UTC STAFF DATA REQUEST NO. 8:

In response to Public Counsel Data Request 4, TSYS stated, in part, that it had "initially planned on and sought to use IP interconnection (SIP) between ESInet1 and ESInet 2" but that CenturyLink refused IP-based interconnection, requiring an SS7 interconnection solution.

a. Please explain whether the proposed IP-based interconnection would have included M3UA or some other, similar protocol. Provide all documents (or identify if already provided in discovery responses in this case), all emails, and all other materials that described TSYS' IP-based interconnection proposal to CenturyLink.

RESPONSE:
TSYS would not have interconnected with CenturyLink using M3UA but with SIP. TSYS did not get to the stage of proposing a detailed SIP interconnection plan since CenturyLink rejected this approach outright. [check transition agreement with CTL]

b. Please explain whether, had CenturyLink agreed to IP-based interconnection, TSYS would have been limited to (4) connections to TNS for purposes of call signaling, access to ALI, and/or access to Location Database records in support of the Washington PSAPs receiving 911 calls on ESInet2 from ESInet1.

RESPONSE:
TSYS would not have used an intermediate provider if IP-based interconnection had been used. Instead, TSYS would have connected directly to CenturyLink. TSYS would have connected directly to CenturyLink, if agreed to, using a quad standard. TSYS also sought to interconnect directly with CenturyLink after the CenturyLink Outage, a proposal that CenturyLink also rejected. *See* **Attachment 2.** Please note, interconnection *via* TNS in Washington was only used for SS7 call signaling, not used for ALI or voice traffic.

c. Please explain whether, had CenturyLink agreed to IP-based interconnection, TSYS would have been limited to (4) connections to TNS for purposes of call signaling, access to ALI, and/or access to Location Database records in support of the Washington PSAPs receiving 911 calls on ESInet2 from CenturyLink and/or other carriers on ESInet2 after those PSAPs had been fully transitioned from ESInet1 to ESInet2.

RESPONSE:
Please see TSYS's response to DR 8.b., above.

d. Would IP-based connectivity have provided greater redundancy, flexibility and/or could have prevented failure in the CenturyLink transport network during the December 27-29, 2018 time-frame from impacting the call signaling, access to ALI

and/or Location Database records and /or completion of calls to PSAPs that had transferred to ESInet2? If so, please explain. If not, please deny.

Response:
TSYS cannot provide a definitive answer of what would have occurred in the proposed hypothetical situation, but direct, IP-based connectivity would have avoided CenturyLink's use of interstate DS3s[2] to carry TSYS/TNS ordered DS1s. Absent used of interstate DS3s, call signaling traffic would have been via SIP and the local CenturyLink IP circuits – not long-haul interstate circuits – may not have been impacted by CenturyLink's nationwide outage. Since the CenturyLink IP circuits from ESInet 1 to PSAPs reportedly functioned properly throughout the CenturyLink outage period, TSYS presumably would also not have been affected by the CenturyLink outage.

[2] TSYS only learned of CenturyLink's use of such DS3s through CenturyLink's responses to data requests this proceeding.

From: Lobdell, Valerie
To: Lisa Dubuque
Cc: Brody Evans; Michael Mihelich; Greg Lathrop; Greg Pittsford; Lobdell, Valerie; Van Den Toorn, Ben; Pope, Michael; Latimer, Robin W; Janssen, Sue; Potts, Mike M; Tschirhart, David; Tiarks, Douglas
Subject: RE: SS7 Direct Trunks between CTL and Comtech"s Seattle and Phoenix STPs
Date: Monday, January 6, 2020 2:45:10 PM

WARNING: External Email: Exercise Caution

Hello Lisa,

Thank you for offering an additional meeting but the information and documents you provided were sufficient for our SME's to make a determination. CenturyLink is declining to direct connect to Comtech for SS7. There is not an economical advantage for us as well as the additional time it would take to install. TNS is the provider we are using and will continue to use. Please move forward with the necessary steps on your side to ensure SS7 connectivity so we can begin cutting over trunks as quickly as possible.

Thank you,

Valerie Lobdell **PMP**
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From: Lisa Dubuque <Lisa.Dubuque@comtechtel.com>
Sent: Friday, January 3, 2020 2:50 PM
To: Lobdell, Valerie <Valerie.Lobdell@centurylink.com>
Cc: Brody Evans <Brody.Evans@comtechtel.com>; Michael Mihelich <Michael.Mihelich@comtechtel.com>; Greg Lathrop <Greg.Lathrop@comtechtel.com>; Lisa Dubuque <Lisa.Dubuque@comtechtel.com>; Greg Pittsford <greg.pittsford@comtechtel.com>
Subject: SS7 Direct Trunks between CTL and Comtech's Seattle and Phoenix STPs

Val,

In follow up to the call yesterday, as mentioned I've blocked off time and will have a SME on our side available next Tuesday afternoon at a time convenient for CTL.

As far as your concern expressed on call this week about this effort affecting the SoWA timeline. Comtech agrees that getting ingress of CTL's WA PSAP 911 calls into the Comtech ESInet is the highest priority.

Comtech believes if CTL looks at the full trunk count monthly cost with TNS, times many years of using TNS method long-term in WA for CTL to do SS7 signaling, that CTL would see significant cost savings. Comtech basis this on the confirmed 772 trunks CTL plans to bring into the Comtech ESInet (it could be hundreds of thousands of dollars per year in costs savings to CTL). Additionally, as mentioned on the call yesterday, CTL as a carrier offering Wireline (and potentially VoIP i2) service in other parts of the country such as Iowa, where Wireline carriers are also required to a Comtech ESInet this year, that CTL can utilize the same direct trunk method for signaling and save significant costs.

Once your SS7 SMEs are engaged, we can sit down and discuss further.

Lisa

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