A YANG Data Model for L1 Connectivity Service Model (L1CSM)

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Document Status

• Fixed comments in early YANG Doctor Review
  – Coordinate the MEF structure with ITU;
  – Editorial changes;
• Github repository:
  https://github.com/haomianzheng/IETF-ACTN-YANG-Model
Coordination between MEF and ITU

- MEF Tuple [MEF63]: <protocol, coding function, optical interface>
- ITU: client-signal [layer1-types];
- GE as an example:

<table>
<thead>
<tr>
<th>MEF</th>
<th>ITU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol: Ethernet</td>
<td>ETH-1Gb, identityref to l1-types:client-signal</td>
</tr>
<tr>
<td>Coding: 1000BASE-X</td>
<td></td>
</tr>
<tr>
<td>Optical interface:</td>
<td></td>
</tr>
<tr>
<td>SX PMD 38, LX PMD 38, etc.</td>
<td></td>
</tr>
</tbody>
</table>

```
---rw access
  ---rw unis
    ---rw uni* [id]
      ---rw id
      ---rw (uni-access-type)?
        ---: (mef)
          ---rw protocol identityref
          ---rw coding identityref
          ---rw optical-interface identityref
        ---: (itu)
          ---rw client-signal identityref
```
Changes in layer1-types

• Common ‘client-signal’ are having multiple bases:
• List of identities that with multiple bases:
  – STM-1/4/16/64/256;
  – OC-3/12/48/192/768;
  – FC-100/200/400/800/1600/3200;

```plaintext
identity STM-1 {
    base client-signal;
    base "coding-func";
    description
        "Client signal type of STM-1;
        STM-1 G.707 (N=1) coding function.";
    reference
        "RFC7139/ITU-T G.709
        MEF63: Subscriber Layer 1 Service Attributes";
}
```
Next Step

• To describe the process rule for inconsistent configuration on \( <p, c, o> \) (\#72)\n
• Coordinate the performance metric part with a few other documents;
Thank you!