

OET Plan for
Evaluation of TVWS Database Systems for Operation

OET's evaluation of a database system examines 5 elements of performance as described below. Satisfactory showings for the individual elements of performance provide the basis for our phased approval of a database system.

- A. Ability to 1) establish and maintain a database that contains the information required by the rules as required under Section 15.715(a), 2) acquire information from the Commission's databases and to synchronize with the Commission's databases at least once a week as required under Section 15.715(b), 3) establish processes for registering facilities entitled to protection but not included in the Commission's databases, including MVPD receive sites and temporary Broadcast Auxiliary Service links as required under Section 15.715(c) and Section 15.712(c), and 4) establish processes for registering facilities where Part 74 low power auxiliary devices (licensed and unlicensed wireless microphones) are used on a regular basis as required under Section 15.715(d). For this evaluation, we need access to the database system's records for protected services and its facilities for registering facilities entitled to protection but not included in the Commission's databases.

We are continuing our work to develop the process and FCC data base capabilities for registration and approval of venues where unlicensed wireless microphones are used. However, setting up the required FCC data base capabilities is likely to take several additional months to complete. In the interim, we are allowing database administrators to use a temporary registration process that mirrors their registration process for licensed wireless microphones in their 45 day trials.

We have developed a web-based procedure for fee-free update of the receive channel(s) for low power TV stations. This will relieve database administrators of responsibility for registering receive sites of low power TV, TV translator and Class A TV stations. That web-app has not been made "live" yet, but should be soon. Relatedly, we are still working on the waiver requests for receive sites beyond 80 kilometers from broadcast station contours. Neither of these issues will delay our approval of a database because the white spaces databases rely on CDBS and any changes to receive site input channel or additional protected sites will be reflected in CDBS.

- B. Ability to correctly produce channel availability lists

We will test database systems for their ability to produce correct lists of available channels. These tests include protected facilities extracted from the FCC databases, sites protected in the rules, and sites registered by the database systems. For this testing, we need a means to access the database to specify coordinates and obtain lists of the channels available at those coordinates.

- C. Ability to perform contacts with authorized TVWS devices, including validating that a device is authorized and limiting contacts to only authorized devices

We intend to examine this function through an actual device that is designed to contact the database for lists of available channels. In cases where a device is not available, the database administrator will be allowed to demonstrate the system's performance on an interim basis through use of a virtual device. However, the database system will not be granted operational

authority until we test the system with an actual device (the final check of the database can occur concurrent with our examination of a device for certification).

- D. Security systems for a) protecting communications and interactions between the database and devices and b) protecting the database unauthorized data input or alteration of stored data.

Database administrators must provide information to allow us to validate that the database's systems are compliant with the security procedures in Sections 15.711(f)(4), 15.713(j)(1) and 15.715(f) of the rules. We will conduct a paper review to examine a database's security features.

- E. Protocols and procedures for exchange of data for sites where licensed wireless microphones are used, approved venues where unlicensed wireless microphones are used, MVPD receive sites, and temporary BAS receive sites.

Examination of this function requires that there be at least two operating databases. When we have two (or more) databases, we will test them concurrently for these features.

In addition, we will need documentation describing:

- The database overall architecture
- Procedures for accessing and maintaining FCC Data
- Procedures for providing access to protected entities
- Test access plans
- Database coordination procedures
- Database security

We may request additional documentation relating to testing of the database as may be needed to address specific issues and concerns that may arise our examinations.

We will also verify that the database administrator and its database can respond in a timely manner to 1) verify, correct and/remove inaccurate data as required under Section 15.715(i), that it has functionality to, upon request of the Commission, 2) indicate that no channels are available when queried buy a specific TVBD or model of TVBD as required under Section 15.715(k), and 3) make the contents of its database available for inspection by the public.