INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

I.630

Amendment 1
(03/2000)

SERIES I: INTEGRATED SERVICES DIGITAL NETWORK

Maintenance principles

ATM protection switching

Amendment 1

ITU-T Recommendation I.630 – Amendment 1

(Formerly CCITT Recommendation)

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ITU-T Recommendation I.630

ATM protection switching

AMENDMENT 1

Summary

This amendment contains only editorial enhancements and corrections, but no technical changes, to the first version (02/99) of ITU-T Recommendation I.630.

Source

Amendment 1 to ITU-T Recommendation I.630 was prepared by ITU-T Study Group 13 (1997-2000) and approved under the WTSC Resolution 1 procedure on 10 March 2000.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. 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 turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSC Resolution 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

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. 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, 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.

ITU-T Recommendation I.630

ATM protection switching

AMENDMENT 1

1 Introduction

This amendment contains only editorial enhancements and corrections, but no technical changes, to the first version (02/99) of ITU-T Recommendation I.630.

2 Additions and corrections

2.1 Generic terminology

Table 1 relates terminology used in the first version of ITU-T Recommendation I.630 with the generic protection terminology.

Table 1/I.630 – Terminology relation

I.630 term	Generic protection term
non-revertive switching	non-revertive operation
revertive switching	revertive operation
working traffic	normal traffic
configuration	architecture

2.2 1:1 protection architectures

The following figure illustrates the 1:1 protection architecture for ATM and the naming/numbering of signals and transport entities.

The 1:1 architecture in ATM differs from the similar architecture in SDH. In ATM's 1:1 architecture, two protection entities are defined with VPI/VCI of Np and E. Protection entity with VPI/VCI Np is the protection entity that may carry the normal signal. If extra traffic is supported, protection entity with VPI/VCI E may carry the extra traffic signal. Refer to Figure 1. Supervision of SF/SD conditions apply to the working entity #1 and to the protection entity with VPI/VCI Np. The protection protocol communication (APS OAM cell transport) only applies to the protection entity with VPI/VCI Np.

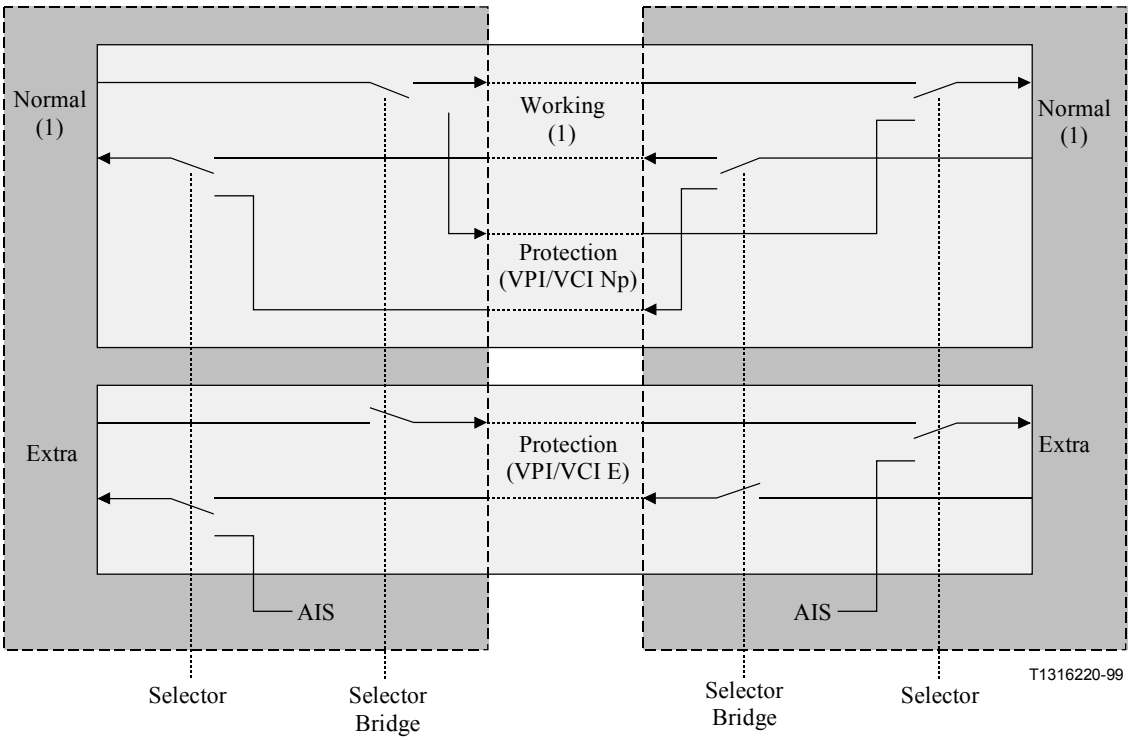

Figure 1/I.630 – 1:1 protection architecture for ATM

2.3 Subclause 7.2.1

Add at the end of subclause 7.2.1 the following sentence:

The working and protection APS VPC/VCCs may be monitored by the use of the ATM layer OAM functions defined in ITU-T Recommendation I.610.

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Geneva, 2001