Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of () Information Sought on Methods () for Verifying Compliance with () E911 Accuracy Standards ()

Docket No. ET 99-300

Comments of the Telecommunications Industry Association

The Telecommunications Industry Association ("TIA") submits the following brief comments in response to the Federal Communications Commission's recent Public Notice seeking technical information on measuring the accuracy of Enhanced 911 (E911) systems for locating wireless callers.¹ TIA is the principal industry association representing manufacturers and suppliers of telecommunications products and equipment, including manufacturers of mobile radio equipment, and its engineering committees have been active in the development of standards involving E911 systems.²

¹ Information Sought on Methods for Verifying Compliance with E911 Accuracy Standards, Docket No. ET 99-300, *Public Notice*, DA 99-2130 (Released October 8, 1999).

² For example, TIA Engineering Subcommittee TR-45.2 on Wireless Intersystem Technology, through an Ad Hoc Committee on Emergency Services, has been working diligently in developing a Wireless E911 Phase II Automatic Location Identification (ALI) standard [expected to be delivered in the first quarter of 2000 as a Joint Standard with Committee T1, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS)]. The standard will allow all of the known location technologies, both network-based and handset-based, to provide data to a public safety access point (PSAP) in the framework of a common interface.

General Principles regarding testing and verification/compliance

While TIA, as an association, at this time is unable to answer each and every question presented in the *Public Notice*, we provide some general principles for the Commission's consideration.

Participants in the wireless telecommunications industry, including TIA member companies, will of course develop testing and verification methodologies. Development of the specifics of the processes used in these methodologies is best left to the private sector. The FCC does not need to use its scarce resources where industry can develop thorough mechanisms in an open, fair environment that also will be guided by a competitive market.

In fact, TIA is of the understanding that at least a substantial portion of the industry is calling for an open and transparent private sector collaborative process to determine appropriate testing guidelines. If testing procedures or guidelines are developed by the industry in this fashion, they would be available to any proposed Phase II ALI solution and could be applicable for all wireless technologies (CDMA, TDMA, GSM, AMPS, *etc.*) in the same way that that TR 45.2 is developing standards for Public Safety Access Point (PSAP) interfacing. They also would be applicable for both handset and network-based automatic location identification (ALI) methodologies. The Commission should support this approach because it would fulfill a universal objective – that test plans must be competitively neutral.

2

Should industry, including TIA member companies, as well as the Commission, point to the TIA engineering committees as an appropriate vehicle for the accomplishment of this work, TIA, as always, will be fully committed to supporting the initiative. A primary benefit of such TIA engineering committee meetings, of course, is that they will be open to participation by all directly and materially interested parties, as required by the consensus standards process of the American National Standards Institute ("ANSI") under which TIA is an accredited standards development organization ("SDO").

To be successful, E911 verification and compliance procedures should be as simple as feasible. They also should not be too costly because Phase II location systems themselves will be very expensive and the overall costs should not be raised even further.

The weight of different environments should reflect the real distribution of E911 calls. For example, if most of the calls are being made in suburban environments, then the suburban environment should have the highest weight in an evaluation.

Market based enforcement should be a principle tenet. Industry is committed to developing these testing methodologies that would ensure that the FCC's Phase II accuracy rules are properly implemented.

Testing methodology

The Commission need not, and should not, mandate industry testing of E-911 Phase II solutions. To the extent that the Commission offers guidance and clarification on compliance testing, however, TIA wishes to impress on the Commission that such guidance should recognize the desirability of simulator methodologies because they are:

- Repeatable, on an hour-to-hour, day-to-day, season-to-season, manufacturerto-manufacturer basis.
- Controlled, so that many unknown or unpredictable variables can be removed.
- Clear (at least potentially), so manufacturers are held to a common standard that can be used across cellular standards and by service providers.
- Available, since simulators (global positioning satellite (GPS) signal and maybe others) are commercially available that can provide signals that simulate a wide variety of effects due to environment and user motion. The simulator can account for antenna pattern, *etc*.
- Accepted, both for verifying receiver functionality, and also in verification of type compliance.
- Simple and the most inexpensive.
- Reflective of the real world. There is a need for some distribution of simulator test cases that are reasonably related to the "real world."

A mandate from the Commission to field test Phase II ALI systems (especially if it is for all PSAPs) will create a bottleneck that will result in substantial delay in E-911 Phase II deployment. Should the Commission offer guidance on field testing, the Commission should remain cognizant of the difficulty, expense and burden of conducting field tests.

We greatly appreciate the opportunity to share the above views of TIA with the Commission and its staff.

Respectfully submitted, Telecommunications Industry Association

/s/

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