Before the
Federal Communications Commission
Washington, D.C. 20554

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

REPLY COMMENTS OF THE UTILITIES TELECOM COUNCIL

Pursuant to Section 1.405 of the Commission's Rules, the Utilities Telecom Council ("UTC") hereby files the following reply comments in response to the Commission's Public Notice inviting comment on a proposed Revised Framework for the 3.5 GHz band.[1] As it explained in its initial comments, UTC remains concerned that the Commission's Revised Framework would lead to congestion and interference, which would discourage the 3.5 GHz band from use for mission critical communications, including by utilities and critical infrastructure industry (CII) entities. However, UTC would support the proposal by Motorola Solutions to accommodate the newly proposed priority access licensing (PAL) scheme for commercial users under the Revised Framework, and to reserve a portion of the spectrum for "users with critical quality-of-service needs" including utilities and critical infrastructure.[2]

Under Motorola Solutions' proposal, the band would be dynamically segmented on an as needed basis based on local spectrum utilization, but each segment (i.e. commercial, critical user and General Authorized Access (GAA)) would have a guaranteed minimum exclusive portion of the spectrum. UTC agrees with this approach and Motorola's recommendation to reserve a minimum of 20-30 megahertz each for commercial and critical uses.[3] UTC also agrees with Motorola Solutions' proposal to refrain

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[1] *Commission Seeks Comment on Licensing Models and Technical Requirements in the 3550-3650 MHz Band,* Public Notice, GN Docket No. 12-354, 2013 WL 5912497, (Nov. 1, 2013)(hereinafter "Public Notice"). Note that 3.5 GHz band refers to the 3550-3650 MHz band.

[2] Comments of Motorola Solutions, Inc. in GN Docket No. 12-354 at 2 (filed Dec. 5, 2013).

[3] *Id.* at 3-4 (adding that 10 megahertz should be made available for GAA uses with the remainder of the band being shared (i.e. GAA with commercial or critical users, subject to priority access rights)).

from using PALs – and by extension, spectrum auctions – in the segment for mission critical users. Instead, "[a]dditional priority access schemes may be derived among critical users to deterministically share spectrum if needed." [4]

By segmenting the band, it would guard against interference and congestion by commercial users and consumer devices in the other segments of the band. By dynamically adjusting the size of the segmentations, it would make effective use of the band by users in each segment. By guaranteeing a minimum spectrum "floor" for commercial and mission critical users, it would provide regulatory certainty needed to encourage investment and deployment of systems in the band. Finally, by relying on priority access schemes, mission critical users could ensure communications reliability and avoid costly spectrum auctions. Thus, the proposal by Motorola Solutions would address many of the concerns with regard to congestion and interference, as well as regulatory certainty, which UTC raised in its initial comments regarding the Revised Framework.

The public interest would be served by this approach. As Motorola Solutions explains, mission critical uses are "generally not commercially motivated, but serve the greater public good."[5] In recognition of their public service, Congress identified utilities and other CII within the class of "public safety radio services" that are exempt from spectrum auctions.[6] While Congress clearly intended that they have access to spectrum to meet their needs, there has been no dedicated spectrum made available for their use. Instead, their existing spectrum has been subject to increasing congestion and interference, as well as narrowbanding, due to increasing demand from disparate and incompatible other operations that share the spectrum.[7] In addition, some of their existing spectrum bands have also been subject to

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[4] *Id.* at 3, n.3 (stating that "[o]pen eligibility for PALs would not be allowed in the true priority access (PA) tiers, and the newly proposed PALs would not generally be needed among critical users of the spectrum.")

[5] *Id.* at 2.

[6] NPRM at ¶35, citing Section 309(j)(2)(A) which prohibits competitive bidding, to the extent that the predominant use of the spectrum would be the provision of "public safety radio services."

[7] *See* Comments of UTC in GN Docket No. 12-354 at 3-4 (filed Dec. 5, 2013).

reallocation, rebanding, licensing freezes and relocation of incumbents.[8] Finally, utilities and CII have not been able to compete at auction for new spectrum with commercial service providers, particularly for broadband spectrum in urban markets.[9] Therefore, it is necessary and appropriate to reserve a portion of the 3.5 GHz band for mission critical communications, including by utilities and CII, to serve the greater public good and consistent with Congress's intent to provide access to spectrum by these providers of public safety radio services.

At the same time, the interests of those non-mission critical users with QoS requirements, such as commercial service providers, would be served by providing them access to PALs. While some of these comments on the record in response to the Public Notice argue for longer license terms and larger geographic areas, UTC believes that the Commission should provide for a mix of both short and long license terms, as well as large and small geographic areas. That way, a more diverse set of interests would be able to access the band to meet their communications needs in both the short and the long term.[10] This may also help to avoid instances of mutual exclusivity, consistent with Congress's intent when it provided the Commission with its spectrum auction authority.[11] Similarly, the Commission should adopt technical rules that provide flexibility but also protect against interference in the band. In that regard, the technical rules for GAA use of the band should ensure that any "use-it-or-share-it" policies do not interfere with operations in the priority access segments, particularly by mission critical

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[8] For example, the 800 MHz band is still undergoing the rebanding process to address interference issues; the 900 MHz band is still under a freeze, and the Commission has most recently imposed a freeze on the 470-512 MHz (T-Band). All of these bands are used by utilities and other CII.

[9] Comments of UTC in GN Docket No. 12-354 at 4 (filed Dec. 5, 2013).

[10] *See also* Comments of Microsoft in GN Docket No. 12-354 at 6 (filed Dec. 5, 2013)(stating that "the Commission should ensure that the licenses do not provide any single company or set of companies with excessive control over the spectrum. If a few companies permanently control the entire band, innovation and consumer benefits will be unlikely to follow.")

[11] *See* Section 309(j)(6)(E) of the Communications Act, which directs the Commission to use engineering solutions, negotiation, threshold qualifications, service regulations, or other means to avoid mutual exclusivity where it is in the public interest to do so.

users.[12] Finally, UTC agrees with Motorola Solutions and other comments on the record that the priority access segments should be guaranteed a minimum spectrum "floor", below which GAA access to the priority access segment would be prohibited.[13]

CONCLUSION

UTC remains concerned that the Revised Framework would increase the potential for interference and congestion in the 3.5 GHz band by opening eligibility in the priority access tier. Further, UTC remains concerned that the Revised Framework would increase the likelihood of spectrum auctions which in turn would increase the cost of using this spectrum, particularly in urban and dense urban areas where commercial service providers would most likely compete at auction for access to the spectrum. UTC is concerned that the potential for interference and congestion would be increased further to the extent that more intensive use of the band is made using the Spectrum Access System (SAS) database to dynamically select frequencies for different entities in real-time, including for GAA users who could potentially access the priority access segment, which could be made available on a "use it or share it" basis, as proposed by the Commission. Finally, UTC believes that providing targeted opportunities for mission critical communications, such as within buildings, would go far enough to meet the needs of utilities and other CII, which need spectrum for outdoor operations over large geographic areas. Thus, UTC believes that the Commission's original proposal is preferable to the Revised Framework.

If the Commission does adopt a Revised Framework, it should modify it to reserve a certain amount of spectrum for mission critical communications, and dynamically segment the 3.5 GHz band for PALs for commercial services and GAA access for consumer devices, consistent with the comments filed by Motorola Solutions. This would serve the public interest by ensuring reliability of mission critical communications, including by utilities and CII for the public good. At the same time, it would open up access to the band for commercial services with QoS requirements, as well as for consumer devices for

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[12] *See* Public Notice at ¶29 (inviting comment on how the "use-it-or-share-it" concept could be implemented.)

[13] Comments of Motorola in GN Docket No. 12-354 at 1, 2 (filed Dec. 5, 2013)(stating that "each class of user should have a guaranteed 'floor' amount of spectrum available for exclusive use by that class.")

Wi-Fi and other applications. This would make more efficient use of the band, while promoting the use of the band for mission critical communications that require a high degree of reliability.

Respectfully submitted,

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