



Implementation Steps of the Digital Radio Mondiale (DRM) Standard

The aim of this short article is to provide the stakeholders in countries ready to roll out the DRM standard with general recommendations on how best to proceed with such a challenging but exciting project, so that the implementation process is smooth and successful.

Radio broadcasters around the world are increasingly looking at how to digitise their free-to-air radio transmissions in order to provide more diverse programme content in excellent sound quality to their domestic and/or international audiences.

The Digital Radio Mondiale (DRM) standard which can be used in all frequency bands (both in the AM as well as in the VHF bands, including FM) can uniquely offer full-country coverage depending on the needs of the individual broadcasters. Thus, every citizen can have access to a modern, more diversified digital radio experience in high quality sound, with images and multi-lingual text on their radio screens both in cars, home radios or even in phones.

In order to start the digital radio implementation project, there needs to be an approved and adopted broadcasters' strategy to bring new digital radio content to the country's citizens, as often mandated by the government directly or through a regulatory body. Following such an approved strategy, roll-out plans can be developed either separately, or as a mixture of several options:

National plan for a new transmitter network with the aim to achieve full country coverage, by installing a few high-power DRM transmitters (with Single Frequency Network - SFN capability, if necessary).

Regional plan with an upgrade of existing regional services to DRM, eliminating redundant transmitters. These plans can come in several forms depending on what needs to be achieved.

- a. **Regional to national migration plan** by gradually adding new high-power DRM transmitters to cover a country fully
- b. **Local coverage plan for big cities** with crowded FM spectrum, aimed at migrating analogue to digital radio by inserting DRM transmissions in the FM band and/or adding VHF band-III coverage (with SFN capability)
- c. **Local coverage plan for small towns and villages** in order to digitise FM services of community stations for instance, thus reducing transmission costs and enhancing the radio experience for local communities.



- d. **All of the above**, producing a very comprehensive **national digital DRM roll-out plan**, generally for large to very large and geographically diverse countries, responding thus to a variety of coverage needs and listeners' needs.

To achieve a successful DRM standard roll-out, it is paramount to involve all key radio stakeholders in this complex process right from the start. This can be done as follows:

Set up a national **Stakeholders' Group** to include the Ministry of Telecommunications and Information, the national Regulator (if not already a department of the Ministry), the local manufacturing industry, network operators, public and commercial broadcasters, possibly major distributors and retailers. At each stage, the Stakeholders' Group's mission is to study the best solutions for rolling out DRM digital radio.

The Group needs to assign a **Project Leader** whose mission it is to drive the entire process and organise the regular meetings with all stakeholders (ideally on a monthly basis).

The Project Leader, in co-operation with the entire Stakeholders' Group team, needs to produce a comprehensive **Project Plan**, with precise tasks and deadlines. Some of the key items of such a document are: the development of a detailed network planning, the decision on budgets and timeframes, the acquisition of the necessary broadcast licenses, the contact with transmitter/antenna manufacturers, the organisation of demos/trials supported by the proper technical set-up.

A fundamental element for the success of digital radio DRM is also the **creation of new and exciting content** which cannot be available in analogue radio.

No digital radio project will be successful, if the broadcaster departments responsible for content production are not fully involved in this process. These departments need to be part of a broadcaster team and should participate in the Stakeholders' Group right from the start. The best way to ensure the take-up of digital radio by listeners is to provide them with exclusive digital programmes (be it music, sports, arts, news, specialised or localised content, etc). This will also encourage and speed up the process of selling digital receivers.

The final decision to roll out DRM in a country **must be communicated officially and effectively on a national and even international level and, first of all, to the manufacturing industry**. The Government needs to indicate a precise date when digital radio (i.e. the broadcasts) will be launched and when digital programmes will be on air on a regular basis. This step is key for the success of any digital radio project. Why is the official communication of this major decision so important?

The manufacturing industry – that means home radio manufacturers, car manufacturers and OEMs, mobile phone manufacturers will become aware of the vast commercial potential digital radio will have for their own businesses. Manufacturers need to trust the government and broadcasters alike, that the digital radio roll-out is not just "a rumour" or a project but that it is a reality with a precise launch date. This is the only real trigger to start the production of DRM digital receivers.



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Distributors and retailers will also become aware of a huge potential business opportunity. The more receivers are ordered and sold by them, the lower their price will become. The price of receivers will always depend on volumes sold and not on volumes produced.

Listeners should be informed about the benefits of the upcoming digital radio broadcasts only a few months (3-6) before the actual launch date, not earlier. By the time the communication reaches the listeners, retailers would have acquired receivers and placed them on shelves in the shops. Through regular advertising and media communications, listeners need to be explained the advantages of the new modern digital radios in order to get them excited about these modern devices, which should become “objects of desire”, widely available in shops.

The implementation recommendations outlined in this article are only a broad guide on how to approach the DRM roll-out by the key stakeholders in a country. More details can be found in the DRM Handbook accessible for free on the Digital Radio Mondiale website, www.drm.org

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