1.	Record Nr.	UNINA9910140493303321
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	Titolo	Aeronautical air-ground data link communications / / Mohamed Slim Ben Mahmoud [and four others]
	Pubbl/distr/stampa	Hoboken, New Jersey : , : ISTE Ltd/John Wiley and Sons Inc, , 2014
	ISBN	1-119-00685-6
		1-119-00695-3
		1-119-00677-5
	Descrizione fisica	1 online resource (151 p.)
	Collana	Focus series, , 2051-2481
	Disciplina	669.1092368
	Soggetti	Air traffic control
		Airports - Communication systems
	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	Cover; Title Page; Copyright; Contents; Foreword; Introduction; I.1. Objectives and motivations; I.2. Organization of the book; 1: Current Communication Radio Systems for Data Link; 1.1. History and definition; 1.1.1. From voice to data link; 1.1.2. Communication traffic classes; 1.1.3. Main actors and organizations; 1.2. Systems architecture; 1.2.1. ACARS; 1.2.2. FANS 1/A; 1.2.3. ATN baseline 1 and FANS 2/B; 1.2.3.1. ATN internetworking; 1.2.3.2. VDL2 and ACARS over AVLC; 1.2.3.3. ATN and IP suite; 1.2.3.4. ATN applications; 1.2.3.5. Deployment status
		1.3. Radio subnetworks for air-ground communications1.3.1. Radio resource management; 1.3.1.1. Frequency bands for aeronautics; 1.3.1.2. Frequency sharing and multiple access; 1.3.1.3. Random access basics; 1.3.2. VHF communications; 1.3.2.1. ACARS; 1.3.2.2. VDL mode 2; 1.3.3. SATCOM; 1.3.3.1. Geostationary satellites and related constraints; 1.3.3.2. Definition of AMSS; 1.3.3.3. Physical channels; 1.3.3.4. Procedures; 1.3.3.5. MTSAT AMSS capacity augmentation; 1.3.3.6. LEO satellites alternative, brief presentation of Iridium; 1.3.4. HF communications
		1.3.4.1. Beyond line of sight communications using HF1.3.4.2. Implementation of data link using HF channels, motivation, access method and expected performances; 1.3.4.3. Performances; 2:

Emerging and Future Communication Radio Systems for Data Link; 2.1. Data link related research projects; 2.1.1. Topics of interest; 2.1.1.1. Emerging communication systems; 2.1.1.2. Aeronautical network services; 2.1.2. European project: SESAR; 2.1.2.1. General project description; 2.1.2.2. The different SESAR WPs related to data link communication technologies; 2.1.3. North American project: NextGen 2.1.4. Designing emerging communication systems for data link (for both SESAR WP and NextGen technologies)2.2. Emerging communication systems; 2.2.1. Integrated end-to-end communication architecture; 2.2.1.1. Aeronautical communication usages; 2.2.1.2. Multilink communications; 2.2.2. Future aeronautical communication systems; 2.2.2.1. AeroMACS; 2.2.2.1.1. AeroMACS network architecture; 2.2.2.1.2. AeroMACS profile; 2.2.2.2. L-DACS; 2.2.2.2.1. L-DACS1 physical layer and system architecture; 2.2.2.2.2. L-DACS2 physical layer and system architecture
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3.3.2. IP mobility candidate solutions

Sommario/riassunto	This book deals with air-ground aeronautical communications. The main goal is to give the reader a survey of the currently deployed, emerging and future communications systems dedicated to digital data communications between the aircraft and the ground, namely the data link. Those communication systems show specific properties relatively to those commonly used for terrestrial communications. In this book, the system architectures are more specifically considered from the access to the application layers as radio and physical functionalities have already been addressed in detail in others book