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

In the Matter of	
Wireless E911 Location Accuracy Requirements	PS Docket No. 07-114
911 Requirements for IP-Enabled Service Providers	WC Docket No. 05-196

REPLY COMMENTS OF T-MOBILE USA, INC.

Thomas J. Sugrue
Kathleen O'Brien Ham
Sara F. Leibman
James Nixon
Amy R. Wolverton
T-MOBILE USA, INC.
401 9th Street, NW, Suite 550
Washington, DC 20004
(202) 654-5900

John T. Nakahata
Brita D. Strandberg
S. Roberts Carter III
HARRIS, WILTSHIRE & GRANNIS LLP
1200 Eighteenth Street, NW
Washington, DC 200036
(202) 730-1300

Counsel to T-Mobile USA, Inc.

July 11, 2007

TABLE OF CONTENTS

I. INTRODUCTION AND SUMMARY. 1

II. THE RECORD SHOWS THAT PSAP LEVEL ACCURACY CANNOT BE ACHIEVED AT ALL PSAPS WITH CURRENTLY DEPLOYED TECHNOLOGY. 3

III. MSA/RSA ACCURACY COMPLIANCE IS ALSO NOT TECHNICALLY FEASIBLE WITH CURRENT TECHNOLOGIES, AND IS COMPETITIVELY BIASED. 10

IV. THE RECORD DEMONSTRATES THAT PSAP LEVEL ACCURACY IS NOT RIGHT FOR EVERY PSAP OR GOVERNMENTAL UNIT. 11

V. THE COMMISSION MUST ALSO ADDRESS THE PRACTICAL PROBLEMS WITH A PSAP-LEVEL ACCURACY MANDATE. 12

VI. THE FCC MUST CONSIDER PSAP OR OTHER MORE GRANULAR ACCURACY TOGETHER WITH OTHER ACCURACY ISSUES, AND CONDUCT A RISK AND COST-BENEFIT ANALYSIS OF ANY PROPOSED NEW ACCURACY REQUIREMENTS.....14

VII. AN ADVISORY COMMITTEE REPRESENTING ALL STAKEHOLDERS WOULD BE A GOOD WAY TO EVALUATE WHAT CAN FEASIBLY AND EFFECTIVELY BE ACHIEVED, INCLUDING ALL BENEFITS AND COSTS. 15

VIII. CONCLUSION. 17

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

In the Matter of	
Wireless E911 Location Accuracy Requirements	PS Docket No. 07-114
911 Requirements for IP-Enabled Service Providers	WC Docket No. 05-196

REPLY COMMENTS OF T-MOBILE USA, INC.

I. INTRODUCTION AND SUMMARY.

The comments uniformly show that the Commission's decision to review its accuracy requirements was timely. By conducting such a review the Commission can assure itself, the public and public safety that they are getting as accurate an E911 location as available technologies will feasibly and reasonably allow. The leadership of Chairman Martin and this Commission in assuring public safety has been strong and unflinching.

But the comments – from a wide range of commenters – also make clear that new accuracy requirements, including a mandate to meet the current standards at every PSAP – and even at some more aggregated levels – would require new technology development and deployment. This underscores the need for the Commission to consider all of the possible changes to the accuracy requirements together, establishing both a technically feasible and economically reasonable accuracy objective, and a technically feasible and economically reasonable migration path to get there.

Moreover, both the diversity of PSAP needs reflected in the record and the clear lack of a near or even medium term implementable technically feasible solution to meet the current accuracy requirements at every PSAP further demonstrate the need for an objective and scientific risk and cost-benefit analysis. The Commission needs to be sure both that any new requirements will be helpful to those PSAPs who will seek them, and that any new requirements will be a net positive, not a net negative, for public safety. Such an analysis needs to include whether any new requirements will cause carriers to withdraw from service in some areas (thereby potentially reducing the likelihood that 911 calls can be placed), raise prices to consumers (thereby causing some consumers to drop service and thus lose the ability to place a wireless 911 call), or limit future network buildouts so that consumers who cannot use wireless to make a 911 call today will continue to be unable to do so. In this regard, the comments make clear that the costs of PSAP-level compliance and testing would be substantial.

Furthermore, a number of carriers and PSAPs catalog the many practical issues that the Commission would need to address in promulgating a new geographic accuracy mandate below the state level. T-Mobile echoes these issues, which are real and which must be addressed to make any new requirement workable, once any such new requirement becomes technically feasible and economically reasonable.

As a way of addressing both the technical and practical issues surrounding E911 accuracy, T-Mobile supports the proposals by Commissioner Adelstein, NENA and several carriers for an all-stakeholder advisory committee, modeled on the WARN Act process. It is critical that either this advisory committee – or the Commission itself –

conduct real-world testing to sort the realistically achievable from the inevitable technology vendor puffery.

II. THE RECORD SHOWS THAT PSAP LEVEL ACCURACY CANNOT BE ACHIEVED AT ALL PSAPS WITH CURRENTLY DEPLOYED TECHNOLOGY.

As desirable a goal as PSAP level accuracy testing and compliance may seem, a mandate that cannot be implemented will not improve public safety. The comments reflect a remarkable consensus among a wide range of stakeholders that the current accuracy standards cannot be achieved at every PSAP using current technology. Indeed, no commenter actually contends that carriers can comply with current accuracy standards at all PSAPs using the technologies they have currently deployed. All commenters addressing the issue recognize that new technologies would have to be developed and implemented to yield PSAP level accuracy at current standards.

The comments confirm NASNA's observation that "there is no silver bullet solution for the provision of Phase II service,"[1] and the Network Reliability and Interoperability Council (NRIC) VII's report that "all parties agree that it is not technically possible today for every carrier to meet the FCC location accuracy requirement at every PSAP."[2] NENA acknowledges that meeting the current accuracy requirements at the PSAP level "currently may not be technically feasible in some areas."[3] Indeed, NENA recognizes that were the FCC to adopt a PSAP level accuracy mandate, "elemental fairness demands suspension of enforcement of this requirement for

---

[1] Letter from Steve Marzolf, President, National Association of State 9-1-1 Administrators to Chairman Martin, CC Docket No. 94-102 at 1 (Sept. 19, 2005).

[2] NRIC VII, Focus Group 1A, Near Term Issues for Emergency/E9-1-1 Services, Final Report at 51 (Dec. 2005) ("NRIC VII Report").

[3] Comments of NENA at 1 ("NENA Comments").

a reasonable period because it is new and the timing for its attainment is uncertain."[4] King County also concludes that new technologies would have to be "developed and deployed" to deliver accuracy at the FCC's required thresholds at a more granular level than today.[5]

With respect to A-GPS technology, the record is unequivocal that A-GPS, either alone or in combination with available network solutions, cannot meet the Commission's 50/150 handset based accuracy standards at every PSAP. Qualcomm is unambiguous, "AGPS cannot today, nor in the foreseeable future, meet the E911 Phase II accuracy requirements in each and every PSAP on a PSAP-by-PSAP basis."[6] Qualcomm further states that although it is working on developing enhancements and improvements, none of these "currently in the pipeline will make the dramatic changes that would be necessary to guarantee that the Phase II requirements will be met in each and every one of the 6,000 PSAPs, with their arbitrarily defined boundaries."[7] As to hybrid solutions, Qualcomm reports, "Moreover, there is no hybrid position location technology that will ensure compliance with a PSAP-by-PSAP requirement. . . .it would be inaccurate to say that the accuracy requirements can be met on a PSAP-by-PSAP basis merely by the deployment of hybrid solutions."[8]

Verizon's and Sprint's comments verify Qualcomm's assessment of A-GPS. Verizon and Sprint both detail the environmental factors affecting accuracy of an A-GPS

---

4 *Id*. at 2.

5 Comments of the King County E911 Program at 7 ("King County Comments").

6 Comments of Qualcomm Incorporated at 4 ("Qualcomm Comments").

7 *Id.* at 5.

8 *Id*. at 6-7.

system, including the fact that the network-based back-up system cannot always meet the requirement for 150 meters accuracy 95 percent of the time.[9]

TruePosition's comments actually confirm, rather than contradict, Qualcomm's conclusions about the inability of hybrid technologies to meet current FCC accuracy requirements at every PSAP. TruePosition states that the combination of its solution, U-TDOA with A-GPS can only meet the 50/150 meter handset-based accuracy requirement in "the vast majority of cases," which is far from a statement that this standard can be met for all PSAPs.[10] Moreover, although TruePosition claims that this hybrid combination would meet the 100/300 network-based accuracy standard in "virtually all cases," this statement ignores the fact that, under the FCC's rules, a hybrid technology is considered a handset-based, not a network-based solution, and thus must meet the more stringent 50/150 meter accuracy requirement.[11] A hybrid technology that can meet only the 100/300 network-based accuracy standard in every PSAP – which is more than what even TruePosition claims it can do – is therefore not compliant with FCC accuracy standards at the PSAP level.

It is also undisputed in the record that U-TDOA, the predominant network-based solution used by both AT&T and T-Mobile, cannot meet the FCC's accuracy standards at every PSAP. U-TDOA is a good network-based location technology. In many instances,

---

[9] *See* Comments of Sprint-Nextel at 11 ("Sprint-Nextel Comments"); Comments of Verizon Wireless at 22 ("Verizon Comments").

[10] Comments of TruePosition, Inc. at 5 ("TruePosition Comments"). If the Commission further alters test procedures, such as specifying a higher percentage of indoor test points than is currently called for under the NRIC guidelines, that could further change the extent to which accuracy standards can be met at the PSAP level. This further shows how the issue of the geographic area for testing and compliance with accuracy standards is interrelated with the other issues in the NPRM that are not included within this comment period.

[11] *Id.*; *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems*, Third Report and Order, 14 FCC Rcd. 17388, 17391-2, 17422 (¶ 8, ¶ 74) (1999).

it delivers location estimates well within 100 meters.[12] The accuracy of a given estimate is affected by, among other things, the number of Location Measurement Units (LMUs) that can receive the signal from the handset, surrounding terrain, radio multi-path effects, and the topology of the network sites receiving the signal (such as whether they are well-spaced or in a line down the highway).

Even TruePosition's comments show that U-TDOA cannot meet the Commission's accuracy requirements at every PSAP. TruePosition does not claim that its U-TDOA solution can meet the current network standard everywhere: it only claims that its U-TDOA solution is capable of achieving the mandated 100/300 meter accuracy standards at the PSAP level "in the majority of situations."[13] This, again, is a far cry from showing that U-TDOA can meet the FCC accuracy requirements at every PSAP.

Further, although TruePosition provides a list of "investments" that could be undertaken to meet the accuracy standards, its comments essentially concede that achieving PSAP level accuracy would require substantial technological changes and cannot be achieved at every PSAP in the near to medium term. In the first instance, TruePosition's representation that accuracy could be met at the PSAP level by adding LMUs at existing cellsites is at best misleading, because TruePosition ignores the fact that carriers such as T-Mobile already deploy LMUs at every cellsite in those areas where

---

[12] T-Mobile cannot respond to King County's assertions about the performance of network-based location technology in the Seattle area at this time. T-Mobile has to date received only the County's summary statistics, and cannot from that ascertain why the County obtained the results that it did. T-Mobile has asked to review the County's raw data, which is necessary to ascertain why King County got the results it did, and has not yet received the data. This is the first step in determining whether these results are, in fact, accurate and, if so, whether further optimization steps can be taken to improve performance. NRIC VII Report at 53 (Appendix E – E9-1-1 PHASE II Accuracy Optimization Reporting and Resolution Process). T-Mobile's own tests at Phase II deployment in King County showed good location accuracy performance.

[13] TruePosition Comments at 2.

location accuracy is most challenging (particularly in rural areas) and least likely to meet accuracy standards at the PSAP level.[14] In fact, T-Mobile estimates that installing LMUs at every cellsite would *not* enable T-Mobile to meet the accuracy requirements at significantly more PSAPs than with its current LMU deployment.

TruePosition also lists the implementation of hybrid technologies. As explained above, implementing hybrid technologies would *not* bring T-Mobile within the FCC's handset accuracy requirements, which TruePosition admits cannot be met even with a combination of U-TDOA and A-GPS. Moreover, to implement a hybrid technology would require changing out at least 95 percent of T-Mobile's handsets to meet the handset penetration requirements. TruePosition's assertion that this can happen in three years is fanciful, and not borne out by the FCC's experience under existing handset rules.[15]

As discussed in T-Mobile's comments, adding either new cell sites or LMU-only sites for the sole purpose of improving location accuracy presents real practical issues, such as the difficulty of obtaining local approval for additional tower sites, even when it is explained that adding a new cell will improve 911 performance.[16] Moreover, the costs of acquiring, constructing, maintaining and operating such location-only sites are prohibitive, and gaining approval for siting new towers which do not improve general cell quality is bound to be even more difficult.[17]

---

[14] Comments of T-Mobile USA, Inc. at 5 ("T-Mobile Comments").

[15] T-Mobile Comments at 7.

[16] *Id.* at 5-6.

[17] *Id*. at 6.

Nor will the addition of Angle-of-Arrival technologies to supplement U-TDOA help appreciably to meet FCC network-based accuracy requirements at the PSAP-level. In the first instance, this technology combination only recently became available in a pre-production environment from T-Mobile's technology vendor, so there is no real-world experience with the combined technology. Moreover, it is T-Mobile's current expectation that Angle-of-Arrival combined with U-TDOA would not improve location accuracy estimates enough to meet PSAP-level accuracy in areas where the signal is being received by three or fewer cellsites. In addition, Angle-of-Arrival accuracy degrades with increased distance from the cellsite. Where the degradation is most evident is in the same areas that U-TDOA accuracy is most challenged (*e.g.*, rural areas and highways). Furthermore, Angle-of-Arrival requires additional and larger antennas than U-TDOA. The addition of these antennas would present significant issues in obtaining necessary approvals to place these antennas on cell towers, and would, even when approval can be secured, make the installation and space rental for these antennas much more difficult and costly due, *inter alia*, to the increased weight and wind load factors involved. Furthermore, Cincinnati Bell Wireless, which has installed 20 Angle-of-Arrival antennas in its network, reports that it is unlikely to meet accuracy requirements at the PSAP level for PSAPs at the edge of its coverage area.[18] Indeed, Cincinnati Bell Wireless projects that it would have to "either remove certain sites at the edges of its network that serve only small portions of certain PSAPs' jurisdictions or

[18] Comments of Cincinnati Bell Wireless LLC at 4 ("Cincinnati Bell Comments").

build additional sites at the edges of its network for which there is little or no consumer demand."[19]

Finally, LMU-sharing will also not be the "silver bullet" that allows carriers to meet the FCC network-based accuracy requirements at every PSAP.[20] TruePosition ignores the fact that often carriers are collocated on the same tower. In that case, LMU sharing provides no benefit. Furthermore, in many areas, cellsites, even when they are on different towers, are clustered – not coincidentally – in the same areas. Sharing LMUs that are close together will not meaningfully improve accuracy. There may be a few instances in which LMU sharing could provide additional accuracy. However, the logistics of arranging for such sharing, establishing the terms and conditions, including liability allocation, for such sharing, and then keeping databases of network configurations up-to-date would be substantial. For example, T-Mobile makes dozens, if not hundreds, of network changes every day that impact LMU operations and has spent many years fine-tuning its network databases to track these changes. Any sharing arrangement would have to ensure that these changes could be coordinated between carriers, which would likely be impossible since it would have to be near-real-time and would be highly dependent on the operational procedures of each carrier, which are likely to differ. The theoretical possibility for some LMU sharing does not alter the reality that U-TDOA is incapable of delivering location estimates within the FCC's requirements at every PSAP.

Accordingly, the record clearly and unambiguously establishes that it is not technically feasible to comply with existing FCC accuracy standards at every PSAP.

---

[19] *Id*.

[20] *Cf.* TruePosition Comments at 3.

III. MSA/RSA ACCURACY COMPLIANCE IS ALSO NOT TECHNICALLY FEASIBLE WITH CURRENT TECHNOLOGIES, AND IS COMPETITIVELY BIASED.

Although it certainly will be technically feasible to comply with the FCC accuracy requirements at a greater percentage of MSAs and RSAs than PSAPs, it is still not likely to be technically feasible to meet the FCC accuracy requirements in every MSA and RSA. As Cincinnati Bell Wireless explains, network-based technologies inherently deliver weaker performance at the edges of the coverage area.[21] Thus, where a carrier has limited coverage of an MSA or RSA on the edge of the carrier's service area, it will be much more difficult, and likely impossible, to meet the FCC's accuracy requirements without extraordinary and cost prohibitive steps such as building, operating and maintaining cellsites solely to provide additional location points.

Compounding this problem is the fact that, while older cellular licenses were issued according to MSA and RSA boundaries, other wireless licenses were issued, for example, on a BTA, MTA or EA basis. These boundaries are not congruent with the MSA and RSA boundaries, and thus create greater problems for carriers with non-MSA and RSA license areas.[22] Thus, it is incorrect that "carriers generally engineer, construct and maintain their networks on the basis of those [MSA and RSA] geographic areas."[23] The Commission should therefore reject these competitively biased proposals to mandate MSA and RSA-based accuracy testing and compliance.[24]

---

[21] Cincinnati Bell Comments at 4.

[22] *See* Comments of Nsighttel Wireless, LLC at 3.

[23] Cincinnati Bell Comments at 5.

[24] *See e.g.* Cincinnati Bell Comments at 3; Comments of United States Cellular Corporation at 5-6.

IV. THE RECORD DEMONSTRATES THAT PSAP LEVEL ACCURACY IS NOT RIGHT FOR EVERY PSAP OR GOVERNMENTAL UNIT.

The comments demonstrate that there is a wide diversity among PSAPs as to the geographic level of accuracy that they find appropriate and helpful, and some reject the current approach to accuracy altogether. While there are many PSAPs that want mandated PSAP level testing and compliance, the Texas 9-1-1 Alliance, for example, states, "the most reasonable geographic PSAP area for location accuracy testing may vary by local regions and local geography circumstances," and expresses its preference that "the appropriate geographic PSAP responsibility testing area should ideally be worked out to the extent possible between the wireless carriers and the 9-1-1 authorities in a cooperative manner." [25] King County, Washington, raises the possibility of testing accuracy at the regional 911 authority level.[26] APCO itself, in its initial Petition and Supplemental Comments, posited several different geographies, from the PSAP to MSAs and RSAs at which accuracy testing and compliance would be desirable.[27]

The State of Washington goes further, and recommends an entirely different approach to accuracy reporting.[28] The State of Montana cautions against changing the existing Phase II regime at all, and supports the National Association of State 9-1-1 Administrators' (NASNA) to examine any new requirements as wireless Phase III.[29]

---

[25] Comments of the Texas 9-1-1 Alliance at 2-3.

[26] King County Comments at 15.

[27] *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems*, Association of Public-Safety Communications Officials-International, Inc. Request for Declaratory Ruling, CC Docket No. 94-102 at 4-6 (filed Oct. 6, 2004); *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems*, Association of Public-Safety Communications Officials-International, Inc. Supplement to Request for Declaratory Ruling, CC Docket No. 94-102 at 3-4 (filed Feb. 4, 2005).

[28] Comments of the State of Washington Enhanced 911 Program at 6.

[29] Comments of the State of Montana at 1.

What these comments demonstrate is that any new accuracy requirements must be carefully calibrated to address a wide variety of local situations.

V. THE COMMISSION MUST ALSO ADDRESS THE PRACTICAL PROBLEMS WITH A PSAP-LEVEL ACCURACY MANDATE.

Even assuming that the Commission considers more granular E911 location compliance measurements at the same time that it addresses the other issues outlined in the *NPRM*, it should also consider a number of practical problems that characterize certain PSAP deployments. Indeed, as discussed above, PSAPs and local governments themselves have noted a number of circumstances in which location accuracy testing would be desirable at geographic areas other than the PSAP level.[30] And as NASNA has explained, a mandatory near-term PSAP-level testing requirement could have a substantial fiscal impact on states that have wireless carrier cost recovery.[31]

Moreover, the lack of a single, definitive listing of actual PSAPs demonstrates that the targeted testing areas are impossible to define concretely, making compliance and enforcement problematic. T-Mobile echoes the concerns of Verizon and Sprint-Nextel that PSAP-level measurement and compliance will be extraordinarily difficult in many circumstances regardless of the technologies used. For example, as T-Mobile explained in its opening comments, it is often difficult even to determine the appropriate PSAP for testing purposes, such as in California where the California Highway Patrol is the PSAP

---

[30] *See* Section IV, *supra*.

[31] Letter from Steve Marzolf, President, National Association of State 9-1-1 Administrators to Marlene H. Dortch, Secretary, CC Docket No. 94-102 at 1 (May 23, 2007); *see also* Comments of the State of Montana at 1.

for the highways, but individual cities, counties and towns are the PSAPs for areas that abut the highways.[32]

The CHP PSAP boundary issue is symptomatic of a larger concern set forth in greater detail by Verizon and Sprint: PSAP deployments range from small towns to entire states, and do not follow any standard conventions for size or operation.[33] This wide disparity makes it impossible to set any sort of benchmarks by which to measure compliance.[34] Compounding this difficulty, PSAP boundaries themselves are often subject to change. Indeed, as Verizon has explained, "over 1,000 modifications are made yearly to PSAP boundaries."[35] It is therefore not surprising, as Sprint has noted, that boundary revisions frequently result in disputes among PSAPs as to which PSAP is the appropriate requesting entity for E911 service.[36]

Finally, T-Mobile shares Verizon's concern that the practice of PSAPs contracting with other PSAPs to handle calls – arrangements that can change each year – will also make PSAP-level compliance substantially more difficult in many cases.[37] As Verizon has explained, it is unclear in such circumstances whether a carrier must comply at the requesting PSAP's area or at the area of the PSAP handling the calls.[38] And, as stated above, these arrangements have resulted in disputes between PSAPs themselves as to which PSAP should receive E911 calls.[39] Compliance in these situations will be

---

32 T-Mobile Comments at 8.

33 Verizon Comments at 23-24; Sprint-Nextel Comments at 4.

34 *See* Sprint-Nextel Comments at 4.

35 Verizon Comments at 24.

36 Sprint-Nextel Comments at 5.

37 Verizon Comments at 24.

38 *Id.*

39 *Id.*

difficult or impossible for reasons wholly apart from technical ability, and the Commission should take such issues into account when fashioning new rules for measuring wireless E911 location accuracy.

VI. THE FCC MUST CONSIDER PSAP OR OTHER MORE GRANULAR ACCURACY TOGETHER WITH OTHER ACCURACY ISSUES, AND CONDUCT A RISK AND COST-BENEFIT ANALYSIS OF ANY PROPOSED NEW ACCURACY REQUIREMENTS.

The comments also support T-Mobile's view that the Commission must conduct cost-benefit analyses of any new accuracy requirement in order to promulgate a legally sustainable rule.[40] Under the Administrative Procedures Act, the Commission's rules must be "based on a consideration of the relevant factors,"[41] and must not view these factors "in isolation from one another."[42] It is thus critical for the Commission to evaluate the net benefits and costs of its proposed rules on both public safety and consumer welfare as a whole.

As NENA notes, the issue of the geographic area for accuracy testing and compliance must be "put into proper context with other current wireless E9-1-1 issues. Location accuracy is important, but so too is being able to locate a wireless 9-1-1 caller at all."[43] While NENA focuses on the need to make more progress in upgrading the 25 percent of PSAPs without Phase II capability to Phase II service, NENA's observation applies equally to ensuring that accuracy rules do not lead carriers to reduce or fail to expand coverage in rural areas – through which many callers may merely be transiting, such as on a highway – or lead to increased prices for service, either of which could

---

[40] Comments of AT&T Inc. at 3, 6 n.7 ("AT&T Comments"); Verizon Comments at 13.

[41] *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416 (1971); AT&T Comments at 7 n.8, Verizon Comments at 8.

[42] *See MCI v. FCC*, 842 F.2d 1296, 1303 (D.C. Cir. 1988); Verizon Comments at 13.

[43] NENA Comments at 5-6.

reduce public access to 911, with or without location information. The wireless and public safety industries have made tremendous advances since the Commission first began considering wireless E911; any action now that negates some of this progress would move in the wrong direction.

Similarly, the various issues discussed above, including the technical feasibility and economic reasonableness of any new requirements, the utility to PSAPs in a variety of different circumstances of the prescribed information, and the practical difficulties in defining and implementing a PSAP-level accuracy requirement all demonstrate the need for a rigorous cost-benefit review.

VII. AN ADVISORY COMMITTEE REPRESENTING ALL STAKEHOLDERS WOULD BE A GOOD WAY TO EVALUATE WHAT CAN FEASIBLY AND EFFECTIVELY BE ACHIEVED, INCLUDING ALL BENEFITS AND COSTS.

Finally, as a means to find a feasible way forward that will be a net improvement to public safety and consumer welfare, T-Mobile fully endorses Commissioner Adelstein's call to "leverage the expertise of those who have worked on E911 issues for some time" to inform the Commission's decisionmaking,[44] and adds its voice to those supporting the creation of an all-stakeholder advisory committee to accomplish this goal.[45] As Commissioner Adelstein has explained, such a committee could proceed along the lines of the Warning, Alert and Response Network Act ("WARN Act") Advisory Committee,[46] which is chaired by Chairman Martin and comprised of

---

[44] *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114, *911 Requirements for IP-Enabled Service Providers*, WC Docket No. 05-196, Notice of Proposed Rulemaking (May 31, 2007), Separate Statement of Commissioner Jonathan S. Adelstein at 28-29.

[45] *See e.g.* NENA Comments at 5; AT&T Comments at 3-6; Comments of CTIA – The Wireless Association ® at 6-7 ("CTIA Comments"); Comments of Rural Cellular at 8-10.

[46] *Id.*

numerous experts charged with providing substantive recommendations by a date certain.[47]

Establishing an expert forum with Public Safety, Commission, technology vendor, and wireless industry participants will help ensure that wireless E911 accuracy improves as expeditiously as possible. As CTIA observes, creation of such a committee will allow stakeholder experts to pool resources and share ideas, leveraging their combined knowledge to determine the best solutions available.[48] Moreover, an expert forum would provide a means of objective, independent testing of proposed autolocation solutions.[49]

T-Mobile also agrees with AT&T that establishment of an advisory committee will "provid[e] the Commission with critical evidence regarding the technical and economic feasibility of various E911 requirements."[50] A forum in which stakeholder experts can critically examine autolocation approaches and rigorously test solutions makes it substantially more likely that the resulting consensus recommendations will be capable of being deployed in the real world. Simply put, improving wireless location accuracy is a complex undertaking that can best be achieved by combining stakeholder resources, and T-Mobile stands ready to participate in such an effort.

---

[47] *See generally* Commercial Mobile Service Alert Advisory Committee home page, available at http://www.fcc.gov/pshs/cmsaac/ (last visited Jul. 9, 2007).

[48] CTIA Comments at 7.

[49] *See* AT&T Comments at 5-6.

[50] *Id.* at 6.

VIII. CONCLUSION.

T-Mobile continues to look forward to working with the Chairman and Commission as they consider how best to improve the accuracy of E911 location estimates. The comments reflect the complexity of these issues, and the technological, operational, and practical considerations that need to be addressed. The best solution remains to move forward initially with steps such as implementing the NRIC VII recommendations, while convening an all-stakeholder forum to evaluate and recommend both the technically feasible and economically reasonable ultimate objectives for the FCC's accuracy requirements, and the technically feasible and economically and operationally reasonable transition path to get there.

Respectfully submitted,

John T. Nakahata
Brita D. Strandberg
S. Roberts Carter III
HARRIS, WILTSHIRE & GRANNIS LLP
1200 Eighteenth Street, NW
Washington, DC 200036
(202) 730-1300

Counsel to T-Mobile USA, Inc.

Thomas J. Sugrue
Kathleen O'Brien Ham
Sara F. Leibman
James Nixon
Amy R. Wolverton
T-MOBILE USA, INC.
401 9th Street, NW, Suite 550
Washington, DC 20004
(202) 654-5900

July 11, 2007