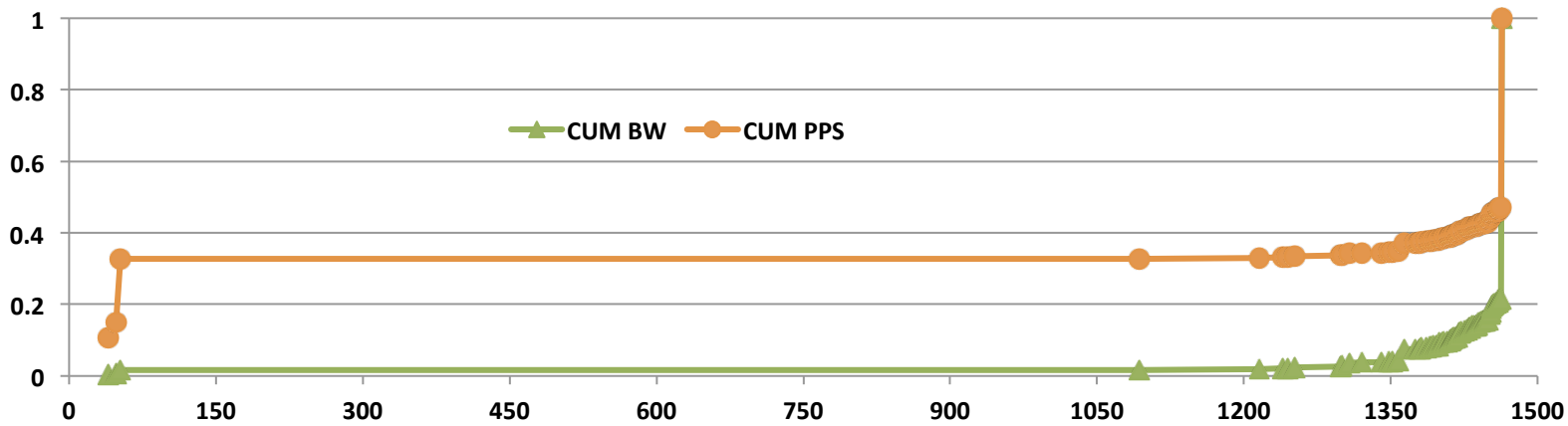
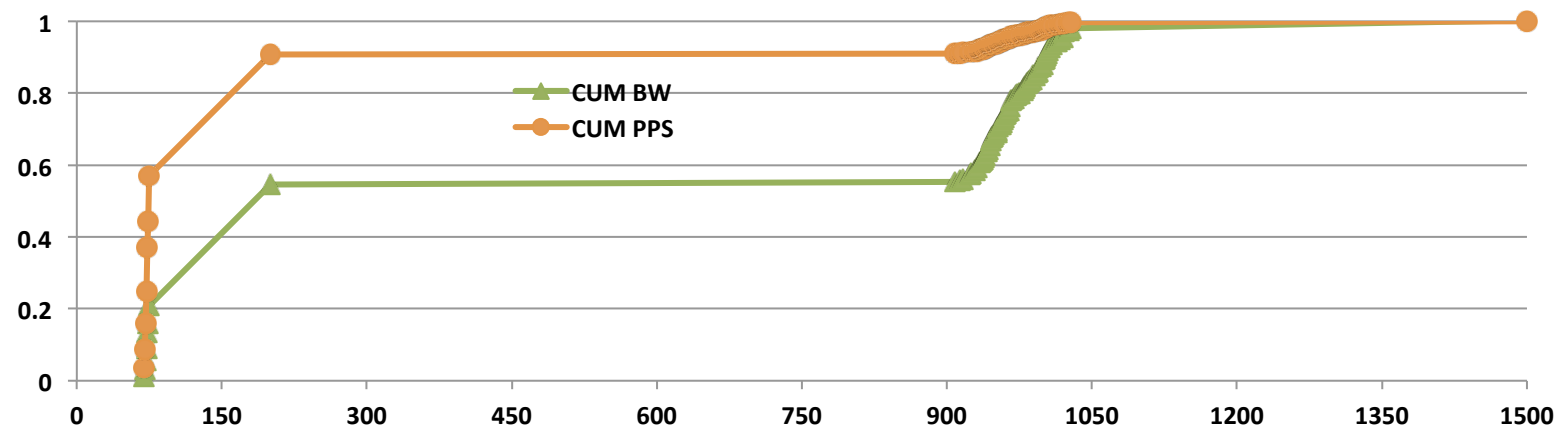
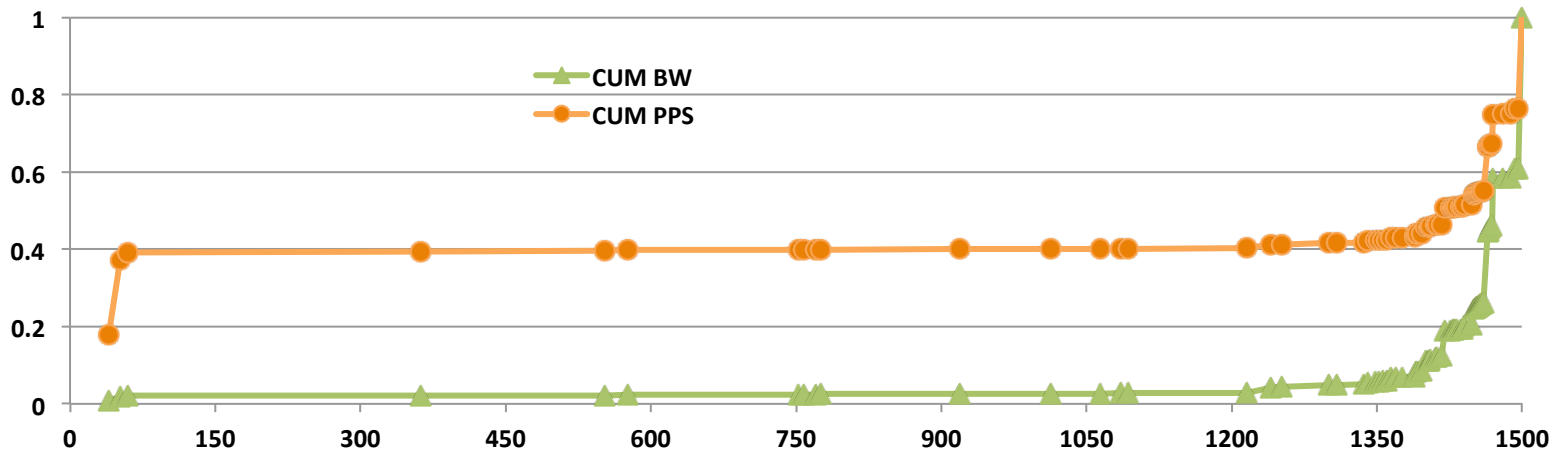


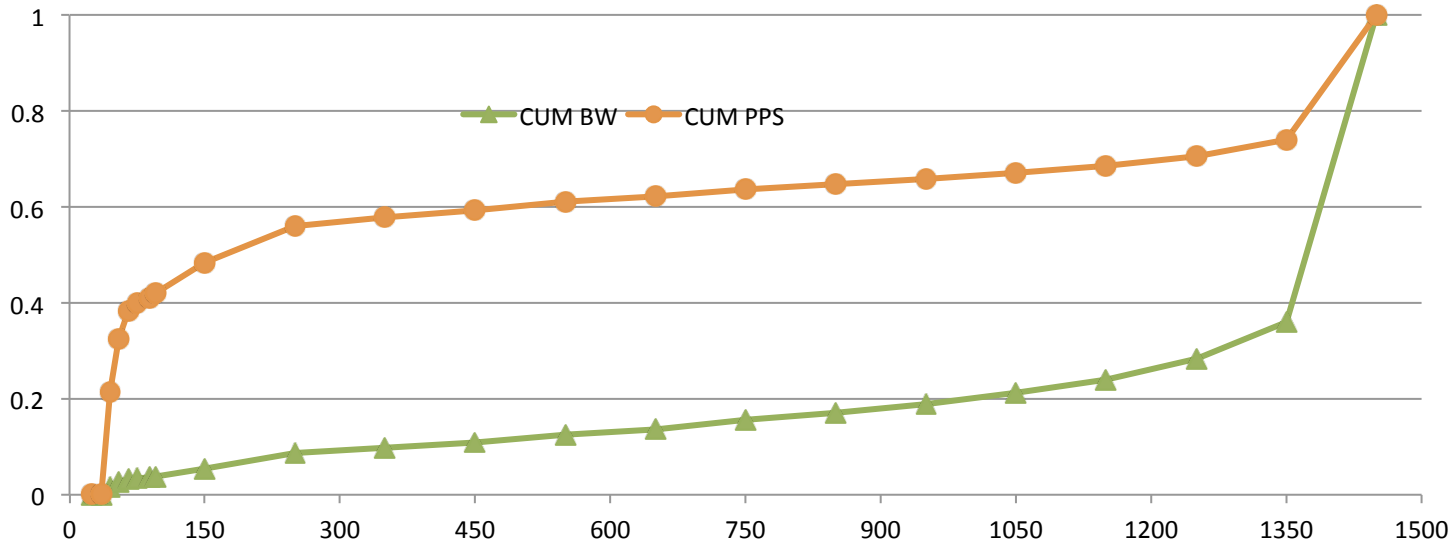
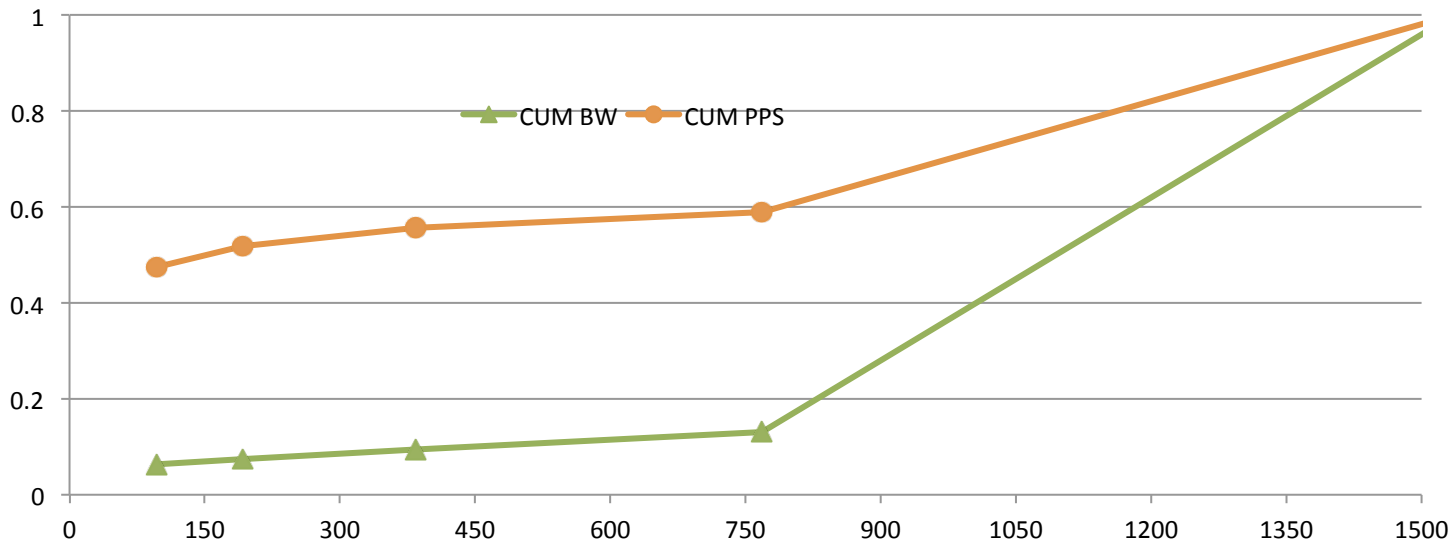
A Preliminary Analysis of the Overhead of Source Routing in SP networks (i.e. just the negatives)

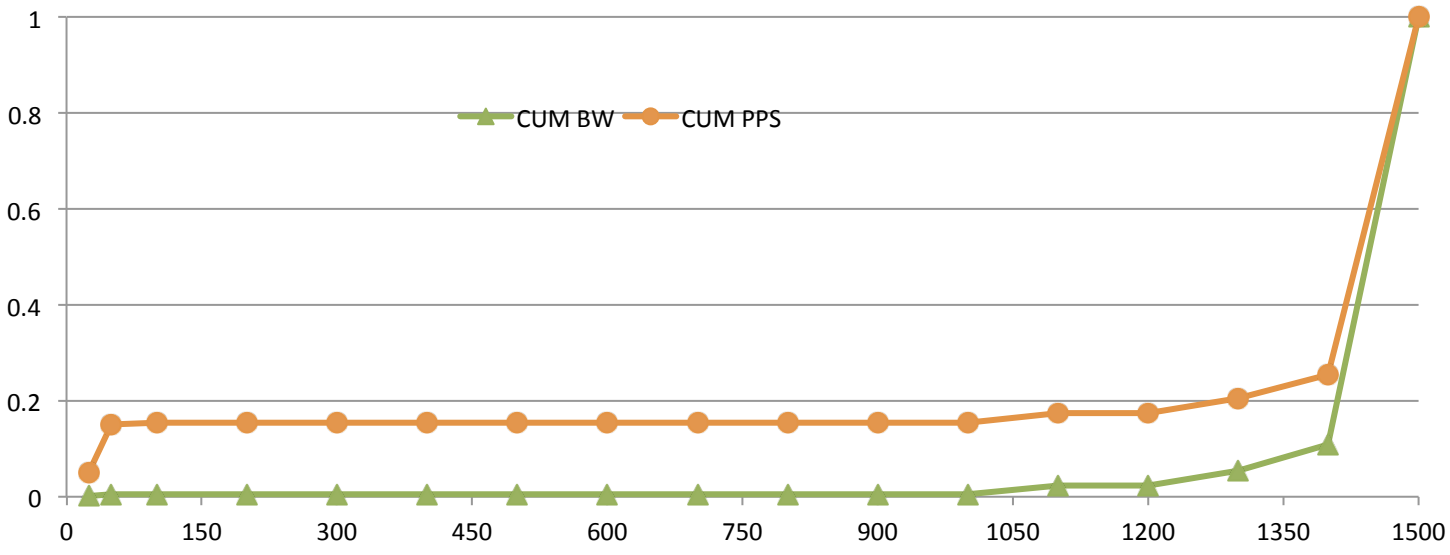
Peter Ashwood-Smith
peter.ashwoodsmith@huawei.com

Q&A from Berlin

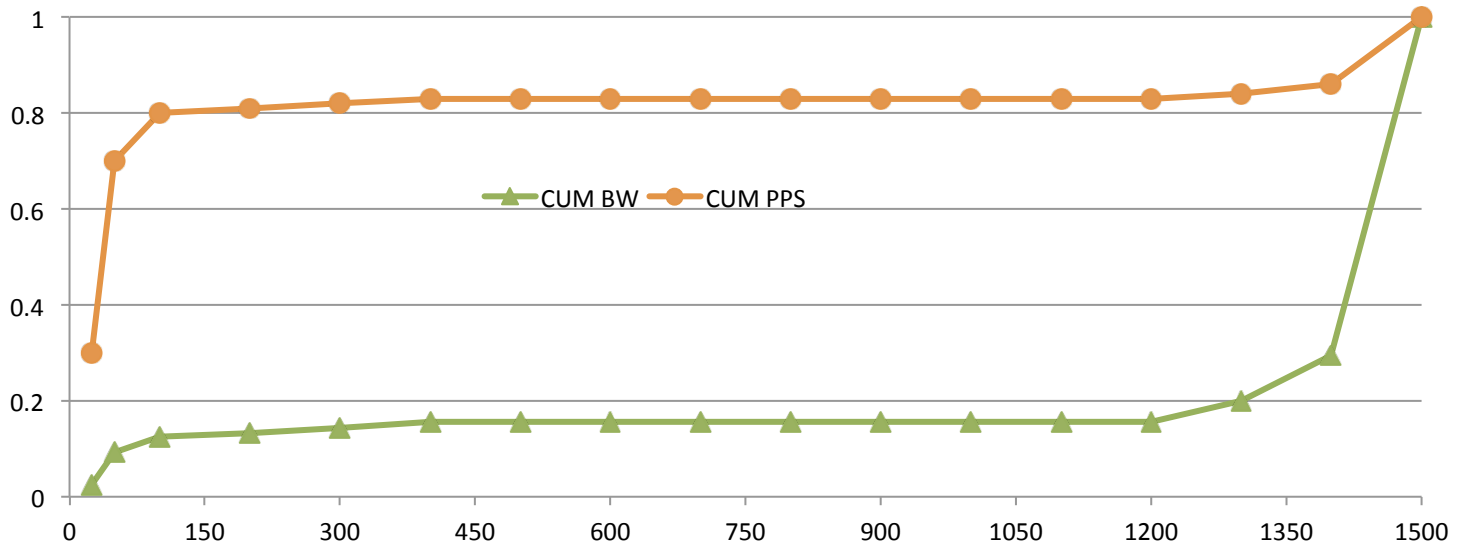
- *“Now we are moving state into the packet, so what is the limit? Have people thought about that? Is there some point at which MTU breaks or something breaks?”*
- *“If you look at it theoretically, it fails, you can think of 24 labels. The real gain is by looking at the real operator deployment.”*
- So I asked a number of SP's for some PDU size distributions from various link types.
- 4 Responses for total of 7 links
- Then computed B/W increase for 4,8,16,20 & 24 bytes PDU delta across each link's PDU distribution.
- Plotted B/W percent increase for each link as F() of PDU delta.
- Obviously this is worst case (all packets encapsulated).







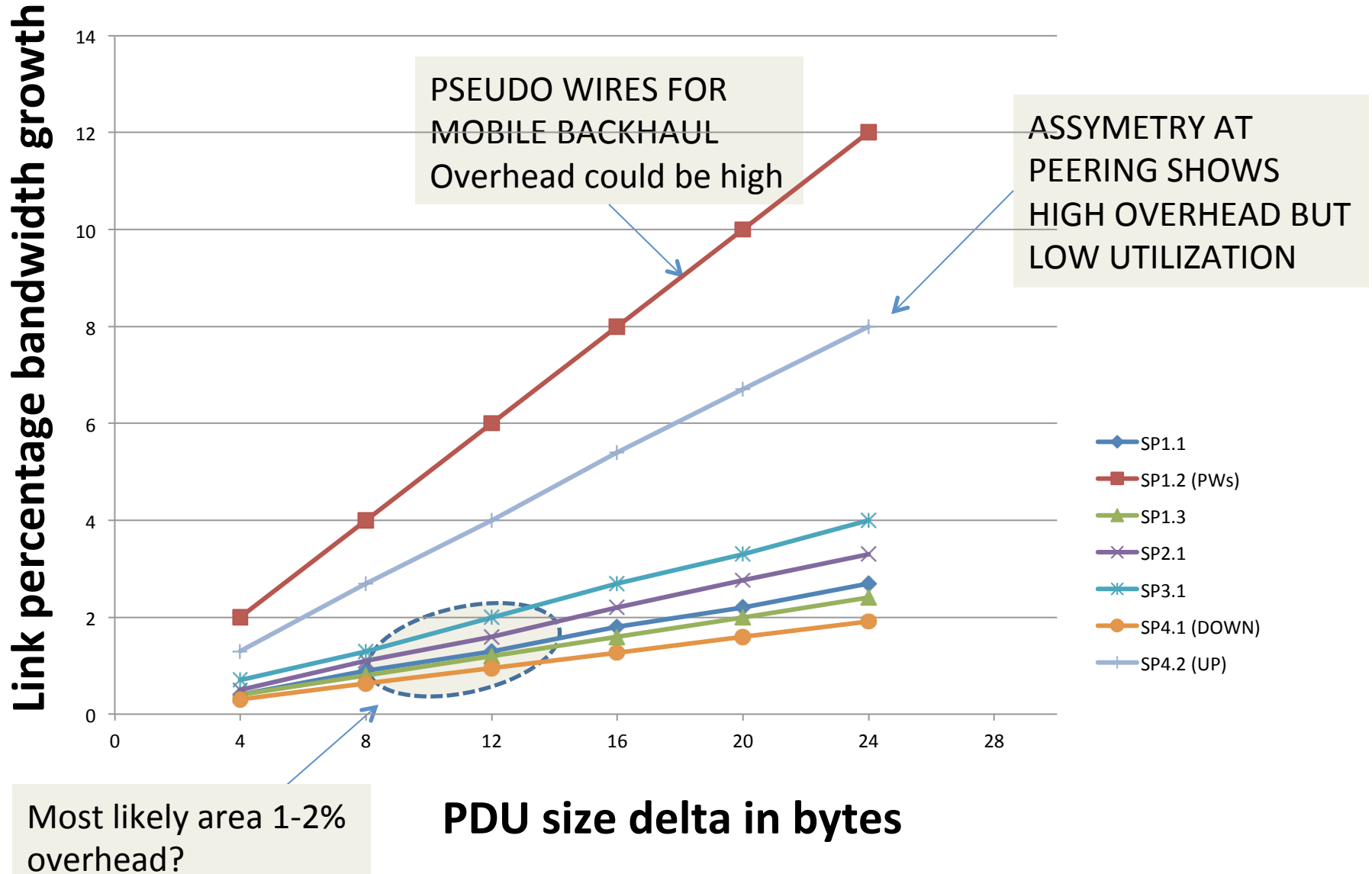
SP4.1 (down)



SP4.2 (up)

Results (based on limited data sets so far)

LINK UTILIZATION INCREASE AS $F()$ OF PDU DELTA



I am happy to include more link data and share anonymously if that is useful.

Thank-You