



Spectrum Sharing by TV Band Devices

16 June 2009 • Dearborn, Michigan

Do you have a stake in the unlicensed use of UHF TV spectrum? ...

If so, then you need to join the SDR Forum for an informative workshop on TVBD spectrum sharing, addressing the following issues:

- Goals and principles of spectrum sharing by independent TVBDs.
- Metrics used to measure success at achieving those goals
- Technical and economic challenges that make spectrum sharing difficult
- Implicit sharing methods vs. explicit signalling methods
- Etiquettes of proposed standards (eg. IEEE 802.22, Cognea, others)
- Proposed methods for safe, fair, and efficient sharing
- Use of internet connections or database registration
- Means to detect and limit the impact of rogue TVBDs
- Incentives to encourage participation in spectrum sharing standards
- Approaches to certify compliance with spectrum sharing standards

Who should attend and participate

- Anyone with a stake in the use of UHF TV spectrum
- Developers of TV band devices and communications networks
- Participants in standards organizations
- Potential users of TV band devices
- Broadcasters, wireless microphone companies, and other incumbent TV band users
- Regulators, regulatory affairs specialists, and regulatory economists
- Researchers in cognitive radio and dynamic spectrum access

The FCC has recently approved TV Band Devices (TVBDs) that will operate on an unlicensed basis in unoccupied TV channels. Multiple industry organizations and standards bodies are developing systems and technical standards intended for use in this spectrum. There is no regulatory constraint on the interference TVBDs may cause to each other.

There is a potential for significant spectrum congestion and competition for channel access among TVBD communications networks. For example, one calculation suggests there can be harmful interference between a 802.22 client device and a personal/portable TVBD that are more than 10 kilometers apart. To avoid a tragedy of the commons, mutually agreed spectrum sharing approaches are desirable for otherwise incompatible TVBDs.

After the workshop, the SDR Forum plans to facilitate interaction among all stakeholders to document areas of mutual agreement, alternatives proposed in areas of disagreement, and potential spectrum sharing problems that have been identified. This document is intended to accelerate problem resolution and standards development.

MORE INFORMATION AT WWW.SDRFORUM.ORG

JOIN US FOR OUR WORKING MEETING

This workshop is being held in conjunction with The SDR Forum's working meeting from June 15th to 18th at the Dearborn Hyatt, in Dearborn, Michigan. This meeting represents the 63rd General Meeting of the Forum and will comprise working sessions advancing the SDR Forum's 2009 operations plan in support of the commercial, public safety, satellite communications, and international tactical radio communities. Groups tentatively scheduled to meet in Dearborn include:

- International Tactical Radio Special Interest Group
- Public Safety Special Interest Group
- Satellite Communications Special Interest Group
- Regulatory Committee
- Cognitive Radio Work Group
- Commercial Baseband Processing Technologies Work Group
- Meta-language for Mobility Work Group
- RF Technologies Task Group
- SCA Work Group
- Security Work Group
- Smart Antenna Work Group
- Test and Measurement Task Group
- Transceiver System Interface Task Group

Another workshop, "Smart Communications in Transportation Systems" will be held on June 18th. This workshop will allow vehicle manufacturers and government officials world-wide to come together with leading experts in reconfigurable radio technologies to realize the technical and business advantages offered by SDR and CR technologies in modern transportation systems. Highlights of this workshop will include keynote presentations from Michael Noblett, VP of Business Development, Global Automotive Initiatives, Connexis and Chair of the ISO Technical Committee 204 on Intelligent Transportation Systems and from Marco D'Ambrosio of Selex Communications. Participants in the workshop include representatives of:

- o Connexus
- o Cognitive Radio Technologies
- o General Motors
- o Noblis
- o OnStar
- o Selex Communications
- o Toyota

An additional meeting highlight includes a plenary presentation given by Rohde & Schwarz on June 17th entitled "Smart-RF" Compensation of Imperfect Analogue RF-Frontend Characteristics by Digital Means in a SDR"

Online registration for the Meeting and Workshop is available at www.sdrforum.org. Please use the Registration Form to register for both.

Facility fees for the meeting and workshop are as follows:

On or Before May 15th

Meeting Only Fee (Includes Spectrum Sharing Workshop):

SDRF members: \$275 USD

SDRF non-members: \$375 USD

Workshop Only Fee (per workshop):

SDRF Members: \$150 USD

Non-Member: \$200 USD

Meeting Plus Workshop Fees (includes Both Workshops):

Presenters and SDRF Members: \$400 USD

Non-Members: \$450 USD

After May 15th

Meeting Only Fee (Includes Spectrum Sharing Workshop):

SDRF members: \$325 USD

SDRF non-members: \$425 USD

Workshop Only Fee:

Presenters and SDRF Member: \$175 USD

Non-Member: \$225 USD

Meeting Plus Workshop Fee (includes Both Workshops):

SDRF Members: \$450 USD

Non-Members: \$550 USD

Both the workshop and the general meeting are open to anyone interested in next-generation radio technologies, including non-Forum members.

International visitors to the United States from 'visa waiver' countries must file for travel authorization on-line prior to boarding the aircraft. There is no charge for this service. The application may be found at <https://esta.cbp.dhs.gov/> and more information about the program, including the countries involved, may be found at http://www.cbp.gov/xp/cgov/travel/id_visa/esta/

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Meeting location

This workshop will be held in conjunction with the SDR Forum's 63rd Working Meeting at the Dearborn Hyatt, in Dearborn, Michigan.

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Rate: \$107, use code G-SDRF
Reservation Deadline: 1 June

Limited rooms available, so reserve early.
For hotel information and reservations, visit:
www.dearborn.hyatt.com

