

A User Comment Draft Amendment of AASHTO, ITE, and NEMA

NTCIP 1407 v01.03

Amendment 1 b

Transit Communications Interface Profiles

Part of the NTCIP

Standard on Control Center (CC) Objects

October 2002

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444 North Capitol St., N.W., Suite 249
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Institute of Transportation Engineers (ITE)

1099 14th Street, N.W., Suite 300 West
Washington, D.C. 20005-3438

National Electrical Manufacturers Association (NEMA)

1300 North 17th Street, Suite 1847
Rosslyn, Virginia 22209-3801

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TS 3. TCIP-CC, version 98.10.01, October 1, 1998. NTCIP Standards Bulletin B0035 reported minor changes in formatting from the previous version. Approved by AASHTO in October 1999, approved by ITE in May 2000, and approved by NEMA in April 2000. (Assigned document number NTCIP 1407.)

NTCIP 1407 v01.02, December 31, 2000. November 2001—Reformatted for printing; incremented version number and updated date; added and revised front matter; updated references to NTCIP and NEMA document numbers in Clause on References; updated references to ITE document numbers; inserted introduction text in Section on Requirements; deleted Annex A Comment Form; and inserted introduction text in Annex for the ASN.1 Script.

DRAFT NTCIP 1407 v01.03 Amendment 1, August 2002 – Changes are described in this document.

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Section 1 GENERAL

1.2.1 Normative References

-- Updated the publications information for Normative References

draft NTCIP 1400:2002 Amendment 1, *Transit Communications Interface Profile Framework*, version 1.05 Amendment 1.

draft NTCIP 1401:2002 Amendment 1, *Transit Communications Interface Profile, Standard on Common Public Transportation Objects*, version 1.03 Amendment 1, August, 2002.

draft NTCIP 1404:2002 Amendment 1, *Transit Communications Interface Profile, Standard on Scheduling and Runcutting Objects*, version 1.03 Amendment 1, August, 2002.

draft NTCIP 1405:2002 Amendment 1, *Transit Communications Interface Profile, Standard on Spatial Representation Objects*, version 1.03 Amendment 1, August, 2002.

draft NTCIP 1406:2002 Amendment 1, *Transit Communications Interface Profile, Standard on On-Board Objects*, version 1.03 Amendment 1, August, 2002.

ISO/IEC 8824:1998, *Abstract Syntax Notation One (ASN.1)*

SAE J1587 – Joint SAE/TMC Recommended Practice for Electronic Data Interchange Between Microcomputer Systems in Heavy Duty Vehicle Applications, February 2002.

1.2.2 Informative References

-- Updated the publications information for Informative References

IEEE Std 1489-1999, *IEEE Standard for Data Dictionaries for Intelligent Transportation Systems*. 27 October 1999.

IEEE Std 1488-2000, *IEEE Trial-Use Standard for Message Set Template for Intelligent Transportation Systems*. 13 July 2000.

Section 2 TERMINOLOGY

2.3 ACRONYMS

-- *Add the acronym for VAN*

VAN Vehicle Area Network

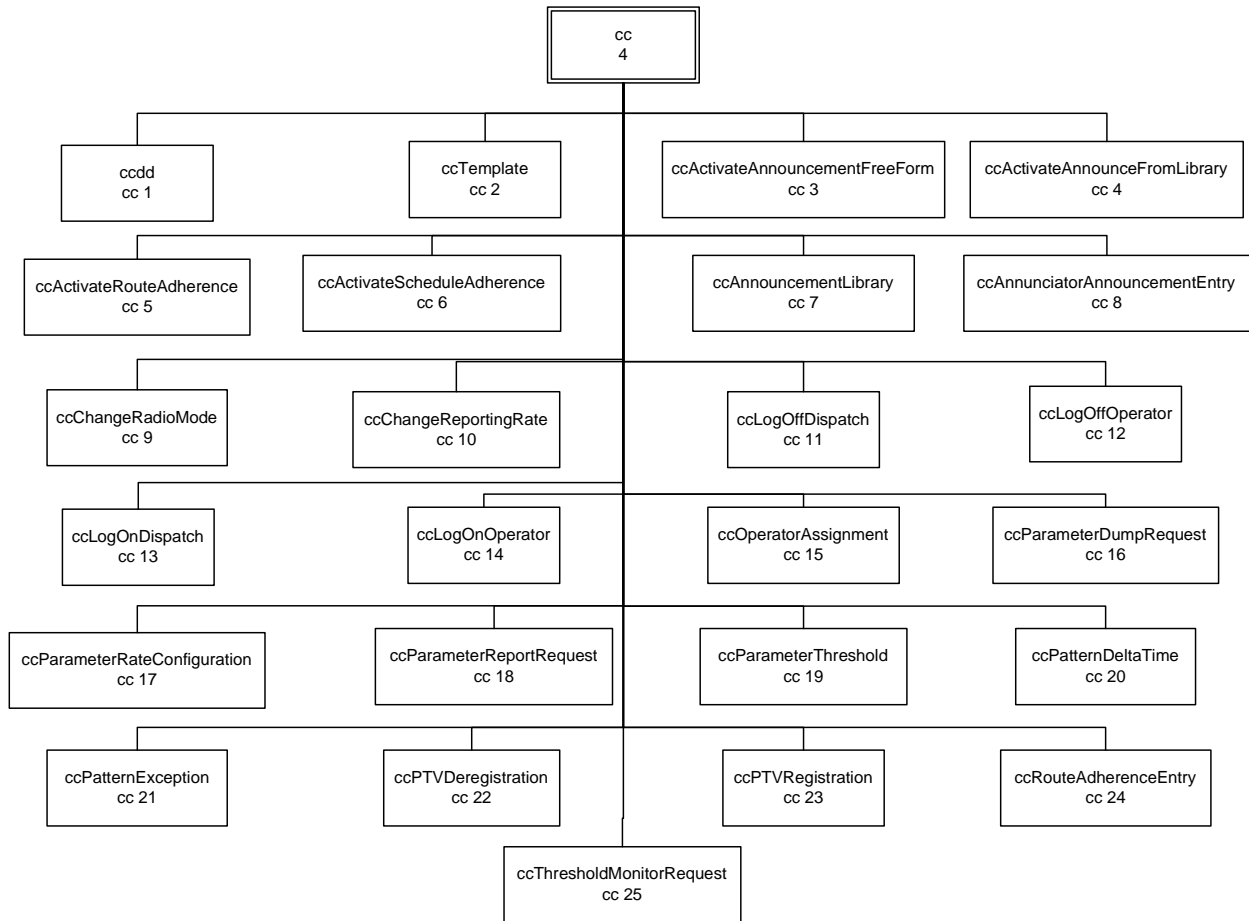
Section 3 CONCEPT OF OPERATIONS

-- Changed title from BASIC CONCEPTS to CONCEPT OF OPERATIONS

3.3.2 TCIP Classification Tree

-- Add Figure 3.2 TCIP Control Center Tree Structure

Figure 3.2 TCIP Control Center Tree Structure



Section 4 REQUIREMENTS

4.1 DATA DICTIONARY

CC_ReturnToleranceEarly_tm/IEEE/ASTM SI:time

(1) The definition was modified.

Definition The deviation from scheduled time a transit vehicle must adhere to (once considered early) before it is considered on time (i.e., on-schedule) again.

CC_ReturnToleranceLate_tm/IEEE/ASTM SI: time

(1) A typo was corrected in the definition.

Definition The deviation from scheduled time a transit vehicle must adhere to (once considered late) before it is considered on time (i.e., on schedule) again.

CC_RouteIDShort_id

(1) The Representative class term (in descriptive name and field) was modified to identifier (id).

Descriptive Name CC_RouteIDShort_id
Representation class term identifier

CC_RunIDShort_id

(1) The Representative class term (in descriptive name and field) was modified to identifier (id).

Descriptive Name CC_RunIDShort_id
Representation class term identifier

CC_WorkstationID_id

(1) The Representative class term (in descriptive name and field) was modified to identifier (id).

Descriptive Name CC_WorkstationID_id
Representation class term identifier

CC_AnnouncementMsgID_id

(1) The Representative class term (in descriptive name and field) was modified to identifier (id).

Descriptive Name CC_AnnouncementMsgID_id

Representation class term identifier

CC_BlockIDShort_id

(1) The Representative class term (in descriptive name and field) was modified to identifier (id).

Descriptive Name CC_BlockIDShort_id

Representation class term identifier

CC_DetourID_id

(1) The Representative class term (in descriptive name and field) was modified to identifier (id).

Descriptive Name CC_DetourID_id

Representation class term identifier

CC_MobileUnitID_id

(1) The Representative class term (in descriptive name and field) was modified to identifier (id).

Descriptive Name CC_MobileUnitID_id

Representation class term identifier

CC_PTVehicleIDShort_id

(1) The Representative class term (in descriptive name and field) was modified to identifier (id).

Descriptive Name CC_PTVehicleIDShort_id

Representation class term identifier

CC_AlarmCode_cd

Added new data element.

Descriptive Name CC_AlarmCode_cd

Descriptive Name Context Manage Transit

Definition The type of alarm that may occur on a revenue vehicle.

Formula

Source

Class Name CC

Classification scheme name TCIP

Classification scheme version NTCIP 1400

Data concept type Data Element

Keyword

Related data concept

Relationship type

Remarks

Symbolic name ccdd 31

Symbolic name usage

ASN1 name CC-AlarmCode

Representation layout CC-AlarmCode ::= INTEGER (0..255)

Constraints

Value Domain UBYTE

Data type UNIVERSAL 2 Integer Type

Representation class term code

Valid value rule

code	Category
0-49	General error
50-99	I/O controller error
100-149	Drive train error
150-199	Information device error
200-255	Local use code error

4.2 MESSAGE SET

CcActivateAnnouncementFromLibrary_message

(1) *Added new field to message body:*

library-message-id CC-AnnouncementMsgID OPTIONAL

Message body CcActivateAnnouncementFromLibrary ::=SEQUENCE {
 components SEQUENCE OF OB-MID --combined device address and device configuration
 sign-parameters ObBusTextMessageToDisplay OPTIONAL, --if sign announcement
 sign-type ObBusTextMessageDisplayType OPTIONAL, --if sign announcement
 library-message-id CC-AnnouncementMsgID OPTIONAL
 -- this field references the message-id: CcAnnunciatorMessageEntry
}

CcActivateScheduleAdherence_message

(1) *Corrected typo, removed OF from SEQUENCE in object construct.*

Message body CcActivateScheduleAdherence ::= SEQUENCE {
 tolerance-early CC-ScheduleToleranceEarly,
 return-tolerance-early CC-ReturnToleranceEarly OPTIONAL,
 tolerance-late CC-ScheduleToleranceLate,
 return-tolerance-late CC-ReturnToleranceLate OPTIONAL,
 report-frequency CC-ExceptionFrequencyReport OPTIONAL,
 response CC-MsgResponse
 --indicates whether initiation of this message
 --triggers a status/acknowledge response
}

CcDataLoadTemplate_message

(1) *Retired this message. Redundant with CcOutboundMessageTemplate*

CcOperatorAssignment_message

(1) Corrected inconsistencies with referenced Type References including:
CC-OperatorAssignmentType, SCH-TimeTableVersionID and CPT-OperatorBaseID

Message identifier cc 15
Metadata source Direct
Descriptive name CcOperatorAssignment_message
Descriptive name context Manage Transit
Definition A run assigned to a particular operator. The type of operator assignment is defined by CC-OperatorAssignType. Special data elements are associated with the different assignment

types.

Source

Class name CC
Classification scheme name TCIP
Classification scheme version NTCIP 1400
Data concept type Message

Keyword

Related data concept

Relationship type

Remarks

Symbolic name

Symbolic name usage

ASN1 Name CcOperatorAssignment

Constraints

Message body

```
CcOperatorAssignment ::=SEQUENCE {
employee-id CPT-EmployeeID,
run-id SCH-RunID,
activation-date CPT-ActivationDate,
--date on which Operator Assignment was made, e.g., pick date
assignment-type CC-OpeartorAssignmentType,
block-id SCH-BlockID OPTIONAL,
time-table-version SCH-TimeTableVersionID OPTIONAL,
day-type SCH-DayType OPTIONAL,
operator-base CPT-OperatorBaseID OPTIONAL
--one of the following variations of this message must be implemented
--for actual assignments
} ( WITH COMPONENTS {..., block-id PRESENT}
--for pick assignments
WITH COMPONENTS {..., time-table-version PRESENT, day-type PRESENT, operator-base
PRESENT})
--for planned assignments
WITH COMPONENTS {..., operator-base PRESENT} )
```


Annex A
ASN.1 Script

(Informative)

-- removed from document