#### Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of	)
Use of Spectrum Bands Above 24 GHz For Mobile Radio Services	) GN Docket No. 14-177
Establishing a More Flexible Framework to Facilitate Satellite Operations in the 27.5-28.35 GHz and 37.5-40 GHz Bands	) IB Docket No. 15-256 )
Petition for Rulemaking of the Fixed Wireless Communications Coalition to Create Service Rules for the 42-43.5 GHz Band	) RM-11664 ) )
Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95, and 101 To Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules and Policies for Certain Wireless Radio Services	<ul> <li>WT Docket No. 10-112</li> <li>)</li> <li>)</li> <li>)</li> <li>)</li> <li>)</li> </ul>
Allocation and Designation of Spectrum for Fixed- Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz and 48.2-50.2 GHz Frequency Bands; Allocation of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band; Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services; and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations	) IB Docket No. 97-95 ) ) ) ) ) )

# REPLY COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION

The Telecommunications Industry Association ("TIA")<sup>1</sup> hereby submits reply comments

in response to the Commission's Further Notice of Proposed Rulemaking ("FNPRM")<sup>2</sup> in the

<sup>&</sup>lt;sup>1</sup> TIA is the leading trade association for the information and communications technology ("ICT") industry, representing companies that manufacture or supply the products and services used in global communications across all technology platforms. TIA represents its members on the full range of policy issues affecting the ICT industry and forges consensus on industry standards. Its hundreds of member companies can be expected to be active participants in the

above-captioned proceeding. In these reply comments, we focus briefly on two issues. First, given the Commission's decision in the *Report and Order* to implement co-primary sharing between Federal and non-Federal users in the lower 37 GHz band segment, we agree that applying elements of the well-functioning 70/80 GHz framework to that band segment could provide a workable path forward. Second, we re-iterate our concerns regarding a use-it-or-share regime in the 37 GHz upper band segment or elsewhere in the millimeter-wave bands.

## I. THE 70/80 GHz SHARING FRAMEWORK COULD SERVE AS A BASELINE FOR THE LOWER 37 GHz BAND SEGMENT.

As described in our initial comments, any spectrum sharing and coordination in the millimeter-wave bands, including the lower 37 GHz band segment, should be implemented using the simplest means necessary to enable non-Federal use of the bands.<sup>3</sup> Specifically, TIA described our significant concerns regarding the use of spectrum access systems (SAS), whether in the lower 37 GHz band segment or elsewhere in the millimeter-wave bands.<sup>4</sup>

Instead - and given the Commission's decision to implement co-primary sharing with

Federal users – TIA agrees with Intel that applying the well-functioning 70/80 GHz framework

to the lower 37 GHz band segment could provide the Commission with a workable baseline.<sup>5</sup> As

the Commission itself noted, this system has been effectively used for over a decade to facilitate

<sup>3</sup> TIA Comments at 15.

<sup>4</sup> *Id.* at 16.

evolving marketplace for telecommunications services using spectrum above 24 GHz. TIA previously filed initial comments in response to the Further Notice of Proposed Rulemaking in this proceeding. *See Comments of the Telecommunications Industry Ass'n*, GN Docket No. 14-177 (filed Sept. 30, 2016) ["TIA Comments"].

<sup>&</sup>lt;sup>2</sup> Report and Order and Further Notice of Proposed Rulemaking, *Use of Spectrum Bands Above* 24 GHz For Mobile Radio Services, GN Docket No. 14-177, et al., FCC 16-89, 31 FCC Rcd 8014 (2016) ["Report and Order" or "FNPRM"].

<sup>&</sup>lt;sup>5</sup> See <u>Comment of Intel Corporation</u>, filed Sept. 30, 2016 in GN Docket No. 14-177 ["Intel Comments"] at 5-6.

co-existence between commercial systems and federal systems.<sup>6</sup> Under that framework, frequency coordination would be handled using a coordination database.<sup>7</sup> Moreover, given the Commission's decision to use site-based registrations for non-federal users in the lower 37 GHz band segment,<sup>8</sup> user-defined polygons should be used to define each site registration, subject to approval by the database in its coordination role.<sup>9</sup> TIA takes no position regarding Intel's further observation that real property boundaries might also be suitable to define site licenses.<sup>10</sup>

However, the Commission should also fulfill its promise of continuing to work with various stakeholders, including industry, before adopting any sharing framework.<sup>11</sup> While using elements of Intel's proposal to apply the 70/80 GHz framework to the lower 37 GHz band segment may provide a good baseline as described above, exploration of other options should also be on the table.

## II. USE-IT-OR-SHARE-IT REQUIREMENTS ARE INAPPROPRIATE.

As TIA described in our initial comments, use-it-or-share-it requirements will hinder innovation.<sup>12</sup> Deployments of new services on a short-lived or temporary basis are likely to lead to consumer frustration, could impose significant costs on licensees and device manufacturers, and lengthen product development cycles. Instead, secondary market transactions in a liquid

<sup>&</sup>lt;sup>6</sup> FNPRM ¶ 439, 31 FCC Rcd at 8165.

<sup>&</sup>lt;sup>7</sup> Intel Comments at 6.

<sup>&</sup>lt;sup>8</sup> See 47 CFR 30.7(a), 31 FCC Rcd at 8206 ("The 37-37.6 GHz band will be available for sitebased registrations on a coordinated basis with co-equal federal entities").

<sup>&</sup>lt;sup>9</sup> Intel Comments at 8.

<sup>&</sup>lt;sup>10</sup> *See id.* 

<sup>&</sup>lt;sup>11</sup> Report and Order ¶ 115, 31 FCC Rcd at 8060.

<sup>&</sup>lt;sup>12</sup> TIA Comments at 19-20.

marketplace with low transfer costs built on a coordinated band plan (such as that proposed by TIA in our initial comments) are a better way to ensure appropriate spectrum utilization.

In addition, TIA agrees with commenters that any spectrum made available to others through use-it-or-share it regimes would generally not be utilized anyway. Among other reasons, the Commission has now opened a large swath of 14 GHz of dedicated unlicensed spectrum between 57-71 GHz. Therefore, secondary deployments in the licensed bands seem unlikely to be prioritized in the marketplace, at least for now.<sup>13</sup> Meanwhile, there are real costs in deployment uncertainties for the licensed ecosystem if such a rule is created at a time when 5G network architecture designs are still emerging.<sup>14</sup>

## III. CONCLUSION

As the Commission considers how to further enable new uses for millimeter-wave spectrum, it should not elevate the goal of spectrum sharing above the more basic need to create a successful mobile ecosystem in the first place. At least for the time being, the Commission should adopt simple sharing mechanisms and provide greater certainty for licensees, thus giving the marketplace the boost necessary to make 5G networks and technologies a reality.

Respectfully submitted,

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<sup>&</sup>lt;sup>13</sup> See, e.g., Intel Comments at 17-18.

<sup>&</sup>lt;sup>14</sup> See, e.g., TIA Comments at 20, Intel Comments at 18-20.