to projectoffice@drm.org

Countries considering the adoption of DRM

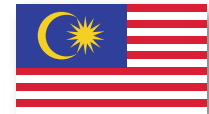
SOUTHERN AFRICA

- The Southern African Development Community (SADC), representing sixteen African countries, in conjunction with the Communications Regulators' Association of Southern Africa (CRASA), representing their thirteen states, have also recommended DRM and DAB+ for their sixteen member countries.
- The African Telecommunications Union (ATU) is considering making the same recommendation.



AUSTRALIA

- Stakeholders in Australia have successfully tested DRM in mediumwave (Wangaratta) and FM (Baranduda) between 2019-2022. The demonstrations were carried out using a variety of desktop and professional receivers as well as in cars and on Android devices. A report on the has been shared with the Regulator.



MALAYSIA

- The country has been showing interest in DRM and in acquiring AM DRM equipment, as some stakeholders have found it the most suitable radio digital standard for future country-wide deployment.



NEPAL

- Radio Nepal is testing DRM in the FM band in the country's capital.



DRM field trials and demonstrations

Extensive DRM tests have been conducted throughout the world over many years.

The results confirm that the DRM standard (both in the AM and VHF/FM bands), enjoying the same features and benefits across all broadcast bands, performs according to the specifications and that it can be rolled out to meet a wide range of broadcasters' requirements, coverage needs and in all types of environments.

Please visit our DRM website where all trials and demonstrations are listed:

www.drm.org/about-drm/field-trials/

For keeping up to date with DRM developments go to www.drm.org, subscribe to our free monthly newsletter (newsletter.drm.org), follow us on social media and become a Consortium member.

You can follow us on



July 2024