

BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, DC 20554

In the Matter of	)	
	)	
Expanding Flexible Use in Mid-Band Spectrum	)	GN Docket No. 17-183
Between 3.7 and 24 GHz	)	

Comments of Sony Electronics Inc.

Sony Electronics Inc. (“Sony”)<sup>1</sup> respectfully submits the following comments on the Notice of Inquiry in the above-referenced proceeding.<sup>2</sup> Sony is one of seven parties that have received conditional approval from the Wireless Bureau and Office of Engineering and Technology to serve as a Spectrum Access System (“SAS”) administrator for the Citizens Broadband Radio Service (“CBRS”) in the 3.5 GHz spectrum band.<sup>3</sup> Based on the encouraging momentum in that proceeding, and on its experience with developing spectrum-sharing database technologies, Sony encourages the Commission to implement a similar sharing architecture in the 3.7-4.2 GHz band.

In the *Notice*, the Commission seeks comment on innovative approaches to promote coexistence between users and minimize the potential for harmful interference between and among licensees.<sup>4</sup> Sony believes the database-supported authorization framework used for the CBRS in the 3.5 GHz band would accomplish these objectives. Specifically, Sony encourages the Commission to:

- Establish three tiers of users: Incumbent Access; licensed Priority Access (“PAL”); and unlicensed General Authorized Access (“GAA”), with each tier required to protect the tier(s) above it;

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<sup>1</sup> Sony Electronics Inc. is a U.S.-based research and development, marketing, and sales subsidiary of Sony Corporation. Sony entities design, manufacture, and sell mobile products throughout the world, and have undertaken extensive research and testing of next-generation wireless services.

<sup>2</sup> *In the Matter of Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, Notice of Inquiry, 32 FCC Rcd 6373 (2017) (“*Notice*”).

<sup>3</sup> See *Wireless Telecommunications Bureau and Office of Engineering and Technology Conditionally Approve Seven Spectrum Access System Administrators for the 3.5 GHz Band*, Public Notice, GN Docket No. 15-319, 31 FCC Rcd 13355 (WTB/OET Dec. 21, 2016).

<sup>4</sup> See *Notice* at 6381.

- Maintain continued protection of incumbent Fixed Satellite Service (“FSS”) and terrestrial Fixed Service (“FS”) licensees;
- Establish two classes of devices: Category A devices that would operate at lower power levels and heights, and which could be installed by a non-professional; and Category B devices that would operate at high power levels at a minimum specified height, and which would require professional installation;
- Require a 3.7-4.2 GHz SAS to, among other things: register, authenticate, and assign frequencies and maximum power levels to PAL and GAA users; enforce protection and exclusion zones for incumbent operations; protect PAL users from interference; and allocate GAA authorizations in a way that maximizes efficient use of the spectrum and promotes a stable spectral environment;
- Use the same methods to protect FSS and FS incumbents in the 3.7-4.2 GHz band that are used to protect FSS incumbents and grandfathered wireless broadband licensees, respectively, in the 3.5 GHz band;
- Allow existing 3.7-4.2 GHz licensees and registered links to qualify for incumbent status, provided that the locations, signal strengths, and frequencies of those links are registered with the Commission’s Universal Licensing System; and finally
- Require the SAS to dynamically maximize the number of GAA sites in a given geographic area.

Sony believes that the Commission’s 3.5 GHz CBRS rules represent the kind of “comprehensive, sound, and flexible spectrum policies” that will “enabl[e] innovations and investment to keep pace with technological advances,”<sup>5</sup> and accordingly encourages the Commission to use this paradigm and architecture to guide the development of the 3.7-4.2 GHz band.

Respectfully Submitted,



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October 2, 2017

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<sup>5</sup> Notice at 6374.