

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of:)	
)	
Office of Engineering and Technology)	ET Docket No. 04-186
Announces the Opening of Public Testing)	
For Nominet White Space Database System)	
)	

**COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS**

I. INTRODUCTION

The National Association of Broadcasters (NAB)¹ hereby submits comments in response to the Public Notice issued by the Office of Engineering and Technology announcing the opening of testing for the Nominet White Space Database System.² NAB's review of the Nominet database revealed errors and omissions that Nominet must systematically address before its database is made available for broader use to ensure that Television White Space (TVWS) operators relying on Nominet's database do not cause harmful interference to licensed operations. Most notably, Nominet's database did not provide correct channel information for television stations during the testing period.

¹ The National Association of Broadcasters is a nonprofit trade association that advocates on behalf of free local radio and television stations and broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.

² *Office of Engineering and Technology Announces the Opening of Public Testing for Nominet White Space Database System*, Public Notice, ET Docket No. 04-186, DA 18-608 (June 11, 2018).

NAB raised several issues with Nominet via e-mail on July 17, 2018. In a report it subsequently submitted to the Commission, Nominet addressed some of them.³ However, a number of Nominet's responses are inadequate or unconvincing. And even beyond Nominet's unsatisfying answers, it is perhaps more concerning that, absent NAB's review, these errors would not have been discovered. This fundamental problem highlights a critical issue for the TVWS database regime as a whole; namely, the database remains dysfunctional, inaccurate and unpoliced.

More than three years ago, the National Association of Broadcasters filed a petition for rulemaking asking the Commission to amend its television white spaces (TVWS) rules to eliminate the so-called "professional installation" option for determining the location of fixed TVWS devices.⁴ As part of that petition, and repeatedly since, NAB demonstrated the unreliability of the TVWS database and the insufficiency of professional installation as a method for determining the location of TVWS devices.⁵ Unfortunately, the Commission has taken no further steps to improve the functioning of the TVWS database, apparently because there are not enough white spaces devices to make the effort worthwhile.

If the white spaces experiment ever bears fruit, there is a serious question whether the database is capable of functioning as intended. We thus urge the Commission to take a more active role in examining this and other database providers' applications to ensure that the

³ Nominet, "USA TV White Space Database Testing Report," Version 1.0 (July 27, 2018), ET Docket No. 04-186 (filed July 30, 2018) (Nominet Report).

⁴ Emergency Motion for Suspension of Operations and Petition for Rulemaking, RM-11745 (March 19, 2015).

⁵ See, e.g., Letter from Patrick McFadden to Marlene H. Dortch, RM-11745, ET Docket No. 14-165 (June 25, 2015), Letter from Patrick McFadden to Marlene H. Dortch, ET Docket No. 16-56 (July 15, 2016).

TVWS database regime is capable of ensuring that licensed users will not experience harmful interference.

II. SPECIFIC ISSUES WITH THE NOMINET SYSTEM

Testing of the Nominet database system revealed several errors, at least three of which appear to still be unresolved: (1) failure to exchange data with other database providers; (2) no fixed TVWS registration utility; and (3) incorrect channel information for full-power television stations. NAB explains each of these errors below.

Failure to Exchange Data

On July 11, NAB reviewed the Nominet database of fixed devices and discovered that the database contained no entries. NAB concurrently reviewed the fixed white space device database previously maintained by Google and found that it contained 943 registered devices. In response to NAB's inquiry, and in its report, Nominet stated that it is now exchanging data with Google.⁶ There are at least two problems with this response.

First, until NAB identified this issue, Nominet was apparently not exchanging data with other database providers as required in Section 15.715(l) of the Commission's rules.⁷ Second, Google no longer maintains its TVWS database, so the utility of Nominet's exchanging data with Google is questionable. A subsequent review of the Nominet database of fixed devices on August 1 showed 391 devices, or 552 fewer than listed in Google's database. It is unclear why there is a difference between the two database providers if they are in fact exchanging information. Nominet's report does not acknowledge this disparity and there is no indication that Nominet intends to address it. Nominet also does not acknowledge that Google is no

⁶ Nominet Report at 5, Issue P02.

⁷ 47 CFR §15.715(l).

longer maintaining its database. Thus, at present, no one, including the FCC, appears to have any way of knowing whether there are almost a thousand or fewer than 400 devices operating.

No Fixed TVWS Registration Utility

The Public Notice encourages parties to test the fixed white space device registration utility.⁸ NAB was unable to locate any such utility on Nominet's website, and so was unable to test this functionality. When NAB contacted Nominet, Nominet explained that it charges a fee for registration of fixed devices and that therefore this function was not part of the 45-day test the Commission announced.⁹ As a result, NAB has been unable to test this function to confirm that it works. It is not clear whether the Commission or any other interested party has been able to test this function. Regardless of Nominet's decision to charge a fee for registrations, the point of a public testing period is to allow the public to *actually test* the database. NAB does not understand how Nominet can plausibly be certified under these circumstances.

Incorrect Channel Information

The most fundamental component of the TVWS database, if it is ever to work, is correct channel information. Nevertheless, when NAB spot checked a full power television station in Nominet's database, that station was listed on its old, pre-repacking channel even though it had transitioned to its new channel approximately one month earlier. There is no valid reason for this delay.

When NAB contacted Nominet, Nominet responded that it had resolved the issue with this station and others like it. Nominet's report claims that this issue was addressed on July

⁸ Public Notice at 2.

⁹ Nominet Report at 5, Issue P03.

25.¹⁰ However, on August 1, NAB checked another full-power television station (WGBA-TV, Green Bay, Wisconsin), which notified the Commission that it had completed its transition from Channel 41 to Channel 14. This station was not listed in the Nominet database at all. Given that nearly a thousand television stations will be changing channels in the coming years, this is a gating issue that Nominet must address before the Commission allows it to act as a database provider.

Any of these issues individually would raise serious concerns as to whether or not Nominet is qualified and capable of acting as a TVWS database provider. Together, particularly given that it is unclear if any other party engaged in any similar review, Nominet's experience calls into question the Commission's entire approach to the TVWS database. It is plain that an unpoliced database may be subject to errors and fundamental performance issues. And it appears plain that no one, including the Commission, is policing the database.

Moreover, some previously-authorized TVWS database providers, such as Comsearch, Spectrum Bridge, Key Bridge, Google and LSTelcom, are either no longer providing service or no longer providing the required database extracts. This may leave some registered devices unable to communicate with a database as required. In the event the white spaces experiment ever bears fruit and leads to the deployment of hundreds of thousands or even millions of TVWS devices, NAB and other industry participants simply cannot shoulder the burden of ensuring that database providers are capable of following the rules in every instance. We urge the Commission to take this opportunity not only to more carefully consider Nominet's qualifications, but to consider a broader review of the means by which it certifies

¹⁰ *Id* at 6, Issue P08.

database providers to ensure that the parties in charge of maintaining the database can be relied upon.

III. CONCLUSION

The errors NAB discovered in a brief review of Nominet's database, particularly the incorrect channel information, demonstrate that the TVWS database continues to serve as an inadequate foundation for protection from harmful interference for licensed operations. Beyond the specific errors NAB discovered, it is unclear whether any other party bothered to perform an in-depth check of Nominet's system. TVWS databases continue to contain obvious errors, such as fake names, e-mail addresses, phone numbers and plainly inaccurate location information. NAB has repeatedly urged the Commission to take a more proactive role in ensuring that the primary means of preventing interference to licensed operations actually works. The Nominet database serves as a timely reminder that until the Commission does so, the white spaces experiment will remain an ongoing failure.

Respectfully submitted,

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