Wireless Innovation Forum Applauds Balanced Approach to Spectrum Sharing Outlined in Presidential Memorandum



For Immediate Release

Washington, DC, **18 June 2013** – The Wireless Innovation Forum (http://www.WirelessInnovation.org), a non-profit international industry association dedicated to driving the future of radio communications and systems worldwide, today announced enthusiastic support of President Barack Obama's <u>recent memo</u> on expanding available wireless spectrum. As reflected in the Forum's Advocacy Agenda (<u>http://groups.winnforum.org/advocacy</u>) the members support the President's initiative on:

- 1. the requirement that adequate interference protection be provided for federal users to ensure national security, law enforcement and safety of life responsibilities;
- 2. shared access to federal spectrum for commercial purposes when such interference protection is provided; and
- 3. requirements for performance criteria for radio receivers.

Forum members believe dedicated spectrum is critical to the development and operation of essential and critical communications systems to support, for example; first responders, state and local public safety communities and federal Homeland Security networks. The need for immediate and prioritized access to spectrum, in emergency/crisis situations, can only be met by exclusively authorized (licensed or assigned) spectrum. Given the complex intertwining of existing spectrum licenses, reallocation of spectrum is no longer feasible due to high cost, length of time to implement and disruption of service.

Insofar as providing shared access to federal spectrum for commercial purposes when such interference protection is provided, Forum members advocate a regulatory model that includes combinations of licensed and unlicensed, sharing and hierarchical, cooperative and co-existent domains for the optimal utilization of spectrum. This approach will also permit the use of spectrum that is currently unavailable due to warehousing or is no longer used though the license remains active. The Forum also recommends the use of new technologies, and paradigms such as small cells that address the emerging spectrum crisis.

"While exclusive-use spectrum is a necessary regulatory condition, it is insufficient to ensure that national spectrum resources are optimally leveraged to maximum benefit. The integration of unlicensed access models and establishment of new spectrum sharing regulations, including increased tolerance of nominal levels of interference where appropriate, coupled with effective interference resolution processes are critical," said Lee Pucker, CEO of the Wireless Innovation Forum.

The growing movement to encourage spectrum sharing will be a significant enabler for cognitive radio systems, as noted in the Forum's recently published report "<u>Top Ten Most Wanted Wireless Innovations</u>." However, existing spectrum users have a reasonable expectation that their systems operation will not be impaired by new in-band and adjacent band users. Historically, this has been managed through a variety of standards and regulations primarily focused on transmitter parameters, sometimes with unexpected consequences. The Forum believes that long term the entire range of both transmitter and receiver characteristics must become an integral part of spectrum regulation and management. Specifically, adding focus on regulating receiver performance can bring much benefit in terms of spectrum efficiency through such regulation while at the same time reducing risk for new market and new technology entrants.

In addition, the Forum asks that this model be extended to commercial spectrum as well, allowing federal users to access additional spectrum in times of crises such as Hurricane Katrina, Hurricane Sandy or 9/11. The capability to dynamically access additional spectrum for essential and critical communication users is essential. First responder demand for spectrum access can rise dramatically during major incidents and disaster responses. Exclusive assignment of spectrum to public safety and other critical / essential communication systems is necessary, though expensive, and can result in under-utilization of spectrum during normal operations over large geographical areas. However, large numbers of responders operating during a crisis can easily over-burden the planned system capacity in a localized region. As recommended by the PCAST report "Realizing the Full Potential of Government Owned Spectrum to Spur Economic

<u>Growth</u>," mechanisms for shared access to spectrum are necessary to ensure that public safety users can access needed spectrum with appropriate priority during times of need, while allowing commercial use for the remainder of the time. The Forum advocates appropriate mechanisms are established to ensure that essential and critical communications receive the appropriate priority for dynamic access of the spectrum.

Members of the Forum stand ready to support the Spectrum Policy Team in understanding the latest advances in spectrum sharing policy and technology. A number of reports produced by Forum members, including the recently approved "Assessment of Cognitive Radio Technologies for Public Safety Communications" and the frequently downloaded "Quantifying the Benefits of Cognitive Radio" provide a wealth of information on the this important technology (additional reports can be found in the Forum's document library: http://www.wirelessinnovation.org/Document_Library).

To create the Advocacy Agenda, the Forum's Regulatory Committee sought participation from the different stakeholders and leveraged the body of work that has been approved by the Forum's members that advocate positions to advance wireless innovation in spectrum utilization and radio technologies. The Advocacy Agenda is composed of five focus areas: Essential and Critical Communications, Innovation and Competition, Spectrum, Security and Interoperability. To learn more and download the full Agenda: http://groups.winnforum.org/advocacy.

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About the Wireless Innovation Forum

Established in 1996, The Wireless Innovation Forum (SDR Forum Version 2.0) is a non-profit mutual benefit corporation dedicated to driving technology innovation in commercial, civil, and defense communications worldwide. Members bring a broad base of experience in Software Defined Radio (SDR), Cognitive Radio(CR) and Dynamic Spectrum Access (DSA) technologies in diverse markets and at all levels of the <u>wireless value chain</u> to address emerging wireless communications requirements. To learn more about The Wireless Innovation Forum, its meetings and <u>membership benefits</u>, visit <u>www.WirelessInnovation.org</u>.

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