Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Wireless E911 Location Accuracy Requirements	)	PS Docket No. 07-114
	)	
Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems	)	WT Docket No. 94-102
	)	
Association of Public-Safety Communications Officials-International, Inc. Request for Declaratory Ruling	)	
	)	
911 Requirements for IP-Enabled Service Providers	)	WC Docket No. 05-196

COMMENTS OF VERIZON WIRELESS

John T. Scott, III
Vice President and
Deputy General Counsel – Regulatory Law

Lolita D. Forbes
Counsel

1300 I Street, N.W.
Suite 400 West
Washington, D.C. 20005
(202) 589-3740

July 5, 2007

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COMMENTS OF VERIZON WIRELESS

Verizon Wireless hereby submits its initial comments on the Commission's Notice of Proposed Rulemaking ("*Notice*") in the above-captioned proceedings.[1] The Commission has asked parties to respond at this time only to Section III.A of the *Notice.* That section tentatively concludes that Section 20.18(h) of the Rules should be amended to require compliance with existing Enhanced 911 Phase II accuracy standards at a geographic level defined by the boundary of each local Public Safety Answering Point ("PSAP"). Although Section III.B of the *Notice* raises issues that are closely linked to the appropriate geographic scope for E911 testing, the Commission defers those issues for later comment and consideration, thus bifurcating the proceeding.

[1] *See* In the Matter of Wireless E911 Location Accuracy Requirements, *Notice of Proposed Rulemaking*, FCC 07-108, PS Docket No. 07-114, ¶ 5 (rel. June 1, 2007).

SUMMARY

Verizon Wireless is concerned with both the premises underlying the *Notice's* tentative conclusion and its bifurcated approach. The tentative conclusion presumes, without evidence, that current E911 services are inadequate due to the lack of a PSAP-level testing mandate. To the contrary, Verizon Wireless's E911 technology provides highly reliable location information to PSAPs that has been of immense value in finding emergency callers. Imposing a PSAP-level testing mandate will not improve the accuracy of Verizon Wireless' E911 service but will only impose unnecessary, wasteful testing burdens.

The *Notice* also fails to consider at all the work done by the National Reliability and Innteroperability Council VII – the Advisory Committee that the Commission charged with addressing E911 accuracy. NRIC did not support PSAP-level testing, but instead proposed a comprehensive solution of compliance *and* performance testing that was endorsed by every member but one. Yet the *Notice* ignores NRIC's work without explanation.

The *Notice's* bifurcated approach, if followed, would result in arbitrary and capricious action without advancing the goal of improving E911 services. The *Notice* presumes that it can and should impose PSAP-by-PSAP testing without considering other E911 issues, and without considering changes to other E911 requirements that impact the feasibility of compliance at a PSAP level. This cart-before-the-horse approach is unwarranted and of dubious legality.

Verizon Wireless explains in Section II of these comments why compliance with the accuracy standard at each PSAP is not technically feasible. Its handset-based GPS solution, while the most accurate technology available, will not provide location data that meet the Commission's strict accuracy standard (67% of all calls within 50 meters and 95% within 150 meters) in every PSAP. This is because its GPS technology is dependent on line-of-sight access

to at least three GPS satellites. In some PSAPs, terrain obstructions preclude obtaining sufficient line-of-sight access to GPS satellites to achieve this high level of accuracy. While many calls will meet the accuracy standard, some calls will not. If just two of every twenty calls within a PSAP area are not visible to enough GPS satellites, compliance with the rule is not feasible. The topology in some PSAPs is a physical obstacle to meeting the current accuracy standard. Imposing a new testing mandate will do nothing to remove that obstacle.

Verizon Wireless thus opposes adoption of a PSAP-level compliance requirement. Adoption of this mandate, in isolation, would violate the Administrative Procedure Act's requirement that the Commission engage in reasoned decisionmaking when adopting new rules, as well as caselaw that requires an agency to show that compliance with its mandates is technically feasible. The Commission, in the E911 context in particular, has sought to ensure that even its most stringent requirements are or will be feasible within the deadlines allowed. While PSAP-level compliance may be feasible in some PSAPs if other rules are also amended, the *Notice* wrongly postpones consideration of other interrelated rule changes to another day.

The *Notice's* very brief discussion of PSAP level testing did not acknowledge all of the many practical problems with PSAP-level testing that have been identified by NRIC and others. As documented by Section III of these comments, the use of PSAP boundaries in itself amounts to arbitrary line drawing that will burden PSAPs and carriers and force the Commission to intervene even more, without improving accuracy.

The *Notice* also seeks comment on whether the Commission should defer enforcement of a PSAP-level testing rule should it adopt such a rule. As Section IV of these comments explains, adopting but then deferring enforcement of this mandate would not make it lawful. It would still suffer the same flaw – lack of evidence that compliance is feasible.

Verizon Wireless urges the Commission instead to postpone a decision on the appropriate geographic standard for E911 testing until it can assemble a record on the other issues the *Notice* raises and consider NRIC's recommendations. This will comport with the agency's rulemaking obligation because it will be able to consider simultaneously the other components of its Phase II accuracy requirements – the very issues teed up in the second stage of the *Notice* – that are inextricably linked to a geographic testing mandate.

I. ADOPTING A PSAP-LEVEL COMPLIANCE MANDATE IN ISOLATION WOULD VIOLATE THE APA BY IMPOSING AN UNNECESSARY AND INFEASIBLE REQUIREMENT.

A. There is No Evidence that Verizon Wireless's Solution Does Not Provide Meaningful Automatic Location Data for First Responders.

The *Notice* is premised on an assumption that there is a need for immediately adopting a new E911 requirement that would compel carriers to comply with the existing accuracy standards at every PSAP. But the *Notice* fails to identify facts supporting that assumption, let alone facts that could justify severing the geographic scope of testing from the many other interrelated issues as to how to test E-911 accuracy. The *Notice* merely quotes an assertion from an *October 2004* filing by the Association of Public Communications Officials International ("APCO") that current testing procedures "could leave significant portions of the country with virtually useless levels of E911 accuracy."[2] Aside from the fact that this claim was made more than two and a half years ago,[3] it is entirely speculative. Indeed, the Commission also seeks comment on whether and to what extent to defer enforcement of PSAP-level compliance – thus

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[2] Association of Public Safety Communications Officials – International, Petition for Declaratory Ruling, CC Docket No. 94-102, filed October 6, 2004, at 1.

[3] Given that the Commission did not place APCO's petition out for comment for 2 ½ years, it is not clear why the Commission has now determined that it will address the PSAP level testing issue on a fast track in isolation from other interrelated issues. Such unexplained haste only underscores the APA concerns detailed below.

calling into question the compelling public safety interest in adopting the requirement so urgently and independent of related technical issues.[4]

Over the past four years, Verizon Wireless has deployed Phase II service to more than 2,800 PSAPs covering more than 220 million people in all 49 states where it provides service. It uses a handset-based technology that relies on GPS satellites to ascertain a caller's location, coupled with supplemental location technologies. It has invested heavily in this effort, devoting substantial capital and personnel resources. This technology provides a high degree of accuracy, and has enabled PSAPs to locate literally thousands of wireless callers and direct emergency aid to them quickly.

The deployment of wireless E911 systems is one of the success stories of the public safety community and the wireless industry. Public Safety and wireless carriers have worked together in literally thousands of communities to install, test and improve to the maximum extent feasible these emergency calling systems. During all of the literally thousands of deployments that Verizon Wireless has completed, no PSAP has filed a complaint with the Commission asserting that the company has not met its obligations under the E911 rules. The company uses a performance monitoring tool to track performance results of its location solution and identify data errors in the system that may impact accuracy. As a result, Verizon Wireless engages in proactive measures and routinely exceeds the performance metric guidelines set by the Assisted-GPS ("AGPS") location solution vendor. These proactive measures include troubleshooting the system and ensuring that the location solution parameters and reference data are optimized to the extent technically possible.

Based on Verizon Wireless's experience, the *Notice's* focus on the geographic test area is not productive and will not improve the accuracy of its handset-based E911 system. The

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4 *See Notice* at ¶¶ 7-8.

accuracy of Verizon Wireless's AGPS solution is primarily determined by the location of the handset – *i.e.* whether the handset can access multiple satellites – not the size of the testing area. Nothing in Verizon Wireless's experience supports APCO's undocumented claim that by forcing testing to be measured at a PSAP level, accuracy would be improved. Neither APCO, nor the *Notice*, has explained how this would occur, and the Commission has deferred consideration of other accuracy-related issues to the second part of the *Notice*.[5] Indeed, there is no evidence that Verizon Wireless's AGPS solution does not already "provide meaningful automatic location information that permits first responders to render aid" as the Commission intends.[6]

A new rule would be unnecessary as well as costly. It would force Verizon Wireless and individual PSAPs to conduct literally millions of test calls at thousands of PSAPs – all to confirm what is already known – that the GPS technology works extremely well when satellites are visible to the handset, and less well when they are not. Forcing consideration of a new, localized testing requirement risks distracting stakeholders and the Commission from the real issues that remain to be addressed – most notably, finding ways for the thousands of PSAPs that are still without E-911 services at all to obtain them. Public Safety organizations have repeatedly raised with the Commission the difficulties they have had in securing funding, and the lack of E911 service in many communities should be the focus of the Commission and other federal agencies. Imposing PSAP-level accuracy on PSAPs that already have successful E911 capabilities will do nothing to help the thousands that do not.

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[5] APCO itself acknowledged that "the rules do not specify the geographic area within which that level of accuracy must be met" and "that a PSAP-level accuracy requirement will be difficult to meet in some areas by some carriers at the present time." *See* APCO International *Ex Parte* Communication, CC Docket No. 94-102, filed Sept. 14, 2005.

[6] *See Notice* at ¶ 6.

The *Notice's* lack of a factual basis for its tentative conclusion is of particular concern given its cursory discussion of the Commission's authority to make this change. The *Notice* asserts that amending Section 20.18(h) would be merely a "clarification" of the rules, as if carriers should have known that the Commission intended them to test at the local level.[7] But, as numerous letters filed in this proceeding have documented,[8] adopting a PSAP-level testing requirement would be a radical reversal of the Commission's longstanding determination – that carriers have relied on – *not* to set binding testing methodology. While the Commission might now assess a record that would give it a lawful basis to intervene, that action would be a major change to existing rules, not a simple "clarification."[9]

B. Any New Rules Must Have a Record Basis, and Technically Infeasible Mandates Fail to Meet that Requirement.

The Administrative Procedure Act ("APA") requires the Commission, in adopting final rules, to "examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'"[10] To meet this standard, the Commission must address substantial and material factual issues based on a review of the whole record, and explain its resolution of those issues.[11]

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[7] *Notice* at ¶ 6.

[8] *See, e.g.,* Letter from Thomas Coates, Dobson Communications Corp., David Nace, Rural Cellular Association, Thomas Sugrue ,T-Mobile USA, Inc., and John T. Scott, III, Verizon Wireless, to Marlene Dortch, Secretary, FCC, filed May 8, 2007 in CC Docket No. 94-102.

[9] The *Notice* asserts at ¶ 6 that "we are not convinced that the avenue of clarification is precluded." Verizon Wireless respectfully disagrees, for all of the reasons set forth in the Letter of May 8, 2007. The changes would be a major, substantive change to longstanding Commission rules and policy that clearly requires a factual record to support the change pursuant to full notice and comment procedures.

[10] *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962)); *U.S. Telecom Ass'n v. FCC*, 227 F.3d 450, 461 (D.C. Cir. 2000).

[11] *See, e.g., MCI WorldCom, Inc. v. FCC*, 209 F.3d 760, 765 (D.C. Cir. 2000); *AT&T Corp. v. FCC*, 86 F.3d 242, 247 (D.C. Cir. 1996); *City of Brookings Municipal Tel. Co. v. FCC*, 822 F.2d 1153, 1167-69 (D.C. Cir. 1987); *see also GTE Service Corp. v. FCC*, 205 F.3d 416, 422 (D.C. Cir. 2000) (Commission's failure "to consider an important aspect of the problem" is error); *Achernar Bdcasting v. FCC*, 62 F.3d 1441, 1445 (D.C. Cir. 1995) (no deference is due when Commission does not exercise its expert judgment).

A regulation must be achievable and feasible in order to be lawful. For an agency to establish that its rules are "based on a consideration of the relevant factors" and not "a clear error of judgment,"[12] the "record must establish that the required technology is feasible, not merely *possibly* feasible."[13] In this regard as well, courts have held that "impossible requirements imposed by an agency are perforce unreasonable"[14] and that the "law does not compel the doing of impossibilities."[15] To the extent the Commission may exercise its "predictive judgment" with respect to questions of technical feasibility, the Commission's rules must have an "ascertainable foundation in the record" demonstrating "thoughtful consideration duly attentive to the comments received."[16]

The public safety benefits the Commission cites as a basis for measuring accuracy at the PSAP level, aside from having no proven connection to this requirement, are themselves inadequate under the APA to support imposing the Commission's tentative conclusion as a binding rule.[17] As the Commission has recognized in adopting other E911 rules, it must also have a factual basis in the record supporting the technical feasibility of such a requirement.

The D.C. Circuit's consideration of the Commission's E911 deadlines and requirements for interconnected VoIP providers ("IVPs") is particularly instructive here. The Commission's reasoning did not purport to rely on the Commission's public safety mandate alone,[18]

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12 *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415-416 (1971).

13 *Bunker Hill Co. v. EPA*, 572 F.2d 1286, 1301 (9th Cir. 1977) (emphasis in original); *see Essex Chemical Corp. v. Ruckelshaus*, 486 F.2d 427, 433 (D.C. Cir. 1973), *cert. denied,* 416 U.S. 969 (1974) (noting that the feasibility determination must be based on record evidence, not a "subjective understanding of the problem or 'crystal ball inquiry'").

14 *Alliance for Cannabis Therapeutics v. DEA*, 930 F.2d 936, 940 (D.C. Cir. 1991).

15 *Hughey v. JMS Development Corp.*, 78 F.3d 1523, 1530 (11th Cir. 1996), *quoting* Black's Law Dictionary 912 (6th ed. 1990) ("*Lex non cogit ad impossibilia:* The law does not compel the doing of impossibilities").

16 *See Telocator Network of America v. FCC*, 691 F.2d 525, 549-50 (D.C. Cir. 1982); *see also Fresno Mobile Radio, Inc. v. FCC*, 165 F.3d 965, 971 (D.C. Cir. 1999) (in review of Commission's exercise of predictive judgment, at issue is "the reasonableness of the agency's decision *on the basis of the record then before it*") (emphasis added).

17 *See Notice* at ¶ 6.

18 *See IP-Enabled Services, E911 Requirements for IP-Enabled Service Providers*, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 1024, ¶ 5 (2005) ("impos[ing] E911 obligations on interconnected

independent from its obligation to avoid "impossible requirements."[19] As the Commission stated to the D.C. Circuit, "the FCC necessarily had to make a forecast as to when IVPs could *feasibly* complete implementation of the new 911 requirements ...."[20] At oral argument, in response to Judge Kavanaugh's inquiry as to whether the Commission's position was that the IVP E911 implementation deadline "was appropriate even if it was not feasible in a large number of cases," the Commission responded "No" and that while "aggressive ... it was something *that could be met* ...."[21] The court noted that the Commission did not purport to argue that the its statutory public safety duty alone justified the Commission's aggressive E911 rules for IVPs.[22]

Moreover, the Commission did *not* assert that it had authority to impose the aggressive deadline "even if it's not feasible."[23] The Commission, citing the court's *Fresno Mobile* decision, instead clarified that the Commission's argument "rises and falls on the question of whether at the time the Commission made this predictive judgment, it was reasonable to believe that it was *feasible* for these parties to [comply] within the deadline provided" and stated that it had "acted reasonably" not only in light of public safety considerations, but also "*the record, [and] on the basis of what had already happened*" as well.[24] The D.C. Circuit upheld the Commission's order, discussing at length its finding that there was "substantial ... record evidence" in support of the Commission's findings of technical feasibility and stating that "the

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VoIP providers and to set firm *but realistic target deadlines* for implementation of those requirements" and "allow[ing] the providers flexibility to adopt a technological solution that works best for them.").

19 *See Alliance for Cannabis Therapeutics v. DEA*, 930 F.2d at 940.

20 *Nuvio Corp. v. FCC*, No. 05-1248, Brief of Respondents, at 23 (D.C. Cir. filed Feb. 22, 2006) (emphasis added).

21 *Nuvio Corp. v. FCC*, No. 05-1248, Transcript of Proceedings, at 19 (D.C. Cir. Sept. 12, 2006) (statements of James M. Carr, counsel for respondents) (emphasis added).

22 *Nuvio Corp. v. FCC*, 473 F.3d 302, 305 n.5 (D.C. Cir. 2006).

23 *Id.* at 20.

24 *Id.*

Commission ha[d] reasonably determined that nomadic, non-native VoIP E911 access is technologically feasible ...."[25]

The law, therefore, is clear that adoption of a new rule requiring compliance at the PSAP level may not be merely aspirational, based solely on a stated Commission policy objective. Rather, such Commission action must be grounded in record evidence demonstrating that such a rule is feasible, not merely possibly feasible.

C. Adopting a PSAP-Level Testing Rule in Isolation Would be Infeasible and Thus Unlawful.

Throughout its E911 proceedings, the Commission acknowledged it needed to ground its Phase II E911 accuracy rules on record-based judgments of technical feasibility.[26] In adopting the current accuracy requirement, the Commission "recognize[d] that any location system may fail or provide highly erroneous readings occasionally ... because these systems are based on radio technologies, which confront inherent difficulties in achieving 100 percent reliability."[27] The Phase II accuracy rules have always been coupled with a policy of deferring of technical and operational standards to the cooperative efforts of the parties, consistent with the Commission's intention that verification methods "take into account practical and technical realities, and to give

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[25] *Nuvio Corp. v. FCC*, 473 F.3d at 305-08. The court disagreed with Judge Kavanaugh's concurrence insofar as he argued that the *VoIP E911 Order* "suggest[s] that 'the 911 requirement would be justified even if VoIP providers could not feasibly meet the 120-day deadline.'" *Id.* at 305 n.5.

[26] *See* In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, *Report and Order and Further Notice of Proposed Rulemaking*, 11 FCC Rcd 18676, ¶¶ 17, 70 (1996) ("*First Report and Order*") ("The 125 meter RMS standard will assist emergency response teams by providing relatively precise location for 911 callers and is currently technically feasible" and citing to testing and other evidence), *aff'd in relevant part on recon.* 12 FCC Rcd. 22665, ¶ 120 (finding that technical developments and tests since adoption proved viability); *First Report and Order* at ¶¶ 70-71 (declining to impose vertical requirement); In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, *Third Report and Order*, FCC 99-245, 14 FCC Rcd 17388, ¶¶ 68-77 (1999) ("*Third Report and Order*") (handset-based solution accuracy trials, notably a trial in King County, Washington, and vendor claims).

[27] *Third Report and Order* at ¶ 75.

appropriate weight to the variety of conditions and locations in which wireless equipment is used."[28]

The Commission has already found that compliance with the requirements of Section 20.18(h) is feasible precisely because "the Phase II rules are intended to be applied in a manner that takes into account practical and technical realities" as evidenced by OET's Guidelines for compliance testing which, in turn, "should reduce, if not eliminate, carrier concerns that ALI systems that have demonstrated the capability to comply with the rules might nonetheless be found in violation."[29]

Unfortunately, however, the Commission is now taking a different course, inconsistent with the case law discussed above and its prior approach to Phase II accuracy requirements. The Commission has structured this proceeding in a manner that makes it virtually impossible for it to meet its APA obligations to ensure that there is the requisite connection between the factual record and a PSAP-level testing requirement. Specifically, the Commission has bifurcated the current proceeding and expressly instructed commenting parties here to address PSAP-level compliance first, followed later by discussion of the current accuracy standard and the capabilities of E911 location technologies.[30] Further, the Commission apparently contemplates adopting its tentative conclusion supporting PSAP-level testing irrespective of the feasibility of compliance with the accuracy requirements under such a new regime.[31]

The Commission has structured the proceeding so that its decision on the appropriate geographic area for compliance will be divorced from the very considerations necessary to

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28 *See Third Report and Order* at ¶¶ 83-85 (citing the *First Report and Order* at ¶¶ 73-76).

29 In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Fourth Memorandum Opinion and Order*, 15 FCC Rcd 17442, ¶¶ 21-22 (2000) ("*Fourth MO&O*").

30 *Notice* at ¶¶ 9-12.

31 *Id.* at ¶ 7 ("the required geographic area over which compliance … will be measured is of primary importance to our resolution of the [remaining] issues …."); *id.*, Statement of Chairman Kevin J. Martin ("[o]ur decision on this issue … must be prompt").

determine the technical feasibility of such a requirement in the first place. For example, it could be that a PSAP level of compliance is technically feasible with a reduced accuracy standard, but not the existing standard or more stringent one. Alternatively, a PSAP level of compliance may be feasible if specific types of topology that preclude accurate location data are excluded from testing methodology. It is also entirely possible that PSAP-level compliance is not feasible in certain PSAPs even with such changes. But by deferring the accuracy standard and testing methodology, while deciding the geographic level of compliance first and separately, the Commission will not be able to meaningfully evaluate as part of that decision the critical question of what the underlying accuracy standard should be.

The question of how the relevant accuracy standard and the test methodology impact the technical feasibility of PSAP-by-PSAP compliance is unquestionably a "relevant factor" the Commission must consider *before* adoption of a new rule imposing PSAP level compliance.[32] And, the Commission all but acknowledges that its proposed action will *create* problems of technical infeasibility.[33] However, it contemplates addressing the accuracy requirements separately and later. This is an impermissible "cart before the horse" approach to regulation.

A majority of the Commission has already raised this fundamental problem in the *Notice's* approach. Commissioner Adelstein described the bifurcation of the proceeding and the adoption of tentative conclusions as "premature" and potentially disruptive.[34] Commissioner McDowell cautioned that "we must walk before we can run" as "many wireless carriers are not generally capable of measuring and testing location accuracy at the PSAP level" – and thus expressed his understanding that the Commission did not intend to "preemptively impose a

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32 *Bunker Hill Co. v. EPA*, 572 F.2d at 1294 (citing *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 402 (D.C. Cir. 1973)), *cert. denied,* 417 U.S. 921 (1974) (agency must meaningfully address infeasibility concerns in the record).

33 *Notice* at ¶ 6 (seeking comment on whether or to what extent to defer enforcement).

34 *Notice*, Concurring Statement of Commissioner Jonathan S. Adelstein.

geographic mandate."[35] Finally, Commissioner Copps acknowledged the "need to get a handle – a better handle than we presently have – on the precise capabilities and limitations of today's emergency calling technologies."[36] These statements reflect an overarching desire to get the facts and the outcome *right*. All of these considerations militate in favor of Verizon Wireless's recommended approach here: that the Commission consider all the relevant issues in the *Notice* together, rather than arbitrarily rush to judgment on a single issue that cannot and should not be addressed in isolation.

Where, as here, issues raised in a rulemaking proceeding are inextricably intertwined, the Commission may not pick and choose among them without running afoul of its obligation "to consider an important aspect of the problem."[37] Putting the cart before the horse as the Commission intends here is inconsistent with this requirement.[38] Modifying the testing methodology in isolation from, and without also considering the feasibility of, compliance under the relevant accuracy requirements would amount to the type of "willful blindness" in viewing key issues "in isolation from one another," the D.C. Circuit has found arbitrary and capricious.[39] The Commission's contemplated approach thus ensures that it will "entirely fail[] to consider an important aspect of the problem" and risks making its decision arbitrary and capricious.[40]

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35 *Notice*, Statement of Commissioner Robert M. McDowell.

36 *Notice*, Statement of Commissioner Michael J. Copps.

37 *See Citizens to Preserve Overton Park, Inc.* 401 U.S. at 416; *City of New York v. FCC*, 814 F.2d 720 (D.C. Cir. 1987) (where "FCC's rule appears to make it impossible" to comply with another statutory requirement "the 'relevance' of this consideration can hardly be questioned" and "the FCC had an obligation explicitly to consider the interrelationship between" relevant statutory sections).

38 *See, e.g.*, *Radio-Television News Directors Ass'n v. FCC*, 229 F.3d 269 (D.C. Cir. 2000) ("Incredibly, the Order reinstates the rules before the Commission will have received any of the updated information that the Commission states it requires in order to evaluate the rules.").

39 *See MCI v. FCC*, 842 F.2d 1296, 1303-04 (D.C. Cir. 1988); *see also id.* ("Before considering in detail the FCC's proffered justification, we pause to emphasize the irrationality of the FCC's approach.").

40 *See Citizens to Preserve Overton Park, Inc.* 401 U.S. at 416; *Southern Co. Servs. Inc. v. FCC*, 313 F.3d 574 (D.C. Cir. 2002); *Prometheus Radio Project v. FCC*, 373 F.3d 372, 420-21 (3d Cir. 2004) (in "repealing a rule without any discussion of the effect of its decision on [the objective of the that rule]," the Commission "has not provided 'a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored'" and "'entirely failed to consider an important aspect of the problem,' and this amounts to

For these reasons, the Commission may not impose PSAP-level compliance without a record basis demonstrating that such an approach is technically feasible. In order to sufficiently address the issue of technical feasibility, at the same time, the Commission must also consider and address the relevant accuracy requirements in Section 20.18(h). As Verizon Wireless demonstrates below, PSAP-level compliance under the current rule is technically infeasible.

II. COMPLIANCE WITH THE EXISTING ACCURACY STANDARD AT THE PSAP LEVEL IS NOT TECHNICALLY FEASIBLE IN ALL PSAPS.

Section 20.18(h) of the Commission's rules (the "numerical standard") requires that carriers like Verizon Wireless employing a handset-based Phase II solution achieve accuracy and reliability standards of 50 meters for 67% of calls, 150 meters for 95% of calls, and, "[f]or the remaining 5 percent of calls, location attempts must be made and a location estimate for each call must be provided to the appropriate PSAP."[41]

Verizon Wireless has worked cooperatively with more than 2,800 PSAPs in all of the 49 states where it provides service to deploy its AGPS Phase II solution, which employs both handset-based and network-based location technologies. A GPS solution – on which the Commission's handset-based solution accuracy standard is based – requires the customer's handset to have simultaneous, line of sight access to GPS satellites. However, because of the physical limitations on satellite signal propagation where there are ground-based obstructions, there are PSAPs where compliance with the 150 meter/95% threshold is infeasible. Under that rule, at least nineteen of every twenty 911 calls must achieve accuracy within 150 meters. In some PSAPs, there are too many natural or man-made terrain obstructions that prevent the handset from being visible to enough satellites to meet that stringent standard. In those PSAPs,

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arbitrary and capricious rulemaking" *citing State Farm*, 463 U.S. at 43, and *Greater Boston TV Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970)).

[41] 47 C.F.R. § 20.18(h)(2)-(3).

an accuracy fix will need to rely on other, less accurate solutions that Verizon Wireless has deployed in its network as a backup. These other solutions provide location data that is more accurate than Phase I but not as accurate as the GPS technology and not as accurate as the Commission's handset-based solution accuracy standard requires.

A. The Numerical Standard of Section 20.18(h) Is Just One Component of Phase II Accuracy Requirements.

Phase II accuracy has several components that are relevant to the geographic scope of testing: (1) the Commission-defined and mandated numerical accuracy performance standards; (2) the service area to which those standards apply, for which the Commission has not set any requirements, and (3) the testing methodology that identifies if a carrier meets the numerical standards over the particular service area – again, for which the Commission has provided only nonbinding guidance.

Insofar as the Commission reverses course here and imposes a mandatory service area for calculating compliance, it must concurrently re-evaluate the numerical standards and other testing methodology issues. The Commission cannot assume that carriers can meet the current numerical standards within the confines of a PSAP boundary, which are highly varied in size and topography. Limitations of the AGPS solution will prevent uniform compliance everywhere, especially when measured using a restricted sample of topologies represented by many local PSAP jurisdictions. As AGPS vendor Qualcomm has explained:

> The E911 mandate should not treat each of these disparate areas as equivalent for purposes of the FCC's requirements, particularly because there is no fair, reasonable, or standardized criteria to design for or verify the performance of an E911 solution as implemented by a given carrier in such dramatically uneven areas, any one of which may have unique characteristics that could produce skewed results. Demanding the same level of precision in such varied and arbitrarily composed areas with disparate environments fails to establish

consistent criteria for which position location technology can be designed and instead is highly problematic to implement.[42]

The *Notice's* clear intent is to modify Section 20.18(h) to include a geographic testing mandate, without consideration of these closely interlinked factors. As discussed below, in doing so the Commission would create a regulatory regime in which compliance is technically infeasible, contrary to its obligations under the APA and inconsistent with its own precedents.

B. AGPS Technology's Accuracy Depends on a Handset's Ability to Access GPS Satellites.

In 2001, Verizon Wireless began to deploy a handset-based solution, as authorized by the Commission. It chose this solution over a network-only solution because of the greater degree of potential accuracy. The solution can achieve Phase II accuracy as defined in Section 20.18(h) using GPS when at least three satellites have line-of-sight visibility to the E911 caller's handset. Because of the inherent limitations of GPS satellite visibility, however, Verizon Wireless has also deployed technology known as Advanced Forward Link Trilateration ("AFLT"), which uses Time Difference of Arrival ("TDOA") ranging measurements, based on the triangulation of signals among the handset and multiple cell sites, that assist GPS or independently serve as default location solutions.[43] Verizon Wireless's system is thus referred to using Assisted GPS ("AGPS") technology. However, the AFLT portion of the solution cannot achieve the GPS-derived accuracy levels because of the less precise readings typically obtained from triangulation – a physical limitation that is reflected in the Commission's less stringent rule for network-based E911 solutions, Section 20.18(h)(1).

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42 QUALCOMM, Incorporated, *Ex Parte* Presentation, filed December 23, 2005, at 2.

43 There are two types of GPS systems: (1) User Plane – Fix solution based on chipset/satellite data alone; and (2) Control Plane - Solution determined from combination of chipset/satellite and network information. Verizon Wireless uses the AGPS Control Plane technology for E911Phase II because it provides the best possible fix when enough satellites are visible to the device and if not, "steps down" to other, less accurate measurement techniques.

1. *System Capabilities and Limitations*

When three or more satellites are visible to the handset through line of sight, the GPS satellite component of Verizon Wireless's AGPS technology provides highly accurate results independent of its network-based components. Where fewer than three satellites are visible, the system may combine GPS satellite signals with TDOA measurements to provide a location fix. This is referred to as the "Hybrid" solution. If no GPS signals are available to the handset, the system employs AFLT or other network-based default solutions to provide a location. With each "step down" from pure GPS to Hybrid to AFLT to other network-based default solutions, the accuracy of the location fixes decreases, making compliance with a requirement of 150 meters 95% of the time very difficult to achieve. Only the first situation, where at least three satellites are visible, will yield accuracy readings that comply with the Commission's stringent standard. The other techniques do, however, provide useful data to PSAPs that is generally much more precise than Phase I cell site location data.

Two overall factors affect the ability of wireless location systems to achieve accurate location fixes and both will be affected by test area size. These are: (1) availability of satellite signals; and (2) availability of cell sites.

Availability of Satellite Signals. A minimum of three satellites is needed to provide a GPS fix that can comply with the FCC's existing numerical accuracy standards. GPS solutions are generally challenged, however, in situations where satellite visibility is poor, such as dense forest, medium and high density urban areas and indoor permanent structures. A number of factors can adversely affect the availability of GPS satellite signals:

- **GPS Propagation Characteristics** – To provide the most accurate location data, satellite transmissions must be "line-of-sight." GPS signals that are received after bouncing off of buildings or other obstructions are known as "multipath" signals. They bias measurements by introducing time delays that the system cannot adjust

for since it does not know that the signal is not being received line-of-site. In practical terms, this means that if the receiver is not on a direct line-of-sight path with the satellite, receipt of the signals will take longer to reach the receiver, and as a result, error is introduced into the position calculation. This is why a clear view of the sky is critical for achieving the Commission's accuracy requirement for handset-based solutions.

- **Limited Time to Ascertain GPS Signals** – In order for the handset to know where to search for visible satellite signals, the system uses an almanac and approximate knowledge of the mobile position of the handset (as obtained from the wireless network), to "tell" the handset where to search for satellite signals. But the time available to find the satellites is limited; Verizon Wireless uses the 30 second window suggested by OET Bulletin 71 in which to calculate and provide an accurate location fix.[44] In addition, satellites are constantly moving so each chipset receiver needs to know where each satellite is and precisely at what time. Again, if the GPS signals are reflected by some object, timing errors are possible, causing less accurate location fixes.

- **Signal Strength and Penetration** – GPS satellite transmission signals at 1.5 GHz are low power and do not penetrate structures or dense forest areas as well as signals lower in the frequency spectrum, resulting in loss of GPS signals from in-building callers and remote users. The magnitude of the in-building problem varies somewhat depending on the materials used in its construction and whether the user is close to an opening or a window.

- **Indoor GPS** – Indoor GPS methods generally only have the ability to travel through a single sheetrock wall, with the most advanced GPS techniques only providing an extra 6-10 feet of penetration within a building.

Availability of Cell Sites. Given the limitations of GPS satellite availability, Verizon Wireless's Hybrid solution combines information from any available GPS satellite signals with TDOA ranging measurements to provide useful location data, although generally not to the 150 meter level of accuracy. Hybrid and AFLT use ranging measurements calculated between the handset and at least three contiguous cell site locations. Thus, areas with low cell site penetration will suffer significantly degraded accuracy from both Hybrid and AFLT technology. This impact is most prevalent for rural, indoor and dense forest areas where customer demands

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44 *See* OET Bulletin No. 71 at 4.

and zoning or other land use restrictions do not enable high cell site penetration and, thus, the availability of ranging measurements is limited.[45]

The FCC specifically recognized the limitations of Phase II location information in high-rise buildings, parking garages, tunnels, and in remote areas.[46] Areas with low site penetration, either because of obstruction or few towers, will often pose problems for voice calling. Carriers engineer and build their networks to allow voice calling (and now data) where population densities support the economics of wireless service. The FCC acknowledged that the capability of E911 systems is limited by the capability of voice calling in the first instance: in testing performance carriers are not required to include locations where wireless calls cannot be completed.[47] Almost every RF location finding technique is based upon TDOA, which uses the time difference of arrival to estimate the time of propagation for a signal and to calculate range. Multiple ranging measurements are used to estimate position. As with GPS signals, multipath signals that reflect off of buildings or other obstructions) bias ground-based ranging measurements, by introducing time delays as the signals bounce around, negatively impacting accuracy measurements.[48] Multipath environments are most prevalent in large urban areas, but they are also a significant issue in dense forest and indoor environments. Adding cell sites in such areas with RF signal obstruction will not improve TDOA-based measurements.

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[45] While additional cell site deployment may, in some markets, improve Phase II accuracy for these fallback technologies, the Commission's rules themselves impose a *300 meter*/95% threshold for stand-alone network-based solutions and, moreover, the Commission found that allowing carriers to employ handset-based solutions – with the acknowledged shortcomings – was justified precisely in part because they were not entirely dependent on cell site configuration. *See Third Report and Order* at ¶¶ 23-24.

[46] *Fourth MO&O* at ¶ 22.

[47] *Id.*

[48] The Commission has understood how the physics of RF propagation would affect location technologies since the outset of its E911 proceedings. *See* Revision of the Commission's rules to ensure compatibility with enhanced 911 emergency calling systems, *Notice of Proposed Rulemaking*, 9 FCC Rcd 6170, ¶ 46 (1994) ("Terrestrial radio triangulation methods are also hampered by interference and by signal reflection (multipath), though they are not as affected as satellite communications by attenuation inside buildings.").

2. *Performance by Topology Type*

Verizon Wireless has had years of experience and empirical evidence observing live solution performance of its deployed AGPS/AFLT system in a range of environments. In light of the various technology factors discussed above, it has identified conditions or "topology types" under which its deployed solution will perform well and those in which it will not:

- **Dense Urban, Outside** - For AGPS solutions, concentrations in dense urban areas (with poor GPS visibility and multi-pathing) will make meeting the 95% accuracy level very difficult.

- **Dense Urban, In-Building** - Since GPS satellite visibility is often poor inside permanent structures (especially when not next to an opening or window), an available location fix, if any, is most likely to be derived from AFLT. An AFLT fix is dependent on the ability to obtain unobstructed ranging measurements from at least three cell sites.

- **Open Sky Suburban** – This provides the best performance because of the near certainty of visibility of four or more satellites, with average fixes of less than 50 meters.

- **In-Building Suburban** - Improvements in GPS receiver sensitivity in the latest series of Qualcomm chipsets is providing some improvement in residential in-building performance. Again, however, fixes in this environment remain subject to construction materials and other factors as mentioned above in section A. Because of these ongoing challenges, such fixes are still only moderately reliable.

- **Rural** – While GPS performance will be good in open-sky environments, where GPS visibility is poor (*e.g.* dense forest, indoors, etc.) and step-down technologies are invoked, they will be dependent on receiving enough unobstructed ranging measurements from surrounding cell sites. Thus, areas with low site penetration, whether due to obstruction or cell site configuration, will have a negative impact on ranging measurements. For example, in 21% of all deployed PSAP areas, Verizon Wireless maintains only one cell site to handle the low volume of voice calling.

- **Dense Forest** – GPS satellite visibility can be poor and the ability to obtain ranging measurements for nearby cell sites can be difficult. If there is no visibility to GPS satellites, the best fix that will be generated is an AFLT fix. As stated above in section A, AFLT will be dependent on receiving enough unobstructed ranging measurements from surrounding cell sites. For example, 28% of all counties in which Verizon Wireless has coverage are comprised of over 50% dense forest topology. A large number of those counties have as much as 70% to 80% dense forest.

C. The Limits of GPS Technology Preclude Compliance With the Current Accuracy Standard in Every PSAP.

As demonstrated above, the various components of Verizon Wireless's AGPS solution perform well in some environments and topologies but are challenged in others. Thus, the size of the test area becomes critical to complying with FCC accuracy requirements, particularly within 150 meters for 95% of calls. Establishing too small a test area will often result in a dominant "use type" in which the E911 solution cannot perform to the desired accuracy.

Based on its years of deploying and testing E911 Phase II systems, Verizon Wireless believes it can meet the current accuracy standard in many PSAPs. However, some PSAPs present a small test area with a large concentration of challenging land use environments (dense forest, urban, indoor, etc.) that will preclude achieving the strict 95% mandate. For example, dense urban areas with many buildings will preclude test calls from accessing a sufficient number of GPS satellites. Test calls made on sidewalks and street corners will "see" only portions of the sky. Depending on the slice of sky that is visible, accuracy within 150 meters may not be possible. If only two of twenty calls encounter these obstructions, the 95% standard cannot be achieved. Even parts of cities that are away from buildings will not be able to achieve accuracy due to tree cover, overpasses, and other obstacles.

While, as discussed above, the Hybrid solution that Verizon Wireless has deployed supplements GPS fixes with triangulation of cell sites using TDOA technology, that solution cannot provide GPS-level accuracy unless at least three satellites are accessible. Even then, if there are multipath problems with the network ranging data, a more common problem in urban areas, an accurate fix may not be obtained. Moreover, in many PSAPs Verizon Wireless has not had the commercial justification to deploy a sufficient number of cell sites to provide useful

TDOA data. The company has only one cell site in more than 500 PSAPs. In these PSAPs, network-based location data cannot be obtained.

NRIC VII recognized these topology and other variables in assessing a location solution's performance given the wide variety of topologies individual carriers face, and thus recommended a state-level test area for compliance purposes. Some other combination of markets, such as MSA/RSA (which APCO itself had some time supported) could also provide a larger and more standardized geography, and therefore a more varied and more uniform distribution of location finding geography from which to make test calls and assess system accuracy compliance.[49] Such a system would also help to ensure that carriers' compliance is measured and enforced consistently, using more objective criteria and methodology.[50] The inherent problems with small testing areas would be alleviated. Otherwise, if the Commission is to enforce its rules consistently and equitably, the Commission would need to somehow enable carriers to account for disparities between individual PSAPs in terms of total area, geography and topology, which would be an extremely complex endeavor for the over 6,000 PSAPs nationwide. Regardless of how the Commission might approach the problem, though, it has effectively precluded such considerations here.[51] For these reasons, it would be infeasible, and thus unlawful, to obligate carriers to meet the existing accuracy requirement in every PSAP.

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[49] *See* APCO Supplement to Request For Declaratory Ruling, CC Docket No. 94-102, filed Feb. 2, 2005, at 3-4.

[50] Even at the single county level there can be a lack of diversity. For example, 28% of all counties in which Verizon Wireless has coverage are comprised of over 50% dense forest topology. A large number of those counties have 70% to 80% dense forest. With an AGPS solution in dense forest with no visibility to GPS satellites, the best achievable fix is an AFLT fix. Additionally, dense forest areas usually contain fewer cell sites than urban areas and thus suffer from poor AFLT performance.

[51] To the extent some PSAPs may simply desire to know how a carrier's Phase II system performs in their PSAP, they are free to test the deployed system today. Verizon Wireless has and will continue to work with any PSAP that feels that its system is not performing well, whether based on the PSAP's experience with the system over time or new test results. Verizon Wireless has worked diligently to optimize its E911 system.

III. PSAP LEVEL COMPLIANCE TESTING WOULD BE UNLAWFUL LINE-DRAWING, WOULD CREATE MANY NEW PROBLEMS, AND WOULD IGNORE NRIC'S RECOMMENDATIONS.

In designating PSAP boundaries for E911 location accuracy compliance, the Commission is necessarily "engaged in line-drawing determinations" and, while the Commission's expertise is ordinarily entitled to deference, "its decisions may not be 'patently unreasonable' or run counter to the evidence before the agency."[52] Policy judgments, in themselves, are an insufficient basis for such action;[53] the Commission must have a rational basis for its conclusion and ensure that its proposal is related "to the underlying regulatory problem."[54]

The *Notice* relies principally on policy arguments, and asserts in only conclusory terms that PSAP-level compliance will serve its public interest objectives here. But the Commission's objective – the provision of Phase II location information consistently throughout the country – *cannot* be served by the Commission's proposed rule precisely because PSAP service areas themselves are not established on a uniform, standardized basis. For this reason as well, the Commission should not require Phase II compliance at the PSAP level.

Apart from the technology limitations discussed above, there are enormous practical and resource obstacles to testing individual PSAP areas for compliance purposes.

First, PSAPs are not of standard size or jurisdiction, calling into question the inherent arbitrariness of PSAP-level compliance in the first place. Many PSAPs are countywide while others are even smaller political subdivisions thereof, such as cities and towns. In some cases, the local police department handles E911 calls; in other cases different emergency agencies

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[52] *See Prometheus Radio Project v. FCC*, 373 F.3d at 390 (citing *AT&T Corp. v. FCC*, 220 F.3d 607, 627 (D.C. Cir. 2000) and *Sinclair Broadcasting Gp. v. FCC*, 284 F.3d 148, 162 (D.C. Cir. 2002).

[53] *See San Antonio v. United States*, 631 F.2d 831, 852 (D.C. Cir. 1980) (That a decision involves a policy judgment "does not excuse the [agency] from articulating fully and carefully the methods by which, and the purposes for which, it has chosen to act.").

[54] *See Cassell v. FCC*, 154 F.3d 478, 485 (D.C. Cir. 1998); *WJG Tel. Co. v. FCC*, 675 F.2d 386, 388-89 (D.C. Cir. 1982)

handle calls. If a state or county handles E911 deployment, would the carrier nonetheless have to test at the individual community PSAP level?

Second, PSAP boundaries change. According to the vendors that provide PSAP boundary information, over 1,000 modifications are made yearly to PSAP boundaries. It will be very difficult to compare testing results for a given PSAP from year to year due to the changing boundaries and the shifting of previous test points between neighboring PSAPs. OET Bulletin No. 71 states that test areas not overlap.[55] To meet that recommendation the carrier will need to maintain a comprehensive and frequently updated database of PSAP boundaries in order to ensure test areas are independent of each other, but where would it obtain that information in the absence of a system for all PSAPs to constantly update the carrier?

Third, many PSAPs contract with other PSAPs to handle their wireless 911 calls, and these arrangements can change every year. Would a carrier be obligated to comply in the requesting PSAP's area, or in the area served by the PSAP that is handling calls for that PSAP? Verizon Wireless has also been caught in disputes among PSAPs, usually a county and a city within that county, as to which PSAP will receive E911 calls. How is it to measure compliance and handle testing in that situation?

Fourth, in a number of cases, PSAPs' borders are not contiguous or are unclear. For example, in California, the Highway Patrol handles the calls from cell sectors that primarily point toward a highway. The local PSAPs handle the calls from the cell sectors that are primarily pointing away from the highway. Drawing compliance testing boundaries between the California Highway Patrol and the surrounding local PSAPs will be very difficult. In a number of other cases, PSAPs that are contained in a single city or university campus can be surrounded by the boundaries of the PSAP for the county. In addition, many county PSAPs take sections of

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[55] OET Bulletin No. 71 at 4.

a county that are not covered by city-level PSAPs and as a result, the boundaries of that county are small, noncontiguous sections scattered throughout the county.

Fifth, PSAP-by-PSAP testing would require carriers and PSAPs to coordinate literally millions of test calls. To achieve statistically valid testing, Verizon Wireless conducts hundreds of test calls in a test area. With more than 2,800 PSAPs, and more being added continuously, this would amount to millions of calls. Many PSAPs do not want testing to be conducted at certain hours, requiring testing only during night hours, making compliance even more difficult.

In short, in many markets a carrier's ability to comply with a PSAP-level requirement will be dependent not on the extent of its compliance efforts and the quality of its Phase II technology, but on how third party state, county and local governments configure their individual PSAP jurisdictions. The sole stated reason for the Commission's designation of PSAP-level compliance relates to concerns that "averaging accuracy over a vast service area" could "leave significant portions of the country with virtually useless levels of E9-1-1 accuracy."[56] But what is meant by "vast?" Aside from being factually unsupported, the Commission's rationale begs the question of why a larger, more standardized geographic area, such as MSA/RSA, MTA/BTA, EA/EAG, or statewide (as NRIC VII had recommended), would not also achieve the Commission's goal of "provid[ing] meaningful automatic location identification information that permits first responders to render aid, regardless of the technology or platform employed."[57] Conversely, given the disparities between PSAP environments, it is unlikely that a methodology could be developed to account for such disparities in a way that allows consistent enforcement. The Commission has provided no factual explanation for its tentative conclusion and, for this

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[56] *Notice at* ¶ 5.
[57] *See id.* at ¶ 6.

reason as well, the FCC should not rush to judgment, but should develop a record on all issues before considering a geographic testing mandate.

In any event, these issues are not new. The Commission's own Advisory Committee, Session VII of the National Reliability and Interoperability Council ("NRIC VII"), was fully aware of them. The Commission chartered NRIC VII to present recommendations on many E911 matters, specifically including requirements for wireless location accuracy. Over months of work, NRIC VII's Focus Group 1A, comprised of representatives of public safety, government officials, vendors and wireless carriers, comprehensively studied various E911 systems and the limits that physics and costs imposed on achieving the most accurate emergency location services available. It authored a detailed report that NRIC adopted unanimously except for one member.[58] The report included specific recommendations for new testing procedures that this expert group believed would promote improvements in E911 accuracy by providing PSAPs with data about how carriers' E911 services worked in their jurisdictions.

Critical to NRIC VII's conclusion was the finding that compliance with the existing accuracy standards at every PSAP was not technically feasible. But NRIC VII did recommend compliance testing at a state level, supplemented by **performance** testing at the PSAP level. This way, carriers and PSAPs would cooperate to develop data as to how each carrier's E911 system performed in each PSAP. Should a PSAP believe that the carrier's system was not performing optimally, it would have mediation rights and other remedies at the Commission.

It is unfortunate that the *Notice* fails to discuss NRIC VII's work or seek comment on its comprehensive E911 testing recommendations, as part of the initial phase of this rulemaking. NRIC VII's research, report and recommendations do not support, and in fact contradict, the

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[58] National Reliability and Interoperability Council VII, Focus Group 1A, Near Term issues for Emergency/E911 Services, Final Report, December 2005. NRIC subsequently adopted Focus Group 1A's Report.

Notice's tentative conclusion to require PSAP level testing and compliance VII. In effect, the Commission has *sub silencio* disregarded the work of its own Advisory Committee. While in the end the Commission may not agree with all of NRIC VII's recommendations, they would have been a better place to start. Verizon Wireless urges that, for this reason as well, the Commission not adopt its tentative conclusion but instead consider the need for and benefits of any new testing mandate, together with NRIC VII's report, along with the other related issues that will be considered in the second phase of this proceeding.

IV. DEFERRING ENFORCEMENT OF A PSAP-LEVEL TESTING MANDATE WOULD NOT MAKE IT LAWFUL.

The *Notice* asks for comment on whether the Commission should defer enforcement of a PSAP-level testing requirement until some later date.[59] Such a course would, however, be no more compliant with the APA. First, the Commission cannot adopt a requirement without a factual predicate that it is feasible, and by imposing PSAP-level compliance, is, as detailed above, not feasible for Verizon Wireless's authorized Phase II solution. Adopting, but then deferring enforcement would leave exactly the same problem – the Commission would have adopted a new mandate without requisite factual record that it is feasible. Simply because the Commission in its discretion may decline to enforce the rule would not change the fact that the rule has been adopted. It is for this reason that any legal challenge to a new rule must be brought upon its adoption and publication, regardless of the Commission's enforcement posture.

Second, to the extent a key purpose of the deferral is to build a record on the interrelated issues the *Notice* raises, such as testing methodology, then the proper course is simply not to adopt *any* rule in isolation from those issues, but to consider all of them together. For example, the record may support a requirement for local or regional testing coupled with a change to the

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[59] *Notice* at ¶ 6.

accuracy standard. Or, a geographic testing requirement could be adopted as part of comprehensive testing methodology and procedures that account for topology problems that inhibit determining accuracy of the E911 caller's location. In this way, the Commission would recognize the reality that the geographic scope of testing is only one of many, interrelated variables that should be considered together in determining how best to achieve the most accurate wireless E911 systems.

CONCLUSION

For the foregoing reasons, the Commission should not amend its E911 rules to require carriers to demonstrate they comply with the accuracy standard at the PSAP-level at this time. Instead, it should only consider such a change as part of other changes to its rules based on the record it develops in response to Part III.B of the *Notice*.

Respectfully submitted,

/s/ John T . Scott, III

John T. Scott, III
Vice President and
Deputy General Counsel – Regulatory Law

Lolita D. Forbes
Counsel

1300 I Street, N.W.
Suite 400 West
Washington, D.C. 20005
(202) 589-3740

July 5, 2007