

IOP Steering Committee Summary Minutes

April 14, 2013

Philadelphia, PA

The following represents a summary of the activities and direction/decisions that came out of the IOP Steering Committee meeting.

Reorganization of the IOP Sub-Committees

❑ IOP Review

Reviewed past makeup, organization and activities of IOP Committee (since the beginning of the IOP Committee) and interactions with the IBTTA Board that led us to the current state of interoperability planning – Stone ([Presentation](#))

❑ New Sub-Committee Organization

Introduced new IOP Sub-Committee activities and Sub-Committee organization, general activities for each Sub-Committee and identified leadership of each new Sub-Committee. The population of each of the Sub-Committees is the responsibility of the respective chairs. The agendas for each Sub-Committee were presented by Stone – then group discussion of Sub-Committee activities and organization with additional recommendations that included the addition of a Marketing communications & Signage Sub-Committee to focus on development of a unique interoperability symbology that could be applied to roadway signs, marketing/communications materials, etc. The three newly organized IOP Sub-Committees and chairs are:

- ✓ Roadside Operations (Chair: Tom Knuckey - Atkins)
- ✓ Back-office Operations (Chair: Tim Reilly - CTRMA)
- ✓ Marketing Communications & Signage (Chair: Rosa Rountree – Egis)

❑ Open Standards:

The basis for determining whether a tag/reader protocol has qualified as a candidate “open standard” for consideration as a “national” protocol was presented. Discussion was undertaken about the following criteria – but no formal agreement was taken. It was suggested that we solicit input from the toll tag/reader manufacturing community and finalize this issue at our next IOP Steering committee meeting.

- ✓ All toll tag and reader protocol specifications and operational information must be published with enough detail and direction to allow the manufacture of toll tags and readers (using that protocol) that can be certified interoperable; and
- ✓ Manufacturers of tags and/or readers based on proprietary protocol designs and modifications allow for licensing that does not restrict competition, is not unreasonable and is not economically prohibitive

(to be defined more explicitly for future agreement by the IOP Steering Committee)

- ❑ **Technical Sub-Group:** Stone identified Technical Sub-Group Organization and Support Role and introduced Sub-Group Leader Bob Redding (NYMTA/IAG) who provided presentation on the organization of the Sub-Group and results of recent technical review meeting in Dallas (**for details please see attached presentation; [North American Toll Interoperability Technical Requirements Presentation](#)**). The presentation included:

- ✓ Review of Technical Process and Findings
- ✓ Outline of Roadside Protocol Testing Activities
- ✓ Protocol Testing and Future Interoperability Certification Testing

The group reported significant progress in defining a set of uniform protocol operating requirements. Two outstanding issues were identified: (1) the requirement to program vehicle class on the tag as the basis for determining the toll rate and potential class mismatch (primarily for the IAG) as opposed to agencies who do not program vehicle class on the tag, relying on their AVC systems to define the classification; and (2) the use of switchable transponders for some managed-lane projects which could be problematic as no standard operating requirements exist for these switch positions.

Agreements: Ronnie Hakim from New Jersey Turnpike volunteered to lead an internal discussion (within the IAG) about the issue of programming the class on the tag – to determine if it is a requirement that could be eliminated or modified and the Sub-Group was tasked with investigating the managed-lane projects using switchable tags – to provide a better understanding of how many are using the tags and how they operate – with the goal of determining if this is an issue that needs to be addressed within the interoperability plan.

New Sub-Committee Activities

The following Sub-Committee elements were discussed (discussion led by Stone) and specific elements were agreed to and direction given as follows:

- ❑ **Roadside Operations (Chair: Tom Knuckey from Atkins)**
The Roadside Operations Sub-Committee Chair will be responsible for populating the Sub-Committee with toll agency representatives (employees and consultants) to assist the Chair in the development and oversight of the following activities leading to suggestions for vetting by the IOP Steering Committee as part of their development of final IOP plan recommendations to be presented to the IBTTA Board of Directors.

❖ Investigation of all potential transponder/reader protocols

Discussion: The discussion of this element focused on the process to identify and test all ETC tags currently in widespread use in North America that meet a uniform set of operating requirements (TBD by the Technical Sub-Group with final acceptance by the IOP Steering committee). It was suggested that all potential combinations of readers & tags be tested based on the following: (1) the tags will be tested first in a dual-protocol environment for all potential combinations of readers & tags in support of the 2nd Tag Concept and then (2) the tags will be tested within a tri-protocol environment for all potential combinations of readers & tags to provide an understanding of acceptability in a multi-protocol environment. There was discussion and disagreement about the need for the second step – to test in a multi-protocol environment. The alternate opinion was that it would be time-consuming and costly with only a small number of agencies benefitting.

Based on input to the Chair, it was clear that more than a few regions and agencies are interested in the results of multi-protocol testing for interoperability and certification. The Chair expressed concern about not arbitrarily overriding the interests of member agencies and strongly urged evaluation of both the dual-protocol and multi-protocol environments (at a minimum, tri-protocol) within the testing program – to ensure that the final technical concept presented to the IBTTA Board of Directors would have a basis of solid information supporting the recommendation.

Direction: The Sub-Committee and the Technical Sub-Group will solicit and use information from regional and state tag/reader testing programs (e.g., IAG, Georgia, E-470, Washington, Florida, etc.) and input from the private sector as much as possible to make the testing/evaluation process as efficient and cost effective. Until the “open” standard definition is confirmed, the sub-group will continue development of the testing approach to include all technically acceptable candidates.

- ❖ **Development and oversight of a testing & certification program in order to support open competition of the manufacture and integration of toll devices** – the Sub-Committee, with direct support from the Technical Sub-Group, will be responsible for outlining a testing process to support a final technical recommendation by the IOP Steering Committee to the IBTTA Board. An OmniAir white paper discussing independent testing and certification was distributed (**attached: [OCS Approach to NIOP](#)**).

Agreement: Potential methods for organizing and funding an initial testing process will be discussed by JJ Eden (representing the IOP Steering committee) and Suzanne Murtha (representing OmniAir) with the resulting options being presented to the Technical Sub-Group and Roadside Operations Sub-Committee for vetting and presentation to the IOP Steering committee as a whole for incorporation into the final recommendation to the IBTTA Board

Direction: The Sub-Committee will solicit input directly from the various manufacturers of tag and reader equipment to assist in the development of testing and certification methodologies, standards, measurement criteria, etc.

- ❖ **Economic analysis of the potential IOP options**

The Sub-Committee will develop and undertake a planning level economic analysis of the hardware, software, integration and installation costs for the various combinations of tag and reader changes that might be associated with the 2nd tag concept and the multi-protocol concept for the various interoperable toll regions and independent toll agencies for presentation to the IOP Steering Committee as part of the information leading to the final IOP recommendation to the IBTTA Board

Agreement: The Roadside Operations Sub-Committee economic analysis will include potential changes to back-office operations associated with the various tag/reader approaches and coordinate this analysis with the Back-Office Sub-Committee and the Marketing Communications & Signage Sub-Committee.

Direction: The Sub-Committee will solicit input directly from the various manufacturers of tag and reader equipment to assist in the development of planning level costs related to roadside and back-office changes

❑ **Back-office Operations (Chair: Tim Reilly from CTRMA)**

The Back-office Sub-Committee Chair will be responsible for populating the Sub-Committee with toll agency representatives (employees and consultants) to assist the Chair in the development and oversight of the following activities leading to suggestions for vetting by the IOP Steering Committee as part of their development of final IOP plan recommendations to be presented to the IBTTA Board of Directors.

- ❖ **Transactions standards development** and implementation including file specifications, testing and certification for the exchange and settlement of toll transactions
- ❖ **IOP agreements** – identification of the type and main components of agreements that will be required for toll regions and agencies to become part of the system to exchange and settle interoperable transactions.
- ❖ **Uniform national business rules for exchange and settlement of toll transactions** including toll payment guarantees and reciprocity process
- ❖ **Reporting and audit process** required for the provision of exchange and settlement functions (public and private)
- ❖ **Cost burden and sharing**

Agreement: It was suggested to put together a “cost-sharing” sub-group comprised primarily of agency policy makers (executive directors, CFOs, senior toll agency managers, etc.) to evaluate current toll agency practices for paying the cost of exchange and settlement of toll transactions within interoperable regions and present one or more recommendations to the IOP Steering Committee for inclusion in the final recommended solutions to the IBTTA Board of Directors. Diane Scaccetti of the Florida Turnpike Enterprise (FTE) offered to provide the results of the current investigations underway in Florida on this subject. Scaccetti and Javier Rodriguez from the Miami Dade Expressway Authority (MDX) indicated their interest in participating in such a sub-group. It is anticipated that the sub-group would be comprised of representation from all of the regions and some independent agencies (just like the technical sub-group) and the desire is for the group to include representaives from the existing IOP Steering Committee. All interested in a role with this sub-group, please contact Marty Stone at Mstone.llc@gmail.com.

It is suggested that the group could organize and set their agenda at a meeting just prior to the IBTTA Baltimore conference. Then, using the results from the Florida survey of cost-sharing approaches along with other information, the group could discuss various models (either via phone meetings and/or at the Denver or Vancouver conferences) with a presentation to the IOP Steering Committee for inclusion in the plan presentation to the IBTTA Board in January, 2014.

Governance

Discussion focused on formalizing the current decision-making process, the need for improved internal communications within the IOP Plan development process and future operational governance models for interoperability after implementation (discussion led by Wilkins, Eden and Stone).

❑ Overall IOP Plan Development

The Committee discussed the need to improve the contact and communications to the IBTTA Board, within the IOP Steering Committee and to the IBTTA general membership and to develop a new IOP planning and implementation schedule based on the current status of IOP activities.

Agreement: The IOP Steering Committee will employ more frequent face-to-face meetings (at least quarterly - utilizing as many of the regular schedule IBTTA meetings as possible) and will incorporate the identified meetings into a master IOP Planning Schedule for presentation to the IBTTA Board at the January, 2014 Board Meeting – the following meeting schedule was identified for the near-term meetings (details TBD):

- ✓ Sub-Committee/Sub-Group Meetings: Sunday – June 23, 2013 prior to the beginning of the IBTTA Baltimore Conference
- ✓ Additional Sub-Committee/Sub-Group meetings and/or teleconferences will be added
- ✓ IOP Steering Committee: Sunday – July 21, 2013 prior to the beginning of the IBTTA Denver Conference
- ✓ Potential IOP Sub-Committee/Sub-Group meetings at the IBTTA Annual Meeting in Vancouver (TBD)
- ✓ IOP Steering Committee: TBD – meeting anticipated in the Oct/Nov, 2013 timeframe prior to the IBTTA Board Meeting in January, 2014

Agreement: The IOP Steering Committee will develop a formal minutes and communications process to include written minutes to IOP Steering Committee and IBTTA Board members following all face-to-face IOP Steering Committee meetings that will include reports from the IOP sub-Groups

Suggestion: Quarterly electronic IOP newsletter to entire IBTTA membership summarizing current IOP activities along with an associated webinar to provide information and solicit input from all interested parties (distribution of the newsletters and invitations to the webinars may go outside of IBTTA at the direction of the IBTTA Board)

❑ Assistance Needed from IOP Committee and IBTTA Staff

The request was made to the IBTTA staff to consider adding some additional administrative resources in support of the IOP Committee. Pat Jones reported to the Committee that the IBTTA Board had directed the staff to provide additional assistance and the staff would be complying with that request.

❑ **Governance and Decision Making**

The discussion focused on identification of the Governance/Decision-Making required for moving forward with all interoperability activities and the potential governance requirement after implementation of interoperability (discussion led by Wilkins, Eden and Stone).

Agreement: The IOP Steering committee will evaluate all information and results from the Sub-Committees and Sub-Groups as they are presented and the Steering Committee will formalize agreement and/or direction on the individual issues as part of a step-by-step vetting process. Once agreement is reached within the Steering committee, issues will be considered resolved unless extraordinary circumstances (significant errors, contradictory test results, etc.) dictate it is prudent to re-evaluate the issue. As plan components and/or major issues are resolved, they will be communicated to the IBTTA Board of Directors as recommendations for approval.