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Transmission and Multiplexing (TM); Generic requirements of transport functionality of equipment; Part 3-2: Synchronous Transport Module-N (STM-N) regenerator and multiplex section layer functions; Implementaion Conformance Statement (ICS) proforma specification

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Part 3-2: Synchronous Transport Module-N (STM-N)
regenerator and multiplex section layer functions
Implementation Conformance Statement (ICS)
proforma specification**

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Transmission and Multiplexing (TM) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This ETS provides the Implementation Conformance Statement (ICS) proforma specification to be used in connection with conformance/approval testing of Synchronous Digital Hierarchy (SDH) equipment. It is one of a family of ETSs covering various aspects of SDH equipment standards.

The ICS proforma specification will ultimately consist of 8 sub-parts of ETS 300 417, numbered 1-2 to 8-2, each of which will correspond to sub-parts 1-1 to 8-1 of ETS 300 417, respectively. The ICS sub-parts are:

- Part 1-2: ETS 300 417-1-2: "General information about Implementation Conformance Statement (ICS) proforma specification";
- Part 2-2: ETS 300 417-2-2: "SDH and PDH Physical section layer functions Implementation Conformance Statement (ICS) proforma specification";
- Part 3-2: ETS 300 417-3-2: "STM-N regenerator and multiplex section layer functions Implementation Conformance Statement (ICS) proforma specification";**
- Part 4-2: ETS 300 417-4-2: "SDH path layer functions Implementation Conformance Statement (ICS) proforma specification";
- Part 5-2: ETS 300 417-5-2: "PDH path layer functions Implementation Conformance Statement (ICS) proforma specification";
- Part 6-2: ETS 300 417-6-2: "Synchronization layer functions Implementation Conformance Statement (ICS) proforma specification";
- Part 7-2: ETS 300 417-7-2: "Auxiliary layer functions Implementation Conformance Statement (ICS) proforma specification";
- Part 8-2: ETS 300 417-8-2: "Major compound functions, Implementation Conformance Statement (ICS) proforma specification";

Transposition dates

Date of adoption:	24 October 1997
Date of latest announcement of this ETS (doa):	28 February 1998
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Introduction

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a telecommunication specification. Such a statement is called an Implementation Conformance Statement (ICS).

A client of a test laboratory who requests a conformance/approval test shall provide to the test laboratory a completed ICS proforma for each layer to be tested and a detailed system description of the implementation.

The ICS proforma is not another complete description of the related specification, but rather a compact form of its static conformance requirements, to be used by the test laboratory to identify which test shall be performed on a given implementation. Not every feature of a profile specification is contained in the related ICS proforma. For particular cases requiring specific information the ICS can refer to the appropriate clause of the related specification by means of references, notes and or comments.

The ICS proforma captures the implementation flexibility allowed by the related specification and details which option are left to the implementor, which are conditionally dependent on other option taken by the implementor.

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1 Scope

This European Telecommunication Standard (ETS) provides the Implementation Conformance Statement (ICS) proforma specification for the Synchronous Transport Module-1 (STM-1), STM-4 and STM-16 regenerator section and multiplex section layer functions defined in ETS 300 417-3-1 [2] in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [7] and ETS 300 406 [3].

2 Normative references

This ETS incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] ETS 300 417-1-1 (1996): "Transmission and Multiplexing (TM); Generic functional requirements for SDH equipment; Generic processes and performance".
- [2] ETS 300 417-3-1 (1997): "Transmission and Multiplexing (TM); Generic requirements of transport functionality of equipment; STM-N regenerator and multiplex section layer functions".
- [3] ETS 300 406 (1995): "Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [4] ETS 300 232: "Transmission and Multiplexing (TM); Optical interfaces for equipments and systems relating to the Synchronous Digital Hierarchy [ITU-T Recommendation G.957 (1993) modified]".
- [5] ITU-T Recommendation G.957 (1993): "Optical interfaces for equipments and systems relating to the synchronous digital hierarchy".
<https://standards.iteh.ai/catalog/standards/sist/ab5ca80f-774a-4bc7-bd12-3193f503977/sist-ets-300-417-3-2-e1-2003>
- [6] ISO/IEC 9646-1 (1994): "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [7] ISO/IEC 9646-7 (1995): "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [8] ETS 300 147 (1993): "Transmission and Multiplexing (TM); Synchronous Digital Hierarchy (SDH); Multiplexing structure".
- [9] CCITT Recommendation G.704 (1991): "Synchronous frame structures used at primary and secondary hierarchical levels".
- [10] CCITT Recommendation G.751 (1988): "Digital multiplex equipments operating at third order bit rate of 34 368 kbit/s and fourth order bit rate of 139 264 kbit/s and using positive justification".
- [11] ITU-T Recommendation G.823 (1993): "The control of jitter and wander within digital networks which are based on the 2 048 kbit/s hierarchy".
- [12] ITU-T Recommendation G.825 (1993): "The control of jitter and wander within digital networks which are based on the synchronous digital hierarchy (SDH)".
- [13] ITU-T Recommendation G.826 (1993): "Error performance parameters and objectives for international, constant bit rate digital paths at or above the primary rate".