

Oct 2016 – Feb 2017

Comtech CTL Intrado WMD discuss IP v TDM interconnection
 [Exs. CDK-1TC(4), BR-18C (3-4), SJH-5C (3-5), Comtech Resp. to Staff DR 3]

Spring 2017

TNS/Comtech deploy 2 SS7 links via existing [REDACTED] and 2 SS7 links via [REDACTED]
 [JDW-33CT (14)]

Oct 2017 – Jan 2018

TNS/Comtech slowly work to replace 2 Sprint circuits to be discontinued ~ Nov 2017

Comtech intends to replace 2 [REDACTED] circuits with [REDACTED] but opts for [REDACTED] circuits due to cost; Comtech did not request diversity from CTL or identify purpose of circuits

TNS notes not a "[REDACTED]"
 [Ex. SJH-12C (12-20)]

Aug – Sept 2018

TNS offers Comtech to replace 2 CLC TDM circuits with (SIGTRAN) IPX Connectivity

Comtech recognizes that current design flawed, but rejects IPX due to cost (termination charges)
 [Ex. SJH-12C (8-10)]

Jan – Feb 2017

Intrado/CTL propose [REDACTED] interconnection

Comtech rejects [REDACTED] recommends "[REDACTED]" as second choice
 [Ex. SJH-5C (3-5)]

Sep 2017

Comtech becomes aware Sprint discontinuing service; asks TNS to help replace "half of the SS7 connectivity for 911 traffic in WA"

Comtech acknowledges urgency
 [Exs. JDW-34C (2-3)]

Feb 2018

Red Infinera network outage – no effect on 911 services

Root cause analysis reveals software [REDACTED] allowed certain 64 byte packets to enter IGCC

Infinera scrubs all its Lumen networks and recommends IGCC closed [REDACTED], but not Green (still on v.15.3.3, and thus effectively locked)
 [Ex. JDW-5C]

Dec 2018

Green Infinera network outage (4 packets malformed, combined to be larger than 64 bytes and retained their header information, enter IGCC, leading to packet storm)

CTL-served PSAPs unaffected. Comtech-served PSAPs impaired; all 4 SS7 links on Green network (unknown to CTL)
 [Exs. SJH-1TC (31-36), SJH-11C, CDK-3-4, SET-1TC (24-38), MDV-1TC (10-20), TJM-1C (8-10), JDW-4, 14C, 27C-30C]



REDACTED