

Request for Nomination

National Toll Protocol Requirements Short-list Nomination by Toll Operators

IBTTA Interoperability Committee February 2015

The International Bridge, Tunnel and Turnpike Association (IBTTA) is currently undertaking efforts to plan and implement technologies and business practices leading to electronic toll collection (ETC) interoperability within North America in a manner that fosters open competition and minimizes legal and financial barriers to anyone wishing to provide products and services to toll agencies and customers. The IBTTA Board, Interoperability (IOP) Steering Committee and sub-committees have made great progress over the year toward the goal of National Interoperability (NIOP) in 2016.

The Board has approved the following IOP documents on September 12, 2014 that support this IOP goal:

- NIOP Business Rules Document for National IOP
- NIOP Requirements Document (Electronic Toll Collection Protocol Requirements Document)

These documents can be found at the following link: <http://www.ibtta.org/ibtta-interoperability-committee-iop>

Invitation to Toll Operators to Nominate a Short-listed Protocol

The Roadside Operations Sub-committee, hereafter referred to as the 'committee', has short-listed candidate IOP protocols that are commonly in use and appear to be capable of meeting the technical aspects of NIOP Requirements Document. To develop the short-list, the committee evaluated protocols against NIOP requirements and gave consideration to candidate protocols that were in common use. The short-listed protocols were accepted by the IBTTA IOP Steering Committee in July 2014. The short-listed candidate protocols are the following:

- ISO 18000 6C (also know as ISO 18000 63, or just 6C)
- SEGO (also known as ISO 18000 6B+)
- TDM (also know as IAG or E-ZPass)

The next step in the protocol selection process is to verify, through industry input, the acceptance for testing of one or more of these candidate protocols. This will occur by requesting Toll Operators to nominate one NIOP Protocol from the short-listed candidates, and toll device Suppliers to sponsor one or more of the candidate NIOP Protocols. **For a protocol to advance into testing consideration it must have at one Toll Operator’s nomination and one Supplier Sponsor.**

Toll Operators need not complete the Supplier Sponsorship Letter, however, as a reference it can be found at:

http://ibtta.org/sites/default/files/documents/IOP/Request%20for%20Supplier%20Sponsorship_Final.pdf.

The upcoming NIOP test is estimated to occur in the third quarter of 2015, and will determine if the nominated/sponsored protocol(s) meet the NIOP Requirements Document. The test will be Assessment based testing and will include: 1) device specification conformance verification or testing and, 2) NIOP Requirement performance testing (lab and field). It is intended that following this Assessment Test a protocol will be selected to begin certification testing.

You, as a Toll Operator (or consortium of operators), are requested to provide a response to a brief series of questions to nominate one of the short-listed protocols.

Please click on the following: <https://www.surveymonkey.com/s/JVVD3FV>

Thank you in advance for your participation in this important process.

|----- the above link will open the below ‘survey monkey form’ -----|

1. Toll Operator name: _____
 - a. Name of person responding: _____
 - b. Contact information Phone: _____
 - c. email: _____

2. Toll Operator’s nomination for one of the following candidate short-listed protocols for National Interoperability:
 - a. ISO 18000 6C (also known as ISO 18000 63, or just 6C)
 - b. SEGO (also known as ISO 18000 6B+)
 - c. TDM (also know as IAG or E-ZPass)
 - d. Other: _____(if you have information of another protocol that meets the requirements document and is commonly used in tolling in North America, please indicate so and send an email to NeilGray@ibtta.org with supporting information that can be used to validate its potential inclusion).

3. The IBTTA IOP approach recognizes that many toll operators may keep their current investment in 'local' (or 'home') protocols that are in use today. But for customers that desire to have national interoperability, one or more Toll Operators or commercial entities will have to issue NIOP Protocol transponders and NIOP Toll Operators will either communicate with the NIOP Protocol transponders in the lane, or use license plate identification technology to match an IOP customer to an account. Therefore, you are requested to indicate a 'local' protocol that you would like to see tested along with the NIOP Protocol in a dual protocol mode.
 - a. None, in the event my local protocol is not chosen as the NIOP protocol, I plan to switch to only NIOP technology or video technology and will not use dual protocols
 - b. ASTM v6
 - c. ATA
 - d. Allegro
 - e. ISO 18000- 6C(63),
 - f. SeGO,
 - g. TDM (IAG or E-ZPASS),
 - h. Title 21
 - i. Other _____

4. The committee anticipates the need to test candidate NIOP Protocols alongside select 'local' protocols with limited testing. The cost of such local and NIOP dual protocol testing may become prohibitively expensive, and the committee is exploring various cost sharing options including pooled funding by Toll Operators. Please indicate if your organization may, depending on cost and criteria, be interested in supporting the pooled funding of the 'local' protocol and NIOP dual protocol testing.
 - a. Yes
 - b. No
 - c. Maybe
 - d. comments

5. Test Data – the committee is interested in being able to use or review any test data you may be able to share related to the protocol you nominated for the NIOP Protocol, or the 'local' protocol. Please indicate below if you can provide any data:
 - a. Not applicable
 - b. Yes, I have test data for Protocol: _____
 - i. Type of test data: _____

6. Other comments: Please feel free to leave the committee any comments you have regarding this process of selecting candidate protocols to be tested for determination of the NIOP Protocol.

GLOSSARY

1. Dual Protocol – two protocols actively being used in a single lane for automatic vehicle identification. The technology is currently commonly used. However, this definition assumes that the NIOP and local Protocols will be the two operational protocols with a reader or transponder.
2. IBTTA -International Bridge Tunnel and Turnpike Association
3. IOP – (Interoperability) - a registered toll customer with a valid ETC account from a certified participating toll agency or third party account provider can choose to drive through the ETC lanes of a participating toll operator and that operator will be guaranteed payment for the customer’s transactions from the participating agency or account provider.
4. Local or home – Protocol used by a specific Toll Operator to perform automatic vehicle identification that is not the National Interoperable (NIOP) protocol.
5. National Interoperable (NIOP) Requirements Document – The North American Toll Interoperability Program Electronic Toll Collection Protocol Requirements Document which is a documented set of requirements for the NIOP Protocol approved by the IBTTA Board on September 12, 2014.
6. Protocol – A method of organizing communication conversations between transponders and readers to ensure the transfer of data between said devices.
7. NIOP – (National Interoperability) - Interoperability standards and processes developed by IBTTA to promote Electronic tolling Interoperability in the United States and potentially North America.
8. Steering Committee - Committee made up of Agency and consultant members of IBTTA to carry out IBTTA Board of Directors initiative related to Interoperability.
9. Sub-committee – Specific group areas of IOP topics working at the direction of the Steering Committee, sub committees include:
 - a) Governance Organizational Structure Sub-committee
 - b) Roadside Operations Sub-committee (Referred to as “committee” in this document)
 - c) Back Office Sub-committee
 - d) Branding Sub-committee
10. Supplier – manufacturer or distributor of a transponder or reader seeking to offer candidate NIOP and local protocol devices for NIOP testing and future NIOP certification.
11. Toll Operator – Public Agency, concessionaire, or private entity that is responsible for the collection of revenue for travel on a user fee or toll way.