

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of )  
 )  
Expanding Access to Mobile Wireless Services ) WT Docket No. 13-301  
Onboard Aircraft )  
 )

**REPLY COMMENTS OF T-MOBILE USA, INC.**

Russell H. Fox  
Angela Y. Kung

Kathleen O'Brien Ham  
Steve B. Sharkey  
Eric Hagerson

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND  
POPEO, PC  
701 Pennsylvania Ave., NW  
Suite 900  
Washington, DC 20004  
(202) 434-7300

T-MOBILE USA, INC.  
601 Pennsylvania Avenue, N.W.  
Washington, DC 20004  
(202) 654-5900

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T-Mobile USA, Inc. (“T-Mobile”)<sup>1/</sup> submits these reply comments in response to the initial comments of others in the above-referenced proceeding in which the Commission proposes to increase consumer access to mobile wireless services onboard aircraft through an Airborne Access System (“AAS”).<sup>2/</sup> The record demonstrates that the issue of whether to permit any wireless services onboard aircraft should be left to the expert agencies on aviation operations and safety and aviation consumer protection – the Federal Aviation Administration (“FAA”) and Department of Transportation (“DoT”), respectively. However, if the FAA and DoT decide to permit onboard, in-flight communications, AAS service providers should be treated like other wireless communications providers and subject to roaming and other important obligations.

**I. INTRODUCTION AND SUMMARY**

T-Mobile supports the vast majority of commenters that assert, as an initial matter, that the issue of whether voice services should be permitted onboard aircraft is better left to the FAA and DoT. T-Mobile also agrees that if the FAA and DoT decide to permit onboard communications, the Commission should not require aircraft station operators to obtain licenses for AAS services; instead the licensing requirement should lie with the AAS service provider.

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<sup>1/</sup> T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded company.

<sup>2/</sup> See *Expanding Access to Mobile Wireless Services Onboard Aircraft*, Notice of Proposed Rulemaking, 28 FCC Rcd. 17132 (2013) (“*NPRM*”).

AAS service providers argue that AAS operations should be authorized by the FCC either through a license exemption, an unlicensed framework under Part 15 of the FCC's rules, or a license-by-rule approach under Part 95 of the FCC's rules. Regardless of whether aircraft operators or third parties are authorized to provide in-flight mobile connectivity ("IMC") operations, the AAS service providers also urge the Commission to refrain from imposing separate service requirements, claiming that since agreements for AAS service will be with wireless carriers, the FCC can rely on those carriers to ensure that carrier-related obligations are met. T-Mobile, however, suggests that the Commission reject these proposals and treat AAS service providers like other wireless service providers. To ensure regulatory parity, AAS service providers should be required to obtain secondary, non-exclusive licenses and be subject to the same regulatory obligations as other wireless service providers, including roaming and certain public safety requirements.

In addition, T-Mobile agrees with commenters that the FCC's rules for AAS services should capture future spectrum bands that have not yet been made available for mobile broadband services. It is particularly important for the AASs' network control unit ("NCU"), which along with an airborne picocell would control devices onboard aircraft and prevent the connection between those devices and terrestrial networks, to include a range of frequencies to protect terrestrial networks from harmful interference by communications onboard aircraft. T-Mobile also agrees that before it decides whether AAS services should be permitted, the FCC should conduct additional technical analyses that take into consideration the unique spectrum environment and wireless marketplace in the U.S.

## **II. IT IS MORE APPROPRIATE TO REGULATE AAS SERVICE PROVIDERS AS COMMERCIAL WIRELESS SERVICE PROVIDERS**

### **A. AAS Service Providers Should Be Required to Obtain FCC Authorizations.**

The FCC proposes regulating communications using an AAS under Part 87 of the rules. In particular, it would require aircraft operators to obtain an aircraft station license, or to modify their existing license, to provide airborne commercial mobile services through an AAS.<sup>3/</sup> While licensees would be permitted to contract with third parties to install and operate the AAS onboard a licensed aircraft, the aircraft station licensee would retain sole responsibility for ensuring that the equipment is installed and operated in accordance with the FCC's rules.<sup>4/</sup>

AAS service providers disagree with the Commission's proposed approach. For instance, AeroMobile Communications Limited ("AeroMobile") suggests that the FCC should authorize AAS operations either through a formal license exemption, subject to compliance with applicable technical requirements, or through the adoption of AAS technical rules in a new subpart to Part 15 of the FCC's rules.<sup>5/</sup> Panasonic Avionics Corporation ("Panasonic") similarly recommends that the Commission exempt AAS equipment from individual licensing and instead simply adopt technical rules that would allow AAS service providers to operate on an unlicensed basis.<sup>6/</sup> OnAir S.A. ("OnAir") proposes that the FCC employ a license-by-rule approach by amending Part 95 of its rules to incorporate the technical parameters of AAS operations.<sup>7/</sup>

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<sup>3/</sup> See *NPRM* ¶¶ 43-44.

<sup>4/</sup> See *id.* ¶ 44.

<sup>5/</sup> See Comments of AeroMobile Communications Limited, WT Docket No. 13-301, at 9-11 (filed Feb. 14, 2014) ("AeroMobile Comments"); see also Comments of The Alliance of Passenger Connectivity, WT Docket No. 13-301, at 8-9 (filed Feb. 14, 2014) ("APC Comments").

<sup>6/</sup> See Comments of Panasonic Avionics Corporation, WT Docket No. 13-301, at 6-8 (filed Feb. 14, 2014) ("Panasonic Comments").

<sup>7/</sup> See Comments of OnAir S.A., WT Docket No. 13-301, at 15-18 (filed Feb. 14, 2014) ("OnAir Comments").

Neither the FCC’s proposal nor the approaches proposed by the AAS service providers are appropriate for AAS services. The FCC’s proposed structure fails to recognize and appropriately balance the responsibilities between aircraft operators and AAS service providers. As envisioned by the Commission, a third party – not the aircraft operator – would provide AAS service while aircraft operators would merely be responsible for maintaining equipment onboard aircraft. The aircraft itself would merely serve as the infrastructure that would house the AAS. Issuing licenses to aircraft operators and making them responsible for complying with the FCC’s rules when they have little to do with providing service would produce a curious result – an outcome that would be like the FCC issuing licenses to infrastructure and tower companies for wireless services actually provided by carriers.<sup>8/</sup> It is antithetical to the Commission’s requirement that licensees control the services for which they are authorized for aircraft operators to hold a license for a service that others will provide.<sup>9/</sup>

Commenters agree that requiring aircraft operators to obtain licenses is unnecessary and illogical. As AeroMobile explains, “although airlines install and operate AAS equipment to support IMC offerings to their passengers, they are not involved in the delivery of IMC

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<sup>8/</sup> See *An Inquiry Into the Commission’s Policies and Rules Regarding AM Radio Service Directional Antenna Performance Verification*, Third Report and Order and Second Order on Reconsideration, 28 FCC Rcd. 12555, ¶ 10 (2013) (“[T]ower owners that do not hold Commission authorizations are not directly responsible for complying with the new rules.”).

<sup>9/</sup> See, e.g., *Amendment of Parts 2 and 90 of the Commission’s Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool, Implementation of Sections 3(n) and 322 of the Communications Act*, Third Order on Reconsideration, 11 FCC Rcd. 1170, ¶ 4 (1995) (“[T]he licensee remains in control of its spectrum and remains responsible for insuring that the coverage requirements are met.”); *NOWATA PUBLIC SCHOOLS Petition for Reinstatement of License for Educational Broadband Service Call Sign WLX596 and Late-Filed Request for Extension of Substantial Service Deadline*, Order on Reconsideration, 28 FCC Rcd. 13861, ¶ 7 (2013) (“It is the responsibility of the licensee to ensure that it is in compliance with the terms of its license.”); *Applications for Consent to the Transfer of Control of Licenses; XM Satellite Radio Holdings Inc., Transferor To Sirius Satellite Radio Inc., Transferee*, Memorandum Opinion and Order, 25 FCC Rcd. 14779, ¶ 41 n.23 (2010) (“As the licensee, Sirius XM remains ultimately responsible for all content broadcast on its service.”).

applications to the end users. . . . Thus, there is no basis to impose service requirements on the aircraft operator of AAS equipment.”<sup>10/</sup> The Alliance for Passenger Connectivity (“APC”) likewise notes that because “airlines that install AASs to offer IMC as a connectivity amenity to their passengers are not involved in the delivery of mobile applications to the end users . . . there is no basis to impose service requirements on the airline as a Part 87 license-holder or otherwise.”<sup>11/</sup>

A license-exempt or unlicensed approach, which the AAS service providers prefer, is also flawed and would fail to take into consideration the unique circumstances here. The Commission’s proposal allows an unaffiliated third party to use carriers’ exclusive-use, licensed frequencies. While T-Mobile supports innovative ways for expanding consumers’ access to broadband services, allowing potentially unidentified AAS service providers access to wireless carriers’ spectrum holdings would be potentially disruptive to carriers’ operations. Carriers should control how their frequencies are employed and by whom. At a minimum, the Commission should require the entities using carriers’ frequencies to be licensed, rather than simply allowing open access to carrier assets. Those AAS licenses should be issued on a secondary, non-interference basis to wireless carriers and should be contingent upon a demonstration that the AAS service providers have an agreement with an aircraft operator to locate their equipment onboard aircraft.

This approach has multiple benefits. *First*, issuing authorizations to AAS service providers would align the license holder with the provider of service – the usual approach to Commission authorization. *Second*, a licensing approach would afford greater protection to carriers by identifying the entity that would be using carrier frequencies, permitting quicker

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<sup>10/</sup> AeroMobile Comments at 16; *see also* Panasonic Comments at 10.

<sup>11/</sup> APC Comments at 11.

resolution of interference and related technical matters. If the Commission wishes to permit a third party to use carriers' frequencies, it should not open that opportunity on an unrestricted basis; it should carefully control and identify those entities. *Third*, issuing authorizations would allow the Commission to identify AAS service providers, enabling it to more quickly take any required actions to protect consumers. *Fourth*, because the service that AAS service providers will offer will be no different than those provided by terrestrial carriers, a licensing regime would ensure regulatory parity. *Finally*, a licensing approach would better ensure that AAS service providers meet the important carrier obligations discussed below.

**B. AAS Service Providers Should Be Subject to Requirements Applicable to Wireless Service Providers.**

Because AAS service providers will offer a service similar to their terrestrial counterparts, they should be subject to the same regulatory obligations, including roaming and public safety requirements. In most respects, AAS service providers will act as Commission-mandated lessees of carriers' spectrum, providing their own facilities-based service. Other spectrum lessees of terrestrial services are generally required to comply with the same regulatory obligations as lessors, and a similar result should apply to AAS service providers. Consumers will perceive the service they receive in-flight and onboard aircraft as an extension of their terrestrial wireless services. Indeed, the AAS service providers acknowledge that AAS service "simply extends the reach of mobile broadband capabilities into the aircraft cabin using the passenger's carrier-provided mobile device."<sup>12/</sup> It is therefore important that such services are treated similarly.

Accordingly, T-Mobile supports the FCC's proposal that any mobile wireless services offered by AAS service providers should be subject to, for example, obligations under the

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<sup>12/</sup> AeroMobile Comments at 17; *see also* APC Comments at 11.

Communications Assistance for Law Enforcement Act (“CALEA”).<sup>13/</sup> T-Mobile further suggests that the Commission require AAS service providers, like terrestrial roaming partners, to comply with “basic” 911, “enhanced” 911 (“E911”), and other public safety-related requirements, even if a different approach is required for airborne 911 calls.<sup>14/</sup> As The Boeing Company (“Boeing”) explains, the Commission should ensure that CALEA and related requirements are applicable to airborne wireless service operators because “it is appropriate to maintain parity between similarly situated services.”<sup>15/</sup> Without these requirements, lives and safety could be jeopardized.

The AAS service providers suggest that because they will enter into roaming agreements with wireless carriers to provide service, the FCC need not adopt separate service rules for AAS service providers. They argue that the FCC can instead rely on the wireless carriers to comply with all relevant regulatory obligations. AeroMobile, for instance, asserts that the Commission should avoid imposing separate service obligations on AAS service providers because it can “reasonably rely on the existing carrier licensing to cover any ‘service’ authority” and “the participation of carriers ensure that other important carrier-related obligations can be met.”<sup>16/</sup> Panasonic similarly adds that “[t]he Commission can reasonably rely . . . on existing carrier

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<sup>13/</sup> See *NPRM* ¶ 75.

<sup>14/</sup> See 47 C.F.R. § 20.18 (requiring carriers to deliver all wireless 911 calls to the appropriate Public Safety Answering Point (“PSAP”) and the calling party’s telephone number and location information to the PSAP).

<sup>15/</sup> Comments of The Boeing Company, WT Docket No. 13-301, at 14 (filed Feb. 14, 2014) (“Boeing Comments”).

<sup>16/</sup> AeroMobile Comments at 17; see also OnAir Comments at 27 (stating that wireless carriers will enter into contracts with passengers and thus, as common carriers, will provide consumers with Title II protections for onboard communications); APC Comments at 11.

licensing to ensure that any service-related concerns vis-a-vis end-users will be appropriately addressed.”<sup>17/</sup>

The AAS service providers’ proposed reliance on wireless carriers, however, is inappropriate. The AAS service providers cannot rely on wireless carriers to meet certain important obligations because wireless carriers have no control over the AAS service providers’ facilities. Wireless carriers cannot, for example, satisfy basic or E911 obligations for AAS service providers because, as the FCC notes, the NCU of the AAS will increase the noise floor in the aircraft such that mobile devices onboard will be unable to place 911 calls outside the aircraft.<sup>18/</sup> Wireless carriers will have no ability to control the infrastructure on which these or related obligations rely – the infrastructure will be controlled by the AAS service provider.

Moreover, the basis for the AAS service provider’s ability to use carrier frequencies itself must be subject to regulation and not assumed. Roaming services between carriers are regulated. Commercial mobile radio service carriers, for example, are required, pursuant to the FCC’s rules and Title II of the Communications Act, to provide to other carriers automatic roaming for interconnected voice services, as well as push-to-talk and text-messaging services if certain conditions are met, upon reasonable request and on a just, reasonable, and non-discriminatory basis.<sup>19/</sup> Facilities-based providers of commercial mobile data services are also required under

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<sup>17/</sup> Panasonic Comments at 11.

<sup>18/</sup> See *NPRM* ¶ 37.

<sup>19/</sup> See *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd. 15817 (2007); see also *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, Order on Reconsideration and Second Further Notice of Proposed Rulemaking, 25 FCC Rcd. 4181 (2010); 47 U.S.C. §§ 201, 202.

the FCC's rules and Title III of the Act to offer data roaming arrangements to other providers of such services on "commercially reasonable terms and conditions."<sup>20/</sup>

As facilities-based providers of wireless services, AAS service providers must be subject to similar regulations.<sup>21/</sup> Otherwise, they may choose not to offer roaming or may either unreasonably discriminate among providers or fail to offer roaming on commercially reasonable terms and conditions. Potentially discriminatory or commercially unreasonable behaviors are particularly problematic because there are currently only a handful of AAS service providers and no competitive marketplace for onboard communications services. If carriers are unable to reach an acceptable roaming agreement with AAS service providers, they may be completely shut out of this market, potentially putting them at a competitive disadvantage to carriers that have AAS roaming agreements.

Similarly, because AAS service providers will offer a single access point to aircraft, they must be prohibited from handling roaming traffic contrary to the Commission's rules. As T-Mobile demonstrated in the context of the IP transition, when interconnection points are in the control of only one or a few providers, essentially creating chokepoints to their networks and facilities, such providers are able to engage in anti-competitive behavior with respect to those

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<sup>20/</sup> *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, Second Report and Order, 26 FCC Rcd. 5411, ¶¶ 40-41 (2011) ("Data Roaming Order"), *aff'd sub nom. Cellco P'ship v. FCC*, 700 F.3d 534 (D.C. Cir. 2012); *see also Cellco P'ship*, 700 F.3d at 542-43 (discussing Sections 303(b), 303(r), and 316 as sources of authority for the data roaming rule); *Data Roaming Order* ¶¶ 63-64 (explaining that imposition of the data roaming rule is supported by 47 U.S.C. §§ 301, 303, 304, 309, 316, 1302).

<sup>21/</sup> Indeed, *all* AAS service providers, including existing wireless carriers proposing to provide in-flight connectivity, must be subject to similar rules and obligations that prevent them from engaging in discriminatory behavior and foreclosing other carriers from entering into the AAS service market. These obligations are particularly important where aircraft may not be able to physically support more than one carriers' equipment. *See, e.g.*, AT&T Press Release, *Mobilizing the Sky: AT&T Building 4G LTE In-Flight Connectivity Service* (Apr. 28, 2014), *available at* [http://about.att.com/story/mobilizing\\_the\\_sky\\_att\\_building\\_4g\\_lte\\_in\\_flight\\_connectivity\\_service.html](http://about.att.com/story/mobilizing_the_sky_att_building_4g_lte_in_flight_connectivity_service.html).

networks and facilities.<sup>22/</sup> The Commission must not repeat its past mistakes and ensure that AAS service providers are prohibited from taking such actions going forward.

### **III. COMMENTERS AGREE THAT THE FREQUENCIES AAS LICENSEES ARE ALLOWED TO USE SHOULD NOT BE LIMITED**

T-Mobile joins other commenting parties in suggesting that the list of frequencies that AAS licensees will be permitted to use under proposed Section 87.206(a) of the rules should include spectrum available, and expected to become in the near future, for commercial wireless services.<sup>23/</sup> For instance, AAS service providers should be permitted to operate on the frequencies in the 600 MHz band, which are expected to be made available for commercial mobile services through the FCC's upcoming incentive auction as early as the middle of 2015.<sup>24/</sup> In addition, AAS service providers should be allowed to operate on the frequencies in the AWS-3 bands, which the Commission is currently planning to auction and license by February 2015.<sup>25/</sup>

AAS licensees should be permitted to employ *any* frequency band that wireless carriers are authorized to use, and that has been approved by the FAA, for which they receive a roaming request. Such an approach will provide greater access to wireless services for the travelling public. As CTIA correctly points out, "FCC policy should encourage any airborne access regime to include a wide variety of spectrum bands to ensure that subscribers are not left behind."<sup>26/</sup> It is

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<sup>22/</sup> See Comments of T-Mobile USA, Inc., GN Docket No. 12-353, at 9-11 (filed Jan. 28, 2013).

<sup>23/</sup> See *NPRM* ¶ 54, Appendix A.

<sup>24/</sup> See *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Notice of Proposed Rulemaking, 28 FCC Rcd. 12357 (2013); Tom Wheeler, FCC Chairman, *The Path to a Successful Incentive Auction* (Dec. 6, 2013), available at <http://www.fcc.gov/blog/path-successful-incentive-auction-0> ("I believe we can conduct a successful auction in the middle of 2015.").

<sup>25/</sup> See *Amendment of the Commission's Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands*, Report and Order, GN Docket No. 13-185, FCC 14-31 (rel. March 31, 2014); see also Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156 (2012), codified at 47 U.S.C. § 1401 *et seq.*

<sup>26/</sup> Comments of CTIA – The Wireless Association®, WT Docket No. 13-301, at 8 (filed Feb. 14, 2014) ("CTIA Comments").

also important that the NCU be required to manage all frequencies on which devices may operate in order to limit the potential for interference with terrestrial networks. As CTIA explains, “[a]irline passengers may turn on devices that will search for preferred home networks on newly authorized spectrum bands unaccounted for (and thus not masked and controlled) by in-service Airborne Access Systems . . . . If the NCU does not include a particular band, it cannot mask that band off.”<sup>27/</sup> Both passengers onboard aircraft as well as terrestrial base stations could suffer interference if all frequencies are not accounted for by the AAS.

T-Mobile also supports CTIA’s contention that once an AAS licensee receives a roaming request, it should be obligated to accommodate the frequency band covered by the request within narrow period of time.<sup>28/</sup> Without such a requirement, customers of new entrants in the wireless market operating on recently available frequencies may be foreclosed from obtaining in-flight communications services. T-Mobile recommends that AAS service providers incorporate spectrum in their system within six months of a request by a carrier to do so and approval by the FAA for the use of the frequency onboard aircraft. This represents an appropriate balance between the need to support all consumer devices and AAS service providers’ ability to accommodate such frequencies.

Some parties contend that AASs should not be required to operate on all frequencies. OnAir, for instance, argues that “there is no reason to require that systems operate over all U.S. bands” as “[t]he marketplace will drive the inclusion of the relevant bands.”<sup>29/</sup> Boeing likewise argues that while “the picocell component of AAS can effectively serve most devices using

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<sup>27/</sup> CTIA comments at 8-9; *see also* Comments of Airlines for America, WT Docket No. 13-301, at 5 (filed Feb. 14, 2014) (suggesting that the FCC’s rules should be crafted “broadly to capture future spectrum bands that have not yet been auctioned or made available for commercial mobile broadband services”).

<sup>28/</sup> *See* CTIA Comments at 9.

<sup>29/</sup> OnAir Comments at 19.

relatively few frequencies,” it “should not be required to provide service to onboard devices on all frequencies.”<sup>30/</sup> As noted above and as Boeing and others recognize, NCU’s must at least be required to manage all frequencies on which devices operate in order to limit the potential for interference to terrestrial networks.<sup>31/</sup> If the AAS service provider determines that it is unable to operate across multiple spectrum bands, it should have the burden of demonstrating why it is not technically feasible for it to do so and that it is not discriminating against or for particular carriers in including or excluding particular frequencies.

#### **IV. TECHNICAL ISSUES REQUIRE FURTHER STUDY**

The Commission acknowledges that in order for an AAS service provider to properly operate without causing harmful interference to terrestrial networks, certain technical restrictions must be enforced.<sup>32/</sup> Using the technical analyses and conclusions released by the European Conference of Postal and Telecommunications Administrations, the Commission proposes specific power limits for mobile devices, the picocell, and the NCU.<sup>33/</sup> The AAS service providers support the FCC’s use of European technical models to ensure rapid deployment, while the Commission further determines whether any U.S.-specific standards should be adopted.<sup>34/</sup> CTIA, however, asserts that the European technical studies on which the FCC relies should not be applied to the U.S. environment, because they only evaluated a few spectrum bands and air interfaces, and urges the FCC to engage in further U.S.-specific analyses.<sup>35/</sup>

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<sup>30/</sup> Boeing Comments at 14-15.

<sup>31/</sup> *See id.* at 15.

<sup>32/</sup> *See NPRM* ¶¶ 32-33.

<sup>33/</sup> *See id.* ¶¶ 34-41.

<sup>34/</sup> *See, e.g.,* AeroMobile Comments at 18-23; OnAir Comments at 11-15; Panasonic Comments at 8, 15-17.

<sup>35/</sup> *See* CTIA Comments at 4-8.

T-Mobile appreciates the FCC’s recognition that AAS service onboard aircraft presents a number of technical challenges. For instance, by raising the noise floor in the aircraft to prevent onboard user equipment to connect to terrestrial networks, the NCU could interfere with control channel operations as well as impact frame error rates on communications (traffic) channels, which could adversely affect total terrestrial system capacity. AAS operations also raise potential issues such as harmful interference to wideband technologies, the appropriate jamming signal levels of the NCU, whether aircraft window shielding is a better alternative to raising the jamming signal, and the use of handset power control via the AAS picocell. The Commission should further evaluate these issues before it permits in-flight communications onboard aircraft, keeping in mind that the primary goal should be to ensure that terrestrial operations are protected from any authorized AAS service.

T-Mobile also agrees with CTIA that, contrary to the assertions of the AAS service providers, the European technical studies on which the FCC relies do not transfer seamlessly to the U.S. environment. As CTIA points out, “there are more licensed commercial mobile bands (SMR spectrum, cellular, 700 MHz, PCS, AWS-1, WCS, AWS-4, BRS/EBS, as well as soon-to-be available bands including AWS-3 and the 600 MHz spectrum)” in the U.S. than there are in Europe.<sup>36/</sup> Moreover, wireless carriers in the U.S. use a variety of handsets with different air interfaces, *e.g.*, CDMA, GSM, UMTS, LTE, etc., which have not been evaluated.<sup>37/</sup> The Commission must engage in further analyses, including an evaluation of multiple spectrum bands and air interfaces, before determining whether and how to proceed with AAS services in the U.S.

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<sup>36/</sup> *Id.* at 6.

<sup>37/</sup> *See id.* at 7-8.

**V. THERE IS WIDESPREAD AGREEMENT THAT THE FAA AND DOT SHOULD DETERMINE WHETHER COMMUNICATIONS SERVICES SHOULD BE PERMITTED ONBOARD AIRCRAFT**

Finally, as noted above, T-Mobile agrees with the vast majority of commenters that the issue of using wireless services onboard aircraft is better left to the FAA and DoT.<sup>38/</sup> As the FCC notes, the FAA has oversight of all aspects of U.S. civil aviation, including aviation safety,<sup>39/</sup> and has already undertaken efforts to evaluate the use of portable electronic devices onboard aircraft.<sup>40/</sup> Similarly, DoT, which has declared that issues related to aviation consumer protection fall within its jurisdiction, has issued an Advanced Notice of Proposed Rulemaking seeking comment on whether to ban voice communications on passengers' mobile wireless devices on flights within, to and from the United States.<sup>41/</sup> Thus, whatever services the FCC approves should be subject to these proceedings, FAA authorization, and DoT regulations.

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<sup>38/</sup> See, e.g., AeroMobile Comments at 28-30, APC Comments at 13; Panasonic Comments at 22; Boeing Comments at 1-3; Comments of Aviation Spectrum Resources, Inc., WT Docket No. 13-301, at 6-7 (filed Feb. 14, 2014); Comments of the Consumer Electronics Association, WT Docket No. 13-301, at 7-8 (filed Feb. 14, 2014).

<sup>39/</sup> See *NPRM* ¶ 4 n.11 (adding that “[t]he [Department of Transportation] has oversight over aviation consumer protection issues”).

<sup>40/</sup> See *id.* ¶¶ 20-21.

<sup>41/</sup> See *Use of Mobile Wireless Devices for Voice Calls on Aircraft*, Advance Notice of Proposed Rulemaking, 79 Fed. Reg. 10049 (Feb. 24, 2014).

## VI. CONCLUSION

T-Mobile recognizes the utility of the FCC addressing the issues raised in this proceeding and supports these important efforts. Expanding consumers' access to mobile communications is a key component of the FCC's mission. T-Mobile, however, urges the Commission to proceed carefully and, subject to the necessary approvals from the FAA and DoT, treat AAS service providers like other wireless service providers in order to ensure fairness and the successful extension of in-flight broadband communications onboard aircraft.

Respectfully submitted,

Russell H. Fox  
Angela Y. Kung

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND  
POPEO, PC  
701 Pennsylvania Ave., NW  
Suite 900  
Washington, DC 20004  
(202) 434-7300

/s/ Kathleen O'Brien Ham  
Kathleen O'Brien Ham  
Steve B. Sharkey  
Eric Hagerson

T-MOBILE USA, INC.  
601 Pennsylvania Avenue, N.W.  
Washington, DC 20004  
(202) 654-5900

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