

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
	)	
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	)	WT Docket No. 10-112
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	)	

**COMMENTS OF NOKIA**

Nokia submits Comments in response to the Commission’s Third Further Notice of Proposed Rulemaking (“*Third FNPRM*”) in the above captioned proceedings.<sup>1</sup> Nokia strongly supports the Commission’s continued efforts to unlock the promise of high-band spectrum resources for terrestrial wireless use. Therefore, Nokia supports proposals to issue service rules for the 42 GHz and 26 GHz band for Upper Microwave Flexible Use Service (UMFUS) under Part 30 of the Commission’s rules. Nokia also supports issuing service rules for UMFUS in the 50 GHz range, but believes it is premature to adopt sharing rules between terrestrial and satellite operations in that band until service rules are adopted.

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<sup>1</sup> *Use of Spectrum Bands Above 24 GHz for Mobile Radio Service*, Third Report and Order, Memorandum Opinion and Order, and Third Further Notice of Proposed Rulemaking, GN Docket No. 14-177, WT Docket No. 10-112, FCC 18-73 (rel. June 8, 2018) (“*Third Order and Third NPRM*”).

## **I. THE COMMISSION SHOULD LICENSE THE 42 GHZ BAND UNDER ITS PART 30 RULES**

Nokia appreciates the Commission moving forward with the 42 GHz band in this proceeding, and we continue to support the Commission's proposal to authorize fixed and mobile operations under the Part 30 UMFUS rules.<sup>2</sup> Nokia further agrees with the Commission that the value of this band is enhanced by the potential to use it together with the existing 37 GHz and 39 GHz bands, also governed by Part 30 of the Commission's rules.<sup>3</sup> The potential for global harmonization and creation of a global ecosystem for this spectrum range also enhances the desirability of this band for the U.S. market.<sup>4</sup>

With respect to licensing, technical and service rules, Nokia agrees that the Commission should hold to its tentative conclusion, and the existing record that supported this proposal, to apply Part 30 UMFUS and technical rules to this band as described in the *Third FNPRM*. Nokia supports the Commission's tentative conclusion to license the band in Partial Economic Areas (PEAs) and in 100 MHz blocks.<sup>5</sup> As to protection of RAS facilities, Nokia supports a proposal of T-Mobile, referenced by the Commission, that "coordination with RAS should be required within a defined coordination distance."<sup>6</sup> Nokia also directs the Commission to T-Mobile's [T-Mobile RAS sharing study](#), produced for the 32/47/50 GHz bands.<sup>7</sup> This study is well-suited to also calculating protection zones for RAS sites operating adjacent to the 42 GHz band.

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<sup>2</sup> *Id.* ¶ 49 (citing, broad support in 2016 comments submitted by a number of parties, including Nokia. See, e.g., Comments of Nokia, GN Docket No. 14-177, filed September 30, 2016 at 5-6.

<sup>3</sup> *Third Order and Third NPRM*, ¶ 52.

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

<sup>5</sup> *Id.* ¶ 54.

<sup>6</sup> *Id.* ¶ 56.

<sup>7</sup> Letter from Steve Sharkey, T-Mobile, to Marlene Dortch, FCC, GN Docket No. 14-177, filed Oct. 7, 2017.

## **II. THE 26 GHZ BAND SHOULD BE LICENSED CONSISTENT WITH THE ADJACENT 24 GHZ AND 28 GHZ BANDS**

Nokia supports the Commission’s proposal to license the 26 GHz band for flexible use.<sup>8</sup> Nokia further agrees that a key driver of the band is a “growing international consensus that terrestrial mobile services should be authorized in the band,”<sup>9</sup> which can lead to a global ecosystem and economies of scale. Further, this band can easily be used in conjunction with the nearby 24 GHz and 28 GHz bands, the next bands scheduled to be auctioned in the United States. Nokia supports geographic area licensing on a PEA basis in 100-megahertz license block sizes, which would harmonize the 26 GHz band with adjacent bands.

We strongly advocate that the Commission use Part 30 for licensing rules for the 26 GHz band, as adopted for the adjacent 24 GHz and 28 GHz bands. Nokia agrees that it is important to protect Federal incumbent uses of the band, which the Commission notes “has been fairly limited” to date.<sup>10</sup> We disagree, however, with the suggestion that coordination distances of 52 km for all non-Federal Space Research service (SRS) stations and 7 km for all non-Federal Earth exploration-satellite service (EESS) stations should be adopted.<sup>11</sup> The U.S. contribution that suggested those distances was limited in its scope, and Nokia respectfully suggests that the findings should not be applied as a bright-line rule. Rather, we believe shorter distances would be appropriate in many cases and urge that the rules should protect specific sites on a case-by-case basis using actual UMFUS deployment scenarios (not 52 km for all SRS stations and 7 km for all EEES stations).

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<sup>8</sup> *Third Order and Third NPRM*, ¶ 78.

<sup>9</sup> *Id.* ¶ 75.

<sup>10</sup> *Id.* ¶ 79.

<sup>11</sup> *See id.* ¶ 81.

### **III. IT IS PREMATURE TO ADOPT SHARING RULES FOR THE 50.4-51.4 GHZ BAND**

Nokia has a longstanding history of determining ways to support technical sharing of bands, and agrees with the Commission's goal to "promote spectrum efficiency by permitting spectrum made available for UMFUS to be shared with other allocated services when possible."<sup>12</sup> While we appreciate the Commission proposing rules in anticipation of UMFUS services being introduced into this band, the actual rules for any UMFUS services in the band have not yet been adopted. Because the technical rules for UMFUS operations in this spectrum range are yet to be finalized, Nokia believes that it is premature to issue rules for sharing with those services at this time. As such, Nokia urges the Commission to decline to adopt rules for sharing among services until such rules governing UMFUS are adopted.

### **VIII. CONCLUSION**

For the foregoing reasons, Nokia requests that the Commission move forward as described in these Comments, including issuing service rules for the 42 GHz and 26 GHz bands.

Respectfully submitted,

**Nokia**

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<sup>12</sup> *Id.* ¶ 94.