# Wireless Innovation Forum Members Update Popular Top 10 Most Wanted Wireless Innovations List



Revised list includes Network Management of Mobile Ad-hoc Radios

#### For Immediate Release

Washington, DC, 21 July 2015 – The Wireless Innovation Forum, a non-profit organization dedicated to driving the future of radio communications and systems worldwide, announced today a revision of its "Top 10 Most Wanted Wireless Innovations" list. This list represents the collective view of the Forum's member organizations on innovations, either technical, business or regulatory, that if realized would address key shortcomings in existing wireless communications systems. This 4<sup>th</sup> release of the Forum's popular list brings numerous updates to previous most wanted innovation and adds "Network Management of Mobile Ad-hoc Radios" as a new most wanted technology.

"The development of this technology is essential in defense and public safety communications where existing infrastructures can be comprised," said Bruce Oberlies of Motorola Solutions (NYSE: MSI) and Chair of the Forum. "While these radio systems may incorporate a heterogeneous array of products from different vendors, having the ability for any radio to perform the same ad-hoc networking functions as any other radio will allow networks to operate homogeneously without infrastructure."

Recently, the commercial telecommunications sector has recognized that sufficient density of cellular infrastructure to enable adequate service is economically impractical in certain areas of the world. Rather, for those subscribers who are beyond the coverage range of a cell tower, the ability to have an ad-hoc network forward traffic toward nearby cellular infrastructure can be hugely valuable to both the subscriber and to make existing infrastructure more cost effective.

It is also anticipated that much of the "internet of things" (IoT) now in development will make extensive use of ad-hoc network techniques to provide for connectivity.

## The entire Top Ten list follows:

- 1. Innovation #1: Techniques for Efficient Porting of Waveform Applications Between Embedded Heterogeneous Platforms
- 2. Innovation #2: Network Management of Mobile Ad-hoc Radios
- 3. Innovation #3: Receiver Performance Interference Thresholds
- 4. Innovation #4: Low Cost Wide Spectral Range RF Front-End (Multi-octave Contiguous)(Tx,Rx)
- 5. Innovation #5: Efficient Techniques to Minimize Power Amplifier Spectral Regrowth in Non-contiguous Spectral Environment
- 6. Innovation #6: Increase Communications Time on Battery Charge by an Order of Magnitude
- 7. Innovation #7: Context Aware Cognitive Radio
- 8. Innovation #8: Interference Mitigation Techniques
- 9. Innovation #9: Standardized Computer Interpretable Policy Language for Cognitive Radio
- 10. Innovation #10: Flexible Regulatory Framework for Temporary, Cooperative and Opportunistic Access

To contribute to the conversation and provide your input to the list,

visit http://groups.winnforum.org/winnforum\_top\_ten. To download the document go

to: <a href="http://groups.WInnForum.org/Top">http://groups.WInnForum.org/Top</a> Ten Innovations. To become involved with the Forum in shaping the future of advanced wireless technologies, and learn more about membership benefits, go

to: http://www.WirelessInnovation.org/Member Benefits.

## **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>.

#### **Editorial Contacts**

Lee Pucker, 604-828-9876, Lee.Pucker@wirelessinnovation.org or Stephanie Hamill, 970-290-9543 or Stephanie.Hamill@wirelessinnovation.org