

DIGITAL RADIO MONDIALE (DRM)

DRM ENDS THE YEAR WITH SIGNIFICANT DEVELOPMENTS

BY RUXANDRA OBREJA

The Digital Radio Mondiale (DRM) Consortium (www.drm.org) has closed the past months with a series of remarkable advancements that reaffirm its role as the only global digital radio standard capable of operating seamlessly across all frequency bands. The DRM Consortium has recorded some important developments and successes in 2025, supporting its strong commitment to bridging innovation with accessibility.



Josef Troxler, Business Development Manager at Ampegon.

DRM Strengthens its Position Across the World

DRM remains of interest in both AM and the VHF bands. Shortwave, seen as fast fading in recent years, is getting a new lease of life. According to Josef Troxler, Business Development Manager at Ampegon: "In 2025 we have seen increased appeal, orders and wide interest in digital shortwave, either as a long-awaited upgrade to existing transmitters, like in Nigeria, or as a new resilient insurance provision in countries using a mixture of terrestrial and IP platforms."

DRM has been adopted as the standard of choice in several Asian countries. The Chinese government officially adopted the **National DRM Standard for mediumwave and shortwave broadcasting** in July 2025. This historic move represents more than just an upgrade to infrastructure; it is a deliberate investment in the resilience of national communication networks. With the draft Mandatory Standard for In-Vehicle Wireless Reception also including DRM, China is weaving digital radio into the fabric of everyday mobility, setting an example that other nations are already watching closely. The ripple effect of this decision is clear: DRM is not only about enhancing domestic coverage but also about unlocking scalable, long-term solutions for reliable emergency communications. This sets a precedent for other nations considering DRM as a viable solution for digital broadcasting. Countries like South Africa and other African countries are aware of the DRM and DAB solution, grouped under the Digital Sound Broadcasting (DSB) recommendation, made by the African Telecommunication Union.

Other Asian countries are rolling out or focusing on this technology. The good work is continuing in India, which is recording near 8 million cars with DRM (mediumwave) receivers, upgradeable to FM, once the government announces the FM digitisation standard. Pakistan, Nepal, Bangladesh, and possibly Vietnam and Malaysia, are rolling out or focusing on DRM.


In the Asia-Pacific region, 2025 has been a year of steady progress, with Indonesia acquiring and installing DRM FM transmitters with Emergency Warning Functionality, essential for this country located on the Pacific "Ring of Fire."

There have also been transmission breakthroughs, as the DRM multi-channel option was introduced on VHF Band III, spurred by developments in Indonesia (where DRM was adopted alongside DAB in VHF band II and lower part of band III).


At the International Broadcasting Convention (IBC) 2025 in Amsterdam, the **world's first multi-channel DRM transmitter in VHF Band III**, developed by RFmondial (Germany) in collaboration with the German transmitter manufacturer Plisch, was unveiled. This transmitter, capable of combining up to 15 DRM-FM streams into a single spectrum, allows for up to **45 audio channels** and 15 data channels from one unit. The system's low-power, even solar-powered design, makes it ideal for geographically diverse nations like Indonesia, where energy efficiency and cost-effectiveness are paramount.

Receivers and Apps: Expanding the Listener Experience


Receiver development kept pace with transmission advances. Starwaves (Switzerland) introduced its dual-standard SoftRadio app, enabling Android devices to process DRM and DAB+ signals with a compatible USB tuner. Support across all DRM bands ensures maximum flexibility, from shortwave to FM Band III. Meanwhile, CML Micro (UK) and Fraunhofer IIS (Germany) enhanced the DRM1000 broadcast receiver module, now with Journaline services integrated and optimised for compact, low-consumption receivers such as the newly launched N88 (USA). Its adoption in India, already scaled to mass production, demonstrates that manufacturers are engineering receivers with both efficiency and affordability in mind.



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CML Micro Expands DRM1000 broadcast receiver module with integrated Journaline availability and first customer starts mass production in India

DRM1000 Module now with built-in Journaline data interface & IP royalty at no extra cost!



<https://www.drm.org/cml-micro-expands-drm1000-broadcast-receiver-module-with-integrated-journaline-availability-and-first-customer-starts-mass-production-in-india/>

Monitoring and Modulation: Precision Tools for Broadcasters

Monitoring and modulation tools have advanced in parallel. Encompass and Bridge Technologies, both from the UK, launched a professional DRM monitoring system, offering broadcasters precision data on signal integrity and coverage performance. NewGlee (China) contributed a compact monitoring receiver for both AM and FM DRM, while its DRM-FM modulator, featuring digital pre-distortion, opens a direct path for upgrading analogue FM to fully digital services without replacing the infrastructure wholesale.

Fraunhofer also showcased updates to its Digital Radio Head-end Technology and introduced a new DRM Baseband Library for software-defined radios (SDRs), enabling seamless integration into automotive, mobile, and consumer devices.

These incremental solutions lower the barrier to entry for broadcasters of all sizes.

DRM – Special Benefits

One of the key successes of 2025 is linked to the DRM's capability to deliver more than just audio on all frequency bands. Its multimedia applications such as **Emergency Warning Functionality (EWF)** and **distance learning** (e-learning), were also a major focus.

In a groundbreaking pilot held in The Gambia this year, DRM successfully demonstrated its potential to deliver distance education via digital radio. On April 8th, students at St Joseph's Senior Secondary School in the capital received a live maths lesson broadcast from the UK, over 4,000 km away, using DRM shortwave, complete with audio, multilingual text, and interactive digital textbooks. This world-first for Africa showcased how DRM can support learning in remote areas without internet access, using affordable, low-power receivers.

And the capability of DRM to deliver education is now explored even further, as DRM demonstrated how it can transform both education and emergency communication by also using video. Starwaves’ showcase of a 100-kbps educational video transmitted over DRM-FM proved that low-bitrate video is not a futuristic dream but a practical solution today. Applications such as ‘Diveemo’ point the way toward distance learning models that could bridge the gap for underserved communities worldwide. For regions without reliable broadband, this is nothing short of transformative.

The global dimension of DRM’s growth was evident in the Consortium’s outreach. A quarterly newsletter dedicated to **Africa** has been launched to encourage collaboration and knowledge exchange across the continent (see: <https://www.drm.org/drm-africa-newsletter-debuts-today-following-ibc-2025-announcement>), while the **next DRM General Assembly in Jakarta** - co-hosted with *Radio Republik Indonesia* (RRI) in March 2026 - highlights the growing role of Southeast Asia in digital radio development. By extending **Free Associate Membership** for another year (for information, please contact: projectoffice@drm.org), the Consortium has also kept the door open for fresh voices and perspectives from every corner of the globe.

A Connected Future Within Reach with DRM

Facing the challenges of 2025, DRM proved that it is ready, resilient, and rapidly expanding. From China’s national standard adoption to providing solutions to the islands of Indonesia and the growing momentum across Africa and South Asia, the digital radio transformation is accelerating. DRM Consortium members are tackling real-world challenges with developments that deliver scalable solutions for spectrum efficiency, nationwide coverage, emergency alerts, and distance learning.

According to DRM Chairman, Ruxandra Obreja: “These milestones tell a clear story: DRM is not a niche technology but a robust, scalable system ready for wide adoption. It can provide energy-efficient nationwide coverage, deliver multimedia services, and ensure reliability across diverse terrains.”

As manufacturers, broadcasters, engineers, and DXers look to the future, DRM stands as a proven platform that combines efficiency with resilience. The developments of the past months show that the journey towards universal, connected digital radio is no longer speculative - it is already underway.



Ruxandra Obreja,
DRM Chairman.



DRM Consortium Members at WAVES India 2025.