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ITU-T

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OF ITU

X.215
Amendment 1
(08/97)

SERIES X: DATA NETWORKS AND OPEN SYSTEM COMMUNICATION

Open System Interconnection – Service definitions

Information technology – Open Systems Interconnection – Session service definition

Amendment 1: Efficiency enhancements

ITU-T Recommendation X.215 – Amendment 1

(Previously CCITT Recommendation)

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INTERNATIONAL STANDARD 8326

ITU-T RECOMMENDATION X.215

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION – SESSION SERVICE DEFINITION

AMENDMENT 1
Efficiency enhancements

Summary

The fast associate (upper-layer context identifier) mechanism is an efficiency enhancement which allows a session connection, and the upper-layer connection/association it carries to be established using a compressed form of the information that would otherwise be sent on the S-CONNECT exchange. A conceptual parameter is added which summarizes the contents of the user-data of the S-CONNECT primitives.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

INTELLECTUAL PROPERTY RIGHTS

The ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. The ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, the ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION – SESSION SERVICE DEFINITION

AMENDMENT 1
Efficiency enhancements

1) New subclause 2.3

Add a new subclause as shown below:

2.3 Additional references

– ITU-T Recommendation X.225/Add.1 (1995), *Open Systems Interconnection – Protocol specification for Session layer efficiency enhancements.*

2) Subclause 3.3

Add a new subclause 3.3.12, after 3.3.11 as shown below:

3.3.12 Special-user-data: A parameter exchanged in the S-CONNECT and S-DATA primitives between the SS-users to indicate the nature of the encodings in the SS-user-data parameter.

3) Subclause 9.1

Add the following row and the following Note to Table 2:

Functional unit	Service(s)	Reference
No-orderly-release	Note	9.1.1 *bis*
NOTE – This functional unit removes the orderly release services from the kernel functional unit. This "negative" functional unit provides compatibility with ITU-T Rec. X.215 | ISO/IEC 8326 which requires the (non-negotiable) kernel to be indivisible.		

4) New subclause 9.1.1 *bis*

Add the following new subclause after 9.1.1:

9.1.1 *bis* No-orderly-release functional unit

This functional unit removes orderly release from the kernel functional unit. Abortive release is available. It is not possible to select this functional unit and the negotiated release functional unit for use on the same session connection.

NOTE – This orderly release capability would more logically be a functional unit separate from the kernel; this "negative" functional unit provides compatibility with earlier specifications that require the (non-negotiable) kernel to be indivisible.

5) Subclause 11.1

In Table 5, add User Summary *and* Special-user-data *at the end of the list of parameters.*

6)   Subclause 12.1.2

Add two rows in Table 9, after SS-user data*:*

Primitive Parameter	Request	Indication	Response	Confirm
User Summary	U	C(=)	U	C(=)
Special user-data	U	C(=)	U	C(=)

7)   Subclause 12.1.2.7

Add the following item to the list of functional units:

n)   no-orderly-release functional unit

Add the following sentence to the antepenultimate sentence of this subclause:

It is not possible to select the no-orderly-release functional unit and the negotiated release functional unit for use on the same session connection.

8)   New subclauses 12.1.2.11 and 12.1.2.12

Add after 12.1.2.10:

12.1.2.11   User Summary is a parameter that summarizes the semantic content of the User data, by reference to an Upper-layer context specification.

12.1.2.12   Special user-data is a parameter that may be exchanged by SS-users to indicate the nature of the encodings of the SS-user-data parameter.

NOTE – The Special user-data parameter is not visible at the Presentation service interface defined in ITU-T Rec. X.216 | ISO/IEC 8822. This parameter is intended for use at the Presentation/Session boundary.

9)   Subclause 13.1.2

Add the following text to the end of this subclause with the accompanying Note:

The Special user-data parameter may be exchanged between two SS-users.

NOTE – The Special user-data parameter is not visible at the Presentation service interface defined in ITU-T Rec. X.216 | ISO/IEC 8822. This parameter is intended for use at the Presentation/Session boundary.

Add the following row in Table 10, after SS-user data*:*

Primitive Parameter	Request	Indication
Special user-data	U	C(=)

10)   Subclause 14.1.1

Change the first sentence as shown by the underlined text:

The orderly-release service is always provided and allows either SS-user to release the session connection in an orderly manner unless the no-orderly-release functional unit is selected on the session connection.

11)   Subclause A.5.1

Add the following shown underlined to the definition of fu-dom:

fu-dom   = {FD, HD, EXCEP, TD, NR, SY, SS, DS, MA, RESYN, EX, ACT, CD, <u>NOR</u>}

Add the following definition of NOR to the list of abbreviations, by alphabetical order:

NOR   No orderly release functional unit

12)   Subclause A.5.4.14

Add a new row at the end of Table A.7 as shown below:

rdrtp188	¬FU(NOR)

Change Tables A.15 (Connection release state table without the symmetric synchronize functional unit) *and A.23* (Connection release state table with the symmetric synchronize functional unit) *in the identified rows according to the underlined changes shown below:*

Event \ State	STA03 await SRELcnf	STA09 await SRELrsp	STA713 data transfer	Any other state
SRELind	[18] STA09		<u>p188</u> STA09	
SRELreq		¬p65 [18] STA09	<u>p188 &</u> p63 <u>[18]</u> STA03	

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