In the Matter of
Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz band
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GN Docket No. 12-354

COMMENTS OF THE INFORMATION TECHNOLOGY INDUSTRY COUNCIL

The Information Technology Industry Council (ITI) hereby files these comments in response to the Second Further Notice of Proposed Rulemaking ("Order/2nd FNPRM") in the above-captioned proceeding.¹

ITI represents 61 of the nation’s leading information technology companies, including computer hardware and software, Internet services, and wireline and wireless networking equipment companies.² ITI is the voice of the high-tech community, advocating for policies that advance U.S. leadership in technology and innovation, open access to new and emerging markets, support expansion of e-expansions, protect and enhance consumer choice, and foster increased global competition.


² For more information on ITI, including a list of its members, please visit www.itic.org/about
I. Introduction

ITI has consistently supported the Commission’s efforts to make spectrum available in the 3550-3700 MHz band available for broadband communications.\(^3\) We note at the outset that the Commission’s Order/2\(^{nd}\) FNPRM addressed many of the subjects of ITI’s comments to the original NPRM: The order permits commercial use of PAL spectrum,\(^4\) it includes the 3650-3700 MHz band in the overall regulatory construct for the band,\(^5\) and the “exclusion zones” surrounding ground-based radar facilities have been reduced from initial proposals.\(^6\)

ITI’s member companies operate in all areas of the mobile ecosystem, including network equipment providers, fiber optic providers, mobile handset manufacturers, chipset manufacturers, and mobile software and application providers. We thus have an interest in seeing more spectrum made available for commercial use.

Among the topics raised in the Second FNPRM is the subject of whether a secondary-market regulatory regime could apply to the 3550-3700 MHz band. ITI submits that this would further increase the utility of the band by allowing marketplace solutions to develop as a means of allocating resources to entities that assign them a high value.

\(^3\) See Comments of ITI, filed February 20, 2013.
\(^4\) See Order/2\(^{nd}\) FNPRM at para. 87; ITI Comments at 3.
\(^5\) See Order/2\(^{nd}\) FNPRM at para. 19; ITI Comments at 5-6.
\(^6\) See Order/2\(^{nd}\) FNPRM at para. 259; ITI Comments at 6.
II. The Commission Should Permit Secondary Auctions to Facilitate Innovation

The Commission states that, out the outset, it is skeptical of whether disaggregation of spectrum in a band already segmented into such small sizes (census blocks) is feasible.\(^7\) Although census tracts are quite small, there is little reason not to prohibit a secondary market in smaller units in order to serve, for example, a specific event lasting only a few hours.

Allowing disaggregation of blocks would allow for further innovation in the band. As discussed below, with the SAS model in place, the Commission has already planted the seeds for a secondary market construct that could operate efficiently, without the need for round-the-clock Commission oversight of spectrum transactions occurring in the band.

The Commission has also indicated that the administrative cost of supporting secondary markets (and the partitioning and disaggregation that generally go hand-in-hand with secondary markets for spectrum) may be overly burdensome.\(^8\) Such concerns could be alleviated with a careful look at some of the proposals the Commission itself has cited; specifically permitting secondary markets to exist in the band without requiring prior Commission approval. While it is important to track down the source of interference, registration of contact information with the SAS would allow the Commission to exercise its enforcement function, if necessary, without necessarily requiring prior approval of a spectrum transaction.

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\(^7\) See Order/2\(^{nd}\) FNRPM at para. 434.
\(^8\) See Order/2\(^{nd}\) FNRPM at para. 434.
The SAS model could serve as a vehicle for promoting and sustaining a vibrant secondary market in 3.5 GHz spectrum. If the Commission allowed for streamlined processing of requests for spectrum, a secondary market resembling the spectrum exchange model discussed in the 2nd FNPRM\(^9\) could readily develop. The Commission has already authorized SAS administrators to charge “reasonable fees” to PAA and GAA users, and so an SAS administrator would have an incentive to create a market that encourages transactions among potential users of 3.5 GHz spectrum. In addition, multiple and competing SAS administrators would ensure that markets work efficiently and at reasonable costs to users of spectrum.

The Commission has also sought comment on whether spectrum aggregation limits applicable generally to PAL users should be apply to the secondary market for 3.5 GHz spectrum. \(^{10}\) While ITI notes that the order already establishes a limit of 40 MHz in one census tract, we ask the Commission to consider whether higher limits – perhaps for spectrum requests of very limited duration or geographic area – might be considered in secondary markets. A high demand for a large swath of spectrum (especially for a very short period of time) would indicate an *ad hoc* need, perhaps to cover a specific event. Allowing such transactions could further develop innovative technical solutions applicable not only in the 3.5 GHz band, but as a model in other bands as well.

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\(^9\) *See* Order/2\(^{nd}\) FNPRM at para. 433.

\(^{10}\) *See* Order/2\(^{nd}\) FNPRM at para. 435.
III. Reasonable Protection Criteria Will Promote Investment and Benefits for Consumers

The Commission should use reasonable protection criteria based on actual deployment conditions to protect in-band and out-of-band fixed satellite service (FSS) sites. It should not, for example, adopt default or generalized protection zones for all FSS earth stations. Instead, protection should take into consideration factors such as propagation, terrain, earth station pointing angles, and transmitter characteristics, which will be particular to both individual FSS sites and nearby wireless deployments. Taking into account aggregation effects, in particular, is especially important, because failure to take into account aggregation effects will require SASs to make worst-case density assumptions, even if deployments are not dense. Default protection zones will rely on worst-case assumptions regarding all of these factors, resulting in over-protection of incumbents, loss of usable spectrum, and diminished investment in the 3.5 GHz band.
IV. Conclusion

ITI welcomes the opportunity to again comment in the Commission's rulemaking on the 3.5 GHz band. We believe the two areas discussed above will facilitate greater innovation and investment in the 3.5 GHz band, and in doing so, the demands of the American public will be served by contributing to the growing demand for spectrum and a robust mobile broadband ecosystem. We stand ready to work with the Commission to finalize rules that achieve this and maximize the benefits of the 3.5 GHz band.

Respectfully Submitted,

[Signature]

Vince Jesaitis
Vice President, Government Relations
Information Technology Industry Council
1101 K Street, NW Suite 610
Washington, DC 20005
(202) 737-8888

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