



PUBLIC NOTICE

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Office of Engineering and Technology Announces the Opening of Public Testing for Google's TV Band Database System Registration Procedures

ET Docket No. 04-186

The Commission's Office of Engineering and Technology (OET) announces that on June 2, 2014, it will commence a 45-day public trial of a new registration system for Google's TV band database system. TV band databases support the operation of unlicensed devices on unused spectrum in the TV band (TV white space or "TVWS"). Currently, Spectrum Bridge Inc., another approved TV band database administrator, is managing the registration of protected entities on Google's behalf. Google has now developed its own protected facility registration procedures to replace its use of the Spectrum Bridge procedures. This is a limited trial that is intended to allow the public to access and test Google's new registration procedures to ensure that those procedures properly register certain facilities entitled to protection and that its modified database system provides protection to such registered facilities as specified in the rules. We encourage all interested parties to test these new registration procedures and provide appropriate feedback to Google.

The Commission's Part 15 rules (47 C.F.R. § 15.701 *et seq.*) require that unlicensed TV band devices contact an authorized database system to obtain a list of channels that are available for their operation (*i.e.*, channels not occupied by authorized radio services) at their individual locations and must operate only on those channels. Such devices are required to provide their geographic location, by means of a secure Internet connection, to a TV band database system authorized by the Commission. The database will then return a list of the channels available for operation by a device at its reported location.

As part of its authorization process for TV band database systems, the Commission stated that each database will be subject to a public trial period of not less than 45 days to ensure that the database is providing accurate results before it is allowed to be made available for regular public use. Google's new protected entity registration procedures constitute a major modification of its database system and therefore are subject to the Commission's TV band database approval process, including the 45-day public trial. OET has examined the new Google protected entity registration procedures facilities and finds that those procedures are ready for trial testing by the public.

Trial Access and Details

Parties may participate in the trial by accessing Google's TV band database test facility at: <https://www.google.com/get/spectrumdatabase/sandbox/>. This website provides a description of the trial, instructions for participation, details on use of the new registration procedures and database system,

access to the database's various capabilities, and a link for providing comments and other feedback to Google. The test facility will not be active before the date the trial is scheduled to commence.

During this trial, participants are encouraged to test:

- the MVPD receive site (cable headend and satellite receive site) registration utility
- the broadcast auxiliary temporary receive site registration utility
- the fixed TV band device registration utility; and
- the wireless microphone registration utility
- the channel availability calculator to observe that protection is provided for registered facilities

The trial is intended to ensure that each of these elements of Google's modified database system is working properly and providing the interference protection required under our rules.

In addition, participants are encouraged to report any inaccuracies or provide comments on issues with any other aspect of the registration system and the database system as modified to Google through the response facility on the trial's website. Google will respond, as appropriate, to such reports and comments with an explanation and notification of any responsive actions it may take, as appropriate. During the trial, Google may apply any corrective measures it determines are needed and will advise participants of such measures through the trial's website.

As indicated above, the trial of the modified Google database system is currently scheduled to last for 45 days and will therefore end on July 17, 2014. However, if the results of the trial indicate that additional testing is necessary, OET may extend the trial period.

After the close of the trial, Google will provide a summary report to OET that identifies: 1) problems reported and their disposition; and 2) descriptions of changes made to the registration procedures or channel availability calculator. Once Google submits its report, OET will provide a short period of time for interested parties to submit comments on the report. Note that the successful performance of the modified database system through this trial is only one element in OET's evaluation of a system for approval to operate. Other requirements for TV band database systems are set forth in 47 C.F.R. 15.701 *et seq.* and OET's January 26, 2011 *Order* on TV band database administrators (*see Order* in ET Docket No. 04-186, DA 11-131). OET will grant final approval for Google to operate its modified database system with certified TV band devices once it determines that the system complies with all of the applicable rules and requirements. The public will be informed of such decision through a Public Notice.

The FCC rules require that TV band database systems protect the following radio services: 1) broadcast television stations (including full power, TV translator, low power TV, and Class A stations); 2) fixed broadcast auxiliary service (BAS) links (both permanent fixed and temporary sites); 3) receive sites (and received channels) of TV translator, low power TV, Class A TV stations, and multichannel video programming distributors (MVPDs) (collectively "receive sites"); 4) private land mobile radio service and commercial mobile radio service operations; 5) offshore radio telephone service operations; 6) radio astronomy operations at specific sites; and 7) low power auxiliary service operations (principally licensed and certain approved unlicensed wireless microphone venue sites). Except for temporary BAS links, receive sites, locations where licensed wireless microphones are used, and approved unlicensed wireless microphone venues, the necessary information for TV band databases to provide protection from unlicensed devices is either extracted by the database administrators from the Commission's databases or is specified in the rules. Parties responsible for facilities for which information is contained in the

Commission's records or provided in the rules do not need to take any action to obtain protection from TV band devices.

Parties responsible for temporary BAS links, receive sites, and wireless microphone uses must specifically register their sites to receive protection from TV band devices. Google's modified database system provides new registration procedures for these facilities. These new registration capabilities are available for examination through Google's database test facility at: <https://www.google.com/get/spectrumdatabase/sandbox/>. The rules provide that use of unlicensed wireless microphone may be registered for protection in the TV band databases only at certain qualifying venues and if pre-approved by the Commission. (Such requests may be made through the Commission's Universal Licensing System (ULS) at <http://www.fcc.gov/uls/login>). For purposes of this trial, Google, with OET's approval, has implemented a test registration capability for registration of venues where unlicensed wireless microphones are used that does not require that registrations be pre-approved by the Commission; this test registration capability is available through Google's database test facility.

We encourage parties responsible for MVPD receive sites, licensed wireless microphone operations, venues where large numbers of unlicensed wireless microphones are used, and temporary BAS links to enter trial registrations and make use of these capabilities in their testing of Google's modified database. Registrations for MVPD receive sites, sites where licensed wireless microphones are used, venues where large numbers of wireless microphones are used, and temporary BAS links that are made during the trial period will be deleted by Google after the trial.

Parties can register their temporary BAS links, receive sites, and sites where licensed wireless microphones are used with Google's operational database system now through its use of the Spectrum Bridge registration procedures incorporated therein. Existing registrations and new registrations made through that database will be included, as appropriate, in Google's modified database system after that system is approved and implemented for operation with the new registration procedures. Note that registrations made with Google's operational database are shared with the other databases and registrations that expire will not remain in the TV band databases.¹ New registrations entered into Google's current operational database during the trial or its modified database after the trial will be communicated to, and included in, the other databases.

The TV band database systems are the subject of a docketed proceeding, **ET Docket No. 04-186**, and responses to the trial of Google's database system conducted pursuant to this public notice may be filed with the Commission at any time using the FCC's Electronic Comment Filing System (ECFS) as described below. The FCC has implemented a simplified interface for ECFS to facilitate consumer comment. Documents filed on ECFS may be accessed and reviewed on that system, which contains copies of written submissions and summaries of oral submissions regarding the white spaces proceeding.

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on the trial of Google's database system at any time during and after the trial period. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

¹ Thus far, OET has approved the TV band databases of Spectrum Bridge, Inc., iconectiv (formerly Telcordia Technologies, Inc.), Key Bridge Global, LLC, and Google, Inc. for operation to provide service to devices.

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/>.
- Paper Filers: Parties that choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

All filings must be addressed to the Commission's Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, 445 12th Street, SW, Washington, DC 20554. Parties should also send a copy of their filings to Alan Stillwell, Office of Engineering and Technology, Federal Communications Commission, Room 7-A162, 445 12th Street, SW, Washington, DC 20554, or by e-mail to Alan.Stillwell@fcc.gov. Parties must also serve one copy with the Commission's copy contractor, Best Copy and Printing, Inc. (BCPI), Portals II, 445 12th Street, SW, Room CY-B402, Washington, DC 20554, (202) 488-5300, or via e-mail to fcc@bcpiweb.com.

Documents in **ET Docket No. 04-186** are available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, 445 12th Street, SW, Room CY-A257, Washington, DC 20554. The documents may also be purchased from BCPI, telephone (202) 488-5300, facsimile (202) 488-5563, TTY (202) 488-5562, e-mail fcc@bcpiweb.com.

Questions regarding this Public Notice may be directed to Alan Stillwell at (202) 418-2925 or Hugh L. Van Tuyl at (202) 418-7506.

By the Chief, Office of Engineering and Technology.

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