These are my personal observations

I'm not representing anyone, including my employer, the IETF, my dog, etc.
SBGP (BGPSEC)

- not deployable
- not incremental

soBGP

- “not the right kind of security”
- lack of funding
- lack of government support

pgBGP

- lack of community support

ASPA

RPKI

PSV

lack of community support

not the right kind of security

not deployable

not incremental
The originating AS is authorized to advertise this destination
Traffic will traverse the AS path to reach the given destination
Members of the AS path have agreed/are authorized to transport traffic to the destination
  • Withdraw problem
The AS path represents a real path to the destination (regardless of authorization)
Hide path until use
<table>
<thead>
<tr>
<th>Feature</th>
<th>BGPSEC</th>
<th>soBGP</th>
<th>RPKI</th>
<th>ASPA</th>
<th>PSV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Origination Authorization</td>
<td>Through RPKI</td>
<td>Through RPKI</td>
<td>Yes</td>
<td>Through RPKI</td>
<td>Through RPKI</td>
</tr>
<tr>
<td>Traffic Traversal</td>
<td>This appears to be impossible <em>from the control plane</em> given the constraints of a packet-switched network</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path Authorization</td>
<td>Signed AS Path</td>
<td>No</td>
<td>Not intended</td>
<td>First hop</td>
<td>Signed policy <em>(attached to DAG)</em></td>
</tr>
<tr>
<td>Withdraw Proof</td>
<td>No scalable solution</td>
<td>Yes <em>(at the path level)</em></td>
<td>Not intended</td>
<td>First hop</td>
<td>Yes <em>(path level via the DAG; route level possible through signed policy)</em></td>
</tr>
<tr>
<td>Path Validity</td>
<td>Signed AS Path</td>
<td>Signed DAG</td>
<td>Not intended</td>
<td>First hop</td>
<td>Signed DAG Signed policy <em>(attached to DAG)</em></td>
</tr>
<tr>
<td>Hide Path</td>
<td>Routes advertised normally</td>
<td>Conditional advertisement <em>(path level only)</em></td>
<td>Not intended</td>
<td>First hop</td>
<td>Conditional advertisement</td>
</tr>
</tbody>
</table>