Before the
Federal Communications Commission
Washington DC

In the Matter of	)	FCC-23-83
Safeguarding and Securing the Open Internet	)	WC Docket No. 23-320

COMMENTS ON NOTICE OF PROPOSED RULEMAKING

December 14, 2023

FILING PARTIES

The parties listed below collectively constitute the "Filing Parties," have granted permission to submit these Comments on their behalf, and join together to submit these Comments:

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Executive Summary

The proposed rulemaking (the "NPRM")[1] may be well-intentioned but would have unfortunate and inappropriate effects in one significant respect: it would result in additional preemption and/or limitation on local authority over land use and zoning for wireless facilities under three sections of the Communications Act of 1934, as amended (the "Act"), §224, §253, and §332. We propose below an approach for the Commission to achieve its net neutrality goals without additional preemption on local authority over wireless facilities.

Data-Only Mobile Service

1. Reclassification of mobile-provided Broadband Internet Access Service (BIAS) from private mobile service to commercial mobile service, along with the revised definition of "public switched network," would bring data-only mobile services within 47 U.S.C. § 332(c)(1) (common carrier commercial mobile service) rather than its present categorization in § 332(c)(2) (non-common carrier private mobile service). This change would have downstream effects on mobile BIAS's current treatment in § 332(c)(7), which sets out preservation of local authority. At present data-only mobile services fall completely outside the coverage of § 332(c)(7). Congress made the decision in 1993 and again in 1996 to not preempt or limit local zoning authority over wireless data-only mobile services. This Commission cannot and should not do what Congress expressly and intentionally refused to do.[2]
2. The Commission should not re-classify any mobile data-only service. If the Commission implements net neutrality for mobile data-only service, it should do so under Title III (and other statutory authorities), under which it has statutory authority, without invoking Title II or imposing common-carrier duties or rights.[3]
3. The Commission should not adopt the proposed change to "Public switched network." IP numbers do represent a form of addressing, but they are far different than E.164 telephone numbers as a matter of law and as a matter of technology. Congress has recognized the difference between IP numbers and telephone numbers.
    a) Congress gave direct regulatory authority over telephone numbers to the FCC in §§ 227b-1 and 251(e) (among other provisions). The Commission has authority over **all** E.164 addresses – even those used for "private" and non-publicly routable purposes. Congress has *not* given FCC authority over IP numbering. Instead, public and private IP numbers are managed by the Internet Assigned Number Authority, under the supervision of the Internet Corporation of Assigned Names and Numbers, which is in turn supervised via a contract with the Commerce Department. In the United States, the American Registry of Internet Numbers is the relevant

[1] Safeguarding and Securing the Open Internet
https://www.fcc.gov/document/fcc-start-proceeding-reestablishing-open-internet-protections-0
[2] We take no position on reclassification of fixed wired services.
[3] Accordingly, the bases for authority over mobile data-only service in Appendix A should be sections 301, 302, 304, 307, 309, 316 (excluding 332) of the Act.

Regional Internet Registry. Congress has not granted any authority to the FCC over IP numbers, in great contrast to traditional telephone numbers.

b) There are also functional differences. Telephone numbers in the legacy network are used only to set up and tear down calls, whereas one or more public IP numbers relate to and are used during the entire session. In the mobile world, telephone numbers are hard-connected to the device (or the SIM card in the device), but a user's public-facing IP number can change several times, even during a single session, for example, when the user moves among physical networks, e.g., from a mobile network to a Wi-Fi LAN or WAN, or if the user attaches an Ethernet cable to the device and connects on a wired network. IP numbers are not properly characterized as a part of the public switched network and the Commission's proposal in ¶89 is flawed.

4. If, notwithstanding these comments, the Commission does reclassify mobile data-only BIAS as a commercial mobile service, it should forbear from the application of §332(c)(7) to that service. If the Commission reclassifies mobile data-only BIAS as a common carrier or telecommunications service, it should forbear from the application of §224, §253, and §332(c)(7).

Fixed Wireless Data Service

5. The NPRM also proposes to reclassify fixed wireless BIAS (whether terrestrial, licensed, unlicensed, satellite, or otherwise) from being an "information service" under Title I of the Act to being a "telecommunications service" under Title II of the Act.[4] This would make such wireless services subject to the provisions of § 224 and § 253 of the Act.
6. The Commission should not classify any fixed wireless BIAS as Title II. The Commission can achieve its net neutrality goals for fixed wireless under Title III (without invoking Title II) or imposing common-carrier duties or rights on any fixed wireless BIAS. [5]

Further Analysis of Personal Wireless Service

7. NPRM ¶87 and ¶90 seek comment on the new definition of interconnected service. We disagree with the Commission's proposal and its approach. The Commission should not alter the current definition of "interconnected service" in 47 CFR 20.3.

a) The Commission asserts that the existing definition of public switched network, which is used to determine what is an "interconnected service" for purposes of § 332(d)(2), does not comport with new technology that has arisen since the 2018 *RIF Order*. However the proposed definition of interconnected service is the same as was used in the 2015 net neutrality order. The rationale does not fit the history.

b) The Commission claims an increased "ubiquity" of mobile data is another basis for expanding the meaning of an interconnected service (¶87). However, smartphone penetration has barely changed (by less than 3% of the population) since 2018.[6] Not only has there been no material change in the ubiquity of mobile data, but ubiquity is not necessary or sufficient to merit

[4] NPRM ¶61

[5] The bases for authority for fixed wireless BIAS in Appendix A should be sections 301, 302, 304, 307, 309, 316 (excluding 332) of the Act.

[6] Smartphone penetration rate as share of the population in the United States from 2010 to 2021 https://www.statista.com/statistics/201183/forecast-of-smartphone-penetration-in-the-us/

reclassification. Many information services are ubiquitous, yet the Commission is not proposing to classify them as an interconnected service.

c) The Commission also cites an increase in the number of megabytes transmitted via mobile data traffic as justification for reinventing the definition of interconnected service. However it provides no explanation for why more traffic justifies its approach. (¶87)

d) ¶88 alleges that expanding the meaning of interconnected service was consistent with *"Congress' objective in section 332 of the Act in creating a symmetrical regulatory framework among similar mobile services that were available to the public."* The citation for this characterization of Congressional intent is the Commission's 2015 net neutrality order, which cites an ex parte communication from CTIA – the wireless lobby.[7] In that letter, CTIA actually argues that Congress intended to prohibit mobile BIAS from being regulated under Title II — the opposite of what the Commission is now claiming.[8] The fact is mobile voice and mobile data are not functionally equivalent services, and as described below, Congressional intent was clearly the exact opposite of that asserted by the Commission.

e) The 2015 net neutrality order incorrectly describes §332(d)(3), by claiming a private mobile service includes any "services not effectively available to a substantial portion of the public" [internal punctuation omitted].[9] In fact, the statute defines private mobile services as any mobile service which is not a commercial mobile service (the definition of which includes multiple tests, not just availability to the public). There are many private wireless services that are available to the public or a substantial portion thereof, but that does not make them commercial mobile services.

8. We oppose the NPRM's proposed amendment to the definition of commercial mobile radio service: [bolded text indicates the FCC's proposed revision under the NPRM]:[10]

   The functional equivalent of such a mobile service described in paragraph (a) of this ***definition,*** *section****, including a mobile broadband Internet access service as defined in § 8.2 of this chapter.***

9. Congress added Section 332 subsection (c)(7) under the TCA, in 1996. This legislation built on the Omnibus Budget Reconciliation Act of 1993 amendments to this section.[11] Both before and after 1993, mobile "data" services – including those that served as precursors to internet access service – were classified as "private land mobile services" (before 1993) and "private mobile service" (after 1993). They were not classified as common carrier unless they were interconnected with the public switched network and deemed to be "commercial mobile service." This was the state of the law in 1996 when Congress drafted § 332(c)(7). Congress intended to impose the (c)(7)(B) local authority

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[7] 2015 Order, ¶398,399, which says *"As CTIA recognizes, Congress's intent in enacting section 332 was to create a symmetrical regulatory framework among similar mobile services"* citing CTIA Feb. 10, 2015 Ex Parte Letter.

[8] CTIA February 10, 2015 ex parte letter relating to the 2015 net neutrality order.

"In sharp contrast, as CTIA and others have explained at length, Congress expressly prohibited the Commission from treating services like mobile broadband as common carrier offerings subject to Title II."

In addition, the word "symmetrical" does not appear anywhere in this letter, as erroneously stated by the Commission.

https://www.fcc.gov/ecfs/search/search-filings/filing/60001015608

[9] 2015 *Order* ¶398

[10] NPRM Appendix A, 47 CFR §20.3 (proposed)

[11] § 6002, page 82

https://www.congress.gov/103/statute/STATUTE-107/STATUTE-107-Pg312.pdf

limitations *only* on "commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services" and did not intend to impose the limitations on private mobile service (under which all mobile data were classified at the time). Reclassifying mobile wireless BIAS will therefore violate Congressional intent and the balance struck in 1996 to preserve local zoning authority.

10. NPRM ¶85 and ¶92 propose that, even if mobile BIAS does not meet the definition of commercial mobile service, the Commission finds that it is the functional equivalent of a commercial mobile service and therefore not private mobile service. We disagree with this finding. As outlined in the preceding paragraph, Congressional intent was, and remains, for mobile data service to be classified as private mobile service. Data-only mobile BIAS is a mobile service, but that does not mean it is functionally equivalent to, a commercial mobile service. As the Commission held in its order promulgating rules implementing the 1993 amendments, the "principal inquiry" for functional equivalence is whether the putative private service is "a close substitute" for commercial mobile service. Specifically, would a price change to commercial mobile service, which also includes full native voice capability, prompt customers to move to a data-only mobile service?[12] The NPRM discusses substitutability between mobile and fixed BIAS, but it does not mention or analyze substitutability between full-service mobile – with telephone numbers and native voice capability – and data-only mobile that does not have the ability to natively send and receive phone calls. There is, for example, no information or effort to consider elasticity of demand for either full-service or data-only service. We suggest that most consumers would not respond to a price increase for fully-functional mobile (which includes native telephony) by purchasing data-only mobile and then taking the bother to secure (and separately pay for) over-the-top voice capability, which lacks the quality of service of native telephony.

Impact on State and Local Authority

11. The proposed rule would result in additional preemption and/or limitation of local authority over land use and zoning of wireless facilities.[13] To be clear, in response to ¶47, ¶48, ¶95 and ¶96, and for the reasons set out herein, we oppose any action by the FCC that preempts or diminishes state and local authority over wireless facilities, including without limitation regulating their placement, construction, or modification. Data-only mobile services (which are not an "interconnected service" under today's definition, and/or do not hold out as common carriers) are not at present covered by § 332(c)(7) and therefore not subject to the "limitations" on local zoning authority in § 332(c)(7)(B). Neither fixed wireless nor mobile BIAS are telecom services and are not currently regulated under §224 or §253. The Commission should not end-run Congress' decision to retain local land use authority for fixed BIAS or data-only mobile services.

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[12] In the Matter of Implementation of Sections 3(n) and 332 of the Communications Act Regulatory Treatment of Mobile Services, 9 FCC Rcd. 1411, 1447-1448 ¶ 90 (1994) https://www.fcc.gov/document/implementation-sections-3n-and-332-communications-act-0

[13] NPRM, paragraph 95. FCC states *"We also expect that our proposed regulatory approach could make it more **straightforward** to rely on various express preemption provisions in the Act, such as…the preemption that arises when state requirements hinder provision of services covered under sections 253 or 332(c)(7) of the Act." [emphasis added]*

Further Detail on Recommendations for FCC

12. To reiterate, we take no position on net neutrality *per se.* If the Commission votes to proceed with implementing net neutrality, it must find a way to do so without expanding preemption of local zoning authority over wireless facilities.

The following proposals are not restrictive – FCC may find other approaches to implement net neutrality without increasing preemption over local zoning authority:

13. **Use "Data Roaming" approach.** The DC Circuit ruling in *Cellco Partnership v. FCC* (DC Circuit, 2012) is consistent with and supports our proposal; it affirmed that the FCC has statutory authority to regulate mobile data under Title III. The *Cellco* court upheld the FCC's regulation of data roaming, while at the same time ruling that wireless data was not a common carrier service.[14] The Commission could implement nondiscrimination rules and enforcement measures that do not reach the level of common carrier regulation.
14. The Commission should not classify any fixed wireless BIAS as Title II. The Commission can achieve its net neutrality goals for fixed wireless BIAS under Title III (without invoking Title II) or imposing common-carrier duties or rights on any fixed wireless BIAS.
15. Assuming the Commission proceeds with classifying wired broadband under Title II, it should amend the proposed definition of BIAS by striking the words "**or radio**", as shown:[15]

    > *Broadband Internet access service* means a mass-market retail service by wire ~~**or radio**~~ that provides the capability to transmit data…" [Strikethrough text indicates our proposed deletion, responsive to NPRM ¶59]

16. **Tailored forbearance.**[16] If FCC proceeds with classifying wireless BIAS as Title II, at a minimum it should exercise its authority under 47 USC § 160 and expressly forbear from:
    a) the application of §224, § 253(a)-(d) and § 332(c)(7)(B) with respect to data-only mobile based BIAS; and
    b) the application of §224 and § 253(a)-(d) with respect to fixed wireless BIAS.

The NPRM (¶98) already proposes to forbear from dozens of Title II provisions, as it did in forbearing from the application of 27 provisions under the 2015 *Order.*[17]

Disability Considerations

17. The NPRM seeks comment on the impact on persons with disabilities. By expanding preemption of local authority, and the resulting proliferation of wireless facilities, the Commission will create inevitable and foreseeable harm to persons with EMS disability. The NPRM does not grapple with the

[14] *Cellco Partnership v. Fed. Commc'ns Comm'n*, 700 F.3d 534 (D.C. Cir. 2012) https://casetext.com/case/cellco-pship-v-fed-commcns-commn
[15] NPRM Appendix A, 47 CFR § 8.2
[16] Responsive to NPRM ¶104, ¶106, ¶110, ¶112. ¶107 seeks comment on forbearance specifically for purposes of national security, which would benefit from our proposed forbearance.
[17] NPRM ¶10.

disproportionate impacts of wireless facilities on vulnerable populations, such as women, children, people of color, people with lower incomes, and the disabled.

> ¶54 *Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well as the scope of the Commission's relevant legal authority.*
>
> ¶55 *We seek comment on the impact, if any, that reclassification may have on the Commission's goals to ensure that BIAS remains accessible to individuals with disabilities.*
>
> *121. We further believe our proposed conduct rules would have particular benefits for the safety of individuals with disabilities.*

18. The NPRM adversely impacts vulnerable populations described above, including without limitation, by:
    a) the installation of additional wireless facilities for the provision of fixed and data-only mobile wireless expands the land area and public spaces that become inaccessible to these vulnerable populations – even constructively evicting people from their own homes.
    b) Promoting the idea that data-only mobile or fixed wireless is a suitable substitute for wired broadband leads to a cascade of policy decisions at the federal, state, and local levels, which singly and/or collectively will lead to more residents being served exclusively with mobile based networks and/or fixed wireless. This outcome will create a new digital divide, in which vulnerable populations are unable to subscribe to wireless BIAS because of its impact on their disability, and yet have no alternative provider of wired BIAS. The cascade of decisions includes federal grants, such as the BEAD program, state sub-grants to fixed wireless providers, and local land-use decisions that may adopt mobile solutions and/or fixed wireless instead of deploying wired alternatives.
19. The FCC's recent digital discrimination order declined to include disability as a protected class, defining discrimination as being on the basis of 6 factors: income level, race, ethnicity, color, religion, or national origin.[18] FCC says it decided not to include disability as a basis because the statute only lists these 6 specific classes.[19] However at the same time, FCC acknowledges that the statute allows the FCC to expand the definition of discrimination on the basis of "other factors the Commission determines to be relevant based on the findings in the record developed from the rulemaking,"[20] and even cited significant record evidence in support of including disability , writing "*the record is replete with evidence that classes beyond the six listed groups face varying broadband-related challenges.*"[21]
20. Regardless of the FCC's determination in the digital discrimination order, it clearly has statutory authority under the Infrastructure Investment and Jobs Act § 60506(c)(3) to protect disabled persons

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[18] *Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination*, FCC-23-100, Appendix A, final rules 47 CFR 16.2(g) and 16.3(b)
https://www.fcc.gov/document/fcc-adopts-rules-prevent-and-eliminate-digital-discrimination

[19] Id. ¶94-95

[20] Id, fn 302, citing Infrastructure Investment and Jobs Act § 60506(c)(3)
https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf

[21] Id, fn 301

from the direct and foreseeable harms caused by the proliferation of wireless facilities that would be unleashed by the NPRM, if promulgated as proposed.

Other Public Interest Consideration: Energy Consumption

21. Energy consumption for wireless infrastructure has been reported at ten times that of fiber optics (with "5G" infrastructure requiring 2 to 3.5 times the energy needed for 4G towers).[22] Energy consumption from "5G" infrastructure "*is expected to increase 61x between 2020 to 2030* due to the energy demands of network elements like massive MIMO[23] and edge servers [and] the proliferation of 5G cell sites."[24] At one point, telecom carriers advised their customers to turn off 5G to save battery life on their devices.[25]

Respectfully submitted,
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[22] https://www.emfacts.com/2020/09/5g-base-stations-use-up-to-three-and-a-half-times-more-energy-than-4g-infrastructure/
https://spectrum.ieee.org/will-increased-energy-consumption-be-the-achilles-heel-of-5g-networks
https://www.umweltbundesamt.de/en/press/pressinformation/video-streaming-data-transmission-technology

[23] MIMO means Multiple-Input Multiple-Output and "is a wireless technology that uses multiple transmitters and receivers to transfer more data at the same time" by combining "data streams arriving from different paths" in contrast to Single-Input Single-Output (SISO) technology which "can only send or receive one spatial stream at a time." See, https://www.intel.com/content/www/us/en/support/articles/000005714/wireless/legacy-intel-wireless-products.html.

[24] https://ehtrust.org/report-5g-to-increase-energy-consumption-by-61-times/.

[25] "Why are Carrriers Telling Us to Turn Off 5G?" PC Magazine, March 5, 2021, https://www.pcmag.com/opinions/why-are-carriers-telling-us-to-turn-off-5g.