



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Amendment 1
X.881

(11/95)

**DATA NETWORKS AND OPEN SYSTEM
COMMUNICATIONS**

OSI APPLICATIONS – REMOTE OPERATIONS

**INFORMATION TECHNOLOGY – REMOTE
OPERATIONS: OSI REALIZATIONS –
REMOTE OPERATIONS SERVICE ELEMENT
(ROSE) SERVICE DEFINITION**

**AMENDMENT 1: MAPPING TO A-UNIT-DATA
AND BUILT-IN OPERATIONS**

Amendment 1 to
ITU-T Recommendation X.881

(Previously "CCITT Recommendation")

FOREWORD

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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. The text of ITU-T Recommendation X.881, Amendment 1, was approved on 21st of November 1995. The identical text is also published as ISO/IEC International Standard 13712-2.

NOTE

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

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DATA NETWORKS AND OPEN SYSTEM COMMUNICATIONS
 (February 1994)
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Summary

This amendment to Rec. X.881 | ISO/IEC 13712-2 provides the mapping of ROSE APDUs onto the A-UNIT-DATA service, and the inclusion of three built-in operations – Probe, Acknowledge and Cancel – which are of general utility to designers of ROSE-based applications.

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – REMOTE OPERATIONS: OSI REALIZATIONS – REMOTE OPERATIONS SERVICE ELEMENT (ROSE) SERVICE DEFINITION

AMENDMENT 1 Mapping to A-UNIT-DATA and built-in operations

1) Clause 1

Rewrite the third sentence of the second paragraph as follows (with the changes underlined):

The ROSE services are provided by the use of the ROSE protocol (specified in a companion Recommendation | International Standard, ITU-T Rec. X.882 | ISO/IEC 13712-3), in conjunction with the Association Control Service Element (ACSE) services (ITU-T Rec. X.217 | ISO/IEC 8649) and the ACSE protocol (ITU-T Rec. X.227 | ISO/IEC 8650-1 and ITU-T Rec. X.237 | ISO/IEC 10035-1), and, optionally, the Reliable Transfer Service Element (RTSE) services (ITU-T Rec. X.218 | ISO/IEC 9066-1) and the RTSE protocol (ITU-T Rec. X.228 | ISO/IEC 9066-2), and the Presentation service (ITU-T Rec. X.216 | ISO/IEC 8822).

2) Subclause 2.1

Add the following references:

- ITU-T Recommendation X.237 (1995) | ISO/IEC 10035-1:1995, *Information technology – Open Systems Interconnection – Connectionless protocol for the Association Control Service Element: Protocol specification*.
- ITU-T Recommendation X.880 (1994)/Amd.1 (1995) | ISO/IEC 13712-1:1995/Amd.1:1996, *Information technology – Remote Operations: Concepts, model and notation – Amendment 1 : Built-in operations*.
- ITU-T Recommendation X.882 (1994)/Amd.1 (1995) | ISO/IEC 13712-3:1995/Amd.1:1996, *Information technology – Remote Operations: OSI realizations – Remote Operations Service Element (ROSE) protocol specification – Amendment 1: Mapping to A-UNIT-DATA and built-in operations*.

3) Clause 6

Add the following figure and text at the end:

The internal structure of ROSE is depicted in Figure 3.

Basic ROSE provides for the ability to send and receive invocations and returns of operations. The basic ROSE services are defined in clause 8. In addition, ROSE may contain a number of built-in operations which provide extended ROSE services, as defined in clause 10. Built-in operations are included if they are required by the association contract being supported.



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