

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of	)	
	)	
Revision of Part 15 of the Commission's	)	ET Docket No. 13-49
Rules to Permit Unlicensed National	)	
Information Infrastructure (U-NII) Devices in	)	
the 5 GHz Band	)	

To: The Commission

**REPLY COMMENTS OF ARRL,
THE NATIONAL ASSOCIATION FOR AMATEUR RADIO**

ARRL, the national association for Amateur Radio, formally known as the American Radio Relay League, Incorporated (ARRL), by counsel and pursuant to Section 1.415 of the Commission's Rules (47 C.F.R. §1.415), hereby respectfully submits its reply comments relative to the *Notice of Proposed Rule Making*, FCC 13-22, 78 Fed. Reg. 21320, 28 FCC Rcd. 1769, released February 20, 2013 (the Notice).¹ For its reply to comments filed in response to the Notice, ARRL states as follows:

1. As noted in ARRL's comments in this proceeding, the Amateur Radio Service has a secondary allocation at 5650-5925 MHz in the United States. The comments of the National Telecommunications & Information Administration (NTIA) indicate that NTIA shares the same concern that ARRL has raised repeatedly in earlier proceedings concerning the 5 GHz band: that the *aggregate* interference potential of ubiquitous U-NII devices to incumbent radio services (or as NTIA put it, "the likelihood of harmful interference from large numbers of U-NII devices to protected federal systems in the...

¹ On June 17, 2013 the Chief, Office of Engineering and Technology released an Order (DA-13-1388) in this proceeding granting the motions of IEEE 802 Local and Metropolitan Area Networks Standards Committee and the Wi-Fi Alliance to extend the reply comment date, and extended that date to and including July 24, 2013. Therefore, these reply comments are timely filed.

5850-5925 MHz band...”) is currently unknown. The incumbent users of the 5.85-5.925 GHz band, as graphically depicted in a chart at paragraph 88 of the Notice, are as follows:

Frequency Band	Service Type	Federal Primary	Non-Federal Primary	Non-Federal Secondary
5.85-5.925 GHz	Radiolocation	X		
5.85-5.925 GHz	Fixed Satellite(Earth to Space)		X	
5.85-5.925 GHz	Mobile Service		X	
5.85-5.925 GHz	Amateur Service			X

2. ARRL’s comments urged that a complete study of interference potential and mitigation techniques should be conducted prior to making the band 5.85-5.925 GHz available for the operation of U-NII devices. The study should take into consideration the potential interaction between U-NII devices (including the aggregate interference potential of those devices) and each of the above incumbent services. Applicable mitigation techniques with respect to each and all of these incumbent services, as well as the extent to which aggregate interference could be mitigated should also be evaluated. The present allocation status of this band is quite complicated due to the presence of important Federal systems, safety-based DSRC applications (including connection between vehicles, and vehicle-to-roadside systems to detect and avoid hazards in a vehicle’s path); fixed-satellite applications and fixed and mobile Amateur Radio facilities. An additional overlay of unlicensed, high-use density mobile applications, ARRL urged, requires careful planning. ARRL suggested that a full and complete investigation of the sharing concerns be conducted in an open, transparent manner.

3. The comments of the Wi-Fi Alliance, at page 25 thereof, are consistent with that position. The Alliance notes that the Notice proposal would make an additional 75 megahertz of spectrum for unlicensed Wi-Fi operations in the so-called U-NII-4 band (5850-5925 MHz). The Alliance states that before making rules for this band, “the Commission must consider the operations that will be permitted in this band and the measures necessary to protect incumbent operations therein.” Users of the “U-NII-4 band” would have to protect, for example, DSRC operations. The Alliance states that it “does not view the formality of this rulemaking proceeding as the most useful mechanism to develop a sharing proposal.” Instead, it calls for “a more interactive dialogue of industry experts, as well as government stakeholders, to resolve sharing problems.” To effectuate this, the Wi-Fi Alliance proposes that the Commission facilitate meetings, beginning at the earliest possible time, of “all stakeholders” to exchange information on respective requirements; discuss mitigation solutions; and agree on mutually acceptable testing and implementation.

4. While ARRL takes no position on the issue of compatibility between U-NII devices and DSRC systems, ARRL is in full agreement with the Wi-Fi Alliance that this proceeding is not the proper vehicle for development of a compatible sharing plan with associated interference-avoidance protocols. Instead, the proper procedure in a multiple-use band such as 5850-5925 MHz, when considering an unlicensed overlay, is to have all stakeholders engage in meetings to develop compatible sharing protocols *before* rules are enacted to effectuate the new sharing plan. The rules should reflect or incorporate by reference the standards and parameters developed as the result of the meetings suggested by the Wi-Fi Alliance. ARRL, as one of the stakeholders in this band, commits and

expects to actively participate in any such meetings, and to contribute to a plan for compatible sharing among all users of the band and U-NII to the maximum extent possible.

5. As ARRL argued in its comments, any decision on U-NII authorization in the 5.85-5.925 GHz band should await a full and complete evaluation of interference potential and interference mitigation techniques among the varied and incumbent users of that segment, and an opportunity for the public to evaluate the results of the NTIA study.

Therefore, the foregoing considered, ARRL, the national association for Amateur Radio, respectfully requests that the Commission address the addition of U-NII in the 5.85-5.925 GHz segment in accordance with the recommendations contained in ARRL's comments and these reply comments, and not otherwise.

Respectfully submitted,

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