WILTSHIRE & GRANNIS LLP

June 4, 2009

Ex Parte

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Unlicensed Operation in the TV Broadcast Bands
ET Docket No. 04-186

Dear Ms. Dortch:

On June 3, 2009, Peter Stanforth, Mario Camchong, Jeff Schmidt, and Christian Duffus of Spectrum Bridge, Inc. and Edmond Thomas on behalf of Spectrum Bridge met with Julius Knapp, Rashmi Doshi, Walter Johnston, Steve Jones, Ira Keltz, Alan Stillwell, and Hugh Van Tuyl of the Office of Engineering and Technology. During this meeting, the parties discussed implementation of the TV band database to be used with geolocation-enabled white space devices. Specifically, Spectrum Bridge observed that its white spaces database technology, based on Spectrum Bridge's robust system architecture for existing secondary market uses, supported the white spaces TV band database requirements. Spectrum Bridge also provided OET with a demonstration of this technology controlling white space devices as described in the attached presentation.

Pursuant to the Commission's rules, a copy of this notice is being filed electronically in the above-referenced docket. If you require any additional information please contact the undersigned.

Sincerely yours,

Edmond J. Thomas
Senior Technology Policy Advisor

Attachment

cc: meeting participants

Spectrum Bridge, Inc.

The online marketplace for spectrum

Enhanced Database Control of TVBDs

Demonstration to the FCC

June 3 2009

SPECTRUM BRIDGE

SBI Overview

- Established to bring reality to the vision of secondary markets
  - Core business in Spectrum Management Solutions, Spectrum Databases and a Spectrum Marketplace
    - Created www.specex.com as an online marketplace for spectrum
    - Created *SpecEx Spectrum Index*™ to track relative spectrum value
- White Space Management is a subset of the core business
  - Created www.showmywhitespace.com to promote awareness of whitespace and the impacts of the FCC R&O

SPECTRUM BRIDGE

White Space System Demo

- We are going to walk you through several scenarios that demonstrate
  - Installation and registration of fixed TVBDs (Access Points)
  - Allocation and use of channels under database direction
  - Re registration after expiration of the channel map
  - Implementation of “special event” processes
  - Radio behavior in situations where contact with the database is lost.
- The database supports all the requirements of the R&O. It only needs integration of adequate radio security for commercial deployment.

SPECTRUM BRIDGE

The implementation

- Based on our Cognitive System Architecture for secondary markets
  - Provides for control of Center Frequency, Channel Size, EIRP and operating time frame - based on the location of the radio/network
- We have adapted the radio and database to provide an effective control system for TVBDs in a whitespace scenario
  - We are only controlling Center Frequency (Channel) and time in this demonstration

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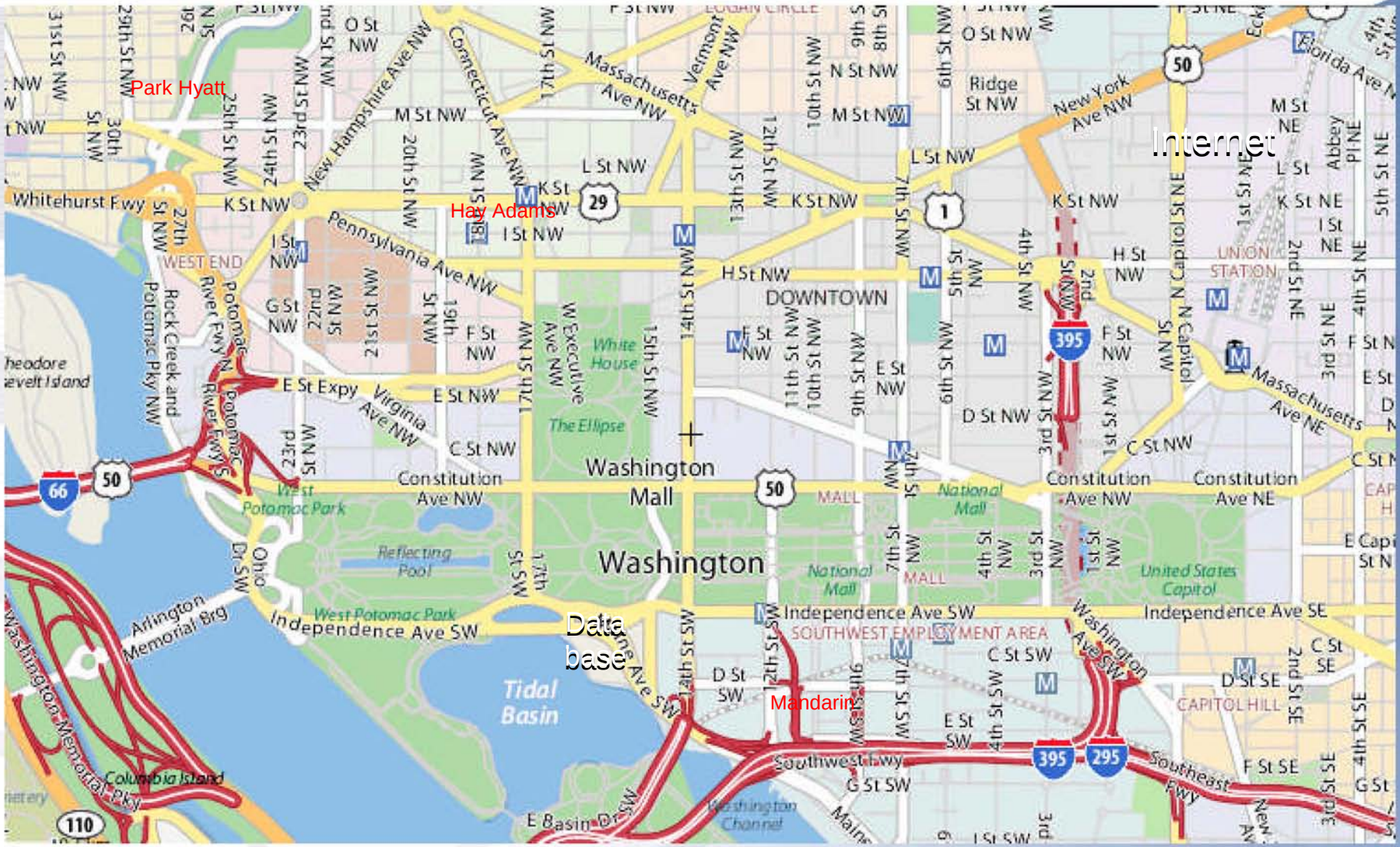

SPECTRUM BRIDGE

Physical Configuration

Ethernet Switch

Park Hyatt

Hay Adams

Mandarin

(Wired) RF environment

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Step 1

- Install the radios using radio API
  - Define the contact name and radio location.
  - to show that a radio can be configured with an identity and a location that can be used by the database
  - Note: Spectrum analyzer monitoring channels 7-13 (the effective range of the radio)

Ethernet Switch

SPECTRUM BRIDGE

Step 2

- Radios Request a channel Map
  - Database keeps track of radio location
  - Provides channel map with an expiration (in minutes)
  - Radio begins operation on a valid channel

Note: radios all employ the same algorithm so they will initially come up on the same channel

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Step 3

- Radio authority expires
  - Radios request a new channel map. Prior to expiration of the old one.
  - Radios operation continues on a valid channel
- Time can be varied based on the location, allows for more efficient use of spectrum on time shifted basis

Ethernet Switch

Message Tracing Point

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Step 4

- Create a “News Event”
  - In this case an event at the White House
  - The event is created in the database
    - Assumes that originator is authorized
- Result is an Exception
  - Designed to handle temporary events of a few hours or days
  - Longer term and permanent changes expected to come through normal FCC process

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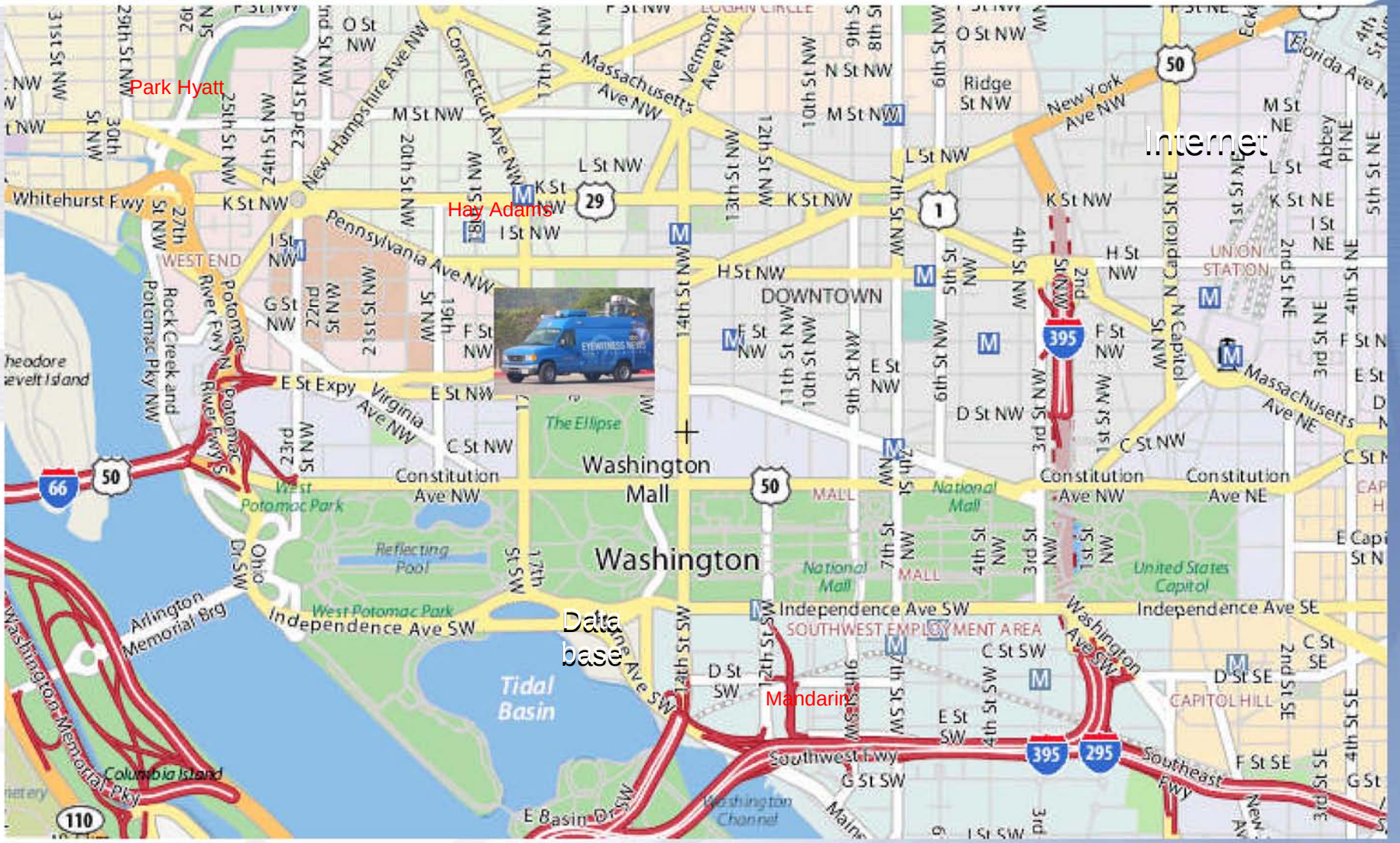
White House “News Event”



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Step 4 Continued

- The Channel map is revoked for all radios that fall under the shadow of the Exception
- The radios acknowledge the revoke so that we have a way of recognizing any radio that has not got the message

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Step 5

- Radio that loses connection to the Database stops transmitting
  - Disconnect radio from network and it will recognize the fact and stop transmitting.
- The radio that was lost gets reconnected to the network
  - Radio requests and receives a channel map and begins operation.
  - Note: depending on when the cable is “cut” the current radio implementation may take up to 2 minutes to determine that it has lost connection

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