PLC-IoT Interoperability and Compliance Testing
Industry Connections Activity Initiation Document (ICAID)
Version: 2.0, May 2019
IC17-008-02 Approved by the IEEE-SASB 11 June 2019

Instructions
- Instructions on how to fill out this form are shown in red. It is recommended to leave the instructions in the final document and simply add the requested information where indicated.
- Shaded Text indicates a placeholder that should be replaced with information specific to this ICAID, and the shading removed.
- Completed forms, in Word format, or any questions should be sent to the IEEE Standards Association (IEEE-SA) Industry Connections Committee (ICCom) Administrator at the following address: industryconnections@ieee.org.
- The version number above, along with the date, may be used by the submitter to distinguish successive updates of this document. A separate, unique Industry Connections (IC) Activity Number will be assigned when the document is submitted to the ICCom Administrator.

1. Contact
Provide the name and contact information of the primary contact person for this IC activity. Affiliation is any entity that provides the person financial or other substantive support, for which the person may feel an obligation. If necessary, a second/alternate contact person’s information may also be provided.

Name: Oleg Logvinov
Email Address: oleg@iotecha.com
Phone: 
Employer: IoTecha
Affiliation: IoTecha

Name:
Email Address:
Phone:
Employer:
Affiliation:

2. Participation and Voting Model
Specify whether this activity will be entity-based (participants are entities, which may have multiple representatives, one-entity-one-vote), or individual-based (participants represent themselves, one-person-one-vote).
**Individual-Based**: As an outreach activity in a rapidly evolving technology field, the IC needs to engage with a diverse and widely dispersed technology development and implementation community.

**Purpose**

2.1. **Motivation and Goal**
Briefly explain the context and motivation for starting this IC activity, and the overall purpose or goal to be accomplished.

IEEE P1901.1 is developing the Standard for Medium Frequency (less than 15 MHz) Power Line Communications for Smart Grid Applications. Interoperability of products based on this standard and produced by different vendors is the key to the development of a vibrant ecosystem. Compliance and Interoperability testing is the best tool for this task.

This IC activity will focus on selection of the labs for the testing, analysis and publication of the results, identification of the ambiguities and gaps in the standard and related test procedures, generation of additional use cases, and broader industry engagement with the goal of the acceleration of the adoption of the IEEE 1901.1 standard during its development and after the publication. The IC activity will explore collaboration with ICAP.

2.2. **Related Work**
Provide a brief comparison of this activity to existing, related efforts or standards of which you are aware (industry associations, consortia, standardization activities, etc.).

This Industry Connections activity will complement the work of the IEEE P1901.1 the Standard for Medium Frequency (less than 15 MHz) Power Line Communications for Smart Grid Applications and of the IEEE P1901.1.1 Standard for testing of devices implementing Test Procedures for IEEE 1901.1.1 the Standard for Medium Frequency (less than 15 MHz) Power Line Communications for Smart Grid Applications when it is approved and launched.

2.3. **Previously Published Material**
Provide a list of any known previously published material intended for inclusion in the proposed deliverables of this activity.

None

2.4. **Potential Markets Served**
Indicate the main beneficiaries of this work, and what the potential impact might be.

Describe the potential markets.
Smart Grid, Smart Cities, Smart Buildings, Smart Lighting, Industrial IoT
3. **Estimated Timeframe**  
Indicate approximately how long you expect this activity to operate to achieve its proposed results (e.g., time to completion of all deliverables).

**An ongoing activity with the publication of annual and potentially quarterly and on demand reports through June 2021.**

IC activities are chartered for two years at a time. Activities are eligible for extension upon request and review by ICCom and the IEEE-SA Standards Board. Should an extension be required, please notify the ICCom Administrator prior to the two-year mark.

4. **Proposed Deliverables**  
Outline the anticipated deliverables and output from this IC activity, such as documents (e.g., white papers, reports), proposals for standards, conferences and workshops, databases, computer code, etc., and indicate the expected timeframe for each.

**Potential outputs of this Industry Connection’s Initiative include:**
- The list of approved labs
- Analysis of test results
- Identification of the ambiguities and gaps in the standard and related test procedures
- Additional use cases
- Industry workshops and forums

5. **Funding Requirements**  
Outline any contracted services or other expenses that are currently anticipated, beyond the basic support services provided to all IC activities. Indicate how those funds are expected to be obtained (e.g., through participant fees, sponsorships, government or other grants, etc.). Activities needing substantial funding may require additional reviews and approvals beyond ICCom.

Industry Connections staff will provide standard support as made available to all IEEE-SA IC activities. Activity members will provide any needed support for hosting meetings, marketing activities that exceed basic IC support.

6. **Management and Procedures**

6.1. **IEEE Sponsoring Committee**  
Indicate whether an IEEE sponsoring committee of some form (e.g., an IEEE Standards Sponsor) has agreed to oversee this activity and its procedures.

**Has an IEEE sponsoring committee agreed to oversee this activity?: NO**

6.2. **Activity Management**  
If no IEEE sponsoring committee has been identified in 7.1 above, indicate how this activity will manage itself on a day-to-day basis (e.g., executive committee, officers, etc).

- An executive committee comprised of officers and P1901.1 and P1901.1.1 working groups leaders.
• Activity management to include a diverse group of global experts from industry, community developers, academia, and governments.

6.3. Procedures
Indicate what documented procedures will be used to guide the operations of this activity; either (a) modified baseline Industry Connections Activity Policies and Procedures, (b) Sponsor policies and procedures accepted by the IEEE-SA Standards Board, or (c) Working Group policies and procedures accepted by the Working Group’s Sponsor. If option (a) is chosen, then ICCom review and approval of the P&P is required. If option (b) or (c) is chosen, then ICCom approval of the use of the P&P is required.

Will use the baseline Industry Connections Activity Policies and Procedures.

7. Participants

7.1. Stakeholder Communities
Indicate the stakeholder communities (the types of companies or other entities, or the different groups of individuals) that are expected to be interested in this IC activity, and will be invited to participate.

Specify types of entities or groups of individuals.

Equipment manufacturers, silicon manufacturers, electric utilities, software developers, IoT developers and implementers and smart city implementers.

7.2. Expected Number of Participants
Indicate the approximate number of entities (if entity-based) or individuals (if individual-based) expected to be actively involved in this activity.

Number of entities or number of individuals. Over time 20-80.

7.3. Initial Participants
Provide a list of the entities or individuals that will be participating from the outset. It is recommended there be at least three initial participants for an entity-based activity, or five initial participants (each with a different affiliation) for an individual-based activity.

Use the following table for an entity-based activity:

<table>
<thead>
<tr>
<th>Entity</th>
<th>Primary Contact</th>
<th>Additional Representatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entity Name</td>
<td>Contact Name</td>
<td>Email Address</td>
</tr>
</tbody>
</table>

Use the following table for an individual-based activity:

<table>
<thead>
<tr>
<th>Individual</th>
<th>Contact Information</th>
<th>Employer</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oleg Logvinov</td>
<td><a href="mailto:oleg@iotecha.com">oleg@iotecha.com</a></td>
<td>IoTech</td>
<td>Huawei</td>
</tr>
<tr>
<td>Xiuyan Li</td>
<td><a href="mailto:xiuyan.li@huawei.com">xiuyan.li@huawei.com</a></td>
<td>Huawei</td>
<td>Huawei</td>
</tr>
<tr>
<td>Chunyan Li</td>
<td><a href="mailto:chunyan.li@huawei.com">chunyan.li@huawei.com</a></td>
<td>Huawei</td>
<td>Huawei</td>
</tr>
<tr>
<td>Yifan Wu</td>
<td><a href="mailto:wuyifan@huawei.com">wuyifan@huawei.com</a></td>
<td>Huawei</td>
<td>Huawei</td>
</tr>
<tr>
<td>Name</td>
<td>Email</td>
<td>Company</td>
<td>Company</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------</td>
<td>---------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Hongguang Dai</td>
<td><a href="mailto:michael.dai@hisilicon.com">michael.dai@hisilicon.com</a></td>
<td>Hisilicon</td>
<td>Hisilicon</td>
</tr>
<tr>
<td>Scott Willy</td>
<td><a href="mailto:s.willy@ppc-ag.de">s.willy@ppc-ag.de</a></td>
<td>PPC AG</td>
<td>PPC AG</td>
</tr>
<tr>
<td>Markus Rindchen</td>
<td><a href="mailto:m.rindchen@ppc-ag.de">m.rindchen@ppc-ag.de</a></td>
<td>PPC AG</td>
<td>PPC AG</td>
</tr>
</tbody>
</table>