



**Smart Radio
Accessible
to All**

DRM Social Benefits – Distance Learning & Emergency Warning Functionality (EWF)

Alexander Zink

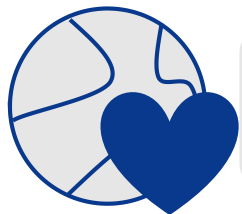
Vice-Chair, DRM Consortium
Chief Business Development Manager DR/BA, Fraunhofer IIS



ABU TC
Delhi, India

November 26, 2022

DRM Consortium



Not for profit organization



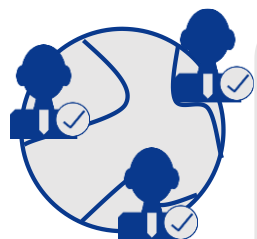
Global Presence

- Forums in Germany, India, Brazil, South Africa
- Expert groups in Pakistan, Indonesia



Over 100 International Members

- Includes: broadcasters, network operators, regulators, manufacturers, research organizations etc.



Internal Experts and Technologists

- Maintains DRM standards
- Provides subject matter expertise and advise

**Become a member
today**

by

writing to

projectoffice@drm.org

DRM Consortium

Select DRM Members



Panasonic

AMPEGON



RFmondial



The not-for-profit DRM Consortium
supports and promotes the DRM Standard and its take-up globally



DRM Distance Learning

Why Use DRM Digital Radio for Education / Training / Essential Information?

- Radio enjoys wide coverage
 - DRM Digital Radio offers both conventional audio and data services
 - DRM can offer **education** and **information** to people wherever they are
 - DRM can provide **education to remote areas or during a pandemic** or crisis
- DRM offers education/information free-to-air to everybody, **without the need for Internet**
 - DRM receivers can **cache information** for convenient **access at any time** (e.g. schooling documents collected over night)



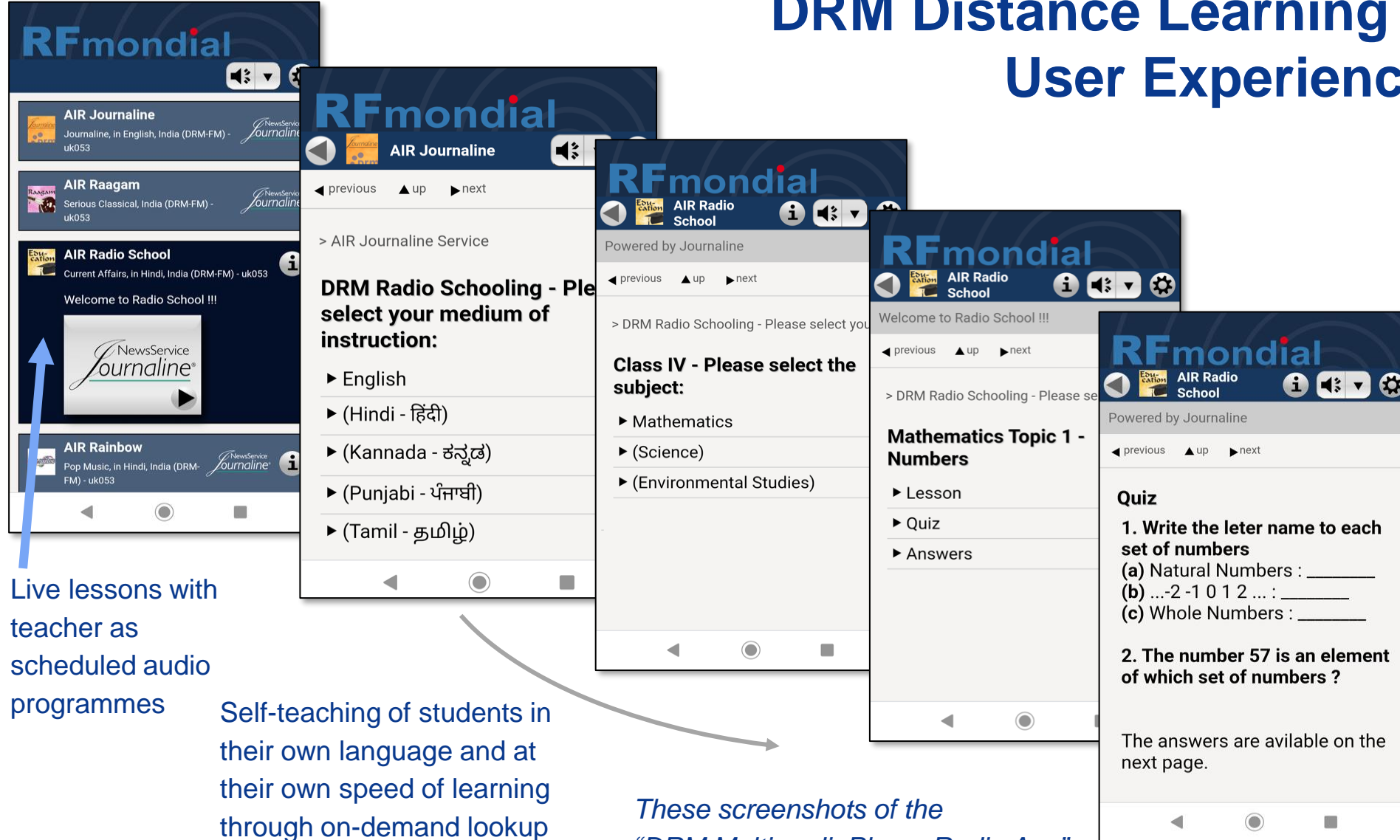
DRM Distance Learning



How it works:

- Lessons and textbook-content via **Journaline**
→ Always available on-demand, even for self-study
- At specific times, accompanied by **live teacher** (audio service)
→ Scheduled by language / class level / subject (up to 3 in parallel)
→ Referencing the current Journaline textbook location
- Options for student **interactivity**:
Journaline quiz, Q&A re-broadcast, etc.

DRM Distance Learning – User Experience

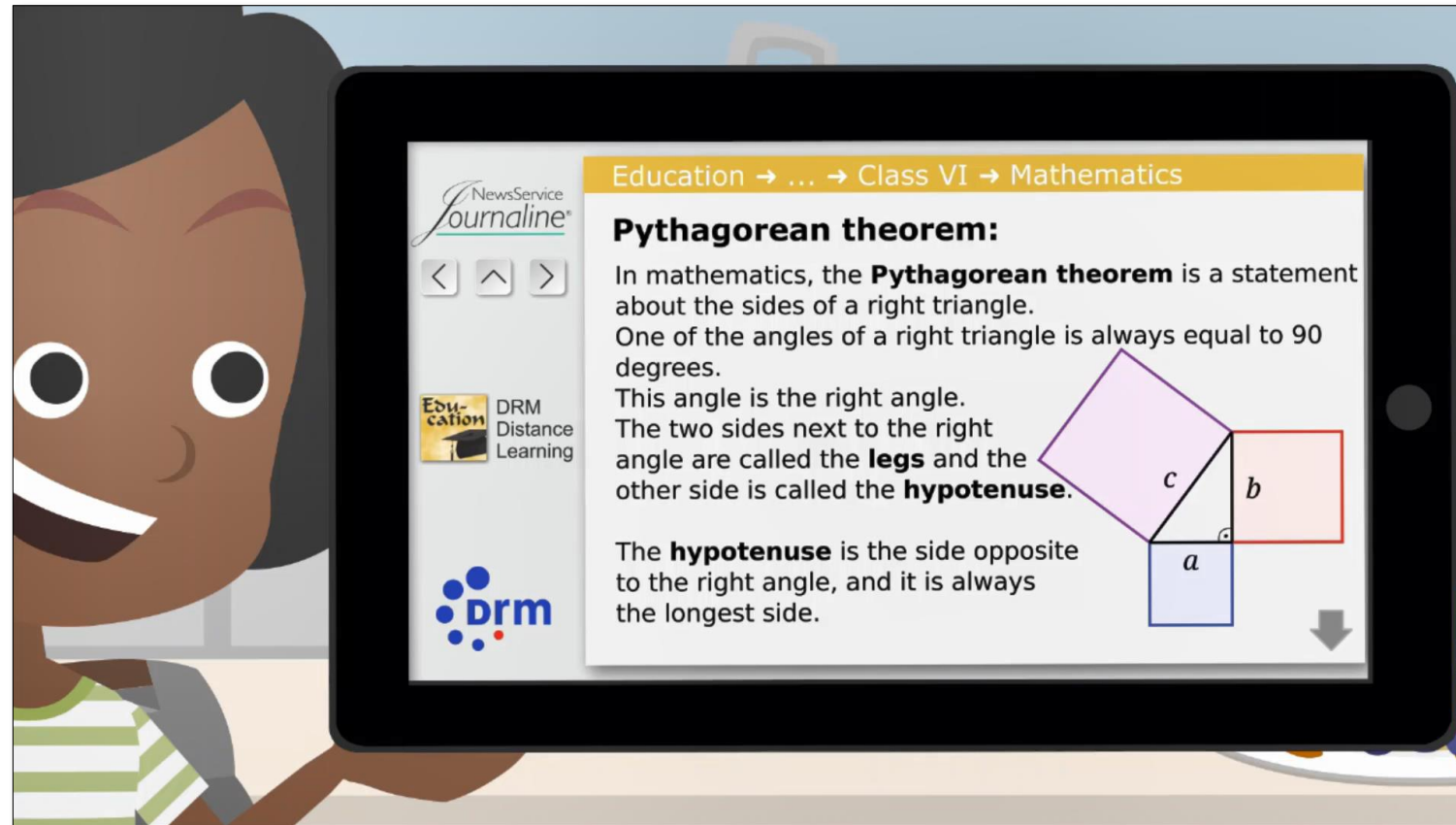


Live lessons with teacher as scheduled audio programmes

Self-teaching of students in their own language and at their own speed of learning through on-demand lookup of lessons

These screenshots of the “DRM MultimediaPlayer Radio App” show an example for a radio schooling service.

DRM Application in Education: Distance Learning



The image shows a cartoon illustration of a young boy with brown skin and a white shirt, holding a tablet. The tablet screen displays a DRM Distance Learning application interface. At the top, a yellow navigation bar reads "Education → ... → Class VI → Mathematics". Below this, the "NewsService Journaline" logo is visible. The main content area is titled "Pythagorean theorem:" and contains the following text: "In mathematics, the **Pythagorean theorem** is a statement about the sides of a right triangle. One of the angles of a right triangle is always equal to 90 degrees. This angle is the right angle. The two sides next to the right angle are called the **legs** and the other side is called the **hypotenuse**." To the right of the text is a diagram of a right-angled triangle with legs labeled 'a' and 'b', and hypotenuse labeled 'c'. Squares are drawn on each side: a blue square on side 'a', a red square on side 'b', and a purple square on side 'c'. Below the diagram, the text states: "The **hypotenuse** is the side opposite to the right angle, and it is always the longest side." The DRM logo is in the bottom left corner of the tablet screen, and a downward arrow is in the bottom right corner.

Project: Distance Learning via DRM Radio

Project Base: West Africa

Partners:

The DRM Consortium and some members will work with a **partner school in West Africa** on a ground-breaking pilot showcasing DRM School in action

Partner School:

Students aged 15-16

Timeline:

2022 / 2023



Project Participants:

- Africa based school
- BBC
- DRM Consortium
- Encompass Digital Media
- Fraunhofer IIS
- Kintronics Lab
- RFmondial
- Starwaves
- TDF

Join the project – contact: projectoffice@drm.org
→ **Invitation extended to ABU members!**

DRM Emergency Warning Functionality (EWF)

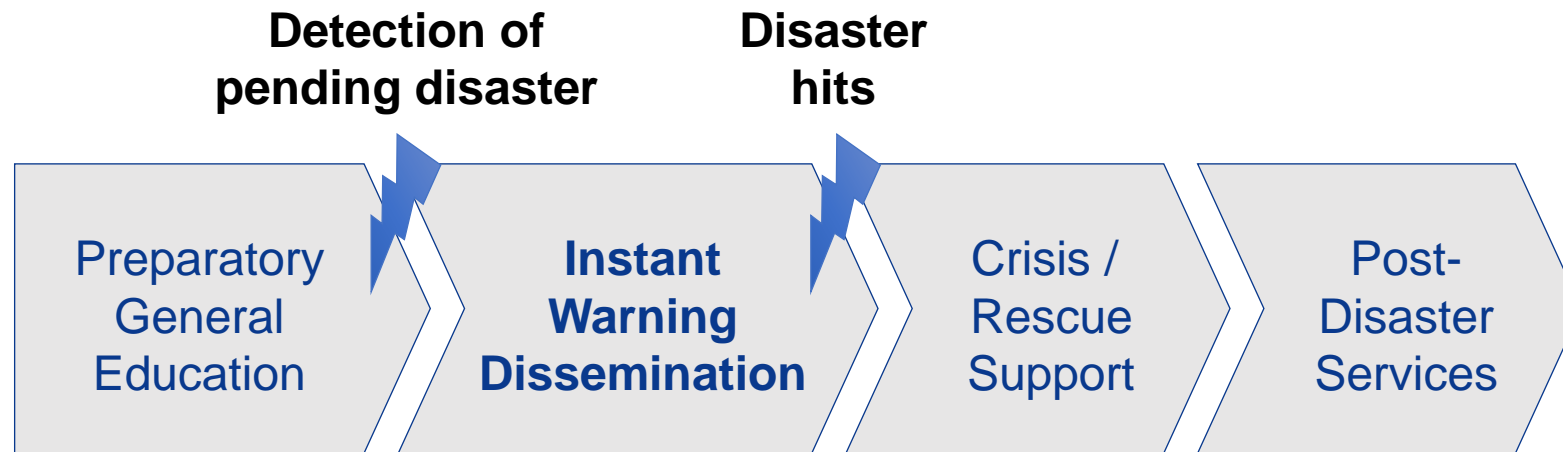
DRM Applications in Focus

Emergency Warning Functionality (EWF)



EWF for Digital Radio provides essential services it:
reaches the affected people reliably
enables detailed multi-lingual text infos / instructions

Digital Radio for Emergency Warnings Disaster Stages



Digital Radio provides essential services in all these stages, as it:

- a) reaches the affected people reliably
- b) enables detailed **multi-lingual text infos**

Emergency Warnings – Why the DRM Standard?

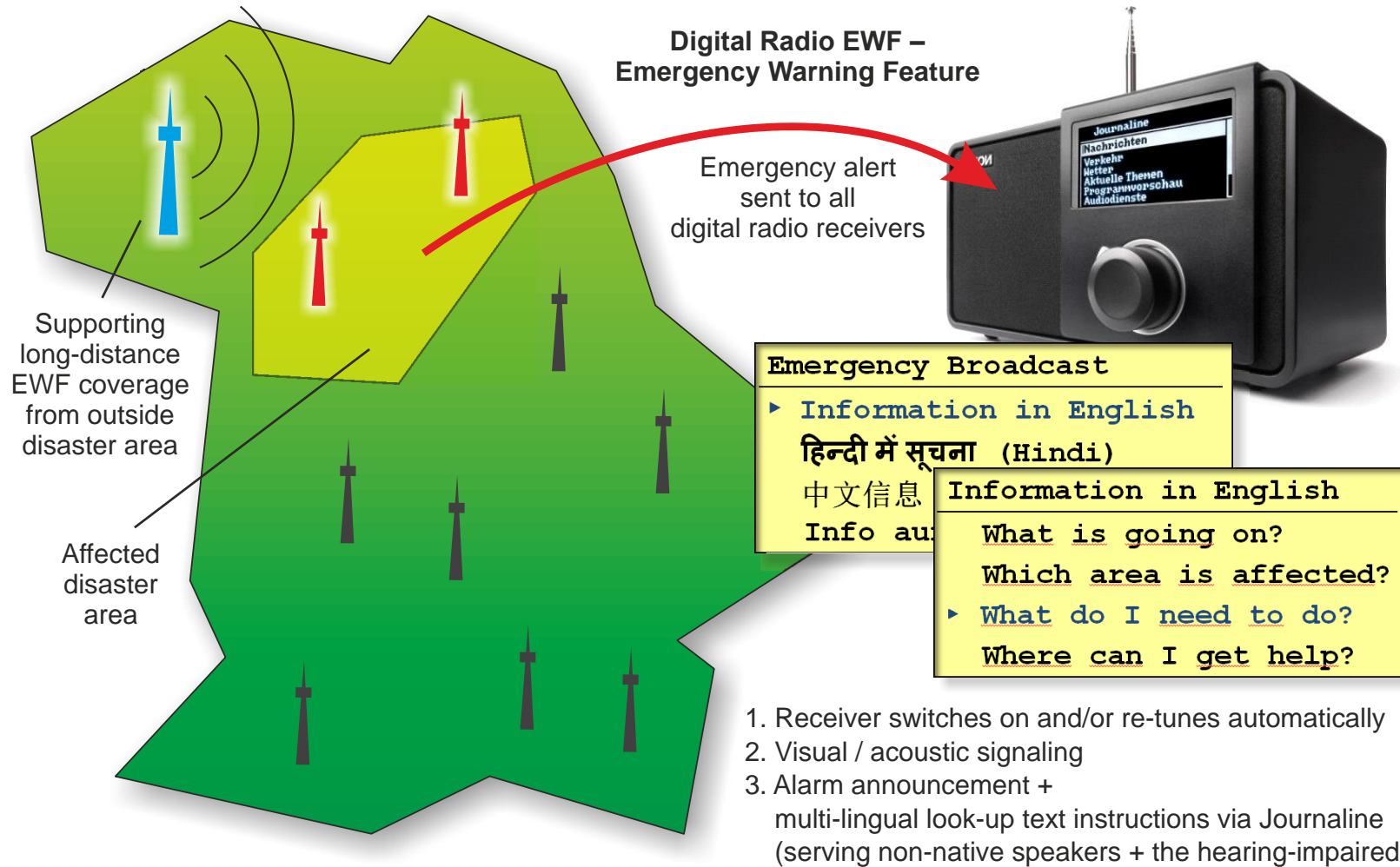


Emergency
Warning
Functionality



DRM Digital Radio standard is an **Open System** and has **all required tools built-in** for a quick and complete mass-notification in case of disasters / catastrophes

DRM Emergency Warning – Overview



DRM Emergency Warning – Journaline Text Component

- Enables provision of very detailed information
- Serves non-native speakers / travelers
- Serves the hearing impaired



Emergency Broadcast

- ▶ **Information in English**
हिन्दी में सूचना (Hindi)
中文信息 (Chinese)
Info auf deutsch



Information in English

- ▶ **What is going on?**
What do I need to do?
Where can I get help?

What is going on?

A major tsunami is expected for the Shanghai region at 16:00 today.
The tsunami will hit the



What do I need to do?

1. Move away from shore!
2. Evacuation has started. Find the nearest meeting point: Look for green



DRM Application: EWF – Emergency Warning Functionality

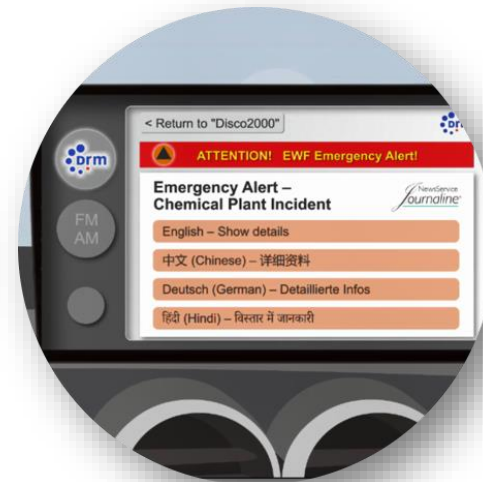




DRM ADDITIONAL RESOURCES

Accessible Guides to DRM:

Videos



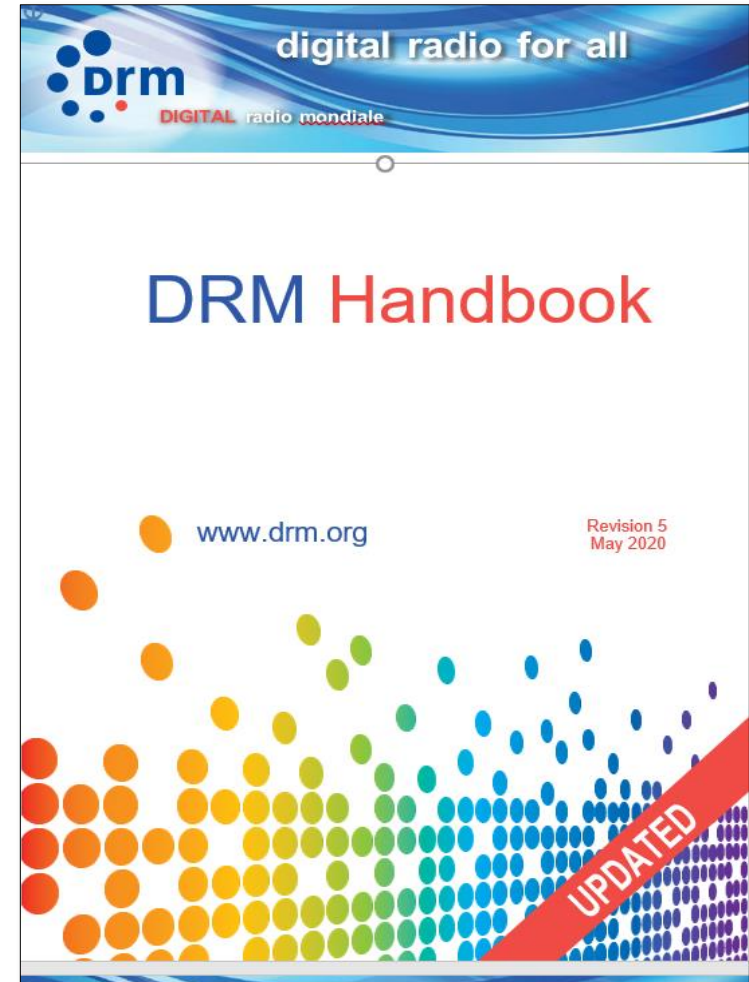
videos.drm.org

All you need to know about DRM Digital Radio

DRM Handbook Version 5

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handbook.drm.org

All DRM Information at your fingertips:
pocket.drm.org



DRM Smart Radio Benefitting All Listeners



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