

ISO 20206:2015-08 (E)

Space data and information transfer systems - IP over CCSDS space links

Contents	Page
1 INTRODUCTION.....	1-1
1.1 PURPOSE.....	1-1
1.2 SCOPE.....	1-1
1.3 DEFINITIONS.....	1-1
1.4 CONVENTIONS.....	1-2
1.5 REFERENCE DOCUMENTS.....	1-3
2 OVERVIEW	2-1
2.1 GENERAL.....	2-1
2.2 SERVICE OVERVIEW	2-2
2.3 FUNCTIONS OVERVIEW.....	2-2
3 SERVICE DEFINITION.....	3-1
3.1 OVERVIEW	3-1
3.2 SUMMARY OF PRIMITIVES	3-1
3.3 SUMMARY OF PARAMETERS	3-1
3.4 SERVICE ASSUMED FROM THE UNDERLYING SUBNETWORK.....	3-2
3.5 IPOC SERVICE PRIMITIVES	3-3
4 PROTOCOL DEFINITION	4-1
4.1 PROTOCOL DATA UNIT.....	4-1
4.2 PROTOCOL PROCEDURES AT THE SENDING END.....	4-2
4.3 PROTOCOL PROCEDURES AT THE RECEIVING END.....	4-2
ANNEX A SECURITY, SANA, AND PATENT CONSIDERATIONS (INFORMATIVE)	A-1
ANNEX B NETWORK VIEWS (INFORMATIVE).....	B-1
ANNEX C END-TO-END UPLINK/DOWNLINK FUNCTIONAL CONTEXT DIAGRAMS (INFORMATIVE)	C-1
ANNEX D INFORMATIVE REFERENCES (INFORMATIVE)	D-1
ANNEX E ACRONYM LIST (INFORMATIVE)	E-1

Figure

1-1 Bit Numbering Convention.....	1-3
2-1 Scope of IP over CCSDS Data Links	2-1

<u>Figure</u>	<u>Page</u>
2-2 CCSDS IP Transfer Services Context Diagram	2-2
2-3 Relationship of IPE to the Encapsulation Service	2-3
4-1 IPE Header Format and Placement.....	4-1
B-1 IP over AOS VCP Service Using CCSDS IPE plus Encapsulation Service	B-1
C-1 Conceptual End-to-End Uplink CCSDS Functional Flow for Transferring IP PDUs.....	C-1
C-2 Conceptual End-to-End Downlink CCSDS Functional Flow for Transferring IP PDUs.....	C-2

Table

3-1 Recommended CCSDS Transfer Services for Transferring IP PDUs.....	3-2
---	-----