

DRM – Digital Radio Mondiale

The Future of Radio



What is DRM?

Ø **Digital Radio Mondiale (DRM) is a global open digital radio standard for SW, MW, LW – called DRM30 – and band I/II (FM) – called DRM+**

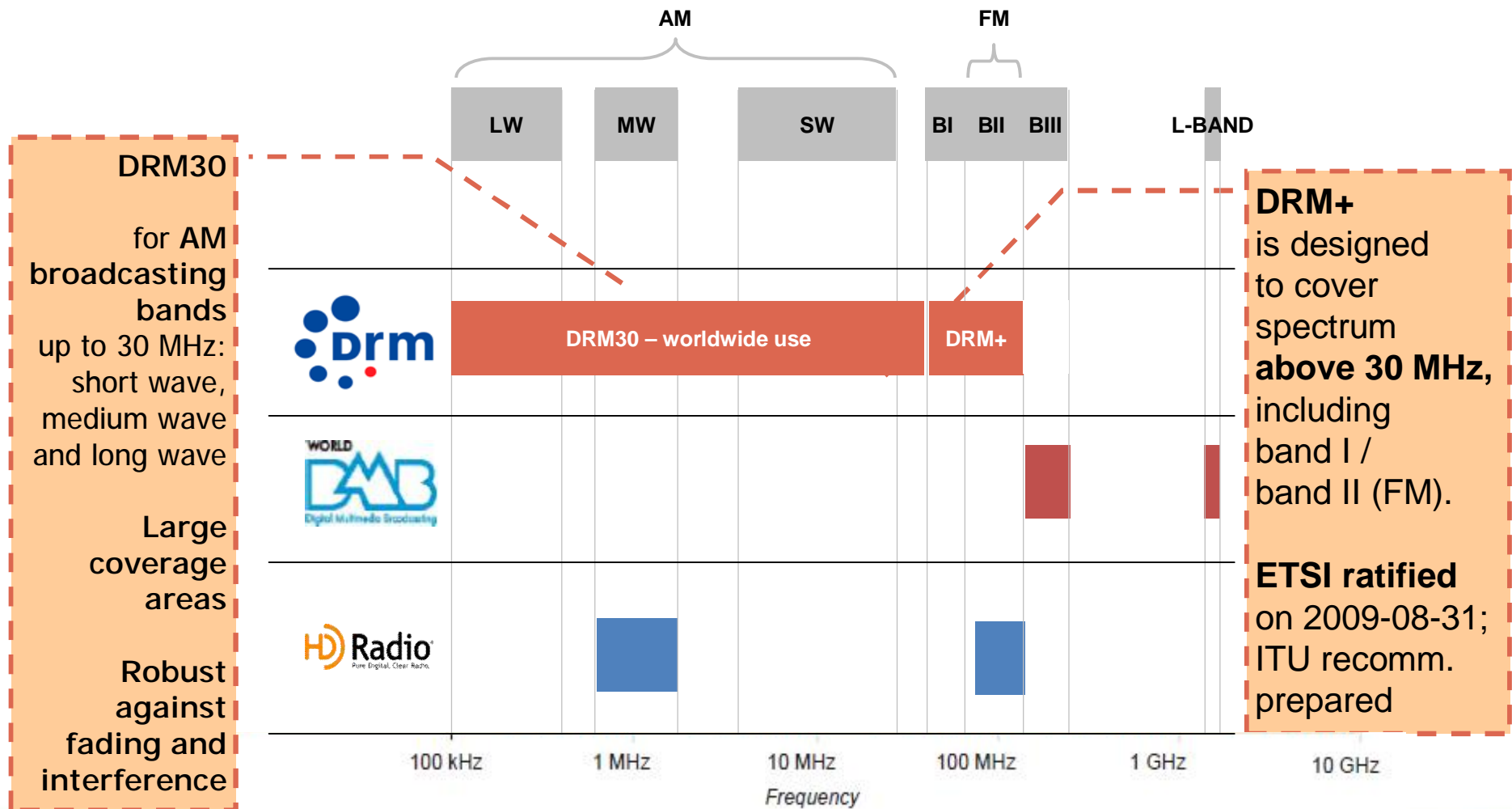
- It can cover large geographic areas but it is also suitable for rural and local markets and on the move
- A low power local service option is also available
- It is a system that complements and works seamlessly with other digital standards
- It is driven by an international consortium



Where DRM fits



Frequency bands & capability of different digital technologies



DRM – The Future of Radio

www.drm.org

Source: Digital Radio Guide, World Broadcasting Unions, Technical Committee; Innovations in AM broadcasting, Thomson, Feb 2008

Background on technology

- Ø Originally developed as a digital broadcast standard for the AM bands using similar techniques developed for DAB and Digital Terrestrial Television (DVB-T)

- Ø DRM System Specification, **ETSI ES 201 980 revised to V3.1.1**
 - includes the additional robustness mode for DRM+
 - includes surround sound support for all modesPublished by ETSI in August 2009

- Ø **ITU-R BS.1114** – “Systems for terrestrial digital sound broadcasting to vehicular, portable and fixed receivers in the frequency range 30 - 3000 MHz”
Proposal to add Digital System G – DRM+

DRM – Digital Radio Mondiale Consortium



Ø DRM Consortium founded in 1998

- **non-commercial**,
promotes the adoption of the DRM standard
- **around 100 members**
incl. broadcasters, manufacturers, network operators, regulators,
research institutes, etc.

The key benefits of DRM and DRM+ are

- Near FM-quality in stereo
- Data such as text, pictures and html
- Easy-tuning on stations name

LISTENERS

- Replace receivers with digital AM receivers
- Increase the market potential
- Identify possibilities for new areas of interest

MANUFACTURERS

- Upgrade of existing transmitters
- Multilingual programs are possible + extra infos
- Reduced power consumption of 40-50%

BROADCASTERS

- Use less spectrum and release spectrum for other use
- An international standard
- Lower cost of operation (power cost)

REGULATORS

The advantages of the DRM system

- Ø It is 21st c. technology with lots of features (audio, video, data)
- Ø It is NOT proprietary
- Ø It is NOT exclusive to one band (works on AM and FM bands)
- Ø It is NOT multiplex dependent
- Ø It is NOT difficult to implement (existing infrastructure)
- Ø It is NOT more expensive than other digital technologies, possibly cheaper

• IT IS HERE, READY TO USE AND MEET YOUR NEEDS !