

1. Record Nr.	UNINA9910139923603321
Titolo	Digital audio broadcasting : principles and applications of DAB, DAB+ and DMB // editors, Wolfgang Hoeg and Thomas Lauterbach
Pubbl/distr/stampa	Chichester, U.K. : , : Wiley, , 2009 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2009]
ISBN	1-282-18888-7 9786612188886 0-470-74620-3 0-470-74619-X
Edizione	[3rd ed.]
Descrizione fisica	1 online resource (454 p.)
Altri autori (Persone)	HoegWolfgang LauterbachThomas
Disciplina	621.384
Soggetti	Digital audio broadcasting Digital communications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	List of contributors -- Prefaces -- Foreword -- Abbreviations -- 1 Introduction -- 1.1 General -- 1.2 Radio in the Digital Age -- 1.3 Benefits of the Eureka 147 DAB Systems Family -- 1.4 History of the Origins of DAB -- 1.5 International Standardisation -- 1.6 Relations to Other Digital Broadcasting Systems -- 2 System Concept -- 2.1 The Physical Channel -- 2.2 The DAB Transmission System -- 2.3 The DAB Multiplex -- 2.4 Conditional Access -- 2.5 Service Information -- 3 Audio Services and Applications -- 3.1 General -- 3.2 Audio Coding and Decoding -- 3.3 Characteristics of DAB Audio Coding -- 3.4 DAB+ Coding Schemes -- 3.5 Programme-associated Data -- 3.6 Multichannel Audio with DAB -- 3.7 Other Advanced Audio Application -- 3.8 Quality of Service -- 3.9 Audio Levels -- 4 Data Services and Applications -- 4.1 General -- 4.2 Data Application Signalling and Access -- 4.3 The Multimedia Object Transfer Protocol -- 4.4 Standardised MOT User Applications -- 4.5 Text Based Services -- 4.6 Traffic Information Services and Navigation Aids -- 4.7 Other Data Transmission Mechanisms -- 5 Provision of Services -- 5.1 The DAB

Service Landscape -- 5.2 Use of Existing Infrastructures -- 5.3 Need for New Infrastructure -- 5.4 Relationship between DAB Data Services and RDS -- 5.5 Electronic Programme Guide (EPG) for DAB -- 5.6 Possible New Audio Services -- 6 Collection and Distribution Networks -- 6.1 General -- 6.2 The Collection Network -- 6.3 The Distribution Network -- 6.4 Example of Implementation -- 7 The Broadcast Side -- 7.1 General -- 7.2 Introduction to DAB Networks -- 7.3 Particularities of Single Frequency Networks (SFNs) -- 7.4 DAB Transmitters -- 7.5 Radio Frequency Propagation Aspects -- 7.6 Coverage Planning -- 7.7 Coverage Evaluation and Monitoring of SFNs -- 7.8 Frequency Management -- 8 The Receiving Side -- 8.1 General -- 8.2 RF Front-end -- 8.3 Digital Baseband Processing -- 8.4 Audio Decoder -- 8.5 Interfaces -- 8.6 Integrated Circuits for DAB -- 8.7 Receiver Overview. 8.8 Receiver Features -- 9 Mobile Television and Multimedia -- 9.1 Overview -- 9.2 DAB - DMB -- 9.3 DAB- IPDC -- 9.4 Application Standardisation -- 9.5 Conclusions -- Appendix 1 DAB Parameters for Modes I, II, III and IV -- Appendix 2 Frequencies for Terrestrial and Satellite DAB Transmission -- Appendix 3 DAB System Protocol Stack -- Bibliography -- Index.

Sommario/riassunto

Revised with the latest standards and updates of all new developments The new digital broadcast system family is very different from existing conventional broadcast systems. It is standardised in a large number of documents (from ITU-R, ISO/IEC, ETSI, EBU, and others) which are often difficult to read. This book offers a comprehensive and fully updated overview of Digital Audio Broadcasting (DAB, DAB+) and Digital Multimedia Broadcasting (DMB), and related services and applications. Furthermore, the authors continue to build upon the topics of the previous editions, including audio coding, data services, receiver techniques, frequencies, and many others. There are several new sections in the book, which would be otherwise difficult to locate from various sources. Key Features: . The contents have been significantly updated from the second edition, including up-to-date coverage of the latest standards . Contains a new chapter on Digital Multimedia Broadcasting . “Must-have” handbook for engineers, developers and other professionals in the field This book will be of interest to planning and system engineers, developers for professional and domestic equipment manufacturers, service providers, postgraduate students and lecturers in communications technology. Broadcasting engineers in related fields will also find this book insightful.
