

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Protecting Against National Security Threats to the)	
Communications Supply Chain Through FCC)	WC Docket No. 18-89
Programs)	
)	

REPLY COMMENTS OF MAVENIR SYSTEMS, INC.

Mavenir Systems, Inc. (“Mavenir”), by its undersigned counsel, submits these reply comments in response to comments filed in the Federal Communications Commission’s (“Commission”) Third Notice of Proposed Rulemaking in the captioned proceeding.¹ Mavenir commends the Commission on its continuing efforts to implement the Secure Networks Act. The FCC stands at the crossroads of not only securing our national communications supply chain, but also of facilitating entry into the Radio Access Network (“RAN”) market. By prioritizing a more secure, cost effective and future proof Open RAN architecture that employs open and interoperable interfaces (“Open RAN”), the Commission will foster competition in the communications supply chain, which will both lower carrier costs and break the lock the two incumbent vendors have on the U.S. RAN market. Commenters have expressed concern in the Supply Chain Third FNPRM that there may not be sufficient funding to remove and replace all of the Huawei and ZTE equipment and services in the U.S. and destroy the equipment and

¹ *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, WC Docket No. 18-89, Third Further Notice of Proposed Rulemaking, FCC 21-26 (Feb. 22, 2021) (Supply Chain Third FNPRM). *See also id.* at 7, para. 25 (asking “Are there other methods for prioritizing any other equipment or services within a reimbursement prioritization category?”).

software after it is removed, and have provided input to the Commission on how the funds should be prioritized.² The Commission also seeks comment on whether it “can further prioritize reimbursement within the prioritization subcategories.”³

Mavenir suggests that the FCC prioritize funding to operators that choose to utilize Open RAN architecture over those carriers that choose to use proprietary RAN. Such prioritization is intended to help stretch funding as far as possible through removing as much Covered List equipment and services as possible. The Commission also notes that in aiding Eligible Telecommunications Carriers (“ETCs”) and other providers to replace equipment, “when replacing older technology that a certain level of technological upgrade is inevitable,”⁴ (*i.e.*, it is appropriate to use federal funds to replace Covered List 2G and 3G equipment with secure 4G LTE and 5G ready).

Open RAN is the most cost effective and secure means of implementing transitions to 4G LTE and 5G.⁵ Open RAN is also the best solution for future proofing wireless networks because innovation and new services can be implemented through software changes rather than hardware swap out. From a security standpoint, the open architecture allows the operators to have a clear and transparent view of their network functions and operations rather than operators allowing equipment vendors to hold the only keys to the proprietary systems.

By prioritizing funding to operators who select Open RAN over proprietary RAN, the Reimbursement Program will also afford American vendors the unique opportunity to enter the

² See Comments of the Rural Wireless Association, Inc. (“RWA”) at pp. 6-9; Comments of Mediacom Communications Corporation (“Mediacom”) at pp. 2-5; Comments of Competitive Carrier Associations (“CCA”) at pp. 6-7; Comments of NTCA at pp. 3-4; Comments of PTA-FLA (“PTA-FLA”) at pp. 1-4; Comments of USTelecom at pp. 2-3. See also Supply Chain Third FNPRM at 6, para. 21.

³ *Id.*, para. 20.

⁴ *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, Second Report and Order, 35 FCC Rcd 14284, 14336, para. 122 (2020) (Supply Chain Second Report and Order).

⁵ See, e.g., Chris Pearson, *Understanding Open RAN*, 5G Americas, <https://www.5gamericas.org/understanding-open-ran/> (last visited Apr. 23, 2021).

communications supply chain market. In the Supply Chain Second Report and Order, then-Commissioner Rosenworcel noted that “we need to stimulate this new market for communications equipment by supporting the development of open radio access network technology here on our shores. . . . And we may be able to do so at lower cost, making this [Open RAN] virtualized equipment more competitive with state-subsidized equipment from Huawei and ZTE.”⁶ As Widelity notes in its Draft Report,⁷ Open RAN positive vendors have pointed out that “Open RAN has already allowed them to mix and match the radio vendor with their baseband offering. . . . [stating] that the price benefits this flexibility provides makes their prices more competitive than a closed RAN solution.”⁸

Open RAN architecture is not a technology – it is an open interface and interoperable implementation of radio access network architecture that supports 4G LTE and 5G technology. Thus Open RAN and proprietary RAN, while different architectures, each support 4G LTE and 5G technologies. Accordingly, it is appropriate and legally supportable to prioritize Open RAN equipment and services for reimbursement over proprietary RAN, as the Commission in so doing would opt to favor secure, cost effective, domestic open *architecture* over that of a few dominant foreign vendors using proprietary *architecture*. As the Acting Chairwoman put it, “Today, most carriers rely on just a few European or Chinese equipment makers to build out their networks—and that market is shrinking.”⁹

⁶ Supply Chain Second Report and Order, 35 FCC Rcd at 14422 (Statement of Commissioner Rosenworcel).

⁷ *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs Wireline Competition Bureau Seeks Comment on a Report and Preliminary Cost Catalog and Replacement List to Help Providers Participate in the Supply Chain Reimbursement Program*, WC Docket No. 18-89, Public Notice, DA 21-355, Attach 1 (WCB Mar. 25, 2021) (Draft Report).

⁸ Draft Report at 31.

⁹ *Id.*, 35 FCC Rcd at 14422 (Statement of Commissioner Rosenworcel).

Indeed, for these reasons, prioritizing funding for those operators choosing Open RAN equipment and services for reimbursement would raise no issues under, and would be wholly consistent with, the neutrality provision of the Secure Networks Act.¹⁰ That provision only requires that the replacement list be technology neutral and not advantage the use of reimbursement funds for capital expenses over operational expenses.¹¹

Accordingly, because Open RAN affords the opportunity to promote domestic innovation and manufacturing—at lower cost than proprietary RAN equipment—while at the same time securing and future proofing our 4G LTE and 5G networks, the Commission should prioritize funding to those operators seeking to use Open RAN over proprietary RAN within each prioritization category all within the bounds of the Secure Networks Act.

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¹⁰ See 47 U.S.C. § 1603(d)(1)(B).

¹¹ *Id.*; see also 47 C.F.R. § 1.50006(c).