

ISO 8571-3:1988-10 (E)

Information processing systems; Open Systems Interconnection; file transfer, access and management; Part 3: File service definition

Contents		Page
0	Introduction.....	1
1	Scope and field of application	1
2	References	1
3	Definitions	2
4	Abbreviations.....	2
5	Conventions	2
Section one: General		
6	Model of the file Service	3
6.1	File Service provider and file Service users	3
6.2	File Service levels.....	3
6.3	Regimes of the file Service.....	4
7	Services of the file Service	4
7.1	FTAM regime control	4
7.2	File store management	4
7.3	File selection regime control.....	4
7.4	File management	5
7.5	File open regime control.....	5
7.6	Grouping control	5
7.7	Access to file content	5
7.8	Bulk data transfer	5
7.9	Recovery	5
7.10	Checkpointing and restarting	5
8	Functional units and Service classes	5
8.1	Functional units.....	5
8.2	Service classes.....	6
8.3	Application Entity roles	8
9	Levels of file Service.....	8
10	Negotiation of Service class, FTAM QoS and functional units	9
10.1	Service Class	9
10.2	FTAM Quality of Service	9
10.3	Functional units.....	9
Section two : Definition of file service primitives		
11	File Service primitives	11
12	Sequences of primitives	11
12.1	Normal sequences	11
12.2	Constraints on the issue of primitives.....	11
12.3	Conventions.....	14

12.4	Confirmed Services	20
13	Common file Service parameters	20
13.1	State result	20
13.2	Action result	20
13.3	Account.....	20
13.4	Charging	20
13.5	Attributes	20
13.6	Requested access	20
13.7	Access Passwords	21
13.8	Concurrency Control.....	21
13.9	FADU Lock.....	21
13.10	Shared ASE Information	21
13.11	Activity Identifier.....	21
13.12	File Access Data Unit Identity	21
13.13	Diagnostic.....	22
14	FTAM regime control.....	23
14.1	FTAM regime establishment Service.....	23
14.2	FTAM regime termination service (orderly)	26
14.3	FTAM regime termination Service (abrupt).....	26
15	File selection regime control	27
15.1	File selection Service	27
15.2	File deselection Service	28
15.3	File creation service	28
15.4	File deletion Service	30
16	File management	31
16.1	Read attribute service	31
16.2	Change attribute service.....	31
17	File open regime control	31
17.1	File open service.....	32
17.2	File dose service	33
18	Grouping control	34
18.1	Beginning of grouping Service	34
18.2	End of grouping Service	35
19	Recovery (Internal service only)	35
19.1	Regime recovery Service	35
20	Access to file contents.....	36
20.1	Bulk data transfer Service	36
20.2	Locate file access data unit service	36
20.3	Erase file access data unit service	37
 Section three; Definition of bulk data transfer primitives		
21	Bulk data transfer service primitives.....	38
22	Sequences of bulk data transfer primitives	38
22.1	Normal sequences	38
22.2	Constraints on issue of primitives.....	38
23	Common bulk data transfer parameters	44
23.1	Bulk Data Transfer Specification	44
23.2	Checkpoint Identifier	44

24	Bulk data transfer	44
24.1	Read bulk data Service	44
24.2	Write bulk data Service	44
24.3	Data unit transfer service	44
24.4	End of data transfer service	45
24.5	End of transfer service	45
24.6	Cancel data transfer service	45
24.7	Sequence of primitives on write	46
24.8	Sequence of primitives on read	46
25	Checkpointing and restart (Internal BOT Service Only).....	46
25.1	Checkpointing service	46
25.2	Restarting data transfer service	47

Annexes

A	Diagnostic parameter values	48
B	Relation of attributes to primitives	53
C	File transfer with commitment control	55
D	Reference to FTAM control information	58
E	State transition diagrams	59

Figures

1	Service Levels.....	3
2	File Service regimes and related primitives	4
3	Simplified State Diagram for successful activity (see Annex E)	13
4	Confirmed Service.....	20
5	F-U-ABORT Service.....	27
6	F-P-ABORT Service	27
7	F-P-ABORT collision	27
8	Simplified State Diagram for Bulk Data Transfer (see Annex E)	39
9	Sequence of primitives on write	46
10	Sequence of primitives on read	47
11	State Transition Diagram for Association Establishment (Initiator)	60
12	State Transition Diagram for Association Establishment (Responder)	61
13	State Transition Diagram of the File Regime Establishment Service (Initiator)	62
14	State Transition Diagram for Grouped Sequences (Initiator)	63
15	State Transition Diagram of the File Regime Establishment Service (Responder).....	64
18	State Transition Diagram for Grouped Sequences (Responder)	65

17	State Transition Diagram for the Bulk Data Transfer Service (Initiator)	66
18	State Transition Diagram for the Bulk Data Transfer Service (Responder)	67

Tables

1	Services and functional units of the External File Service	7
2	Services and functional units of the Internal File Service.....	7
3	Functional units in the file services.....	9
4	Service Class Combinations	9
5	Service Class Negotiation.....	10
6	File Service primitives	11
7	Sequence of service primitives for FTAM regime establishment — Initiator	15
8	Sequence of service primitives for FTAM regime establishment — responder	15
9	Sequence of service primitives for file service regimes — Initiator	16
10	Sequence of service primitives for file service regimes — responder	18
11	F-INITIALIZE Parameters.....	24
12	F-TERMINATE parameters	26
13	F-U-ABORT parameters	26
14	F-P-ABORT parameters.....	26
15	F-SELECT parameters	27
16	F-DESELECT parameters.....	28
17	F-CREATE parameters	29
18	F-DELETE parameters	30
19	F-READ-ATTRIB parameters	31
20	F-CHANGE-ATTRIB parameters	32
21	F-OPEN parameters	32
22	F-CLOSE	34
23	F-BEGIN-GROUP parameters	35
24	F-RECOVER parameters	35
25	BDT read sub-parameters	36
26	BDT write sub-parameters	36
27	Access contexts	36
28	F-LCX5ATE parameters.....	37

29	F-ERASE Parameters	37
30	Bulk data transfer service primitives	38
31	Sequence of service primitives for bulk data transfer — Initiator	40
32	Sequence of service primitives for bulk data transfer — responder	42
33	F-READ parameters	44
34	F-WRITE Parameters	44
35	F-DATA Parameters	45
36	F-DATA-END parameters	45
37	F-TRANSFER-END Parameters	45
38	F-CANCEL parameters	46
39	F-CHECK parameters	47
40	F-RESTART parameters	47
41	Error types	48
42	Sources and observers of errors	48
43	General FTAM diagnostics	49
44	Protocol and supporting service related diagnostics	49
45	Association related diagnostics	50
46	Selection related diagnostics	50
47	File management related diagnostics	51
48	Access related diagnostics	51
49	Recovery related diagnostics	52
50	File attributes	53
51	Activity attributes	54
52	File Service primitives associated with CCR primitives	56
53	FTAM Primitives with Shared ASE Information parameters	56
54	Composite FTAM actions	57