

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**CENTURYLINK COMMUNICATIONS,
LLC,**

Respondent.

DOCKET UT- 181051

**EXHIBIT TO
TESTIMONY OF**

MARTIN D. VALENCE

**ON BEHALF OF
CENTURYLINK COMMUNICATIONS, LLC**

COMTECH RESPONSE TO PUBLIC COUNSEL DATA REQUEST 5

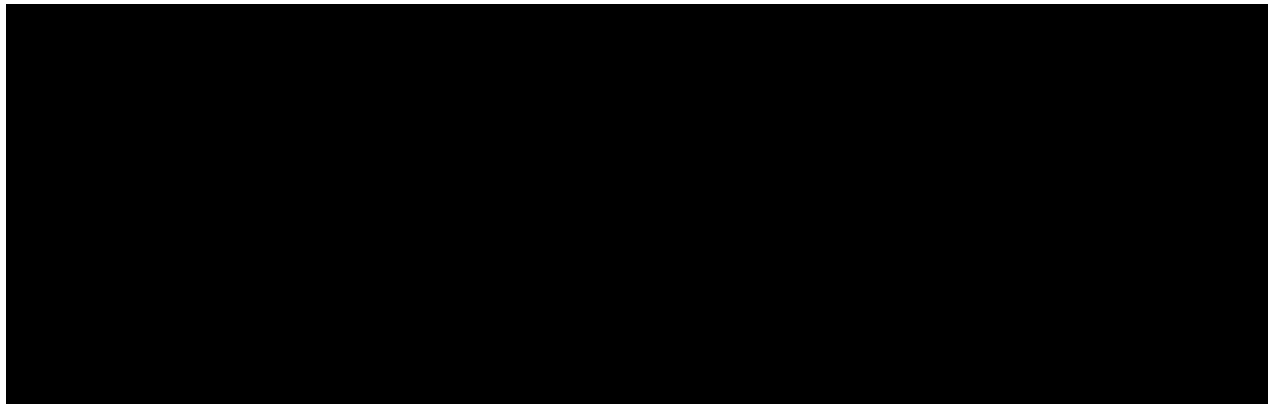
March 31, 2022

CONFIDENTIAL PER PROTECTIVE ORDER IN DOCKET NO. UT-181051
UTC v. CenturyLink, Docket UT-181051
TeleCommunication System, Inc.’s Response to PC Data Request Nos. 1-9 (REVISED)
September 16, 2021

PC5. The service that failed was a commercial long haul TDM facility. Normally, 9-1-1 circuits are treated specially in order to assure high availability. Please explain why commercial circuits were deemed acceptable for a 9-1-1 service.

RESPONSE:

TSYS believes Public Counsel is referring to Telephone Services Priority (“TSP”) 1 classifications, which “provide national security and public safety organizations with a way to receive priority installation and repair of critical data and voice communications circuits.”³ TSP 1 classifications are considered most necessary when there is a single path to a location for critical services, such as the delivery of 911 calls to PSAPs.



TSYS’s estimation is that the reason a failing/erring CenturyLink IP router affected [REDACTED] is that CenturyLink was using pseudowire technology⁴ to convert TSYS’s long haul TDM circuits to IP (without TSYS’s knowledge or consent) and CenturyLink failed to ensure that these IP routes used independent paths. Such use of pseudowire would be invisible to TSYS. Based on the CenturyLink outage report issued by the Federal Communication Commission’s Public Safety and Homeland Security Bureau, it is possible that other 911 vendors’

³ DHS, Office of Emergency Communications, Telecommunications Service Priority (2017), https://www.cisa.gov/sites/default/files/publications/TSP_Fact_Sheet_one_column_March_2017_FINAL_508C_031617.pdf.

⁴ In telecommunications, pseudowire (or pseudo-wire) technology “is an emulation of a native service over a packet switched network (PSN).” See Bugenhagen; Michael K., CenturyLink Intellectual Property LLC, System and Method for Advanced Adaptive Pseudowire, U.S. Patent No. 8,761,207 (issued Nov. 4, 2010), <https://patents.justia.com/patent/8761207>. The service being converted and carried (aka emulated) may be Asynchronous Transfer Mode (“ATM”), Frame Relay, Ethernet or time-division multiplexing (“TDM”) while the packet network may be Multi-protocol Label Switching (“MPLS”), Internet Protocol (IPv4 or IPv6), or Layer 2 Tunneling Protocol Version 3 (“L2TPv3”).

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circuits that might have sought TSP 1 designations for their CenturyLink circuits did not have their impairments resolved by CenturyLink any faster than TSYS's circuit impairments.⁵

Respondents: Susan Ornstein, Senior Director, Legal & Regulatory Affairs
Todd Poremba, Vice President, Product Management

⁵ See, e.g., FCC, *December 27, 2018 CenturyLink Network Outage Report, A Report of the Public Safety and Homeland Security Bureau* at ¶ 28 (2019), <https://docs.fcc.gov/public/attachments/DOC-359134A1.pdf> (determined that West Safety Services relied on CenturyLink's network to route 911 calls to PSAPs in Texas and Montana; impairments experienced by West were not resolved until 11:07 am and 3 pm, respectively, on December 28, 2018).