

# Introduction to the Wireless Innovation Forum (SDR Forum Version 2.0)

Presented by Lee Pucker

CEO

8 June 2011



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*Driving the future of radio communications and systems worldwide*

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# What is the Wireless Innovation Forum

**A nonprofit “mutual benefit corporation” dedicated to:**

***“Driving the Future of  
Radio Communications  
and Systems  
World Wide”***



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# The Forum IS Its Members...





# “A KEY AND RELIABLE SOURCE FOR UNDERSTANDING WIRELESS INNOVATION”

- Comments, *Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, ET 02-380 (2003)
- Comments, *Cognitive Radio Technologies*, ET 03-108 (2004)
- Comments, *Spectrum Sharing Innovation Test-Bed*, ET 06-89 (2006)
- Comments, *Public Safety Network in the 700 MHz Band*, PS 06-229 (2007 and 2008)
- Contribution to ITU-R Working Party 5A, *Preliminary Draft New Report on Cognitive Radio in Land Mobile Service* (2008)
- Comments, *Fostering Innovation/Investment in Wireless Communications Market*, GN 09-157 & 09-51 (2009)
- **Comments, *Promoting More Efficient Use of Spectrum Through Dynamic Spectrum Use Technologies*, ET 10-237 (Feb. 2011)**

# Moving Forward

**The Forum welcomes the opportunity to continue this long, productive relationship through support of the Commission's efforts in promoting wireless innovation.**

- Projects of Interest
- Key proceedings
- SDR '11-WInnComm (Nov/Dec)



# DSA / White Space Interoperability Work Group

Status Report

Presented by Jesse Caulfield, Chair

8 June 2011



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# Broad Industry Participation

## 47 Professionals across 36 Companies

WINN Forum Members

Industry Experts

Administrators

Manufacturers

Wireless  
Operators

International  
Regulatory Advisors

Other Interests

Administrators

Incumbents

Wireless  
Operators

Manufacturers

Subject Matter  
Experts



The Group has an open invitation policy – all are welcome to participate.



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# About the White Space Work Group

## Officers

- Chair: Jesse Caulfield Key Bridge Global LLC
- Vice-chair: Dave Gurney Motorola Solutions

key bridge  


 MOTOROLA SOLUTIONS

## Two Group Deliverables

- Database Operating Guidelines Document
- Device Interoperability Specification Document

## Two Phases of Development

- Phase I Draft to inform FCC March 10 meeting (complete)
- Phase II Version 1.0 for publication

## Collaborations with Industry and Other Forum Groups

- Regulatory Committee
- Test and Measurement Group
- Security Group
- TD-LTE Group
- IEEE 802.22 and IEEE 802.19
- IETF and others upon completion

# Open Dialog and Collaboration

## Open Participation

- The Group is open to all interested parties (members and non-members alike) – basically a free trial of WINForum services

## Voting and Decision Making

- By charter: only WINForum members may officially vote
- However most all decisions are the result of open debate and straw poles

## Contributions

- Group deliverables are developed and build upon each participant's respective contributions, input, advice and guidance

## Outreach and Participant Education

- Group has invited industry experts to brief participants on their experiences and observations with key technologies
  - Security Infrastructure by Fortinet Inc.
  - Status of FCC Spectrum Auctions by Bingham McCutchin
  - Internet Infrastructure by Equinix Inc.
  - Database Synchronization & Security by Oracle Corporation

# Database Operating Guidelines

## Concept of Operation

- Publish / Subscribe data distribution strategy
- Sender / Receiver Responsibilities
- Use-case Scenarios and Operational Procedures

## Communications

- Database to Database Synchronization
- Database to FCC (e.g. reporting, audit, enforcement)
- Entity registration procedures (e.g. wireless mics)

## Information Assurance

- Ecosystem Security
- Data Protection (Identity, Authentication, Encryption)
- Use-case Scenarios and Operational procedures

## Other

- Database Infrastructure Best Practices
- Synchronization Frequency
- Transaction Logging and Records Retention

# Device Interoperability Specification

## Concept of Operation

- Device Operating Modes
- Client / Server Party Responsibilities
- Use-case Scenarios and Operational Procedures

## Communications

- Device Initialization and Bootstrap Procedures
- Device / Database Transactions
- Internationalization and Value-Added Extensions

## Information Assurance

- Data Protection (Identity, Authentication, Encryption)
- Crypto-Key Distribution and Management
- Use-case Scenarios and Operational Procedures

## Other

- Enumerated and Defined Data Fields
- Reference Implementation and Source Code
- Test and Verification Advisory Guidelines (HW + SW)

# Deliverables Schedule

