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**ITU-T**

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OF ITU

**Q.751.4**

(05/98)

**SERIES Q: SWITCHING AND SIGNALLING**

Specifications of Signalling System No. 7 – Signalling  
System No. 7 management

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**Network element information model for SCCP  
accounting and accounting verification**

**ITU-T Recommendation Q.751.4**

(Previously CCITT Recommendation)

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*For further details, please refer to ITU-T List of Recommendations.*

## ITU-T RECOMMENDATION Q.751.4

### NETWORK ELEMENT INFORMATION MODEL FOR SCCP ACCOUNTING AND ACCOUNTING VERIFICATION

#### Summary

Measurements for SCCP accounting and accounting verification have been defined in Recommendation Q.752. The network element information model – based on Recommendations X.742 and Q.751.2 – for these measurements is contained in this Recommendation.

#### Source

ITU-T Recommendation Q.751.4 was prepared by ITU-T Study Group 11 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 15th of May 1998.

#### Keywords

Accounting, Measurements, network element information model, object model, OMAP, SCCP, TMN, Verification.

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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.

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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.

## NOTE

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

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## Recommendation Q.751.4

## NETWORK ELEMENT INFORMATION MODEL FOR SCCP ACCOUNTING AND ACCOUNTING VERIFICATION

(Geneva, 1998)

### 1 Scope

This Recommendation contains the network element information model which is necessary to manage network elements for accounting and accounting verification of SS7 SCCP traffic according to Recommendation Q.752. The model is based on the models defined in Recommendations Q.751.2 and X.742. SCCP Accounting options which are marked "f.f.s." in Recommendation Q.752 are not included.

### 2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; all users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published.

- ITU-T Recommendation I.751 (1996), *Asynchronous transfer mode management of the network element view*.
- ITU-T Recommendation M.3100 (1995), *Generic network information model*.
- ITU-T Recommendation Q.750 (1997), *Overview of Signalling System No. 7 management*.
- ITU-T Recommendation Q.751.1 (1995), *Network element management information model for the Message Transfer Part*.
- ITU-T Recommendation Q.751.2 (1997), *Network element management information model for the Signalling Connection Control Part*.
- ITU-T Recommendation Q.751.3 (1997), *Network element information model for MTP accounting*.
- CCITT Recommendation X.208 (1988), *Specification of Abstract Syntax Notation One (ASN.1)*.
- ITU-T Recommendation X.680 (1997) | ISO/IEC 8824-1:1998, *Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation*.
- ITU-T Recommendation X.711 (1997) | ISO/IEC 9596-1:1998, *Information technology – Open Systems Interconnection – Common Management Information Protocol: Specification*.
- CCITT Recommendation X.720 (1992) | ISO/IEC 10165-1:1993, *Information technology – Open Systems Interconnection – Structure of management information: Management information model*.
- CCITT Recommendation X.721 (1992) | ISO/IEC 10165-2:1992, *Information technology – Open Systems Interconnection – Structure of management information: Definition of management information*.
- CCITT Recommendation X.722 (1992) | ISO/IEC 10165-4:1992, *Information technology – Open Systems Interconnection – Structure of management information: Guidelines for the definition of managed objects*.
- ITU-T Recommendation X.722/Amd.1 (1995) | ISO/IEC 10165-4/Amd.1:1996, *Set by create and components registration*.
- ITU-T Recommendation X.723 (1993) | ISO/IEC 10165-5:1994, *Information technology – Open Systems Interconnection – Structure of management information: Generic management information*.
- CCITT Recommendation X.731 (1992) | ISO/IEC 10164-2:1992, *Information technology – Open Systems Interconnection – State management function*.



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- CCITT Recommendation X.733 (1992) | ISO/IEC 10164-4:1992, *Information technology – Open Systems Interconnection – Systems management: Alarm reporting function.*
- ITU-T Recommendation X.742 (1995) | ISO/IEC 10164-10:1995, *Information technology – Open Systems Interconnection – Systems management: Usage metering function for accounting purposes.*

### 3 Terms and definitions

For the purpose of this Recommendation, the following definitions apply.

This Recommendation makes use of the following terms defined in Recommendation M.3010:

- a) performance management;
- b) configuration management;
- c) fault management;
- d) Telecommunications Management Network (TMN).

This Recommendation makes use of the following term defined in Recommendation X.700:

- object instance.

This Recommendation makes use of the following terms defined in Recommendation X.701:

- a) managed object class;
- b) management information;
- c) notification.

This Recommendation makes use of the following term defined in Recommendation X.710:

- attribute.

This Recommendation makes use of the following terms defined in Recommendation X.720:

- a) inheritance;
- b) name binding;
- c) package;
- d) parameter;
- e) action;
- f) actual class;
- g) attribute group;
- h) behaviour;
- i) conditional package;
- j) instantiation;
- k) superclass.

This Recommendation makes use of the following terms defined in ITU-T Rec. X.701 | ISO/IEC 10040:

- a) managed object class;
- b) notification.

### 4 Abbreviations

This Recommendation uses the following abbreviations:

|       |                                                  |
|-------|--------------------------------------------------|
| ASN.1 | Abstract Syntax Notation One                     |
| ERD   | Entity Relationship Diagram                      |
| GDMO  | Guidelines for the Definition of Managed Objects |
| max   | Maximum                                          |
| MO    | Managed Object                                   |