

**Request for Sponsorship**  
**National Toll Protocol Requirements**  
**Short-list Sponsorship by Suppliers**

**IBTTA Interoperability Committee**  
February 2015

**[ALL SUBMITTALS DUE BY MARCH, 31 2015]**

**Submittals are to be made to Neil Gray, at: [neilgray@ibtta.org](mailto:neilgray@ibtta.org)**

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 NIOP documents on September 12, 2014 that support this IOP goal:

- NIOP Business Rules Document
- 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 Suppliers to Sponsor 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 the 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 known as ISO 18000 63, or just 6C)
- SEGO (also known as ISO 18000 6B+)
- TDM (also known 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 least one Toll Operator's nomination and one supplier Sponsor.**

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.

## Supplier Sponsorship Response Requirements

All suppliers are invited to sponsor one or more NIOP protocol(s). Suppliers are invited to indicate their willingness to participate by completing the attached Supplier Sponsor Application which includes:

- 1) Cover letter including a listing and description of the items submitted
- 2) Contact information for the supplier
- 3) Identification of one or more sponsored NIOP candidate short-listed protocols for testing
- 4) Identification of Transponder and/ or Reader model numbers for NIOP testing
- 5) Identification of local protocols that could be tested together in various combinations with the NIOP testing in dual protocol configuration
- 6) Completed Traceability Matrix indicating conformance or areas of non-conformance to the National Toll Protocol Requirements Document, with associated requested documentation

(Matrix can be found as Attachment 1 at the following link:

<http://ibtta.org/sites/default/files/documents/IOP/Application%20Checklist%20Supplier.xlsx>)

- 7) Identification, contact information, and resume of a single technical resource that the supplier is offering as available to participate on the Special Panel as a Peer in evaluating responses
- 8) Commitment to provide the following in the future when requested by the Committee:
  - a) Programming documents, instructions and information to support installation of equipment and testing
  - b) Sufficient quantities of transponders, readers, and associated cables, antennae and other necessary hardware and software to support testing

Responses must be received electronically, by the date on the top of this notice.

### **Public Information**

All proprietary information should be so marked. IBTTA makes NO warranties or assurances that any information provided will be kept in confidence. Proposers should anticipate all materials will be subject to public review. Members of the Special Panel will have access to all submitted information as part of the Peer evaluation process.

### **Participation in the Special Panel**

The Committee will convene a Special Panel made up of committee members, IBTTA members and supplier peers to review the sufficiency of the traceability matrix responses and other information submitted as well as verification that the “open” requirements (including the provisioning of all related required documentation) of the National Toll Protocol Requirements Document section 3.4.1 are met prior to beginning of IBTTA sponsored lab or field testing. This panel will serve at the discretion of the Chair of the Committee. The panel will review the submitted sponsorship information from the suppliers; verify the sufficiency of the sponsor’s explanations and documents so as to recommend by vote to the ROSC a candidate NIOP protocol and corresponding sponsor participation for testing. The Special Panel may also convene during the testing regime to support the process as requested by the Chair.

The Special Panel will elect its chair from the Committee membership. Any ROSC member is eligible to participate as a member of the Special Panel up to the maximum number of members. The maximum number of Special Panel members will be determined after the sponsorship due date, and will not exceed six (6) more than the number of members of the ROSC. Non voting members on the Special Panel will include the Suppliers' representatives and the Chair of the ROSC Committee. The Special Panel will vote by simple majority after deliberation and hold sufficient meetings so as to conduct its work as it relates to determination of the sufficiency of sponsored protocol to move forward into testing. In the event that a person can no longer serve on the Panel, the ROSC Chair may appointment another person. The Special Panel will include the following members:

- ROSC members
- Outside technical and legal resources (members of IBTTA, Toll Operators and Consultants), and outside independent technical expertise
- Suppliers, not to exceed one person per supplier

Suppliers sponsoring one or more protocols will have only one representative regardless the number of protocols the supplier sponsors. Suppliers sponsoring a protocol are required to submit the name, contact information, and resume of the one person they are requesting to represent them on this Special Panel with supplier peers. This person needs to have a strong technical background in the technical and engineering aspects of the sponsored protocol.

### **Multiple Sponsorships of a protocol**

In the event that multiple suppliers offer to sponsor the same NIOP protocol, or provide equipment for local protocol testing, the Special Panel will prioritize the sequence of multiple NIOP devices of the same protocol for testing. It is sufficient for the Committee to test and demonstrate that a single device using a NIOP candidate protocol successfully meets the requirements during the testing. In the event that a device provided by a sponsor fails to meet the requirements during testing, the committee may continue testing of that specific NIOP protocol with another supplier's device.

## 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.