
**Information technology —
Telecommunications and information
exchange between systems — Protocol
for Computer Supported
Telecommunications Applications (CSTA)
Phase III**

iTeh STANDARD PREVIEW

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*Technologies de l'information — Téléinformatique — Protocole pour
applications en télécommunications supportées par ordinateur (CSTA)
en phase III*

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 18052 was prepared by Ecma International (as ECMA-285) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

This second edition cancels and replaces the first edition (ISO/IEC 18052:2000), which has been technically revised.

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Introduction

This International Standard defines the ASN.1 protocol for Phase III of Services for Computer Supported Telecommunications Applications (CSTA), ECMA-269 8th edition. This International Standard is part of a Suite of Standards and Technical Reports for Phase III of CSTA. All of the Standards and Technical Reports in the Suite are based on practical experience of Ecma member companies and each one represents a pragmatic and widely-based consensus.

Phase III of CSTA extends the previous Phase I and Phase II Standards in major theme directions as well as numerous details. This incorporates technology based upon the versit CTI Encyclopedia (Version 1.0), which was contributed to Ecma by versit.

Major areas of advancement include (all advancements are coloured blue):

- enhances the ability to support non-voice media interactions such as Email, Instant Messaging and Chat
- enhances the ability for CSTA applications to utilize SIP-based features supported by underlying protocol layers
- enhances the ability to leverage CSTA Standards for Voice Browser applications by the addition of three new profiles
- adds interactive voice features to support speech/DTMF input and speech output processing
- adds features to support interactive voice resources such as: listener, DTMF, prompt, prompt queue
- facilitates obtaining a list of CSTA services and events that are supported via the new Get CSTA Features service
- provides a set of profiles that are especially tailored for CSTA applications that control and monitor an endpoint device (a SIP device, for example)
- adds new options for establishing an application association. One of these options can be used with the Ecma Session Control Services Standard (ECMA-354/ISO/IEC 22534).
- adds a new device identifier format specifically for URIs
- enhances the existing device identifier format to allow special characters used in international (canonical) number representations
- enhances the encodings for several existing parameters that allow them to be used in more environments: callIDs, messageIDs, etc.
- adds media class types that define additional granularity for the existing Message type: IM, SMS, MMS
- adds a category of error codes that can be used to provide vendor-specific errors
- adds a capability to omit very large message attachments in a CSTA event
- adds an explicit user attribute to a CSTA group device for modeling a user
- new features that enables the establishment and control of advanced types of conferences

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- new set of location-based features that enable location-aware applications
- call control enhancements that include the ability to deflect a call to multiple destinations
- enhanced deviceID formats to indicate when a number and/or name associated with a deviceID is private
- new features that enhance the ability of applications to synchronize with a CSTA implementation.

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ASN.1 Tools Acknowledgement

The ASN.1 specified in this International Standard has been checked for conformance with the ASN.1 Standard by the OSS Nokalva, Inc. ASN.1 Tools.

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Information technology — Telecommunications and information exchange between systems — Protocol for Computer Supported Telecommunications Applications (CSTA) Phase III

1 Scope

This International Standard specifies application protocol data units (APDUs) for the services described in ISO/IEC 18051 (ECMA-269), Services for Computer Supported Telecommunications Applications (CSTA) Phase III.

This International Standard describes the concepts underlying the Remote Operations model, notation and service.

It contains CSTA-specific protocol details, which form the main part of this International Standard.

The protocol in this International Standard operates in the context of an application association.

2 Conformance

A manufacturer may select any part of the CSTA protocol, as specified in this International Standard, for implementation on a system as long as it satisfies the minimum conformance requirements as specified in Clause 2 of ISO/IEC 18051:2010 (ECMA-269).

A Protocol Implementation Conformance Statement (PICS) shall be used to specify the operations which are provided by a particular implementation. A PICS shall also specify the parameter options which are used.

2.1 Static Requirements

To conform to this International Standard, a system shall support the transfer syntax (derived from the encoding rules specified in ISO/IEC 8825-1) named {joint-iso-ccitt asn1(1) basic-encoding(1)}; for the purpose of generating and interpreting CSTA protocol information as defined by the abstract syntax “CSTA-ASN.1-Object-Descriptor” for the operations supported.

2.2 Dynamic Requirements

To conform to this International Standard, a system shall:

- a. follow the procedures as specified in this International Standard, and ISO/IEC 18051 (ECMA-269), relevant to each CSTA operation that the system claims to implement; and
- b. satisfy the definitions, as specified in ISO/IEC 18051 (ECMA-269), relevant to each CSTA service that the system claims to implement.