



August 21, 2024

The Honorable Alan Davidson
Assistant Secretary of Commerce for Communications and Information
National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Avenue NW
Washington, D.C. 20230

Re: *NTIA Request for Comment on Advancement of Telecommunications Technology*

Dear Assistant Secretary Davidson:

The Open RAN Policy Coalition would like to express sincere appreciation for the efforts of the National Telecommunications and Information Administration (NTIA) to examine the current state of development of sixth generation (6G) wireless communications technology through this Request for Comment. Founded in 2020, the Open RAN Policy Coalition promotes policies that drive the adoption of open and interoperable solutions in the radio access network (RAN). Our coalition represents a diverse group of information and communications technology companies unified under a common goal: dismantling technological and market barriers to cultivate a competitive, secure, and resilient wireless market. Our members include carriers, vendors, cybersecurity and cloud service providers, innovators, startups, and established technology companies, all committed to the collective health of the mobile ecosystem.

The current state of RAN offerings is characterized primarily by proprietary systems that can limit innovation and create vendor lock-in. This proprietary nature can also lead to higher costs, less competition, and slower deployment of new technologies, particularly in underserved and remote areas. Proprietary systems restrict operators to a single vendor, which can lead to monopolistic practices and reduced incentives for innovation. The lack of interoperability among different vendors' equipment further exacerbates these issues, hindering the efficient and widespread rollout of advanced network solutions.

In underserved and remote areas, the deployment of new technologies becomes even more challenging due to high costs associated with proprietary systems. These areas often lack financial resources, leading to a digital divide in which rural and remote communities are left behind in technological advancements. The inability to mix and match equipment from different vendors means that operators cannot leverage the most cost-effective solutions, further hindering the expansion of advanced networks to these areas. The rapid evolution toward 6G technology necessitates significant advancements in network flexibility and adaptability, which can be achieved through Open RAN.



Open RAN for 6G

Standardized open and interoperable interfaces within Open RAN provide operators the agility to tailor network architectures to meet the specific needs of various environments, from densely populated urban areas like New York City to remote, sparsely populated regions such as Rumford, Maine. This adaptability is crucial in ensuring optimal network performance and coverage, irrespective of geographical and demographic challenges.

Moreover, the ability to customize and dynamically manage networks with Open RAN enables operators to implement the most effective technological solutions for different scenarios. In urban settings, where high-density data traffic and diverse applications demand robust and high-capacity networks, Open RAN allows for the integration of cutting-edge technologies to handle such complexities efficiently. Conversely, in rural areas, where the focus might be on maximizing coverage and cost-efficiency, Open RAN facilitates the deployment of tailored solutions that ensure connectivity without unnecessary expenditures. This level of customization and nimbleness is vital for advancing 6G technologies, making networks more resilient, efficient, and capable of meeting diverse user needs.

Open RAN interface 6G networks—provide an excellent platform for innovation, value-creation, and next-generation wireless leadership for the U.S. and its partners. Open RAN 6G wireless networks will help unlock and enable groundbreaking innovation in key use cases across the board, including defense, socio-economic, and life sciences sectors. These include extremely high throughput and low latency applications, including high-fidelity virtual reality and augmented reality (training, live simulation, telemedicine, industrial safety, etc.), enhanced automation and robotics in warehouses and factories, dense Internet of Things, and real-time video. Such applications require extremely spectrally efficient, high-performance wireless networks. Spectrum continues to be the most valuable strategic asset for wireless networks. In addition to enabling demanding applications, spectral efficiency improvements would drive better return on investment, increased shared spectrum use by network operators, defense and enterprises, and strengthen the United States and its partners' positioning for next-generation wireless leadership.

Policy Recommendations

To advance U.S. leadership in 6G, including through the development of Open RAN technologies, the following policy recommendations are crucial:

1. **Significant Investment in R&D:** Federal funding for research and development initiatives focused on 6G technologies, including Open RAN, will drive innovation and ensure competitive advancements. NTIA should encourage public-private partnerships to leverage the expertise and resources of both sectors.



2. **Leadership in International Standards Bodies:** Active participation in global standards bodies will enable industry experts from the United States and its free market democratic partners and allies to shape the future of 6G technology, ensuring that standards align with national interests and promote open, interoperable systems.
3. **Robust Cybersecurity Measures:** Policies should promote advanced security protocols from the ground up, protecting the network from potential threats and ensuring the integrity of the communications infrastructure. Collaborative efforts can create comprehensive security frameworks tailored to 6G's unique challenges and opportunities.
4. **Educational Programs and Workforce Development:** Investing in educational programs and training initiatives will equip the next generation with the skills needed to lead in telecommunications. Continuous professional development programs will ensure the existing workforce remains current with technological advancements.
5. **Flexible Financing Options:** To improve the financial footing of global telecom deals and establish the United States as a market-oriented counter-balance to the Chinese Communist Party, the Coalition recommends giving the Export-Import Bank (EXIM) and the Development Finance Corporation (DFC) more flexibility in financing wireless telecommunications projects. This would include waiving certain statutory financial risk restrictions for trusted suppliers competing in global projects against entities on the Federal Communications Commission's (FCC's) Covered List.

We can ensure a sustainable and innovative future for 6G communications by adopting Open RAN solutions and promoting interoperability.

Thank you for your dedication and commitment to fostering the continued development of 6G technology. Your support will undoubtedly pave the way for a more reliable, competitive, and interconnected future.

Sincerely,

/Diane Rinaldo/
Diane Rinaldo
Executive Director
Open RAN Policy Coalition