

White Space Database Administrators Group

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White Space DBA Group

Airity



Google™

key bridge


LS  telcom

neustar™

RADIO
SOFT

SPECTRUM

BRIDGE

 Telcordia®

Purpose

- To establish and maintain a database interoperability specification
- To support development of a device to database API specification
 - To submit the above specification to a recognized standards body
- To address technical and operation issues as they arise that affect the operation of database administrators and work with the FCC

Initial Focus

- The industry already has several standards groups working on solving different parts of the problem
- Multiple solutions will arise for many parts of the ecosystems
- Some areas will require singular solutions to best meet the FCC rules
- The 9 companies have decided to work together to address these areas and liaison with other groups to develop solutions

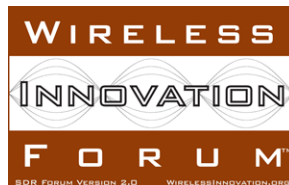
Multiple Standards Efforts

- ECMA-392 standard
 - Developed by CogNeA group and submitted to ECMA International
 - Focused on whole-home high definition audio/video distribution and internet access
- IEEE 802.22 Wireless Regional Area Network (WRAN)
 - Focused on TV White Space bands (VHF/UHF)
 - Large cell size (10km-100km)
- IEEE 802.11af Wireless Local Area Network (WLAN)
 - Extend Wi-Fi (802.11) to TV White Space bands
 - Focused on low-power portable devices



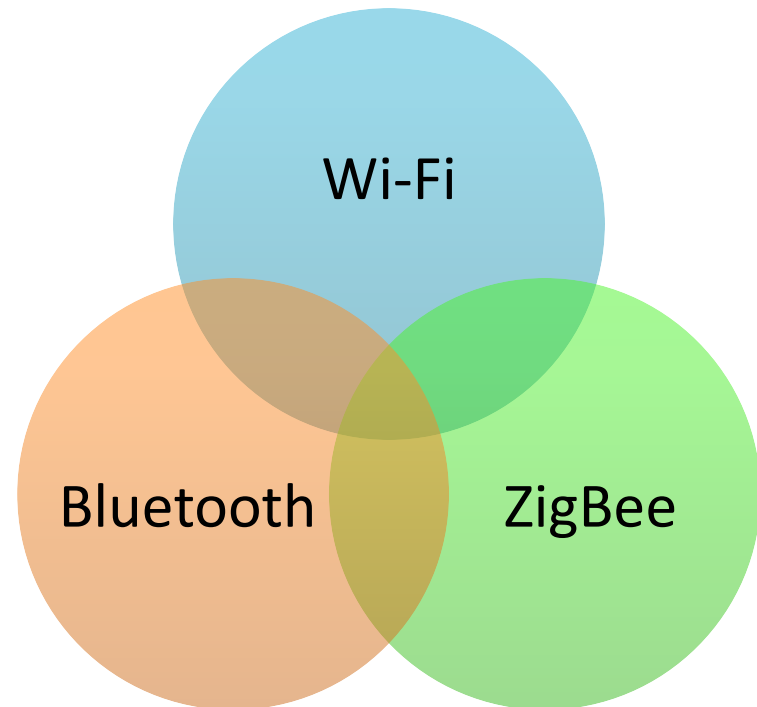
Multiple Standards Efforts (cont.)

- Wireless Innovation Forum
 - Best practice recommendations
 - Device to database contributions
- Internet Engineering Task Force (IETF)
 - Early stage – Birds of a Feather meeting planned
 - Proposed charter: any device, any country, any spectrum band
- CEPT SE43 Work Group
 - Cognitive radio systems - White spaces (470 - 790 MHz)
- White Space Database Group
 - Ad hoc working group; now dormant
- More to come...



Multiple Ecosystems

- In the 2.4GHz unlicensed band multiple ecosystems have evolved, serving different customer use models, different standards & technologies, different business models
- We believe that TV White Space will evolve in much the same way



Multiple Solutions Likely

Some examples:

- Device to Database API
- Device to Database Security
- Protected Entity Registration
- Public access to databases

Areas with Single Solutions

- Data acquisition from FCC
- Data integrity
- **Database interoperability**
- **Available channel calculation**
- Certification criteria for database
- Certification criteria for device and database as a system
- Process for regulatory issue resolution

Database Interoperability

- We are looking at two transport options
 - Secure FTP
 - Web Services
- Currently defining data formats
- Will have a first draft of the specification by next Workshop

Available Channel Calculation

- Framework for channel calculation has already been developed in prior industry efforts
- We will leverage it and complete the work
- Will have first draft of specification by next Workshop

Summary

- We are working to formally establish the White Space DBA workgroup
- We have had two face-to-face meetings and are holding regular conference calls
- We are already making progress on several issues and we intend to develop solutions on the areas we outlined
- We look forward to collaborating with the FCC