

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:)
)
Revision of the Commission's Rules to) CC Docket No. 94-102
Ensure Compatibility with Enhanced 911)
Emergency Calling Systems)
)
Request for Waiver) TRS ID Nos. 808439, 820852

QWEST WIRELESS, LLC AND TW WIRELESS, LLC SECOND AMENDED
PETITION FOR EXTENSION OF TIME OR WAIVER OF SECTION 20.18 OF THE RULES

Sharon J. Devine
Kathryn Marie Krause
Suite 700
1020 19th Street, N.W.
Washington, DC 20036
(303) 672-2859

Attorneys for
QWEST WIRELESS, LLC
TW WIRELESS, LLC

November 30, 2001

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION AND SUMMARY	1
II. PREVIOUS QWEST WIRELESS E911 PHASE II COMPLIANCE FILINGS	3
III. THERE REMAIN OBSTACLES FOR E911 PHASE II COMPLIANCE REQUIRING ADDITIONAL RELIEF	5
A. Unavailability Of Handsets	5
1. The Immediate Problem	5
2. New Penetration Benchmarks Proposal	7
B. Nortel/Ericsson Markets E911 Phase II Deployment And Potential Problems	9
IV. CONCLUSION	10

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:)
)
Revision of the Commission’s Rules to) CC Docket No. 94-102
Ensure Compatibility with Enhanced 911)
Emergency Calling Systems)
)
Request for Waiver) TRS/Form 499 ID Nos. 808439, 820852

QWEST WIRELESS, LLC AND TW WIRELESS, LLC SECOND AMENDED PETITION
FOR EXTENSION OF TIME OR WAIVER OF SECTION 20.18 OF THE RULES

I. INTRODUCTION AND SUMMARY

On October 12, 2001, the Federal Communications Commission (“Commission” or “FCC”) issued a *Public Notice*, outlining the Commission’s expectations regarding filings from mid-size and small wireless carriers with respect to E911 Phase II compliance.¹ The Commission since advised that “[c]arriers who have already filed waiver requests need not refile, but may file revised requests or supplemental information if they wish.”²

Accordingly, Qwest Wireless, LLC and TW Wireless, LLC -- collectively “Qwest Wireless”³ -- herein modifies, for the second time, its pending Petition for relief with respect to

¹ *Public Notice, Commission Establishes Schedule for E911 Phase II Requests by Small and Mid-Sized Wireless Carriers*, FCC 01-302, rel. Oct. 12, 2001. This *Public Notice* was followed up by another one some days later wherein the Commission provided further guidance on the form and content of filings. See note 2, below.

² *Public Notice, Wireless Telecommunications Bureau Provides Guidance on Filings by Small and Mid-Sized Carriers Seeking Relief from Wireless E911 Phase II Automatic Location Identification Rules*, DA 01-2459, rel. Oct. 19, 2001 (“Oct. 19, 2001 Public Notice”).

³ Qwest Wireless, LLC, together with TW Wireless, LLC, a joint venture in which Qwest Wireless holds a majority equity and sole controlling ownership interest, provides broadband Personal Communications Services (“PCS”) in a number of markets.

the Commission's E911 Phase II requirements, specifically Section 20.18(g)(1)(i)-(iv), governing the sale and activation of Automatic Location Information ("ALI")-capable handsets.⁴ Qwest Wireless has been unable to secure ALI-capable handsets in any significant number for testing or commercial deployment, despite an outstanding firm purchase order. Therefore, Qwest Wireless herein modifies the proposed handset penetration schedule currently reflected in its Petition⁵ and Amended Waiver Request⁶ to reflect the fact that, at this time, it has no clear idea when ALI-capable handsets will be made available to it.

Qwest Wireless' various requests for relief meet the requirements for granting waivers generally,⁷ as well as the specific requirements outlined in the Commission's *Fourth Memorandum Opinion and Order*.⁸ Qwest Wireless continues to demonstrate an inability to comply with the Commission's E911 Phase II mandates due to circumstances beyond its control, while concomitantly providing the Commission with an outline of its clear path to compliance

⁴ 47 U.S.C. § 20.18(g)(1)(i)-(iv).

⁵ Qwest Wireless, LLC and TW Wireless, LLC Petition for Extension of Time or Waiver of Section 20.18 of the Rules, filed July 23, 2001 ("Petition"). The handset penetration benchmark dates proposed in the Petition are captured in the Attachment A chart.

⁶ Qwest filed an Amended Waiver Request on Sep. 17, 2001 ("Amended Waiver"), asking that it be granted until March 31, 2002 to begin providing E911 Phase II service commercially in Lucent markets and proposing an ALI-capable handset penetration schedule aligned with this network deployment projection. Amended Waiver at 1-2. The handset penetration benchmark dates as modified by the Amended Waiver are captured in the Attachment A chart.

⁷ See *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990), *Wait Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969) (circumstances of a particular carrier warrant a deviation from rules adopted with respect to an industry or class of carriers and the granting of relief will serve the public interest).

⁸ *In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Fourth Memorandum Opinion and Order*, 15 FCC Rcd. 17442, 17457-58 ¶ 44 (2000) ("*Fourth MO&O*"). See also *Oct. 19, 2001 Public Notice*, noting that the *Fourth MO&O* established E911 Phase II compliance requirements and outlined elements that should be met if waivers from those requirements were requested.

with the Commission's rules. For these reasons, Qwest Wireless' requests for relief should be granted.

In addition to modifying its pending requests for relief, Qwest Wireless here advises the Commission of a situation that could lead to a need for additional relief in the future with respect to switch upgrades in the Nortel/Ericsson markets. At this time, Qwest Wireless is hopeful that the E911 Phase II October, 2002 Nortel/Ericsson deployment schedule does not slip. However, activities occurring over the next few months will determine whether Qwest Wireless may need to request additional relief.

II. PREVIOUS QWEST WIRELESS E911 PHASE II COMPLIANCE FILINGS

In its Petition filed July 2001, Qwest Wireless described its decision to pursue a hybrid solution with respect to E911 Phase II compliance that would be accomplished through a combination of network elements and ALI-capable handsets.⁹ The Petition demonstrated that Qwest Wireless resolutely had proceeded to bring E911 Phase II service to Public Safety Answering Points ("PSAP") in line with the Commission's mandates, but was unable to do so due to circumstances outside of its control.¹⁰ Not only were Qwest Wireless' switch manufacturers unable to provide the fundamental E911 Phase II network infrastructure in line with Commission-mandated deadlines, but ALI-capable handsets were not readily available, thwarting any attempt by Qwest Wireless to meet the Commission's October 1, 2001 date to begin selling and activating such handsets.

The Petition demonstrated that, although Qwest Wireless was changing its E911 Phase II compliance approach from a "network only" one to a "hybrid AGPS" one, the latter would bring

⁹ The solution is called an Assisted Global Positioning Satellite ("AGPS") solution. *See* Petition, *passim*.

¹⁰ *Id.* at 8.

public interest safety benefits unavailable from the former solution.¹¹ In its Petition, Qwest Wireless also outlined its anticipated clear path to compliance, as required by the Commission's *E911 Phase II Orders*.¹² At the same time, Qwest Wireless indicated that the Commission's E911 Phase II requirements represented aggressive targets that were based on predictions rather than manufacturing realities. Qwest Wireless cautioned that circumstances in the future -- again outside of its control -- might cause it to seek additional relief from the Commission's "date certain" Phase II mandates.¹³

Just such circumstances occurred. In September, 2001, Qwest Wireless was forced to file an Amended Waiver Request because one of its switch vendors -- Lucent -- was unable to deliver the necessary E911 Phase II switching upgrades according to its previously committed-to schedule. As a result, Qwest Wireless is no longer capable of turning up Phase II service in its Lucent markets by the end of 2001, as it stated it would do in its Petition.¹⁴ For this reason, Qwest Wireless amended its request such that its Phase II obligations in its Lucent markets would be postponed until March 31, 2002.¹⁵ In line with that requested delay, Qwest Wireless asked that it be allowed additional time to begin selling and activating handsets in its Lucent territories, since handsets themselves were not readily available and Qwest Wireless' customers would not be able to use them in Lucent markets even if they were secured.¹⁶ In the Amended

¹¹ *Id.* at 8-10, 14-15, 18-20.

¹² *Id.* at 5-6, 20-21.

¹³ *Id.* at 8-10, 34.

¹⁴ In Qwest Wireless' Petition, it asked for a waiver through the end of 2001 to install necessary E911 Phase II Lucent software in the Mobile Switching Center ("MSC") switches and begin providing Phase II service commercially. *Id.* at iii, 16.

¹⁵ Amended Waiver at 1-2.

¹⁶ Amended Waiver at 3. There Qwest Wireless aligned the accomplishment of the Lucent switch upgrades (due March, 2002) with the initial commercial deployment of ALI-capable

Waiver request, Qwest Wireless again provided dates to the Commission that it believed were achievable for E911 Phase II compliance; and it demonstrated a clear path to compliance with respect to the Commission's Phase II mandates.¹⁷

III. THERE REMAIN OBSTACLES FOR E911 PHASE II COMPLIANCE REQUIRING ADDITIONAL RELIEF

Qwest Wireless is pleased to inform the Commission that the Lucent network upgrades associated with the implementation of the hybrid solution is proceeding as outlined by Qwest Wireless in its Amended Waiver request. Qwest Wireless anticipates that it will have installed the necessary switching capability for E911 Phase II service in Lucent markets by March 31, 2002, if not before.¹⁸ However, while the switching infrastructure will be available, Qwest Wireless does not anticipate that vendors will make ALI-capable handsets available to it in numbers that will accommodate meaningful commercial deployment until the end of Third Quarter, 2002, as described more fully below.

A. Unavailability Of Handsets

1. The Immediate Problem

At the time Qwest Wireless filed its Petition, it was aware of two vendors that had represented that ALI-capable handsets would be available during Fourth Quarter 2001 --

handsets. The requested dates for the handset deployment were not predicated on a shortage of handsets. However, Qwest Wireless did advise that a shortage of handsets -- independent of other factors -- might cause it to seek additional relief from the Commission. *Id.*

¹⁷ The dates associated with that filing are also reflected in the attached chart (*see* Attachment A).

¹⁸ This is in line with the timeframes in which Verizon and Sprint expect to have Lucent switching capabilities available in their markets. *See In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request for Waiver by Verizon Wireless*, CC Docket No. 94-102, *Order*, FCC 01-299, rel. Oct. 12, 2001 ¶ 11 ("*Verizon Order*"); *In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request for Waiver by Sprint Spectrum L.P. d/b/a Sprint PCS*, CC Docket No. 94-102, *Order*, FCC 01-297, rel. Oct. 12, 2001 ¶ 9 ("*Sprint Order*").

Kyocera and Samsung.¹⁹ Since the filing of that Petition, Qwest Wireless placed a firm order for 25,000 handsets with a qualified vendor. Under the terms of that contract, Qwest Wireless was to have received test handsets by September 1, 2001 and handsets for commercial deployment by October 1, 2001. However, as of the date of this filing, no handsets have been provided to Qwest Wireless. Moreover, the vendor has rebuffed repeated inquiries regarding when such handsets will be forthcoming. Qwest Wireless' current intention is to contact this vendor every other week to check on the status of its order and to document its conversations²⁰ so that the Commission has the opportunity to confirm that the delay in handset availability is not under Qwest Wireless' control.

Qwest Wireless is also negotiating with another handset vendor; and it now anticipates placing another firm purchase order for 10,000 handsets. Initial discussions with this vendor resulted in representations that test handsets would be provided to Qwest Wireless by November, 2001. As of the date of this filing, no handsets have been provided and the vendor has changed the anticipated delivery date to December of 2001. Qwest Wireless has no reason to believe this "firm" commitment to be any more "firm" than those it previously received. Still, as with the first vendor contracted with by Qwest Wireless, Qwest Wireless will contact this vendor every other week to ascertain the status of the delivery of the test handsets.²¹

¹⁹ Petition at 18. At one point in time, Qwest Wireless anticipated working with Kyocera to secure test and commercially-available handsets. *See* Petition at Attachment A: Qwest Wireless, LLC and TW Wireless, LLC Amended Report on Enhanced 911 Phase II Implementation ("Amended Report") originally filed June 19, 2001 at 9-10 and note 20. However, this is no longer an expectation. *See* Attachment B to this filing, Affidavit of Travis V. Beard ("Beard Affidavit") ¶ 3.a.

²⁰ *See* Attachment B, Beard Affidavit ¶ 3.b.

²¹ *Id.* ¶ 3.c.

Qwest Wireless believes the current shortage of ALI-capable handsets to be due to the convergence of two factors, both of which are outside of its control. First, manufacturers have determined not to manufacture an interim ALI-capable model (with a MSM3300 chipset), focusing instead on one with a more sophisticated location capability (the MSM5100) chipset.²² Second, national carriers have negotiated to buy all the available supply through requirements-type contracts so that they may meet the Commission's handset penetration guidelines.²³ And, while the Commission has become a target for manufacturer and vendor claims that new "solutions" to E911 Phase II service provisioning challenges are on the horizon or imminently ready for commercial deployment, Qwest Wireless' experience does not support such claims.²⁴

2. New Penetration Benchmarks Proposal

Given Qwest Wireless' past experience, its expectation is that it will most likely have some ALI-capable test handsets in hand²⁵ by Second Quarter of 2002.²⁶ This would allow for the commercial provision of such handsets in Third Quarter 2002. After appropriate network and quality assurance testing, Qwest Wireless would then be in a position to begin selling and activating those sets to customers by September 30, 2002.

²² In its Petition, Qwest Wireless advised the Commission of this tension. Petition at 17, note 39. *See also Amended Report* at 9-10 and note 20. *And see* Attachment B, Beard Affidavit ¶ 2.a.

²³ Attachment B, Beard Affidavit, *id.*.

²⁴ *Id.* ¶ 4.

²⁵ From Qwest Wireless' Position Determining Equipment ("PDE") vendor, Compaq/Snaptrack, it has secured three MSM3300 model form factor accurate ("FFA") handsets for testing purposes. Thus, any scheduling delay in the availability of handsets for commercial sales will not affect the Lucent market "readiness" or Qwest Wireless' provision of Phase II services to those PSAPs that provide Qwest Wireless with valid Phase II requests.

²⁶ Qwest Wireless cannot make firm commitments regarding the target dates proposed in this filing. In this regard, the Commission's stated enforcement approach with regard to nationwide carriers is inappropriate. *Compare Verizon Order* ¶ 34 (discussing enforcement conditions imposed on grant of Verizon Wireless waiver request). Qwest Wireless' ability to deploy E911 Phase II technology remains dependent on factors outside of its control.

Based on the assumptions for the initial selling of such handsets, Qwest Wireless predicts it might be able to achieve a 25% penetration benchmark by December 31, 2002; a 50% penetration benchmark by June 30, 2003 and a 100% penetration benchmark by December 31, 2003.²⁷ This schedule should allow Qwest Wireless to meet the Commission's overall 95% subscriber penetration requirement by the currently-mandated date of December 31, 2005.²⁸

Of course, achievement of these benchmarks requires considerable manufacturing activity and available inventory and is dependent, in substantial part, on customer purchasing behaviors. Qwest Wireless believes that for there to be any meaningful sales penetration of ALI-capable handsets, a wireless carrier must have more than one model of handset and more than one manufacturer available to its customers. Absent such choice, customers could be expected quite often to choose a non-ALI-capable handset or choose the service of a carrier that provided equipment choices.²⁹ For this reason, achievement of the penetration benchmarks is dependent as much on choices regarding handsets as the availability of handsets themselves.

²⁷ This date is the same as that set by Verizon with respect to its 100% penetration benchmark. See *Verizon Order* ¶¶ 18, 20, 26 (finding that Verizon "has committed to an aggressive and clear path toward full compliance").

Sprint anticipates having 100% penetration by December, 2002. *Sprint Order* ¶ 16. While Qwest Wireless' network more resembles Sprint's than Verizon's, Qwest Wireless -- like Verizon -- "sell[s] products that contain tri-mode capability" (*Verizon Order* ¶ 20). While Verizon requires this type of handset because of its network configuration, Qwest Wireless' requires it because of demonstrated customer demand. See Attachment B, Beard Affidavit ¶ 3.d.(4). Thus, during the year 2003, Verizon and Qwest Wireless will be seeking to tap similar manufacturers for similar handsets. This could mean that Qwest Wireless (the regional carrier) is relegated to a lesser priority by manufacturers and that additional time to achieve this penetration benchmark might become necessary.

²⁸ At this time, Qwest Wireless is predicting it can achieve a handset penetration of 100% by at least December 31, 2003. However, if a handset shortage results in the 100% sales performance benchmark not being achieved by at least March 2004, Qwest Wireless would be unable to meet this date.

²⁹ Attachment B, Beard Affidavit ¶ 3.d.(2).

In the final analysis, only time will tell if the benchmarks are achievable. As Qwest Wireless moves closer to the penetration capability it predicts for the referenced benchmark, it will re-assess its ability to meet the targeted penetration. If it will be unable to achieve the benchmark, it will apprise the Commission in advance and seek additional relief as appropriate.

B. Nortel/Ericsson Markets E911 Phase II Deployment And Potential Problems

While the Lucent E911 Phase II switching infrastructure upgrades are proceeding as anticipated, it is possible that there may be a modest delay in deployment of Phase II services in Nortel/Ericsson markets³⁰ from Third Quarter 2002, as requested in Qwest Wireless' Petition,³¹ to Fourth Quarter 2002 or possibly First Quarter 2003. While Qwest Wireless hopes the Third Quarter 2002 performance date will be realized, certain Nortel manufacturing decisions have resulted in potential E911 Phase II impacts on Qwest Wireless' base station provider, Ericsson. These impacts might cause the Third Quarter 2002 date to slip.

This potential delay stems from Qwest Wireless' open wireless architecture,³² which allows it to maximize its position as purchaser from a variety of manufacturers and vendors. However, this architecture may leave Qwest Wireless' successful E911 Phase II deployment vulnerable to delays of any single supplier. For example, a recent determination by Nortel to

³⁰ The Nortel/Ericsson markets discussed in this section represent about 16-20% of Qwest Wireless' customer base.

³¹ Petition at iii, 16-17. This timeframe is comparable to that reflected in the Commission's mandates with respect to the Verizon and Sprint waiver requests. *See Verizon Order* ¶ 39; *Sprint Order* ¶¶ 1, 10, 37 (both requiring the Nortel upgrades to be accomplished on or before the end of August, 2002).

³² Qwest Wireless' architecture is based on Open A (the "A" representing the A interface based on the TIA/EIA-41 standard network model. The link between the MSC and the Base Station Controller ("BSC") is labeled "A."). The Open A standard refers to a standards-based (not proprietary) connection between MSC and BSC. The Air Interface Standards are IS-95 standards established by the Code Division Multiplexing Access ("CDMA") Development Group.

change an aspect of its wireless switching infrastructure (not E911 specific) has produced unforeseen problems for Qwest Wireless' base station vendor, Ericsson,³³ with respect to E911 Phase II deployment.

At this time, Ericsson anticipates being able to fix the current software incompatibilities between March, 2002 and November, 2002. Qwest Wireless is pressing Nortel and Ericsson for a more precise commitment and it will keep the Commission advised on the status of the discussions. But, at this time, the public interest is not compromised by this situation. First, all but one of the valid PSAP requests are in Lucent markets. Second, the PSAP who requested E911 service in the Nortel/Ericsson market has represented that it is not in a position to deploy Phase II for some time.

IV. CONCLUSION

It is clear from the *Orders* released by the Commission,³⁴ as well as from its determination that an inquiry into technical and operational issues affecting deployment of wireless E911 service is necessary,³⁵ that the Commission is quite concerned about the pace and progress of E911 Phase II deployments. Qwest Wireless understands the Commission's concerns but also appreciates the situation of vendors and carriers attempting to meet "date certain" mandates promulgated years before the existence of any proven technology to achieve

³³ In the past, Nortel provided two software packages, a wireless one and a wireline one. It has decided to discontinue the wireless package. This change produces consequences for Ericsson because Ericsson currently interfaces with the wireless software package, not the wireline one.

³⁴ See *Verizon Order*, *Sprint Order* and other recently-granted waivers for Nextel Communications, Inc. (FCC 01-295, rel. Oct. 12, 2001), AT&T Wireless Services, Inc. (FCC 01-294, rel. Oct. 12, 2001) and Cingular Wireless LLC (FCC 01-296, rel. Oct. 12, 2001).

³⁵ *News Release*, "FCC Announces Dale Hatfield to Lead Inquiry of Technical and Operational Issues Affecting Deployment of Wireless Enhanced 911 Services," Nov. 20, 2001.

the regulatory objectives. In such situation, deployment problems are predictable and inevitable.³⁶

No carrier likes having to file E911 Phase II requests for extension of time or waiver filings with the Commission, particularly not repeated ones. Still, that does not change the facts. Carriers are acting in good faith and reasonably. Manufacturers are working against commercial and marketplace stresses that defy easy answers. And national carriers -- given their needs and purchasing power -- have the primary attention of the manufacturers who are under substantial pressure from the Commission to get on with Phase II deployment. Regional, mid-size and small carriers are struggling to be heard and have an even harder time securing performance for network upgrades and ALI-capable handsets.

In this filing, Qwest Wireless again provides the Commission with its anticipated clear path to compliance. However, it cannot say for certain that another, future filing will not occur. If Qwest Wireless cannot secure an E911 Phase II compliant network by the dates it previously predicted, it will seek additional relief. If Qwest Wireless cannot secure handsets in quantities that allow it to conform to Commission mandates or its most recent sales predictions, it will seek relief. In all cases, Qwest Wireless will be guided by its understanding of the seriousness of purpose of all participants to bring E911 Phase II to the marketplace.

Qwest Wireless' due diligence in pursuing E911 Phase I compliance,³⁷ its determination to proceed with a quality E911 Phase II implementation,³⁸ and the limited relief it seeks, warrant

³⁶ *Compare Verizon Order at Separate Statement of Commissioner Kathleen Abernathy* (“Our E911 regime was a government-led effort to speed the development and deployment of a new technology prior to a commercial demand for that product. It was not based on any statutory mandate; nor was it based on any tangible technological showing. It was a tremendous undertaking, full of uncertainty about the technology, the timing, and the costs for all parties.”).

³⁷ As Qwest Wireless advised the Commission in its original Petition, Qwest Wireless has deployed Phase I service in Arizona, Colorado and Minnesota, within a majority of counties in

granting its requests for relief. Granting the requested relief also comports with various Commission objectives ranging from regulatory precedent of providing carriers relief when compliance difficulties stem from matters outside of their control to the promotion of technology neutrality and, most importantly, the protection of public safety. For the reasons discussed herein, the Commission should grant Qwest Wireless' its requested relief.

Respectfully submitted,

QWEST WIRELESS, LLC
TW WIRELESS, LLC

By: Kathryn Marie Krause
Sharon J. Devine
Kathryn Marie Krause
Suite 700
1020 19th Street, N.W.
Washington, DC 20036
(303) 672-2859

November 30, 2001

Their Attorneys

its coverage area, covering approximately 459,000 customers or 45% of its customer base. Qwest Wireless is currently working toward deploying Phase I service in Idaho (Ada County), Nebraska, Washington (King County) and Oregon covering an additional 171,000 customers, for a total of 63% of its current customer base covered by Phase I service. *See* Petition at 3, note 7. *And see* Attachment C, providing information on existing Phase I implementation.

³⁸ As demonstrated in Attachment C, Qwest Wireless will complete all valid outstanding PSAP requests for Phase II service received before July 31, 2002 by December 31, 2002 or earlier. In addition, valid PSAP requests received after July 31, 2002, will be processed within six months, in accordance with the Commission's rules.

ATTACHMENT A

RELIEF REQUEST COMPARISON

	Petition July, 2001	Amended Waiver September, 2001	Current Filing
Lucent Deployment ¹	December 31, 2001	March 31, 2002	No Change
Nortel/Ericsson Deployment	Third Quarter, 2002	No Change	Warning about possible Nortel/Ericsson compatibility problem; caution that date might slip an additional quarter (end of 2002) or two (beginning of 2003)
Handset Benchmarks	Begin selling = 12/31/01 25% = 3/31/02 50% = 12/31/02 100% = 3/31//03	Begin selling = 3/31/02 25% = 6/30/02 50% = same 100% = same Warned that securing handsets might become problematic	Begin selling = 9/30/02 25% = 12/31/02 50% = 6/30/03 100% = 12/30/03

¹ This represents commercial deployment, *i.e.*, the point at which Qwest Wireless would be in a position to fulfill a valid PSAP request.

ATTACHMENT B

AFFIDAVIT of Travis V. Beard

I, Travis V. Beard, state the following in support of Qwest Wireless' E911 Second Amended Waiver Request. The information set out below is based either on my own personal knowledge or on conversations I have had with colleagues who are in a position to know the accuracy of the information.

- 1. General Information.** I work for Qwest Wireless in the position of E911 Project and Product Manager and have been in that position for 2 years. My responsibilities in that position include managing internal and vendor resources to meet deployment commitments within the timeframes of the FCC's CC Docket No. 94-102 mandate; ensuring Phase I cost recovery; ongoing management and maintenance of existing E911 deployments with internal resources and Intrado (Qwest Wireless' service bureau); managing Phase I and II vendor relationships, including the monitoring contractual commitments made to Qwest Wireless; and acting as point of contact for PSAPs with respect to their deployment plans. In addition to these responsibilities, I also work closely with our internal engineering group to evaluate products and services that might prove useful with respect to Qwest Wireless' deployment of E911 services.
- 2. a.** Below I provide information on Qwest Wireless' attempts to secure handsets for E911 Phase II Deployment. This process has been made difficult by two factors, which converge to create an environment of handset shortages. First, manufacturers originally anticipated manufacturing two models of Automatic Information Location ("ALI")-capable handsets – the MSM with the 3300 chipset and an MSM with a 5100 chipset. A shift in manufacturing strategy caused manufacturing of the 3300 chipset/handset to essentially stop. Therefore, as of now, there is very limited availability or continued manufacturing of the 3300 chipset model. While Qwest Wireless has secured from its Position Determining Equipment ("PDE") vendor (Compaq/Snaptrack) a few 3300 chipset handsets for testing, Qwest Wireless does not expect to receive ALI-capable 3300 chipset/handsets from handset vendors in any numbers to support commercial deployment. Second, the change in manufacturing strategy results in there being fewer potentially available handsets in the marketplace for current or near-future deployments. Qwest Wireless believes that whatever handsets are available are being provided to the national wireless carriers for their use. This results in a handset shortfall with respect to the requirements of regional and local carriers, such as Qwest Wireless.
- b.** I also provide information on my discussions with two vendors that claim they have a "solution" for delayed E911 Phase II deployments. The first vendor, Rosum Corporation, originally surfaced when it filed comments in the Qwest Wireless waiver proceeding. Rosum filed a letter, directed to the attorneys who signed that

Petition; and I was asked to have some follow-up conversations with the business, which I did. The second vendor, Enuvis, apparently approached the Commission with some information claiming it also had a “fix” for the E911 Phase II deployment delays. I originally spoke with Enuvis prior to the communication with the Commission. I report out on my communications and conclusions below. I do not consider either vendor suitable for Qwest Wireless’ E911 Phase II deployment, at this time.

- 3. Handset Deployment** -- Qwest Wireless has had considerable difficulty getting commitments for the delivery of ALI handsets -- including **test** handsets. This makes the decision to proceed to commercial orders, through formal Purchase Orders (“PO”), an unreliable exercise. However, as indicated below, Qwest Wireless has placed at least one firm PO for handsets with a vendor and is currently reviewing the desirability of placing a PO with another.
 - a. Kyocera.** Qwest Wireless had discussions with Kyocera about procuring handsets from them, and this vendor was referenced in Qwest Wireless’ Amended Report and Petition as being a potential source of handsets. Kyocera made a decision not to produce an MSM3300 handset and was not able to support Qwest Wireless in its trial efforts. Qwest Wireless will continue discussions with Kyocera about future handset deployment, in light of Qwest Wireless’ handset penetration expectations.
 - b. Vendor A.** Qwest Wireless has communicated with Vendor A about acquiring both test handsets and commercial handsets with the MSM3300 chipset. In fact, Qwest Wireless placed a PO for 25,000 handsets from this vendor. The contract required delivery of test handsets by September 1, 2001, and additional commercial handsets by October 1, 2001. As of the date of this filing, Qwest Wireless has received no handsets and the vendor professes to have no knowledge regarding when such handsets might be delivered. Qwest Wireless intends to query this vendor every other week for information on the delivery of the handsets, documenting contact dates, names and other pertinent information.
 - c. Vendor B.** Qwest Wireless has had numerous conversations with Vendor B about acquiring ALI-capable handsets. Vendor B previously committed to provide **test** handsets to Qwest in November, 2001, for a trial. However, to date, Qwest Wireless has received no handsets. Vendor B recently announced that it would be debuting the handset Qwest Wireless is interested in procuring at the Consumer Electronic Show held in January, 2002. Upon hearing the announcement, Qwest Wireless contacted Vendor B to confirm the previously-agreed-to delivery schedule. At that time, Vendor B revised the schedule and stated that it would provide Qwest Wireless with a test handset in December, 2001. As with Vendor A, Qwest Wireless intends to query this vendor every other week regarding the anticipated delivery of the handsets.
 - d. Penetration Benchmarks.** Based on the above, it is Qwest Wireless’ current intention to proceed along the following timeline with regard to handset penetration benchmarks:

- (1) Begin Selling: 9/30/02. Recent experience with vendor estimates regarding the availability and deliverability of ALI-capable handsets has been quite disappointing. Initial negotiations with Vendor A created an expectation that Qwest Wireless would have handsets in 2001 that it could begin selling. That expectation has now been defeated. It seems obvious that whether Qwest Wireless secures handsets from Vendor A or from Vendor B (which Qwest Wireless is now pursuing), no handsets will be available before First Quarter 2002, and most likely (given past experience) before Second Quarter of 2002. The initial delivery of handsets will be test handsets. The testing that occurs will involve E911 Phase II functionality but not only that functionality. Assuming all goes well, commercial deployment of such handsets would begin during Third Quarter 2002.
- (2) 25% Penetration Benchmark: 12/31/02. Successfully moving from a “begin selling” status to an actual commercial penetration benchmark will be contingent on two vendor-dependent factors: (1) adequate supply; and (2) availability of more than one type and brand of handset. In Qwest Wireless’ opinion, consumers cannot be expected to purchase a single type of handset, even if it is the only ALI-capable handset in a carrier’s inventory. In the case where a carrier has but a single model of an ALI-capable handset from a single vendor, Qwest Wireless would expect consumers either: (a) not to purchase the handset in some cases; or (b) to go to a competitor that has more than one choice of handset available. For this reason, availability of some reasonable choice of products is a precursor to reaching benchmark performance. The two-vendor, two-model handset formula is necessary to support or achieve a performance benchmark.
- (3) 50% Penetration Benchmark: 6/30/03. Moving from the 25% benchmark to the 50% benchmark will require general availability of multiple models of handsets from multiple vendors. Qwest Wireless anticipates that the combined demand from all carriers for ALI-capable handsets should drive vendor performance such that, during the first six months of 2003, the handset marketplace will reflect both diversity of equipment and supplier, enabling Qwest Wireless to achieve this benchmark.
- (4) 100% Penetration Benchmark: 12/31/03. Qwest Wireless is willing, at this time, to set this as a target for 100% penetration. During 2003, Qwest Wireless and Verizon will be attempting to secure ALI-capable handsets of the tri-mode variety. While Verizon requires this type of handset as a result of its network configuration, Qwest Wireless’ customers have demonstrated a clear preference for this type of handset. At this time, it is not clear that there will be a sufficient supply for all potential demand. But, in light of the fact that Sprint anticipates achieving its 100% penetration benchmark by December, 31, 2002, its purchasing demands should be significantly reduced 2003 such that this benchmark may be achievable.

4. Additional Vendors. As the Commission has been considering carrier E911 Phase II reports, waivers and other filings, it has become the target for manufacturer and vendor claims that new “solutions” to E911 Phase II service provisioning challenges have been developed; and that such solutions can enable carriers to meet Commission E911 Phase II

deadlines in a manner that is reliable and promotive of public safety. I address two such vendor assertions below, Rosum Corporation and Enuvis Company, which I contacted about their claims to solutions to Qwest Wireless' current E911 Phase II deployment delays.

a. Rosum Corporation. After Rosum Corporation filed an *ex parte* in CC Docket No. 94-102, I called and spoke with a person by the name of Morgan Branch. Ms. Branch described how the Rosum system works, and I asked her to send me available white papers on the product. After reviewing the material provided, I understood the product to use Digital TV signals to locate a caller. This appeared to me to be a very interesting E911 Phase II offering. I contacted Ms. Branch and asked for trial results associated with the product. Ms. Branch advised that no trial results existed. I then asked if the company was working with any of the wireless switch manufacturers or handset manufacturers. She said that they were not doing so, as of the time I talked with her.

(1) At the time of my conversations with Rosum, Qwest Wireless was currently in the process of conducting a trial of a Compaq/Snaptrack PDE. Therefore, I asked Ms. Branch to provide me field trial results, whenever they might become available. To this date, I have not received any trial results. I did speak with Ms. Branch one additional time when she called to ask me for contacts at handset manufacturers because Rosum's system would require a chipset to be integrated into a handset.

(2) Qwest Wireless' most recent experience with MSM3300 and MSM5100 chipsets has proven that it takes a minimum of 6-9 months to integrate the chipsets into a commercial handset. For this reason, Qwest Wireless was very concerned about the lead/lag time associated with the unproven Rosum proposal. Not only had the product not been trial tested, it would not be able to be tested for quite some time. At that point, if the product -- associated with a newcomer vendor -- did not prove itself, Qwest Wireless would be facing even further delay to E911 Phase II deployment. For all these reasons, Qwest Wireless decided not to pursue this technology at this time. Qwest Wireless' current plan is to deploy a Compaq/Snaptrack product. Should this product be unable to meet the location metrics required by Commission mandates in specific areas, and should the Rosum product continue to the testing stage and provide encouraging test results, Qwest Wireless may pursue this vendor further at that time.

b. Enuvis. I was recently asked to contact this company by counsel. However, I already had knowledge of this company since I had met Adam Munsch from Enuvis at a location-based services conference that I attended in Alexandria, VA early in 2001. Mr. Munsch and I spoke about the company's product that -- at that time -- was only in the development process. For this reason, while I inquired about trial results, I was not surprised when advised that there were none. I asked Mr. Munsch to keep me informed of trail results if and when they became available. Since that conversation, I have not heard from Mr. Munsch.

c. (1) Based on my conversations, I have concluded that neither vendor has a suitable solution for Qwest Wireless, at this time. This conclusion stems primarily from the fact that these vendors have only the most basic input to the success of any E911 Phase II product -- a chipset. And, it is not the absence of chipsets that is causing the shortage of handsets, in my opinion. QUALCOMM has had the 5100 chipset available to manufacturers now for three-to-six months. The issue is that the chipset must go into a handset manufactured by some entity. The vendors discussed below have not yet forged a relationship with handset manufacturers in the United States. While Qwest Wireless is always willing to discuss product offerings with vendors and potential suppliers, for any chipset supplier to bring its E911 Phase II "solution" to market, the supplier must have a relationship with a handset manufacturer. Waiting for this process would not bring Qwest Wireless closer to achieving compliance with the Commission's E911 Phase II mandates. Rather, such a relationship most likely would put Qwest Wireless at risk of slipping even further behind E911 Phase II achievement than requested in this Second Amended Waiver.

(2) Nor, to the best of my knowledge have the vendors referenced above established a relationship for testing their products with switch vendors. Until these companies can provide necessary data to prove their products will achieve the Commission's mandates, Qwest Wireless does not intend to focus any further efforts on these companies. Qwest Wireless' overall objective is to deploy an E911 Phase II solution as quickly as possible. Efforts to define relationships with unknown and untested suppliers will not advance that objective.

/s/

Travis V. Beard

ATTACHMENT C

Proposed Implementation Completion Date	Current Status	Market	PSAP Authority Request	PSAP State	PSAP's	Serving Switch Type	Phase 1 Routing Solution	Notes
Dec-01	FMA Phase 1	Portland 1, Portland 2, Eugene	State of Oregon	OR	16	Lucent/Nortel	NCAS/Intrado	Deployed in Lucent market, Nortel in progress.
Dec-01	FMA Phase 1	Omaha	State of Iowa	IA	1	Nortel	NCAS/Intrado	In Process
Dec-01	FMA Phase 1	Seattle Elliott, Seattle Auburn, Bellingham	King County	WA	7	Lucent	NCAS/Intrado	In Process
Jan-02	Phase 1	Seattle Elliott, Seattle Auburn	Snohomish, Skagit, Island	WA	3	Lucent	NCAS/Intrado	In Process
Dec-01	Phase 1	Omaha	Sarpy County	NE	1	Nortel	NCAS/Intrado	In Process
Dec-01	Phase 1	Omaha	Douglas County	NE	1	Nortel	NCAS/Intrado	In Process
Jan-02	Phase 1	TW Laurel	Ada County	ID	1	Nortel	NCAS/Intrado	In Process
Feb-02	Phase 1	TW Laurel	Pennington County	SD	1	Nortel	NCAS/Intrado	In Process
Mar-02	Phase 1	Portland 1, Portland 2	Clark Regional	WA	1	Lucent	NCAS/Intrado	In Process
Mar-02	Phase 1	Seattle Elliott, Seattle Auburn	Pierce County	WA	6	Lucent	NCAS/Intrado	In Process
Mar-02	Phase 1	TW Laurel	Spokane County	WA	1	Nortel	NCAS/Intrado	In Process
Mar-02	Phase 1	Seattle Elliott, Seattle Auburn	Thurston County	WA	1	Lucent	NCAS/Intrado	In Process
Mar-02	Phase 1	Seattle Elliott, Seattle Auburn	Cowlitz County	WA	1	Lucent	NCAS/Intrado	In Process
Mar-02	Phase 1	Seattle Elliott, Seattle Auburn	Lewis County	WA	1	Lucent	NCAS/Intrado	In Process
Apr-02	FMA Phase 2	Colorado Springs	EI Paso/Teller County	CO	1	Lucent	NCAS/Intrado	Trialing with Phase 2 trial, deployment will take place after completion of trial.

Proposed Implementation Completion Date	Current Status	Market	PSAP Authority Request	PSAP State	PSAP's	Serving Switch Type	Phase 1 Routing Solution	Notes
May-02	FMA Phase 2	Denver East, Denver Northeast	Larimer County	CO	2	Lucent	NCAS/Intrado	Dependent on El Paso Trial
May-02	Phase 2	Denver East, Denver Northeast	Boulder County	CO	1	Lucent	NCAS/Intrado	Dependent on El Paso Trial
Jun-02	Phase 2	Denver East, Denver Northeast	Arapahoe County	CO	6	Lucent	NCAS/Intrado	Dependent on El Paso Trial
Jul-02	FMA Phase 2	Minneapolis Golden Valley, Minneapolis 7th	State of Minnesota	MN	32	Lucent/Nortel	WID Box (Not Phase 2 compliant)	Dependent on El Paso Trial. WID Box used for Phase 1 does not support Phase 2.
Jul-02	Phase 2	Minneapolis Golden Valley, Minneapolis 7th	St Louis Park	MN	1	Lucent	WID Box (Not Phase 2 compliant)	Dependent on El Paso Trial. WID Box used for Phase 1 does not support Phase 2.
Oct-02	FMA Phase 2	Salt Lake	Murray County	UT	8	Nortel	Not determined	Dependant on Nortel/Ericsson Delivery of Phase 2 software. Offered to deploy Phase 1 during delays to expedite Phase 2 when available, but PSAP is not interested.

CERTIFICATE OF SERVICE

I, Richard Grozier, do hereby certify that I have caused the foregoing **QWEST WIRELESS, LLC AND TW WIRELESS, LLC SECOND AMENDED PETITION FOR EXTENSION OF TIME OR WAIVER OF SECTION 20.18 OF THE RULES** to be 1) filed with the FCC via its Electronic Comment Filing System; and 2) served via email on the parties listed below.

Richard Grozier
Richard Grozier

November 30, 2001

Patrick Forster

pforster@fcc.gov

Qualex International

qualexint@aol.com