

# ISO 22669:2013-06 (E)

## Space data and information transfer systems - Space link extension (SLE) - Return-all-frames service

---

Contents	Page
<b>1 INTRODUCTION.....</b>	<b>1-1</b>
1.1 PURPOSE OF THIS RECOMMENDED STANDARD.....	1-1
1.2 SCOPE.....	1-1
1.3 APPLICABILITY.....	1-1
1.4 RATIONALE.....	1-2
1.5 DOCUMENT STRUCTURE.....	1-2
1.6 DEFINITIONS, NOMENCLATURE, AND CONVENTIONS.....	1-5
1.7 REFERENCES.....	1-13
<b>2 DESCRIPTION OF THE RETURN ALL FRAMES SERVICE.....</b>	<b>2-1</b>
2.1 OVERVIEW.....	2-1
2.2 SPACE LINK EXTENSION REFERENCE MODEL.....	2-1
2.3 SERVICE MANAGEMENT.....	2-3
2.4 ARCHITECTURE MODEL—FUNCTIONAL VIEW.....	2-4
2.5 ARCHITECTURE MODEL—CROSS SUPPORT VIEW.....	2-7
2.6 FUNCTIONAL DESCRIPTION.....	2-7
2.7 OPERATIONAL SCENARIO.....	2-17
2.8 SECURITY ASPECTS OF THE SLE RAF TRANSFER SERVICE.....	2-18
<b>3 RAF SERVICE OPERATIONS.....</b>	<b>3-1</b>
3.1 GENERAL CONSIDERATIONS.....	3-1
3.2 RAF-BIND.....	3-14
3.3 RAF-UNBIND.....	3-20
3.4 RAF-START.....	3-24
3.5 RAF-STOP.....	3-29
3.6 RAF-TRANSFER-DATA.....	3-31
3.7 RAF-SYNC-NOTIFY.....	3-36
3.8 RAF-SCHEDULE-STATUS-REPORT.....	3-39
3.9 RAF-STATUS-REPORT.....	3-43
3.10 RAF-GET-PARAMETER.....	3-46
3.11 RAF-PEER-ABORT.....	3-50
<b>4 RAF PROTOCOL.....</b>	<b>4-1</b>
4.1 GENERIC PROTOCOL CHARACTERISTICS.....	4-1
4.2 RAF SERVICE PROVIDER BEHAVIOR.....	4-4

<u>Section</u>	<u>Page</u>
<b>ANNEX A DATA TYPE DEFINITIONS (NORMATIVE)</b> .....	<b>A-1</b>
<b>ANNEX B CONFORMANCE MATRIX (NORMATIVE)</b> .....	<b>B-1</b>
<b>ANNEX C INDEX TO DEFINITIONS (INFORMATIVE)</b> .....	<b>C-1</b>
<b>ANNEX D ACRONYMS (INFORMATIVE)</b> .....	<b>D-1</b>
<b>ANNEX E INFORMATIVE REFERENCES (INFORMATIVE)</b> .....	<b>E-1</b>

Figure

1-1 SLE Services Documentation .....	1-4
2-1 Return Space Link Processing SLE-FG.....	2-4
2-2 RCF Service Production and Provision .....	2-6
2-3 Example of the Management and Provision of RCF Service .....	2-7
2-4 Simplified RCF Service Provider State Transition Diagram.....	2-10
2-5 Mapping of RCF Service Operations to SLE-PDUs.....	2-12
2-6 Buffers and Delivery Modes .....	2-17

Table

2-1 RAF Operations .....	2-9
3-1 Setting of RAF Service Configuration Parameters .....	3-6
3-2 RAF-BIND Parameters .....	3-15
3-3 RAF-UNBIND Parameters .....	3-21
3-4 RAF-START Parameters .....	3-25
3-5 RAF-STOP Parameters.....	3-29
3-6 RAF-TRANSFER-DATA Parameters.....	3-31
3-7 RAF-SYNC-NOTIFY Parameters .....	3-36
3-8 RAF-SCHEDULE-STATUS-REPORT Parameters.....	3-40
3-9 RAF-STATUS-REPORT Parameters.....	3-43
3-10 RAF-GET-PARAMETER Parameters .....	3-46
3-11 RAF Parameters .....	3-48
3-12 RAF-PEER-ABORT Parameters .....	3-50
4-1 Provider Behavior .....	4-6
4-2 Event Description References.....	4-12
4-3 Predicate Descriptions .....	4-12
4-4 Boolean Flags.....	4-13
4-5 Compound Action Definitions.....	4-13
B-1 Conformance Matrix for RAF Service (Operations) .....	B-1
B-2 Conformance Matrix for RAF Service (Other Requirements) .....	B-2