

## AASHTO, ITE, and NEMA RELEASE FIVE NEW NTCIP STANDARDS

**Rosslyn, VA, December 20, 2006** – AASHTO, ITE, and NEMA are pleased to announce the joint release of five additional NTCIP standards:

NTCIP 1102:2004, version 01.15, *Octet Encoding Rules (OER) Base Protocol*, October 2005 edition, 40 pages;

NTCIP 1201:2005, version 02.32, *Global Object (GO) Definitions – version 02*, October 2005 edition, 82 pages;

NTCIP 1206:2005, version 01.23, *Object Definitions for Data Collection and Monitoring (DCM) Devices*, November 2005 edition, 286 pages;

NTCIP 1208:2005, version 01.12, *Objection Definitions for Closed Circuit Television (CCTV) Switching*, October 2005 edition, 94 pages;

NTCIP 1209:2005, version 01.19, *Data Element Definitions for Transportation Sensor Systems (TSS)*, November 2005 edition, 58 pages.

AASHTO is the American Association of State Highway and Transportation Officials; ITE is the Institute of Transportation Engineers; and NEMA is the National Electrical Manufacturers Association. Since 1996, these three organizations have been jointly developing the National Transportation Communications for ITS Protocol. The NTCIP is a family of communication protocols for traffic management devices.

**NTCIP 1102:2004**, version 01.15, *OER*, is an NTCIP base standard that defines the presentation layer data encoding rules used in conjunction with application layer protocols. NTCIP 1102 is a replacement for part of the superseded NTCIP 1101 (STMF), but also defines additional features. The NTCIP 1100-series base standards define procedures and rules for providing the fundamental operations associated with communications and information exchange over communications links.



**NTCIP 1201:**2005, version 02.32, *GO Definitions - version 02*, is an NTCIP device data dictionary standard that defines data elements which may be used by a variety of ITS traffic management devices, such as data related to device identification, time, scheduling capabilities, event reporting, auxiliary device monitoring and control, and security configuration. The version v02 is a major revision to the superseded NTCIP 1201:1996 v01.10, and now provides Unified Modeling Language (UML) diagrams to more clearly define various rules and concepts.

**NTCIP 1206:**2005, version 01.23, *DCM Objects*, is an NTCIP device data dictionary standard that defines data elements used for the configuration control and status monitoring of transportation data collection devices. DCM equipment processes sensor signals to yield information about the traffic passing over a sensor array. The traffic information is stored in the DCM equipment as data files for future retrieval. The DCM equipment may be portable, or the equipment may be installed permanently for continuous monitoring.

The NTCIP 1206 DCM standard is one of the largest NTCIP standards. So to help users navigate the document, the PDF file was authored with embedded links. The links can be found in several places: the Table of Contents, in the subsection on "How To Use This Document," and in the annexes for references to the Clauses, Object Status, and User Requirements.

**NTCIP 1208:**2005, version 01.12, *CCTV Switching Objects*, is an NTCIP device data dictionary standard that defines data elements used for the control and status monitoring of CCTV video switching devices. Video switches are deployed in traffic management systems to switch video sources (such as cameras, VCR playback, and digital video decoders) to video destination devices (such as monitors, projectors, and VCR recording inputs). The data elements that control CCTV cameras, lens, the pan/tilt units, and camera-generated titles and labels are defined in NTCIP 1205.

**NTCIP 1209:**2005, version 01.19, *TSS Objects*, is an NTCIP device data dictionary standard that defines data elements used for monitoring and controlling TSS devices for detecting and communicating certain traffic parameters. A TSS device can be a loop detector, a video image processing system, or could use other sensing technology. NTCIP 1209 also defines a Zone, a Virtual Zone, and a Sensor, and describes how zones can be logically grouped together.

The new standards are available from the NTCIP Web site, [www.ntcip.org](http://www.ntcip.org), as no-cost Adobe® PDF downloads. This special no-cost offer is made possible by funding from the U.S. DOT's ITS Joint Program Office. Users who have previously registered on the

NTCIP site should click the shopping cart for each of the five new standards, in the Library's Document Links table, and then login with their same email address and password from prior downloads.

The standards are also available in printed softcover editions, with these individual suggested retail prices:

- NTCIP 1102:2004, version 01.15, *OER*, \$61.00
- NTCIP 1201:2005, version 02.32, *GO Definitions - version 02*, \$94.00
- NTCIP 1206:2005, version 01.23, *DCM Objects*, \$176.00
- NTCIP 1208:2005, version 01.12, *CCTV Switching Objects*, \$94.00
- NTCIP 1209:2005, version 01.19, *TSS Data Elements*, \$75.00

To purchase softcover printed editions, contact the AASHTO Publications Bookstore at (800) 231-3475, or browse to [www.aashto.org](http://www.aashto.org).

Contact the ITE Bookstore at (202) 289-0222 ext. 130 (international), 202-289-7722 (fax), or browse to [www.ite.org](http://www.ite.org).

NEMA's document sales are through the IHS Standards Store. Contact IHS at 800-854-7179 (within the U.S.), (303) 397-7956 (international), (303) 397-2740 (fax), or browse to [global.ihs.com](http://global.ihs.com).

Founded in 1914, AASHTO serves its Member Departments, the U.S. Department of Transportation and the Congress, by providing leadership, technical services, information, and advice as well as by contributing to national policy on transportation issues. AASHTO is headquartered in Washington, D.C.

ITE is an international individual member educational and scientific association, and is one of the largest and fastest-growing multimodal professional transportation organizations in the world. Founded in 1930, the Institute is headquartered in Washington, D.C.

NEMA is the trade association of choice for the electrical manufacturing industry. Founded in 1926, its 430 member companies manufacture products used in the generation, transmission and distribution, control, and use of electricity. Domestic production of electrical products sold worldwide exceeds \$120 billion. In addition to its headquarters in Rosslyn, Virginia, NEMA also has offices in Beijing, Sao Paulo, and Mexico City.

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