

Outage Definition

- “a significant degradation in the ability of an end user to establish and maintain a channel of communications as a result of a failure or degradation in the performance of a communications provider’s network” [47 C.F.R. § 4.5(a)]

Metrics and Thresholds

- For **interconnected VoIP**, an outage must be reported when an interconnected VoIP service provider has experienced an outage or service degradation¹ for at least 30 minutes:
 - (a) on any major facility (e.g., Call Agent, Session Border Controller, Signaling Gateway, CSCF, HSS) that it owns, operates, leases, or otherwise utilizes;
 - (b) potentially affecting generally useful availability and connectivity of at least 900,000 user minutes (e.g., average packet loss of greater than one percent for 30,000 users for 30 minutes); or
 - (c) otherwise potentially affecting special offices, or special facilities, including 9-1-1 PSAPs.
- ¹ Service degradation thresholds being proposed as packet loss of one percent or more, round-trip latency of 100 ms or more, or jitter of 4 ms or more from the source to the destination.

Metrics and Thresholds (cont.)

- For **broadband Internet access service**, similarly, an outage must be reported when a broadband Internet access service provider has experienced an outage or service degradation for at least 30 minutes:
 - (a) on any major facility (e.g., authoritative DNS server, DHCP server, HSS) that it owns, operates, leases, or otherwise utilizes;
 - (b) potentially affecting generally-useful availability and connectivity of at least 900,000 user minutes (e.g., average packet loss of greater than one percent for 30,000 users for 30 minutes); or
 - (c) that affects any special offices and facilities, including major military installations, key government facilities, nuclear power plants, airports, and Public Safety Answering Points (PSAPs).

Metrics and Thresholds (cont.)

- For **backbone ISP service**, when it experiences an outage or service degradation for at least 30 minutes:
 - (a) on any major facility (e.g., PoP, Exchange Point, core router, root name server, ISP-operated DNS server, or DHCP server) that it owns, operates, leases, or otherwise utilizes;
 - (b) potentially affecting generally-useful availability and connectivity for any Internet PoP-to-Internet PoP (PoP-to-PoP) pair for which they lease, own or operate at least one of the PoPs where the “loss of generally useful availability and connectivity” is defined as:
 - (1) an average packet loss of one percent or greater;
 - (2) average round-trip delay of 100 ms or greater; or
 - (3) average jitter of 4 ms or greater with measurements taken in each of at least six consecutive five-minute intervals as measured from source to destination PoP.