

*A User Comment Draft of the Joint Committee on the NTCIP
(Second Review)*

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National Transportation Communications for ITS Protocol (NTCIP) Application Profile for CORBA (AP-CORBA)

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FOREWORD

This document uses only metric units.

This publication defines an application profile for communications between management systems. It defines requirements and optional and conditional clauses that are applicable to specific environments for which they are intended. This standard contains one annex, Annex A, which is defined as normative.

During initial development was referred to as TS3.AP-CORBA. However, in order to provide a more organized numbering scheme and to reflect the joint copyright of AASHTO, ITE, and NEMA, the document is now labeled NTCIP 2305.

This document is an NTCIP Application Profile. NTCIP Application Profiles define the upper three layers of the ISO seven-layer Open Systems Interconnect (OSI) Reference Model. They are formally approved by AASHTO, ITE, and NEMA through a ballot process, after a formal recommendation by the NTCIP Joint Committee. An NTCIP Application Profile equates to the following standard types:

AASHTO – Standard

ITE – Standard

NEMA – Standards Publication

For more information about NTCIP standards, visit the NTCIP Web Site at <http://www.ntcip.org>. For a hardcopy summary of NTCIP information, contact the NTCIP coordinator at the address below.

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INTRODUCTION

This publication provides an NTCIP Application Profile for communications between transportation management systems using the Common Object Request Broker Architecture (CORBA), usually with object-oriented applications software. This publication is the second *Application Profile* developed by the Center-to-Center Working Group. Prior to AP-CORBA, the working group developed AP-DATEX (NTCIP 2304-01-03, December 22, 1997) which provides a structured approach for data exchanges between management systems.

This standard defines requirements that are applicable to all NTCIP environments and it also contains optional and conditional clauses that are applicable to specific environments for which they are intended.

The following keywords apply to this document: AASHTO, ITE, NEMA, NTCIP, application, center, C2C, profile.

The effort to develop NTCIP began in 1992 with the 3-TS Transportation Management Systems and Associated Control Devices Section of NEMA. Their original desire was to address a user need for extending the TS 2 Standards for traffic control hardware to include standardized systems communication. Under the guidance of the Federal Highway Administration's (FHWA) NTCIP Steering Group, the NEMA effort was expanded to include the development of communications standards for all transportation field devices that could be used in an Intelligent Transportation Systems (ITS) network. This effort then grew to include communications between management systems dealing with transportation. As a result, in July 1996, the NTCIP Steering Group held the first workshop to address center-to-center communication issues.

In 1996, a formal agreement was reached among NEMA, ITE, and AASHTO to jointly develop, approve, and maintain NTCIP Standards. One of the first actions of this joint effort was to establish the Center-to-Center Working Group. The first meeting of the working group was in July, 1996. The first efforts to develop this document occurred in September, 1997.

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