

ISO 20207:2015-08 (E)

Space data and information transfer systems - CCSDS Space Link Protocols over ETSI DVB-S2 Standard

Contents	Page
1 INTRODUCTION.....	1-1
1.1 BACKGROUND	1-1
1.2 PURPOSE.....	1-1
1.3 SCOPE.....	1-1
1.4 APPLICABILITY.....	1-2
1.5 DOCUMENT STRUCTURE	1-2
1.6 NOMENCLATURE	1-3
1.7 DEFINITIONS AND CONVENTIONS.....	1-3
1.8 PATENTED TECHNOLOGIES	1-5
1.9 REFERENCE DOCUMENTS.....	1-5
2 OVERVIEW	2-1
2.1 ARCHITECTURE.....	2-1
2.2 SUMMARY OF FUNCTIONS	2-1
2.3 INTERNAL ORGANIZATION	2-2
3 CADU STREAM GENERATION.....	3-1
3.1 OVERVIEW	3-1
3.2 INPUT CCSDS TRANSFER FRAMES.....	3-1
3.3 CHANNEL ACCESS DATA UNIT.....	3-1
4 DVB-S2 TRANSMISSION.....	4-1
4.1 OVERVIEW	4-1
4.2 DVB-S2 MODE ADAPTATION FORMAT	4-1
4.3 AVERAGE SIGNAL ENERGY.....	4-1
4.4 SHAPING FILTERING	4-2
5 MANAGED PARAMETERS	5-1
5.1 OVERVIEW	5-1
5.2 PERMANENT MANAGED PARAMETERS	5-1
5.3 VARIABLE MANAGED PARAMETERS	5-3
ANNEX A SERVICE DEFINITION (NORMATIVE)	A-1
ANNEX B SECURITY, SANA, AND PATENT CONSIDERATIONS (INFORMATIVE)	B-1

<u>Section</u>	<u>Page</u>
ANNEX C ACRONYMS AND TERMS (INFORMATIVE)	C-1
ANNEX D DVB-S2 SPECTRAL EFFICIENCIES (INFORMATIVE)	D-1

Figure

1-1 Bit Numbering Convention.....	1-5
2-1 Relationship with OSI Layers.....	2-1
2-2 Stream Format While Transmitting CCSDS Transfer Frames Using DVB-S2.....	2-3

Table

5-1 Permanent Managed Parameters for Transfer Frame Synchronization	5-2
5-2 Permanent Managed Parameters for DVB-S2 Transmission	5-2
5-3 Variable Managed Parameters	5-3