

January 22, 2019

Office of Spectrum Management
National Telecommunications and Information Administration
1401 Constitution Avenue, NW
Washington, DC 20230

**Re: Developing a Sustainable Spectrum Strategy for America's Future
Docket No. 181130999-8999-01**

Motorola Solutions (MSI) hereby replies to the National Telecommunications and Information's (NTIA) request for comments¹ on developing a comprehensive, long-term national spectrum strategy as required by a recent Presidential Memorandum.² NTIA is seeking recommendations that will assist it in fulfilling its obligations under Section 4 of that memorandum to prepare a long-term strategy that includes legislative, regulatory, or other policy recommendations designed, in part, to:

- increase spectrum access for all users through transparency of spectrum use and improved cooperation and collaboration between Federal and non-Federal spectrum stakeholders;
- create flexible models for spectrum management that promote efficient and effective spectrum use while accounting for critical safety and security concerns;
- use ongoing research, development, testing, and evaluation to develop advanced technologies, innovative spectrum-utilization methods, and spectrum-sharing tools and techniques that increase spectrum access, efficiency, and effectiveness;
- build a secure, automated capability to facilitate assessments of spectrum use and expedite coordination of shared access among Federal and non-Federal spectrum stakeholders;
- improve the global competitiveness of United States terrestrial and space-related industries while augmenting the mission capabilities of Federal entities through spectrum policies, domestic regulations, and leadership in international forums.

Motorola Solutions has participated in the development of the comments being submitted today by the Telecommunications Industry Association (TIA). MSI supports those comments but takes this opportunity to highlight a key position. There is a continuing need for the U.S. spectrum management process to consider and support the highly specialized communications needs of certain Federal and non-Federal users through the provision of dedicated spectrum allocations for

¹ National Telecommunications and Information Administration, *Developing a Sustainable Spectrum Strategy for America's Future*, Notice and Request for Comments, 83 Fed. Reg. 65,640 (Dec. 21, 2018).

² President Donald J. Trump, *Memorandum on Developing a Sustainable Spectrum Strategy for America's Future*, 2018 DAILY COMP. PRES. DOC. 00730 (Oct. 25, 2018) (Presidential Memorandum).

non-commercial networks and systems. Specialized communication systems designed for the Department of Defense, Department of Homeland Security, the Department of Justice, State and local public safety organizations, public utilities and industrial and critical infrastructure industries will operate more efficiently, more securely, more capably, and, in many instances, more economically, when operated on networks free of non-critical commercial traffic. Any attempt to consolidate all mission-critical communications into shared commercial networks will result in compromised performance and introduce heightened security risks for critical government data and information.

As the NTIA considers its recommendations for a sustainable spectrum management strategy, it should take note of the tremendous successes that have occurred over a relatively brief period of time. In MSI's view, the U.S. spectrum management process is far from broken. To the contrary, under the leadership of the NTIA, the Federal Communications Commission (FCC) and the U.S. Congress, the industry has completed a dynamic analog to digital changeover that has ushered in a plethora of devices and services that were mostly conceptual as recently as 2000: over-the-air HDTV, the broader Wi-Fi ecosystem, smartphones, and wireless mobile video to name a few. With continued government leadership, MSI believes that the U.S. is well positioned to usher in the next level of technology advancements and lead the world in the development of advanced services such as 5G, telehealth, M2M, smart transportation, private broadband, and homeland security technologies.

The key for success is to ensure that a transparent dialog is maintained where all spectrum stakeholders have the ability to clearly articulate their communications needs and requirements. The debate should not be simply focused on how much revenue can be derived through commercial auctions, as it is without question that the public interest is well served by the proliferation of services and user communities with needs that cannot be fully realized over commercial wireless networks. As it develops the sustainable spectrum management strategy, MSI recommends that the NTIA ensure that the following principles remain at the core of the spectrum management process:

- There are Federal and non-Federal entities with special service requirements that are best served by specialized private networks;
- Rising to the top of the list of specialized needs is increased resilience to cybersecurity attacks initiated by terrorist organizations or nation states or other rogue organizations. Networks isolated or walled-off from commonly available networks offer improved resilience to cyber attacks. In contrast, the risk to cyber attacks is increased as more networks are operated over a common core.
- Federal and non-Federal entities with special service requirements need dedicated exclusive use spectrum as well as specialized shared spectrum. As the need for specialized service continues to increase for these Federal and non-Federal users, existing licensed spectrum minimally needs to be preserved and additional licensed spectrum allocations may be necessary.
- Shared spectrum should be pursued carefully with appropriate partners for innovative opportunities in bands where improved spectral utilization is desired and existing primary Federal and non-Federal users with special requirements can be protected.

By ensuring that critical industries and government services are provided a strong voice in the coming discussions on spectrum access, the NTIA will be providing a balanced process that best serves the interests of the American people.

Respectfully Submitted,

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