

December 17, 2015

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: In the Matter of Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, GN Docket No. 12-268; Amendment of Parts 15, 73 and 74 of the Commission's Rules to Provide for the Preservation of One Vacant Channel in the UHF Television Band For Use By White Space Devices and Wireless Microphones; Notice of *Ex Parte* Communication

Dear Ms. Dortch:

On December 15, Rick Kaplan, Bruce Franca, Bob Weller and the undersigned, all of the National Association of Broadcasters (NAB) had separate meetings with Johanna Thomas, of Commissioner Rosenworcel's office, and Robin Colwell and Erin McGrath, of Commissioner O'Rielly's office. On December 16, Bruce Franca, Bob Weller and the undersigned met with Matthew Berry of Commissioner Pai's office. During these meetings, NAB discussed the attached presentation regarding the Commission's proposal to put one or more channels in the TV band off limits for TV stations.

The chief proponents of the proposal to remove additional channels from the TV band, Microsoft and Google, have repeatedly ignored the dramatic policy shift it would represent and the associated harm it would cause. The Commission's proposal would, for the first time, remove channels within the *TV band* from TV use in favor of unlicensed use, and constrain broadcasters' ability to meet a central tenet of the Communications Act: robust and ubiquitous service to the American people. In addition, removing even more channels from the TV band following the auction will shutter service for viewers across the country, particularly in rural areas, who rely on LPTV and translator service.

Perhaps much of the record in this proceeding is off-kilter because the NPRM inaptly refers to the channels it recommends appropriating as "vacant" channels. This is an odd choice given that these channels are home to LPTV and translator stations from coast to coast. They serve consumers. They provide much-needed diversity. And, in many cases, they are a lifeline for rural communities, especially on tribal lands. Far from preserving a "vacant"

1771 N Street NW Washington DC 20036 2800 Phone 202 429 5300 channel," the Commission is proposing to create new "Microsoft Channels" or "Google Channels" at the direct expense of over-the-air viewers.

Aside from evicting important services already serving consumers in the band, the proposal has the potential to severely curtail broadcaster innovation as well. Forcing full power stations to protect their new primary-status unlicensed neighbors would limit broadcasters' ability to move to a more flexible standard should they elect to do so. This includes preventing expanded service areas through sharing and more efficient use. By choosing to elevate white spaces use above existing TV services in the TV band, the FCC would cut off broadcast TV at the knees while providing even more spectrum for multi-billion dollar companies without any obligation to the public.

Finally, while the harm associated with this proposal will be tangible and concrete, the benefits are, at best, wholly speculative. Five years after the adoption of the current white spaces rules, there are a mere few hundred white space devices operating. Twenty percent of states don't even have a single white spaces device in operation. In the handful of instances where white spaces are actually being used to provide Internet access, the service offered is both expensive and slow. Despite years of opportunity, the white spaces project has simply failed to live up to the grand promises of its proponents. Nothing in the record suggests that doubling down on this experiment will produce different results going forward. Indeed, the most immediate effect of establishing new Google Channels will be to dissuade companies like Google and Microsoft from participating in the incentive auction, as those companies will continue to structure business models around access to increasingly wide swaths of free spectrum.

Respectfully Submitted

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National Association of Broadcasters

cc: Johanna Thomas

Robin Colwell Erin McGrath Matthew Berry



Google Channels: The Facts About What's At Stake



Overview

- The FCC has already committed as part of its incentive auction to provide a nationwide lowband footprint for unlicensed uses
 - New spectrum in the guard bands, duplex gap
- Despite this huge gain, Google, Microsoft and groups they fund are asking the FCC to set aside one or two TV channels post-auction – in every market – for even more dedicated white spaces operation



The Problem(s)

- To date, promises about white spaces innovation have proved to be empty; why would the FCC eliminate and constrain free over-the-air TV service in the name of a failed service?
 - Only a <u>few hundred</u> devices exist more than five years after rules finalized
- The Google proposal hurts broadcaster innovation; a critical source of potential competition for other spectrum holders
- FCC should not sacrifice diversity and rural communities to double down on a failed white spaces experiment



Squeezing out LPTVs/Translators

With limited space available in the newly repacked TV band, LPTVs and translator stations will struggle to find new homes from which to operate:

LOW POWER
LOW POWER
LOW POWER
LOW POWER
FULL POWER
GWARD BAND

SPECTRUM TO WIRELESS INDUSTRY





Further Damage

The Google Channel proposal would compound this challenge by putting already limited spectrum off limits for displaced LPTVs and translator stations:

LOW POWER
FULL POWER
LOW POWER
LOW POWER
FULL POWER

SPECTRUM TO WIRELESS INDUSTRY





Making Matters Worse

In some markets, the FCC proposes to reserve not one, but two channels, making the situation even worse:

LOW POWER
FULL POWER
LOW POWER
LOW POWER
FULL POWER
GOOGLE
FULL POWER
FULL POWER
FULL POWER
FULL POWER
FULL POWER
GOOGLE
FULL POWER
FULL POWER
FULL POWER
FULL POWER

SPECTRUM TO WIRELESS INDUSTRY





The Rationale

- The NPRM explains that this action is necessary because there will be <u>fewer</u> white spaces available after repacking
- Google claims that this proposal won't cause any harm because there are <u>plenty of</u> white spaces
- However, both things cannot be true
 - There can't simultaneously be (1) plenty of room; and (2) not enough room



Town	Population	Vacant Channels Available	LPTV/Translator Stations
Chaparral	15,260	21	1
Clayton	2,875	28	0
Elida	199	27	0
Fort Summer	1,026	23	1
Норе	107	26	1
Las Cruces	100,698	18	3
Lordsburg	2,711	26	2
Los Ojos	121	20	5
Lovington	11,994	23	2
Mosquero	92	27	0
Newcomb	335	25	2
Quemado	229	28	0
Ruidoso	8,152	21	6
Shiprock	8,207	23	4
Silver City	10,151	24	7

Google Reply Comments at 9

Dealing in Facts

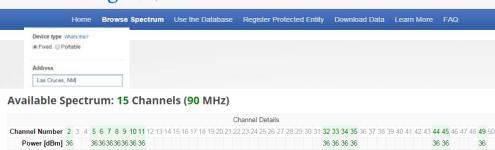
- Google uses this chart to assert there is ample space for translators and LPTV stations
- However, Google:
 - Misleadingly cites the number of channels <u>currently</u> available, <u>before</u> the auction and repacking
 - Calculated vacancy based on TVWS operation and not TV operation
 - Ignored effects of impact of repacking adjacent markets (which will further limit available channels)



KTDO:1317463

KTFN:1487808

Google Spectrum Database



Channels 3 and 4 KCOS:1432098 Ø Ø 000 KFOX-TV:1092992 000 KTSM-TV:2001274 KVIA-TV:1645857 000 KDBC-TV:1320166 000 CWF-LP:1423730 KRWG-TV:1225136 888 KINT-TV:1433060 K26K,I_D:2001620 888 000 KLCP-LP:283995 000 Radio astronomy Wireless mic K38MH-D:1629876 000 KSCE:1359601 000 K42DJ:206739

Market Example

- Google's chart (p. 8) claims that there are 18 channels and 3 low power stations in Las Cruces
- However, Google's own database (shown here) indicates that 6 LPTV/translators serve the Las Cruces area
- Even a best-case analysis
 (ignoring adjacent markets)
 suggests that only 6
 channels will be available for
 these 6 stations in a 126
 MHz band plan



Where's the Benefit?

- In many areas, viewers rely on translators to extend service
 - For example, KNPB, a public broadcaster in Nevada, relies on translators to reach hundreds of thousands of viewers, including tribal communities
 - The FCC's proposal is likely to eliminate some of these translators
 - At the same time, there is not a single TV white space device operating in Nevada*
- In other areas, viewers rely on low power stations for niche and in-language programming not otherwise available

^{*20%} of states do not have a single white spaces device in operation.



Not Just a Rural Issue

- Large markets are also negatively impacted by Google's proposal
- For example, 7 LPTV and translator stations serve St. Louis
 - 84 MHz clearing target: best case, 3 channels available for 7 stations
 - 126 MHz clearing target: no channels available for 7 stations
- Unlike the situation for unlicensed devices, LPTVs/translators have no alternative spectrum



Hurting Diversity

- Low power facilities provide opportunities for increasing diversity of ownership
 - Percentage of LPTVs owned by women is more than double that of full power stations
 - Percentage of LPTVs owned by African-Americans is more than double that of full power stations
 - Percentage of LPTVs owned by Hispanic/Latino persons is more than triple that of full power stations

2014 Report on Ownership of Commercial Broadcast Stations



No Benefit for Mics

- Some have suggested that broadcasters should support Google's white spaces proposal because unlicensed mics can use Google's spectrum as well
- However, the proposal does not provide critical reserved spectrum for <u>licensed mics used to cover</u> <u>breaking news</u>
 - Spectrum is not exclusive-use, meaning broadcasters cannot rely on it in an emergency



The Bottom Line

- Google only needs reserved channels for white spaces because some
 TV stations will be displaced to make room for unlicensed devices
- NAB provided the only serious look at actual LPTV/TV translator operations, and it demonstrates displacement of hundreds of stations
- If FCC undertakes a comprehensive study which it must do to justify such a dramatic departure from decades of precedent – it should allow for public comment and critique of those technical studies before making a reasoned decision
- Alternatively, rather than guess at spectrum recovery amounts and impacts, the FCC could wait until after the auction based on actual facts