3 State Encoding for PCN

Draft-moncaster-3-state-encoding-00

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Requirements

- Allow 3 PCN encoding states
- Provide support for CL-style admission AND termination in single scheme
- Minimise use of standards-track DSCPs
- Simple extension to baseline encoding scheme
- Optional extension to allow end-to-end ECN *

* Note: this implies revealing ECN & PCN marks to the receiver so it can e.g. request a codec to reduce its rate. It also requires the clean passing of ECT codepoints to facilitate this.
Basic Proposal

<table>
<thead>
<tr>
<th>not-ECN</th>
<th>ECT(0)</th>
<th>ECT(1)</th>
<th>CE</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>NM</td>
<td>CU</td>
<td>ExM</td>
</tr>
<tr>
<td>DSCP 1</td>
<td>Not-PCN</td>
<td>CU</td>
<td>ThM</td>
</tr>
<tr>
<td>DSCP 2</td>
<td>Not-PCN</td>
<td>CU</td>
<td></td>
</tr>
</tbody>
</table>

- DSCP1 might be Voice-Admit
- DSCP 2 would be local
- ECN would need to be tunnelled
- CL fully supported
- Relatively easy extension if SM is used with baseline as deployment route
## Extended Proposal

<table>
<thead>
<tr>
<th></th>
<th>not-ECN</th>
<th>ECT(0)</th>
<th>ECT(1)</th>
<th>CE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSCP1</td>
<td>Not-PCN</td>
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<td>NM(CE)</td>
<td>ExM</td>
</tr>
<tr>
<td>DSCP2</td>
<td>Not-PCN</td>
<td>NM ECT(0)</td>
<td>NM ECT(1)</td>
<td>ThM</td>
</tr>
</tbody>
</table>

- DSCP1 might be Voice-Admit
- DSCP 2 would be local
- ECN now carried end-end
- PCN marks can be revealed with appropriate negotiation
- CL fully supported
- Relatively easy extension if SM is used with baseline as deployment route
Next Steps

- Aim is to produce this as experimental
- Will make minor modifications to current draft
- ECN part will be optional as in current draft
- Work needed on appropriate signalling to negotiate ECN
- Will delay pushing this forward until baseline encoding gets through WGLC
Questions?

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