

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of	)	
	)	
	)	
Roadmap for Improving E911 Location Accuracy	)	PS Docket No. 07-114
	)	
	)	
	)	
	)	
	)	

**COMMENTS OF THE INLOCATION ALLIANCE**

The InLocation Alliance (ILA) submits these comments in response to the FCC’s public notice seeking input on the “Roadmap for Improving E911 Location Accuracy” (Roadmap), filed in the above-referenced E911 Location Accuracy proceeding by the Association of Public-Safety Communications Officials (APCO), the National Emergency Number Association (NENA), AT&T Mobility, Sprint, T-Mobile USA, and Verizon (Carrier Parties). ILA thanks the FCC for seeking comment on the Roadmap to ensure that there is a complete and comprehensive record including industry’s views. This is an important step toward implementing the comprehensive and far-reaching framework laid out in the Roadmap. ILA applauds the efforts of the parties to the Roadmap for their obviously hard work developing the terms of this very detailed agreement.

The Roadmap comes directly out of the FCC’s recommendation that industry and public safety work together to develop viable alternatives for consideration in its Wireless E911 Location Accuracy Third Further Notice of Proposed Rulemaking. ILA strongly supports the Roadmap for it presents a reasonable and realizable alternative, in contrast to the proposals set forth in the Third Further Notice. While ILA is working on a variety of innovative location

technologies, Wi-Fi and Bluetooth were the founding technologies behind the formation of the ILA. Indeed, the ILA was created for the same reason the dispatchable address solution was included in the Roadmap — the ubiquity of Wi-Fi access points and Bluetooth beacons.

## **I. BACKGROUND**

The InLocation Alliance (ILA) was founded by the mobile industry to accelerate the adoption of indoor position solutions that enhance the mobile experience by opening up new opportunities for consumers and venue owners. ILA strives to be the open industry forum where technology developers work towards a common technical understanding of the key components, interfaces, and standards for end-to-end solutions. A standards-based solution will stimulate innovation, enhance service delivery, and allow companies playing different roles in the ecosystem to share use cases, experiences, design approaches, and results from both trials and full-scale deployments.

ILA was founded in 2012 with these objectives and has now over 70 members. ILA member companies work to identify and evaluate business cases and customer needs, and merge those with the associated technical and business requirements. In this way, ILA actively collaborates with relevant Standards Development Organizations (SDOs) by contributing technical requirements rather than creating new standards itself.

## **II. PROVIDING A DISPATCHABLE LOCATION IS KEY TO IMPROVING E911**

The framework set out in the Roadmap will leverage location based services (LBS) solutions to provide public safety with a dispatchable location for indoor wireless 9-1-1 calls. These LBS solutions, including Wi-Fi and Bluetooth Low Energy technologies, are at the core of the mission of the ILA.

Wi-Fi hotspots are popping up ubiquitously, as wireless providers and other communications companies, conference centers, hoteliers, restaurants, municipalities, and others

are keen to deliver connectivity across the nation. Similarly, Bluetooth LE beacons are being deployed throughout the country in numerous settings, including retail and sports venue settings. The ILA is committed, via its membership, to help ensure that a healthy standards-based ecosystem exists so that the underlying technologies are ubiquitously deployed and accessible to virtually all wireless devices. Accordingly, ILA believes strongly that the proposed Roadmap is a far-reaching, yet reasonable and realizable approach to providing the location of all wireless 911 callers, including those calling from indoor locations.

### **III. IMPROVED ACCURACY**

In addition to dispatchable addresses, the actual geographical position estimate (i.e., latitude and longitude) will still be an essential part of the 911 location solution. Dispatchable addresses are based on mappings between known deployments of technologies (e.g., Wi-Fi, Bluetooth LE) and the identifiers of the deployed technologies. At the same time, many of these technologies can play a role in the more traditional approaches (e.g., GNSS-based tools) to determine the position of a wireless 911 caller. One particular example would involve the use of Wi-Fi signal measurements, such as where the wireless device and / or wireless infrastructure can provide to the wireless carrier measurements of time of arrival and signal strength, as is currently used today with satellite-based and other terrestrial solutions, to allow an accurate position estimate to be provided to public safety professionals. These position estimates will play a key role in validating disputable addresses and bridging the gap to a ubiquitous solution being available, particularly in challenging indoor locations.

**IV. CONCLUSION**

As noted in these comments, ILA strongly supports the proposed Roadmap for Improving E911 Location Accuracy, for it presents a reasonable and technically realizable alternative to the proposals set forth in the Third Further Notice.

Respectfully submitted,



**INLOCATION ALLIANCE**

Jouni Kämäräinen  
Board Chair

Piscataway, NJ  
Phone 732-562-6056

December 15, 2014