

Phantom Traffic

Many factors contribute to the difficulty rural telephone companies have identifying interconnected traffic, and contrary to some allegations, the vast majority of traffic received by Rural LECs appears to be fully compliant with industry standards. Indeed, nearly all wireless carriers use SS-7 signaling to transfer billing information with every call.

Rural LECs often fail to identify what is likely the single largest contributor to the so-called “Phantom Traffic” phenomenon: when a call is terminated to a first, or intermediate tandem, and the traffic is then mixed on a single common trunk to a second tandem, the second tandem does not have the ability (due to the signaling protocols) to identify the incoming traffic by carrier and therefore the traffic is not recorded or reported by the second tandem. Unless the first tandem makes reports available to companies that subtend the second tandem, there are no records for those calls and they are thus un-billable and fall into the “Phantom Traffic” category. In some instances, Rural LECs contribute to the problem by forming consortiums to purchase their own tandems, which creates the double tandem switching scenario.

The Rural LECs also fail to acknowledge that to the extent this is a problem for rural carriers, it is also a problem for wireless carriers. Wireless carriers also receive phantom traffic originated by Rural LECs for which the Rural LECs owe terminating compensation to the wireless carrier, but the wireless carrier is unable to bill for this traffic because the Rural LEC is not SS-7 capable or routes traffic in a manner that does not transfer billing information.

- In some instances, the RLEC has not established SS-7 connections that permit call-identifying information to accompany the call.
- In many instances, there is a single trunk group from a tandem switch to the rural LEC that delivers, ILEC, CMRS, and IXC traffic to the RLEC. If there were three trunk groups, or even two, traffic identification problems would be diminished, although there would be greater interconnection costs.
- Some Rural LECs continue to allege that CMRS traffic originating within the CMRS carrier’s MTA, but outside of the RLEC’s rate center, should be subject to access, and not the reciprocal compensation rules. Wireless traffic, in fact, should be on a local trunk group as long as the traffic is within the MTA. In this instance, the problem is created by a misunderstanding regarding the FCC rules for intra-MTA wireless traffic. This issue is addressed in the Tenth Circuit’s decision in [ATLAS TELEPHONE CO. v. OKLAHOMA CORP. COMM.](#) (No. 046096, March 10, 2005).

- Some Rural LECs have claimed that interconnected calls need a valid Carrier Identification Code (“CIC”) and allege they improperly receive traffic with a Zero CIC or changed CIC. In fact, the CIC is not part of the signaling protocol on the terminating leg of a call. The CIC is only populated on the first leg of a Feature Group D call going from an originating switch to a tandem. The tandem uses the CIC to route to the appropriate IXC and passes the call along over the second leg, but does not signal the CIC to the IXC. From that point on, the CIC is not part of the signaling process. CIC is not part of the signaling on a direct trunk group between an originating switch and the IXC. Therefore the Rural LEC should not see a CIC in the signaling for a terminating call.
- Some Rural LECs have claimed that the Charged Number (“CN”) is manipulated or improperly is not populated. Both Generic Requirements for Signaling GR-317-CORE and GR-394-CORE have a default mechanism in the protocol in which, as long as Calling Party Number (“CPN”) and CN are the same, the CN is not populated. Since in the vast majority of instances they are the same, CN will most often not be populated and there is nothing improper.
- Some Rural LECs have claimed that wireless carriers improperly are not populating the Jurisdictional Indicator Parameter (“JIP”) field, i.e., they receive calls with an “Empty JIP.” JIP is not a mandatory signaling parameter, nor would it solve the problem since it only identifies the originating network, not the jurisdiction, nor does it address multiple carriers, as JIP does not change once it is populated. Billing by JIP would almost totally exclude access traffic because most IXC traffic is originated on another carrier’s network and would carry a JIP value of another network.
- Some Rural LECs have noted a drop in the number of “toll” trunk groups and associated traffic to be virtually offset by an increase in local traffic and allege this is evidence of improper manipulation. However, this is not unusual and can be explained by the build-out of wireless networks to establish their own intraMTA trunk groups and move away from the underlying IXCs they had used in the past when traffic volumes were lower and did not justify establishing dedicated intra-MTA trunking.