

# DMR

DIGITAL MOBILE RADIO ASSOCIATION



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# Agenda

- What is DMR?
- DMR Association
  - Formation
  - Objectives
  - Membership
- Reasons for DMR



# What is DMR?

- A digital PMR standard ratified by ETSI in 2005 covering unlicensed and licensed conventional and trunked modes of operation
- The worldwide market leading open standard for digital two way radio for business and professional users
- A two slot TDMA technology operating in 12.5 kHz channels with 4 level FSK modulation and advanced FEC techniques
- Defined for PMR frequency bands from 66-960MHz



# Formation of the Association

- The DMR Association is an evolution of the DMR-MOU set up at the time of the standardisation of DMR by ETSI in 2005
- The original MOU group undertook background work such as deciding the choice of vocoder but then ceased activity
- Market evolution (DMR market entrants, competitive landscape) has meant the makers of DMR products and the two way radio user community need an active trade body



# Objectives

- Promotion of the standard to:
  - **Users:** for informed choices about DMR products
  - **Regulators:** for fair allocation of spectrum
  - **Standards bodies:** for recognition of the standard
  - **Equipment and service providers:** to increase user choice and to enable market growth through a greater supply of equipment and services
- Define and run an interoperability process for DMR
- Forum for discussion on the standard



# Interoperability in practice



Mr. Bortolaso, Director of Civil Protection in Italy, holding a DMR transceiver used for security at the G8 summit with infrastructure from a second vendor

# Membership













**KENWOOD**  
Listen to the Future



- Plus discussions with additional organisations ongoing  
Including manufacturers, test equipment makers



# Product Availability

Company	Products	Status
	Subscribers/ Infrastructure	Announced
	Simulcast Infrastructure	Available
	Subscribers/Infrastructure	Announced
	Infrastructure	Announced
	Protocol Stack	Announced
	Simulcast Infrastructure	Available
	Subscribers/Infrastructure	Available
	Test Equipment	Available
	Subscribers/Infrastructure	Announced
	Test Equipment	Available

# Reasons for DMR

- Predictable doubling of capacity in existing 12.5 kHz licensed channels
- Backwards spectrum compatibility with 12.5 KHz analogue systems
- Efficient and simple use of infrastructure equipment saving money, power and work
- Power efficient



# Reasons for DMR

- Ease of use and creation of data applications
- System flexibility through simultaneous voice and data calls, two way calls, double data rates enabled by two slot TDMA
- Advanced control features
- Benefit of an open standard



**DMR**



Thank you..

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