

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

AT&T FLORIDA
SUPPLEMENTAL REBUTTAL TESTIMONY OF MARK NEINAST
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 070736-TP
JUNE 13, 2008

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH AT&T ("AT&T"),
AND YOUR BUSINESS ADDRESS.

A. *My name is Mark Neinast. My business address is 308 S. Akard, Dallas,
Texas 75202. I am employed by AT&T Services, Inc. as an Area Manager
– Regulatory Relations to AT&T's Network Planning and Engineering
Department.*

Q. ARE YOU THE SAME MARK NEINAST THAT FILED DIRECT
TESTIMONY ON APRIL 21, 2008 AND REBUTTAL TESTIMONY ON
MAY 28, 2008?

A. Yes.

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR SUPPLEMENTAL
REBUTTAL TESTIMONY?

1 A. I am offering supplemental rebuttal testimony to respond to issues raised
2 for the first time in the rebuttal testimony of Intrado's witness, John
3 Melcher. Specifically, I address Issues 3(a-b), in this rebuttal.

4
5 Q. CAN YOU PLEASE SUMMARIZE THE KEY POINTS IN YOUR
6 SUPPLEMENTAL REBUTTAL TESTIMONY?

7
8 A. Yes. Mr. Melcher goes into great detail as to why AT&T Florida should
9 adopt a methodology known as Class Marking, which Mr. Melcher refers
10 to as Line Attribute Routing. Although Mr. Melcher has some impressive
11 references regarding his 911 PSAP and NENA experience, he does not
12 state that he has the professional telecommunications background
13 necessary to support the claims he makes. Specifically, he lacks an
14 understanding of the switching translation changes that would be
15 necessary to implement Class Marking¹, and therefore, he can not
16 accurately testify whether Class Marking is more (or less) reliable than the
17 Primary Selective Router method. In fact, he provides no references to
18 NENA, where he was past president, and it was NENA that deemed Class
19 Marking as problematic. As I stated in my direct testimony at page 19,
20 lines 4-6 (with supporting documentation in Exhibit MN-4)² NENA does not

¹ Intrado witness Hicks uses the term Class Marking, while Mr. Melcher uses the term Line Attribute Routing. It is unclear, whether both Intrado witnesses are testifying as to the same proposal or not, but for purposes of my testimony, I will assume that both terms are synonyms for Class Marking.

² Exhibit MN-4 - NENA Standard for E9-1-1 Default Assignment and Call Routing Functions NENA 03-008, Version 1, January 19, 2008, § 2.1 Call Routing Facts (at para. 1) "9-1-1 call

1 recommend using Line Class Codes for determining call routing of 911
2 calls. The process that Intrado proposes would be a detriment to AT&T
3 Florida and its end users that rely on 911 for their protection of life and
4 property and is only being proposed to create a competitive advantage for
5 Intrado. In my supplemental rebuttal testimony, I will further describe the
6 many issues that arise with the use of Class Marking, also known as Line
7 Attribute Routing.

8

9 **Issue 3a: What trunking and traffic routing arrangements should be used**
10 **for the exchange of traffic when Intrado is the designated**
11 **911/E911 Service Provider?**

12 **Issue 3b: What trunking and traffic routing arrangements should be**
13 **used for the exchange of traffic when AT&T is the**
14 **designated 911/E911 Service Provider?**

15

16 Q. MR. MELCHER STATES THAT THERE ARE ONLY LIMITED EFFORTS
17 MADE FOR 911 COMPETITION. IS THIS A LARGE MARKET
18 SEGMENT THAT IS BEING OVERLOOKED BY CLECS?

19

routing accuracy may be affected by various factors ranging from lack of up-to-date identification of the subscriber's service address/calling location; delay in service order processing; default call routing rules used to support the subscriber's NPA NXX, the serving area or the network elements..." (at para. 3) "It must also be recognized that "default" call routing is not the same as a "misroute". Misrouted calls are generally caused by incorrect information associated with the caller due to a human or mechanical failure, whereas default routed calls are caused by a lack of selective routing information."

1 A. No. This is not a large market segment - rather it is an obligation to
2 provide for emergency services for the end users in each community. I
3 cannot agree with Mr. Melcher regarding the competitive market
4 opportunities he sees for 911 services, but Mr. Melcher does correctly
5 state that cost recovery is an issue. Until now, there have not been any
6 CLECs approaching AT&T Florida to compete for 911 services. Maybe
7 CLECs avoid this market because it is a public service and not a retail
8 service with a higher profit margin. Nevertheless, AT&T Florida has not
9 kept CLECs from providing 911 service, as Mr. Melcher alludes in his
10 testimony on page six, lines 9-12. AT&T Florida's negotiations and
11 positions in the Intrado arbitration are mainly concerned with equitable
12 cost recovery and network reliability.

13
14 Q. IS IT APPROPRIATE FOR INTRADO TO REDESIGN THE ORDERING
15 AND PROVISIONING OF SERVICE ORDER SYSTEMS FOR AT&T
16 FLORIDA?

17
18 A. No. The system Mr. Melcher proposes is not in use today because it is
19 manual, unreliable and prone to errors. The public's expectation of 911
20 service is that it should be automatic, reliable and error free. Intrado has
21 created a niche market providing database management functions for 911
22 traffic and should clearly know that any manual system would be inferior to

1 an automated process that utilizes modern database management
2 processes.

3

4 The E911 selective router in fact, utilizes a database management
5 process to route a 911 call to the correct PSAP. Class Marking is a
6 manual process and if it were to be automated, it would require significant
7 financial and manpower resources to change AT&T's overall provisioning
8 process just to accommodate what the selective router already does with
9 a very high degree of accuracy.

10

11 Q. ON PAGE 11, LINES 12-15 OF MR. MELCHER'S TESTIMONY, HE
12 MAKES THE STATEMENT THAT "BY RELYING ON LINE ATTRIBUTE
13 ROUTING...THE CALL MAY BE DELIVERED WITHOUT INTRODUCING
14 FURTHER COMPLEXITIES OR POINTS OF FAILURE DURING CALL
15 SET-UP AND DELIVERY TO THE APPROPRIATE E911 SYSTEM." IS
16 THIS CORRECT?

17

18 A. No. In fact, exactly the opposite is true. Class Marking is a manual
19 process, where each individual Service Representative processing
20 customer service orders will determine the routing of 911 traffic. There
21 are AT&T Service Representatives across AT&T's footprint who take
22 orders from customers and process service orders each day. If they have
23 the necessary knowledge and make no errors whatsoever in their work

1 activities, there will be no problems in processing these orders; 911 calls
2 will route correctly. However, if there are human errors in the processing
3 of these orders, there will be misrouted 911 calls. In my experience, what
4 Intrado proposes is very complex, involving personnel that were never
5 meant to be included in the routing of 911 calls. Mr. Melcher correctly
6 states that the fewer points of failure introduced into call set-up and
7 delivery, the more accurate call delivery will be. However, the method he
8 proposes will create more complexity and points of potential failure than
9 the current selective router method that is in use today.

10

11 Q. ARE 911 CALLS MORE RELIABLE USING THE CURRENT SELCTIVE
12 ROUTER METHOD THAN CLASS MARKING?

13

14 A. Yes. On page 11, lines 17-20, Mr. Melcher ignores a fundamental
15 network principle in that he assumes that all points in the call path will all
16 have the same degree of reliability. This is not the case. 911 Selective
17 Routing is a highly reliable method for routing 911 traffic that has been in
18 place for decades. It is mechanized, efficient and its proven track record
19 makes it the gold standard for the routing of 911 traffic. Performing 911
20 Selective Routing twice, will not degrade the 911 network, since Selective
21 Routing is highly reliable. Conversely, Class Marking is not highly reliable,
22 but error prone. The fact that Class Marking will only be performed once

1 on a call as opposed to Selective Routing being performed twice, does not
2 in itself mean that Class Marking is more reliable.

3

4 Q. CAN YOU PROVIDE AN EXAMPLE TO ILLUSTRATE?

5

6 A. Yes. Assume Selective Routing is 99.999% reliable, and Class Marking is
7 only 90% reliable. Since a call will only be Class Marked once, the overall
8 Class Marking process is 90% reliable. AT&T Florida's proposal is to use
9 the primary Selective Routing method. The majority of calls under this
10 proposal will only need to be Selective Routed once, making the process
11 for the majority of calls 99.999% reliable. The other calls will need to be
12 Selective Routed twice (once at the primary Selective Router, and once
13 again at the Secondary Selective Router); however, since Selective
14 Routing is 99.999% reliable, performing the function twice, still makes the
15 overall process 99.998% reliable, which is still a significant improvement
16 from the Class Marking process which is only 90% reliable.

17

18 Q. CAN CLASS MARKING ACTUALLY CREATE MORE POINTS OF
19 FAILURE IN THE NETWORK THAN PRIMARY SELECTIVE ROUTING?

20

21 A. Yes. Mr. Melcher correctly states that the fewer points of failure
22 introduced into call set-up and delivery, the more accurate call delivery will
23 be. However, the method he proposes will create more complexity and

1 points of failure than the current selective router method that is in use
2 today. With Class Marking, many manual translations changes are
3 required to create the initial network capabilities before it can be used.
4 This is both expensive and labor intensive. Once the basic capabilities
5 have been built into the network, service order changes will be required for
6 every existing customer to change their service to include Class Marking.
7 This step too, is manual, expensive and labor intensive. These manual
8 decisions will be required each time a customer establishes or changes
9 their service. AT&T Florida has never needed to train Service
10 Representatives to understand call routing and network translations
11 impacts, let alone be responsible for insuring that 911 calls are delivered
12 to the correct PSAP.

13

14 Q. ARE 911 CALLS SIMILAR TO LONG DISTANCE CALLS, AS MR.
15 MELCHER STATES IN HIS TESTIMONY, ON PAGE 11, LINES 3-4?

16

17 A. No. Mr. Melcher makes the comparison that 911 routing would be similar
18 to routing 1+ long distance traffic. There are two major configurations with
19 long distance call routing. The first is often referred to as intraLATA toll (or
20 LEC-LEC toll), and it does not use an interexchange carrier (IXC) in any
21 part of the call. The second uses an IXC to carry the call from the
22 originating End Office or Tandem switch to the terminating End Office or
23 Tandem switch. The translations used to route these calls utilize a carrier

1 common block within the switch. Each IXC has specific routing
2 instructions coded into the switch to determine how and where each type
3 of call will be routed, e.g., coin, 8YY, etc.

4
5 Line Class Codes (LCCs) utilize what is referred to as class of service
6 screening to route calls. For each class of service, certain distinctions are
7 coded into the switch to determine the originating rate center, toll
8 properties, block 900 calling and attributes that customers may desire.
9 This is the type of screening that Intrado proposes for AT&T Florida to
10 change within its network and operational support systems. These
11 changes are very complex, expensive and would not work as well as
12 Intrado claims. As I had previously testified, NENA does not endorse
13 Class Marking, and other ILECs do not use or recommend Class Marking
14 to route 911 traffic.

15
16 Q. AT&T FLORIDA PROPOSES USING THE SELECTIVE ROUTER
17 DATABASE TO ROUTE 911 CALLS TO THE CORRECT PSAPS AND
18 TO INTRADO FOR THE PSAPS INTRADO SERVES. ARE THERE
19 OTHER SERVICES IN THE TELECOMMUNICATIONS FIELD THAT
20 UTILIZE DATABASES FOR CALL ROUTING?

21
22 A. Yes. There are several instances where a database is utilized in call
23 routing. One of the first used was Line Identification Data Base (LIDB),

1 where customer specific data was used for operator assisted calls for third
2 party billing and calling name data for Caller-ID. Another is the 800
3 database that correlates an 800 number to a POTS dialable number.
4 Advanced Intelligent Network (AIN) establishes trigger points of a call,
5 where call processing is suspended until a database correlation can be
6 made to determine where a call will route or if it should route. Local
7 Number Portability (LNP) was implemented in 1998, and queries are
8 performed to the LNP database on every call to determine if the
9 terminating end user customer has moved their service to another service
10 provider.

11

12 In support of accurate 911 call routing, there are no major carriers that
13 would ever entertain implementing such a process as Class Marking when
14 a centralized database can do and has done a superior job of call routing.
15 Intrado has hired Mr. Melcher to provide his personal opinion to try to
16 reduce Intrado's costs, even at the risk of inferior service. The inevitably
17 inferior service; however, will harm AT&T Florida and its customers.
18 Intrado's customer is the 911 PSAP, which is essentially unaffected by this
19 issue, since they only terminate the calls and never originate 911 calls.

20

21 Q. ON PAGE 12, LINES 9-19, MR. MELCHER COMPARES CLECS WITH
22 ILECS FOR CALL DELIVERY. IS THIS A FAIR COMPARISON?

23

1 A. No. CLECs typically serve customers from a single switch across a broad
2 area because entrance facilities are less costly to build.³ Also, depending
3 on how it is configured, a switch can handle as many as 100,000 end user
4 customers before a second switch is required. CLECs choose to
5 implement a method of Class Marking because their customer base is
6 small and there is little or no economy of scale for mechanization. Mr.
7 Melcher correctly acknowledges that he cannot make an apples-to-apples
8 comparison with wireless providers;, however, he erred when he makes
9 the comparison of CLECs and ILECs. ILECs have been providing service
10 for many years, and there are no substantial issues of misrouted 911 calls
11 today. AT&T Florida fully embraces all of the new services offered in next
12 generation technologies; however, there must be sound decisions made
13 that will allow a safe and reliable transition to next generation switching.
14 Intrado's proposal does not accommodate this very necessary aspect of
15 network reliability.

16
17 Q. IS THERE AN ADVANTAGE TO INTRADO IF AT&T FLORIDA USES
18 CLASS MARKING?

19
20 A. Yes. Intrado has proposed Class Marking in order to prevent AT&T
21 Florida from using a selective router as part of a 911 call destined for an
22 Intrado served PSAP. In this way, Intrado's PSAP will not be charged by

³ TRRO at ¶ 138

1 two carriers for the selective router function. This is an incremental cost
2 that will be incurred using a Primary/Secondary selective router when
3 AT&T Florida's end offices are split between PSAP jurisdictions. AT&T
4 Florida's proposed language⁴ clearly establishes the majority of calls will
5 be routed to the Primary selective router, which will mitigate additional
6 selective router costs to the greatest extent possible. AT&T Florida's
7 language is reciprocal, fair and will allow Intrado to charge the PSAP for
8 any selective routing it performs, if and when Intrado begins to provide
9 local exchange service in Florida.

10

11 Intrado's language would either use Class Marking or establish Intrado as
12 the Primary selective router, regardless of the number of access lines
13 using Intrado's PSAP service. This is not equitable and should not be
14 allowable. Emergency 911 traffic is an obligation to the public and
15 network reliability must be put before Intrado's profitability.

16

17 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

18

19 A. Yes.

⁴ 911 Appendix Section 6.1.1.1