Transmission of IPv6 Packets over PLC Networks
draft-hou-6lo-plc-05

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Status

• draft-hou-6lo-plc-05
  – Revision based on comments on the mailing list and during IETF 102
Comment 1: Privacy issue in IPv6 address configuration

• Concern:
  – IP address = Prefix + IID derived by EUI-64 or EUI-48
  – Globally unique, but expose the device ID to the public network

• Clarification added in the draft
  – Such kind of address SHOULD only be used for link local address configuration, SHOULD NOT be used for communication with the public network.
Comment 2: Terminology Alignment

- Confusion due to mixed usage of terminology from different PLC technologies
  - Example: PCO stands for “PAN coordinator” in version 04, and “proxy coordinator” in IEEE 1901.1
- Terminology is now aligned in the whole draft
- A terminology mapping table is added

<table>
<thead>
<tr>
<th>IEEE 1901.2</th>
<th>IEEE 1901.1</th>
<th>ITU-T G.9903</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAN Coordinator</td>
<td>Central Coordinator</td>
<td>PAN Coordinator</td>
</tr>
<tr>
<td>Coordinator</td>
<td>Proxy Coordinator</td>
<td>Full-function device</td>
</tr>
<tr>
<td>Device</td>
<td>Station</td>
<td>PAN Device</td>
</tr>
</tbody>
</table>
Comment 3: Fragmentation

• The description “The number of data octets of the PHY payload can change dynamically based on channel conditions” makes people confused.

• Does the fragmentation in the adaptation layer changes according to the channel conditions?
  – No, but the fragmentation in the MAC layer does.
  – Whether adaptation layer fragmentation is needed depends only on the MAC layer’s MTU.

• Clarification is added in the draft
Other Modifications

• Reorganize of the overview
• Rephrase the section 3.4 (routing protocol), more information added for L2 routing in IEEE 1901.1
• Reorganize the ND section, more detailed description about prefix dissemination, context dissemination and address registration
• Clear the ambiguous or misleading descriptions in the draft
Future Work

• WG Adoption?
  – More IP based applications communicate via PLC
  – A guideline for PLC IPv6 adaptation is needed

• Welcome feedback!