

**BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE**

IN RE: :
COMPLAINT OF :
CONCORD TELEPHONE EXCHANGE, INC., :
HUMPHREYS COUNTY TELEPHONE :
COMPANY, TELLICO TELEPHONE :
COMPANY, TENNESSEE TELEPHONE :
COMPANY, CROCKETT TELEPHONE : DOCKET NO.: 1100108
COMPANY, INC. PEOPLES TELEPHONE :
COMPANY, WEST TENNESSEE :
TELEPHONE COMPANY, INC., NORTH :
CENTRAL TELEPHONE COOP., INC. AND :
HIGHLAND TELEPHONE COOPERATIVE, :
INC. AGAINST HALO WIRELESS, INC., :
TRANSCOM ENHANCED SERVICES, INC. :
AND OTHER AFFILIATES FOR FAILURE :
TO PAY TERMINATING INTRASTATE :
ACCESS CHARGES FOR TRAFFIC AND :
OTHER RELIEF AND AUTHORITY TO :
CEASE TERMINATION OF TRAFFIC :
:

PRE-FILED REBUTTAL TESTIMONY OF ROBERT JOHNSON

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PRE-FILED REBUTTAL TESTIMONY OF ROBERT JOHNSON

Q: Please state your name, title and business address.

A: My name is Robert Johnson. I am the President of Ameliowave, Inc. My business address is 307 W. 7th St., Suite 1600, Ft. Worth, TX 76107. Ameliowave is a consulting and software development practice that is under contract with Transcom to provide support for managing existing products, developing new products, and architecting the platform and systems that support all products.

Q: On whose behalf are you appearing?

A: I am appearing for Transcom Enhanced Services, Inc. (“Transcom”).

Q: Are you the same Robert Johnson that presented Direct Testimony?

A: Yes.

1 **Q: What is the purpose of this Rebuttal Testimony?**

2 A: I will respond to the testimony of Concord's et al (the so-called "RLECs") proffered
3 Direct Testimony by Mr. McNabe and Mrs. Robinson.

4 **Q: Will you specifically "rebut" everything in the RLEC witnesses' testimony that you**
5 **take issue with?**

6 A: No. Many of the things they say were already and sufficiently addressed in my Direct. In
7 order to conserve time and paper I will not repeat what I've already said. My silence in this
8 Rebuttal testimony on a claim or argument the RLEC witnesses make should not be interpreted
9 as assent, concurrence, agreement or admission. To the contrary.

10 **Q: To the extent you respond to specific testimony by the two "RLEC" Witnesses are**
11 **you agreeing the testimony is relevant and admissible?**

12 A: No. My Rebuttal is presented in case the TRA decides to receive and consider the
13 "RLEC" Direct to which I respond.

14 **Q: Do you have personal knowledge of the facts you will relate as they pertain to**
15 **Transcom?**

16 A: Yes.

17 **RESPONSE TO MCCABE**

18 **Q: Does Transcom conduct business in Tennessee?**

19 A: This is mostly a legal question. But Transcom's only interaction with Tennessee is that it
20 hands off traffic to termination vendors that ends up in Tennessee. The only equipment that
21 Transcom has in Tennessee is that used to employ Halo's service.

22 **Q: McCabe claims on page 26 that "there is no such thing as ESP-in-the-middle." What**
23 **is your response?**

1 A: That is not a phrase we have used, but it is nonsensical. ESPs have always been in the
2 “middle” of communications between various end points, even though the ESP is also an end
3 point. Communications come in as a termination, are processed, and when an additional leg is
4 created communications go out as the result of the origination of a further communication. That
5 is exactly what the D.C. Circuit was describing when it addressed this very topic in the *Bell*
6 *Atlantic* decision. GoogleVoice is “in the middle.” Skype is “in the middle.” Mr. McCabe is
7 simply wrong.

8 **TRANSCOM’S WEBSITE**

9 **Q: Mr. McCabe made several references to Transcom’s website in his Direct**
10 **Testimony. For the record, what is the address of Transcom’s website?**

11 A: <http://www.transcomus.com>

12 **Q: When you go to Transcom’s website, what is the very first thing you see on the very**
13 **first page, also known as the home page?**

14 A: “Transcom Enhanced Services is a wholesale enhanced voice service provider serving
15 most of North America.”

16 **Q: Does it say that Transcom is an IXC or any other kind of telecommunications**
17 **carrier anywhere on the website?**

18 A: No.

19 **Q: What is Transcom’s “voice termination service” as listed on its website?**

20 A: The “voice termination service” listed on the website is the enhanced voice service I
21 described at length in my Direct Testimony.

22 **Q: So this is the same service that changes the content received on all legs of the**
23 **enhanced session?**

1 A: Yes.

2 **Q: Is this “voice termination service” a “telephone toll service”?**

3 A: That is largely a legal question and one that I dealt with in my direct testimony. Based on
4 the change in content I am advised by counsel that Transcom’s enhanced voice service, or “voice
5 termination service” as it’s described on the website, is an enhanced service and not a “telephone
6 toll service.”

7 **Q: Is Transcom’s traffic “toll traffic”?**

8 A: Again that is largely a legal question and also one that I dealt with in my direct testimony.
9 Based on the fact that Transcom’s enhanced voice service is an enhanced service, I am advised
10 by counsel that the traffic is not “toll traffic.”

11 **Q: Why the discrepancy between these two names for the same thing?**

12 A: Transcom’s website is strictly for marketing and sales purposes and does not exist as a
13 legal document or regulatory filing. The term “voice termination service” exists exclusive for
14 marketing and sales purposes.

15 **Q: What about the “switches” mentioned in Mr. McCabe’s testimony from the**
16 **website? What are those?**

17 A: Mr. McCabe is mistaken in that Transcom’s website never describes Transcom as having
18 “switches.” They are “switch locations.” Each of these “switch locations” contain part of the
19 decentralized and/or centralized computing resources of Transcom’s enhanced service platform.
20 These are not “switches” as Mr. McCabe claims and are not described as such on Transcom’s
21 website or in the exhibit provided by Mr. McCabe.

1 **Q: Can you see any way that anyone with industry knowledge could look at**
2 **Transcom's website and conclude, from that alone, that Transcom is a carrier or offers**
3 **telecommunications services?**

4 A: No.

5 **Q: Mr. McCabe also claims that Transcom's website states is a "long standing and very**
6 **high volume LCR carrier operating in the middle of toll call networks." Does this language**
7 **actually appear on the website?**

8 A: No. While Transcom is proud to point out that it has indeed been around a long time and
9 does a very high volume of enhanced service traffic, nowhere on the website does Transcom
10 claim to be an "LCR carrier" or that it is "operating in the middle of toll call networks." While
11 Transcom does emphasize its cost competitiveness and access to numbers throughout North
12 America, it does not claim the things Mr. McCabe says it does.

13 **LEAST COST ROUTING**

14 **Q: Does Transcom operate a Least Cost Routing (LCR) engine?**

15 A: Yes. LCR is an industry standard methodology used by virtually every ESP, ISP, VSP,
16 Cable MSO, IXC, LEC, and wireless operator to optimize their costs, including AT&T, Verizon,
17 and likely many of the RLECs.

18 **Q: Does using an LCR make Transcom a carrier?**

19 A: No. As I stated above, LCR is an industry standard methodology used by virtually every
20 ESP, ISP, VSP, Cable MSO, IXC, LEC, and wireless operator to optimize their costs, but it is
21 just a methodology and doesn't make an ESP an IXC any more than it would make a LEC an
22 IXC or an ESP just because it used LCR capabilities. Even large enterprise businesses with
23 distributed networks sometimes use "LCR."

1 **Q: Mr. McCabe gave “an example of a call that may involve LCR.” Do you feel this**
2 **description is accurate?**

3 A: No. First, he suggests that the calling end user’s local service company, which he
4 correctly avoids classifying as a LEC, must hand the call off to an “IXC”. This may be the case if
5 the local service company is an LEC, but if the local service company is a VSP, ESP, Cable
6 MSO, CMRS provider, other wireless service provider, or other communications service
7 provider, that is not restricted to a legacy “exchange,” they will likely use LCR methodology to
8 find the least cost path to deliver the call. There may or may not be an IXC involved.

9 Second, even if the call is routed to an IXC by the local service company, that IXC is
10 almost certainly using LCR methodology, so his distinction between “IXCs” and “LCR IXCs” is
11 a misnomer at best and a mistake at worst.

12 **Q: Mr. McCabe also states that “[t]o the best of [his] knowledge Transcom has never**
13 **directly delivered any call to the terminating company.” Is the best of his knowledge**
14 **accurate?**

15 A: No. Transcom originates as much further communication as it can directly with the
16 company that will terminate the call or session. This percentage is increasing as Transcom
17 establishes direct relationships with terminating companies that are willing to do business with
18 Transcom on a fair and equitable basis.

19 **TELECOMMUNICATIONS CARRIER CERTIFICATION**

20 **Q: Does Transcom have a certification as a telecommunications carrier in the State of**
21 **Tennessee?**

22 A: No.

1 **Q: Does Transcom have a certification as a telecommunications carrier in any other**
2 **state?**

3 A: No.

4 **Q: Does Transcom have a certification as a telecommunications carrier from the FCC?**

5 A: No.

6 **Q: Why not?**

7 A: I am advised by counsel that Enhanced Service Providers (“ESPs”), of which Transcom
8 is one, are not regulated as telecommunications carriers and, therefore, Transcom does not seek
9 and is not required to obtain certification as a telecommunications carrier.

10 **TRANSCOM’S REFUSAL TO PAY ACCESS CHARGES**

11 **Q: Mr. McCabe claims that Transcom has refused to pay access charges to the**
12 **“RLECs.” Is that true?**

13 A: No. Transcom has never been billed access charges by any of the complainants in this
14 case.

15 **Q: If the “RLECs” billed Transcom access charges, would Transcom pay them?**

16 A: This is a hypothetical since they have never billed Transcom access charges. Since
17 Transcom is an Enhanced Service Provider (“ESP”) that is purchasing telephone exchange
18 service as an end user from another exchange carrier (here Halo), the complainants can’t send a
19 bill to Transcom. An exchange carrier does not send an access bill to an end user customer of
20 another exchange carrier. Transcom would not pay those bills if they got them. However,
21 Transcom does not get such bills because the complainants are aware of this and do not bill
22 Transcom because Transcom is an end user customer of another carrier and is not a carrier
23 subject to exchange access.

TRANSCOM'S ORIGINATING FURTHER COMMUNICATIONS

Q: Mr. McCabe claims Transcom is “manipulating the origination of the call.” Is this true?

A: No. Transcom does not “manipulate origination.” As an ESP and an end user customer, the call sessions delivered by Transcom’s customers terminate with Transcom. Transcom then “originates a further communication” to its egress vendors. This further communication might be a call to a carrier vendor, such as Halo, that is providing Transcom with telephone exchange service, or it might be a private IP session.

Q: Mr. McCabe further claims that Halo is “re-originating” calls coming from Transcom? Is that true?

A: No. He does not provide a technical definition for “re-originating” or “re-origination.” I am advised by counsel there is also no legal definition. As an ESP and an end user customer, Transcom “originates a further communication” to build each leg for the enhanced session, which means the call has been “originated” by Transcom and therefore cannot be “re-originated” under any definition I can imagine.

Q: Mr. McCabe “seriously questions” whether or not the further communication originated by Transcom to Halo is done wirelessly. Is it?

A: Yes. Transcom uses wireless CPE in the MTA to originate further communications to Halo. Mr. McCabe admitted he is not an engineer. I am an engineer and I can confirm that this origination is done wirelessly.

Q: Mr. McCabe also claims that there are “severe limitations” on Halo’s spectrum that would prevent this. Is this true?

1 A: No. Transcom coexists with Halo's other users on the same spectrum in many MTAs,
2 including those that serve Tennessee, without any of the "severe limitations" Mr. McCabe
3 imagines.

4 **Q: Mr. McCabe further claims Transcom is "misrepresenting the true characteristics**
5 **of the call." Is this true?**

6 A: No. Transcom does not "misrepresent" any of the characteristics of any call it receives.
7 As an ESP and an end user customer, Transcom has the right and the ability to use parameters
8 different from what it receives when it terminates a call or session than those used when it
9 originates a further communication in the form of a call or session. However, Transcom's
10 standard business practice is to preserve as many of the original parameters as possible when it
11 originates a further communication in order to make it easier for its customers to use its
12 enhanced voice service.

13 **Q: Mr. McCabe explains in his Direct Testimony that the Federal Communications**
14 **Commission ("FCC") has "weighed in on the effects of access arbitrage," as he calls it, in**
15 **their November 18, 2011 Report and Order and Further Notice of Proposed Rulemaking**
16 **(the "FCC Order"). Specifically, he refers to the statement by FCC Commissioner Michael**
17 **J. Copps in the FCC Order regarding "phantom traffic". What do you know about**
18 **"phantom traffic?"**

19 A: Only what I read. In the FCC Order the FCC states that:

20 "Phantom traffic" refers to traffic that terminating networks
21 receive that lacks certain identifying information. In some cases,
22 service providers in the call path intentionally remove or alter
23 identifying information to avoid paying the terminating rates that
24 would apply if the call were accurately signaled and billed.¹

¹ FCC order ¶ 703.

1 As a technician, I read this to mean that “phantom traffic” is traffic that is lacking
2 signaling information, such as the Calling Party Number (CPN) or Charge Number.

3 **Q: By this definition, is any of Transcom’s traffic “phantom traffic?”**

4 A: No. First, Transcom sends 100% of the CPN information it receives from its customers
5 when it originates further communications as part of its enhanced voice service offering. Second,
6 as an ESP, Transcom is purchasing telephone exchange service, for which “CPN” is not relevant
7 for billing purposes, although Transcom preserves it anyway for ease of use and to ensure that
8 things like Caller ID work.

9 **RESPONSE TO ROBINSON**

10 **Q: Ms. Robinson states that a “rate center” is the “physical location of a switch.” Is this**
11 **true?**

12 A: No. The rate center is a geographical area defined by the ILEC. The physical location of
13 the switch is defined by where it resides and is typically documented by a Common Language
14 Location Identified (CLLI) code.

15 **Q: Ms. Robinson further states that calls are “routed and completed... according to its**
16 **listed rate center.” Is this correct?**

17 A: No. Calls are routed and completed to equipment, such as a switch, trunking gateway,
18 etc., or other serving equipment that is listed in the LERG as serving that Telephone Number.
19 The LERG tells originating carriers which network is supposed to take the call for further
20 processing by reference to a switch or POI CLLI, which is often far away from the rate center for
21 the telephone number.

22 **Q: Ms. Robinson also states that a telephone number, or “network address” as she calls it,**
23 **“provides the ability to... place a call.” Is this correct?**

1 A: No. The telephone number provides the ability to “receive” a call. You simply do not
2 need a telephone number to place a call. Many IP-based services that are one-way in nature do
3 not have a geographic or even non-geographic telephone number” or “network address.” She is
4 simply wrong from a technical perspective.

5 **Q: When a user has GoogleVoice or Skype and makes a call that results in signaling a**
6 **number obtained from an exchange carrier like Level 3 or Bandwidth.com does the call**
7 **actually “originate” or start off by going through the Level 3 or Bandwidth.com network?**

8 A: No. The number is signaled, but the presence of the number simply cannot lead to the
9 conclusion that the carrier that assigned the number handled the call in any way. I won’t say it
10 never happens, but it almost always did not. The call uses whatever physical layer medium is
11 available to the user, and neither Level 3 nor Bandwidth.com “switch” the call with Class 5 type
12 equipment.

13 **Q: Is it possible for a user to self-select the number that is ultimately signaled?**

14 A: This is most certainly a capability in many IP-based applications or services. The user –
15 and not the provider – can tell the IP application what number to send. It can be any number.

16 **Q: Does a user selecting a particular number imply some intent to defraud or**
17 **misrepresent the “jurisdiction.”**

18 A: Not at all. The most common practice is to select a preferred number to display on Caller
19 ID at the terminating end to facilitate call-back, or to present a number the recipient will
20 recognize. I might choose to have all my devices and various applications deliver one number
21 regardless of the service I am using so that all calls to me always go to that single number. This
22 is how unified messaging works, for example. The single number might be something like
23 GoogleVoice, or it might be a completely unique number using a “virtual number” service like

1 eVoice. See www.evoice.com. I, for example, can program some of my IP-based devices to
2 deliver my residential phone number and that network is absolutely not used when I make an
3 outbound call while away from my home.

4 **Q: Does Transcom handle traffic from these new-technology applications?**

5 A: Absolutely. We have a tremendous amount of GoogleVoice and Skype traffic, and lots of
6 traffic from other similar offerings. We may not know that a specific call came from Skype, but
7 we know we have a lot of Skype traffic.

8 **Q: If a call terminated by one of the complainants has a CPN address signal containing**
9 **a number assigned to another LEC in Tennessee like Frontier Communications of**
10 **Tennessee can anyone conclude the call actually “originated” on the Frontier ILEC**
11 **network in Tennessee?**

12 A: No. While I cannot definitively say that the specific call Ms. Robinson mentions on page
13 14 did not start with that LEC, I do know it is entirely possible that the number was used for
14 convenience and the call was IP-originated and used a new technology application. Ms.
15 Robinson cannot just assume that this was a POTS call that was initially dialed 1+ and used an
16 IXC’s telephone toll service. She would need to present far more evidence to prove her
17 contention.

18 **Q: Does this conclude your testimony?**

19 A: Yes. I reserve the right to make corrections of any errors we may discover by submitting
20 an *errata*.