## Wireless Innovation Forum Announces Support for TIA Recommendations on Spectrum Sharing



## For Immediate Release

Washington, DC, 13 December 2013 – The Wireless Innovation Forum, a non-profit international industry association dedicated to driving the future of radio communications and systems worldwide, today announced its support of many of the recommendations made by the TIA in its recent white paper on spectrum sharing (<a href="https://www.tiaonline.org/sites/default/files/pages/SpectrumSharingR%26DPaper%3D10-20-13.pdf">https://www.tiaonline.org/sites/default/files/pages/SpectrumSharingR%26DPaper%3D10-20-13.pdf</a>).

More specifically, the members of the Forum support TIA's recommendations on funding for spectrum sharing R&D. The members of the Forum advocate strongly for government strategic investment in joint research and development between industry and academia; in particular to address industry needs identified in the Wireless Innovation Forum's Ten Most Wanted Innovations List (<a href="http://groups.winnforum.org/winnforum">http://groups.winnforum.org/winnforum</a> top ten). In addition, the Forum advocates government sponsorship and funding be made available to facilitate real world Spectrum test beds and overcoming existing barriers to spectrum sharing by adjacent and co-channel incumbent spectrum holders, as per the Forum's Advocacy Agenda (<a href="http://groups.winnforum.org/advocacy">http://groups.winnforum.org/advocacy</a>).

The TIA also recommends that government R&D funding should be used to support further ASA/LSA trials, potentially leading to a viable near-term option for spectrum sharing in the United States. The members of the Forum agree, and believe that a regulatory model that includes combinations of licensed and unlicensed, sharing and hierarchical, cooperative and co-existent domains are required for the optimal utilization of spectrum. The Forum also believes in allocating spectrum with licenses adapted towards a spectrum usage rights method that has the minimum necessary technical restrictions to provide adequate protection against harmful interference.

The Forum also applauds TIA's recommendation that policymakers should facilitate the development of globally harmonized spectrum sharing access technologies. This recommendation is also addressed in the tenth innovation in The Forum's Ten Most Wanted Innovations List which calls for a flexible regulatory framework to enable the operation of advanced wireless devices and systems that meet reconfigurability requirements across multiple bands and wireless services on a temporary, cooperative or opportunistic basis. The Forum also supports the unified active management of spectrum (terrestrial/air/space/maritime) to maximize spectrum utilization.

In the report, TIA also recommends that geolocation databases should be further enhanced or adapted to address scalability and applicability to different domains and use cases, such as in bands shared with non-commercial systems and/or using ASA/LSA or some other shared spectrum access system. The Forum strongly supports the use of such networked and synchronized databases accessed with device location information operating with context awareness as per the Forum's Top Innovation number seven.

Forum Innovations numbers four and seven advocate for further research and development of technologies that will improve the utilization of both managed and unmanaged spectrum and use of spectrum sensing technologies to better enable cooperative, opportunistic access and recommend that advances in spectrum sensing technologies not be discounted in future regulatory and system planning. This is consistent with TIA's recommendations that cognitive radio research should be funded and should focus on both intelligent network management and advanced sensing techniques, and that spectrum sensing research should be focused on both individual sensing and distributed sensing approaches.

In addition, the TIA states that more research into cross-application and environment propagation modeling is needed to allow more accurate prediction of interference across various use cases. The members of the Forum concur, and offer that the use of receiver characteristics is a critical part of the analysis of spectrum allocations.

Finally, the TIA recommends that spectrum sharing research and development should include security. The members of the Forum agree and believe that security should be considered throughout the design, development and deployment of systems utilized for essential and critical communications and that regulators' focus on development and application of policies and standards that enable communication systems and platforms to protect all sensitive information and data.

The Forum also advocates that regulators adopt a neutral policy on security of Open Source elements because these elements are, a priori, no less secure than proprietary approaches, and advocates for allowing over the air software reconfiguration of software and radio platform operating parameters.

The Forum created its first Top Ten List in 2010, as an ongoing project to identify major innovations that would be required to create the foundation of the next generation of wireless devices. To add a technical, business or regulatory innovation to our watch list, go to http://groups.winnforum.org/p/bl/ar/blogaid=63.

In 2012, The Wireless Innovation Forum initiated a project to identify the major advocacy positions that the Forum will use to collaborate with governments, regulators, standards bodies, and research sponsors acting as the voice of the wireless innovation community. The resulting Advocacy Agenda supports the Forum's mission statement of advocating for the innovative utilization of spectrum, and advancing radio technologies that support essential or critical communications.

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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 advocating for spectrum innovation, and advancing radio technologies that support essential or critical 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 wireless value chain to address emerging wireless communications requirements. To learn more about The Wireless Innovation Forum, its meetings and membership benefits, visit <a href="https://www.WirelessInnovation.org">www.WirelessInnovation.org</a>.

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