

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

In the Matter of)
)
700 MHZ MOBILE EQUIPMENT) RM-11592
CAPABILITY)
)
Petition for Rulemaking Regarding the Need)
for 700 MHz Mobile Equipment to be)
Capable of Operating on All Paired)
Commercial 700 MHz Frequency Blocks)

To: The Commission

COMMENTS OF VERIZON WIRELESS

John T. Scott, III
Vice President & Deputy General Counsel

William D. Wallace
Senior Counsel

Verizon Wireless
1300 I Street, N.W.
Suite 400 West
Washington, D.C. 20005
(202)589-3760

March 31, 2010

TABLE OF CONTENTS

I.	THE PETITION SHOULD BE DENIED BECAUSE IT RESTS ON ERRONEOUS FACTUAL AND TECHNICAL CLAIMS.....	2
A.	Despite The Alliance’s Unsupported Claims, 700 MHz Band Classes Were Established By An International Standards-Setting Body In An Open Process.....	2
B.	Lower And Upper 700 MHz Are Distinctly Separate Bands That Make Combining Them Into A Single Device Technically Complex And Expensive.....	4
C.	Technical Issues Make Designing Devices Using Lower 700 MHz Spectrum, Particularly The A Block, Even More Complex	7
D.	The Potential Use Of WiMAX As Well As LTE In 700 MHz Makes The Alliance’s Request Even More Problematic	9
E.	Verizon Wireless’ Plans To Deploy LTE Reflect The Technical Obstacles To Combining Upper and Lower Bands In The Same Devices.....	10
II.	THE PETITION SHOULD BE DENIED BECAUSE THE RULES IT SEEKS WOULD CONFLICT WITH KEY COMMISSION POLICY GOALS	12
A.	Granting The Petition Would Impede 4G Broadband Services.....	12
B.	Granting The Petition Would Undo The Successful Policy Of Allowing Technical Differentiation To Drive Benefits To Wireless Consumers.....	14
C.	Granting The Petition Would Hinder The Open Platform Goal For The 700 MHz C Block	15
III.	THE PETITION SHOULD BE DENIED BECAUSE IT LACKS A VALID LEGAL BASIS AND THE RULES IT SEEKS WOULD VIOLATE THE APA.....	16
A.	The Alliance’s Claims Of Violations Of The Communications Act Are Meritless.....	16
B.	The Alliance’s Reliance On The 1981 Cellular Compatibility Rule Is Misplaced.....	19
C.	The Requested Rules Would Be Inconsistent With The APA’s Ban On “Arbitrary And Capricious” Decisionmaking.....	21
IV.	CONCLUSION.....	28

SUMMARY

A group of 700 MHz A Block licensees (the “Alliance”) has petitioned the Commission to adopt rules requiring that all 700 MHz mobile devices be capable of operating across all paired commercial 700 MHz bands. There would be no better way to frustrate and delay the development of wireless broadband, and drive up costs of devices to consumers, than by taking up the Alliance’s Petition. Even beginning the rulemaking the Alliance seeks, let alone adopting the rules it requests, would impede the deployment of broadband mobile devices for 4G services and impair the delivery of the benefits of 4G technology for consumers—all in direct conflict with Congress’s and the Commission’s objectives of promoting advanced broadband services. In any event, the Alliance has offered no credible basis for beginning the rulemaking it seeks.

First, its Petition is premised on false assertions about the development of 700 MHz band plans by 3GPP, the international standards-setting group for LTE, and ignores the technical realities that drove the current 700 MHz band plans. 3GPP adopted those band plans in an open process in which the Alliance’s members could have participated. The band plans were designed to accommodate the reality that the Commission’s rules for the 700 MHz spectrum created very different paired bands that cannot easily be combined in a single device. The Upper and Lower 700 MHz bands are distinct, with separate technical issues that preclude combining them in a single device without greatly adding to the device’s complexity and cost. Moreover, the Lower 700 MHz bands have their own technical challenges for device design due to interference issues with adjacent TV and other spectrum bands. 700 MHz licensees may also adopt different technologies, including LTE or WiMAX, which would make the Alliance’s requested device requirements even more costly and impractical.

Second, adopting an “all-frequency” mandate for 700 MHz devices would conflict with at

least three Commission policies. It would undermine the Commission's recently announced broadband policy objectives, by discouraging and delaying the provision of advanced wireless broadband devices to consumers, and driving up the cost of those devices. The mandate would conflict with the Commission's longstanding and successful policy not to intervene in technical specifications for wireless devices. And it would undermine the Commission's goal to promote third-party development of innovative devices to operate on the 700 MHz C Block.

Third, the provisions of the Communications Act which the Alliance relies on as legal authority for its claims are clearly inapplicable, and there is no legal basis for the regulation it requests. To the contrary, granting the Petition would constitute an unjustified reversal of the Commission's decisions on the 700 MHz band, thereby violating the Administrative Procedure Act. In establishing the 700 MHz band plan, the Commission made the deliberate decision to divide the spectrum into diverse license blocks, based on the band's particular technical characteristics and the Commission's policy goals. The Commission not only recognized that certain 700 MHz blocks were better suited for the provision of particular services and technologies; it also adopted block-specific rules for the express purpose of encouraging different licensees to use them for different purposes. Moreover, the Commission contemplated that devices operating in some 700 MHz spectrum blocks would be available before devices operating in other 700 MHz blocks. Now, however, the Alliance is asking the Commission to abandon this approach and mandate that all 700 MHz mobile units be capable of operating over every paired commercial spectrum block. The Alliance fails to provide the requisite compelling factual showing that would permit the Commission to begin a rulemaking to reverse the policy choices it made in adopting the 700 MHz rules.

For all of these reasons, the Commission should deny the Petition.

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

In the Matter of)
)
700 MHZ MOBILE EQUIPMENT) RM-11592
CAPABILITY)
)
Petition for Rulemaking Regarding the Need)
for 700 MHz Mobile Equipment to be)
Capable of Operating on All Paired)
Commercial 700 MHz Frequency Blocks)

COMMENTS OF VERIZON WIRELESS

Verizon Wireless submits these comments in response to the Federal Communications Commission's ("FCC" or "Commission") public notice seeking comment on the Petition for Rulemaking filed by the 700 MHz Block A Good Faith Purchasers Alliance (the "Alliance").¹ The Alliance requests a rulemaking to adopt rules that would require all devices for the 700 MHz band to be capable of operating on all 700 MHz frequencies.

The Petition should be denied for three separate grounds. First, as explained below, the Alliance's claims are meritless for factual and technical reasons. Its Petition ignores the significant obstacles to designing devices that could operate across multiple 700 MHz frequencies. Second, adopting the rules it seeks would conflict with the Commission's recently

¹ See FCC, Public Notice, *Wireless Telecommunications Bureau Seeks Comment on Petition for Rulemaking Regarding 700 MHz Band Mobile Equipment Design and Procurement Practices*, RM-11592, DA 10-278 (Feb. 18, 2010); see also *700 MHz Block A Good Faith Purchasers Alliance Petition for Rulemaking Regarding the Need for 700 MHz Mobile Equipment to be Capable of Operating on All Paired Commercial 700 MHz Frequency Blocks*, RM-11592 (filed Sept. 29, 2009) (the "Petition").

announced broadband policy goals and undermine the purpose of the open platform rule for the 700 MHz C Block. Third, the provisions of the Communications Act which the Alliance claims Verizon Wireless has violated are inapplicable, and there is no legal basis for the regulation it requests. To the contrary, granting the Petition would constitute an unjustified and thus unlawful reversal of the Commission's decisions on the 700 MHz band. For the reasons set forth below, Verizon Wireless requests that the Commission deny the Petition.

I. THE PETITION SHOULD BE DENIED BECAUSE IT RESTS ON ERRONEOUS FACTUAL AND TECHNICAL CLAIMS.

The Petition claims (without any factual support) that Verizon Wireless and AT&T Inc. have somehow affected the 3rd Generation Partnership Project ("3GPP") international standards setting organization and its recently-completed LTE standard (Release 8) to the detriment of purchasers of Lower Band 700 MHz A Block spectrum. According to the Petition, the result is that licensees of Lower 700 MHz A Block spectrum "are left without viable and widely useful equipment options" while Verizon Wireless and AT&T move forward with their plans to deploy LTE in other spectrum segments of the 700 MHz band.²

A. Despite The Alliance's Unsupported Claims, 700 MHz Band Classes Were Established By An International Standards-Setting Body In An Open Process.

3GPP is an international standards setting organization, which brings together six standards organizations from Asia, North America and Europe to publish mobile device and network standards.³ 3GPP and its sister organization 3GPP2 were formed in the late 1990s to

² See Petition at ii.

³ The six 3GPP partners are ARIB (The Association of Radio Industries and Business) based in Japan, ATIS (The Alliance for Telecommunications Industry Solutions) based in the United States, CCSA (China Communications Standards Association), ETSI (European Telecommunications Standards Institute), TTA (Telecommunications Technology Association) based in Korea, and TTA (The Telecommunications Technology Committee) based in Japan. See www.3gpp.org.

establish standards for the IMT-2000 family of technologies. 3GPP recently completed specifications for Release 8 of Long Term Evolution (“LTE”), which is an outgrowth of GSM technology. (3GPP2 primarily works on standards for cdma2000® technologies.)

Any member of the six 3GPP partners can become a 3GPP member. The North American partner, ATIS, has over 250 member companies. Full ATIS membership is available to service providers, manufacturers, distributors and developers of communications, entertainment and information technology products and services.⁴ Other entities, such as trade organizations, academics, and consumer advocacy groups may become ATIS affiliate members and thereby 3GPP members. Based on a review of the publicly-available membership information for 3GPP and ATIS, none of the members of the Alliance is a member of either 3GPP or ATIS, although they were free to join.

Like other standards organizations, 3GPP uses an open participation process for standards setting, in which any member can submit a proposal or contribution, and any member can participate in the deliberations regarding that proposal. As in similar organizations, proposals are considered in a working group for the specific topic, and the recommendations of the working group are considered at a plenary meeting. 3GPP contributions are evaluated on their technical merits based on the expertise of all participating companies.

The 3GPP specifications associated with the use of LTE include a set of band classes for operation of devices and base stations, based on spectrum bands allocated for mobile wireless operations in various countries and internationally, including 850 MHz Cellular, 1.9 GHz Personal Communications Service (“PCS”), 2.5 GHz Broadband Radio Service (“BRS”), and 700 MHz Wireless Communications Service (“WCS”). For operations at 700 MHz, there are

⁴ See <http://www.atis.org/membership/>.

four band classes identified in the current LTE standard: 12 (Lower A, B, and C Blocks), 13 (Upper C Block), 14 (Upper D Block and PS Broadband Block), and 17 (Lower B and C Blocks).⁵ The proposals recommending the creation of these band classes were submitted to the LTE working groups in 2008.

Throughout the consideration at the 3GPP working group and plenary levels, participants could have objected or proposed modifications to adopting standards for these band classes; in addition, objections can be raised through the various 3GPP partner organizations. Members of the Alliance could have participated, through ATIS or otherwise, in this process, but apparently elected not to do so. The proposals to create these band classes were non-controversial.

In addition to failing to participate in the 3GPP process, the Alliance now insinuates that the adoption of standards locked its members out of the development process. But, the fact that 3GPP has established various band classes for the LTE standard does not compel any service provider or any device manufacturer to use any particular class, or to limit devices to operation in only one class, or to use LTE at all for that matter. Moreover, other arrangements of bands could be proposed for the LTE standard as another band class. Each provider deploying LTE must determine which of the classes or combinations of classes is best suited to meet its authorized spectrum requirements and its business plans.

B. Lower And Upper 700 MHz Are Distinctly Separate Bands That Make Combining Them Into A Single Device Technically Complex And Expensive.

The band classes established for the 3GPP LTE standard and subsequent decisions made by Verizon Wireless regarding which bands to support in its devices are all logical extensions of the circumstances that affect the design of 700 MHz equipment. These include the unique

⁵ Band classes 15 and 16 are “reserved” in the current 3GPP LTE standard for future spectrum allocations.

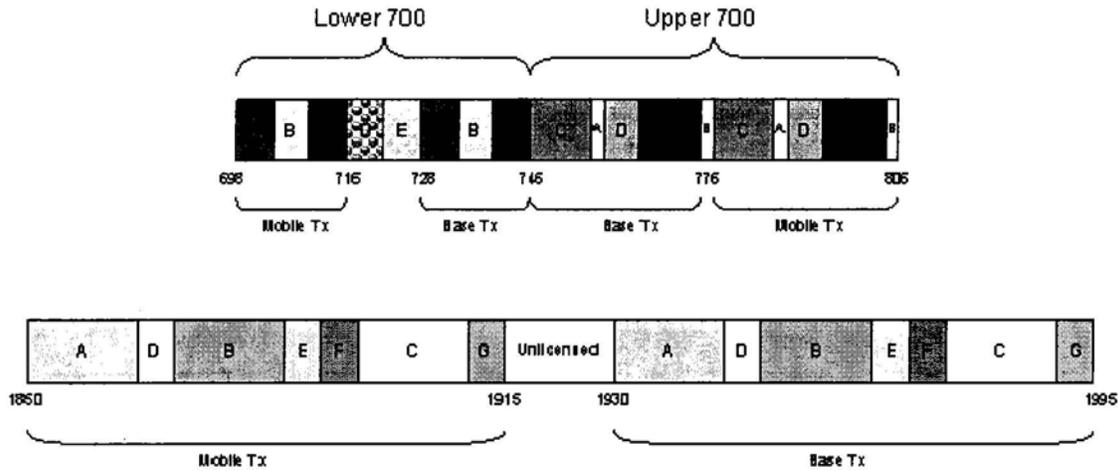
characteristics of the 700 MHz band in the United States, the need to accommodate other operational bands (*e.g.*, Cellular and PCS), the presence of high-power broadcast systems within and adjacent to the Lower 700 MHz band, and the technical limitations associated with designing mobile communications equipment.

The principal reason why 3GPP's 700 MHz LTE band classes are for either Lower 700 MHz *or* Upper 700 MHz spectrum bands is that these are, in fact, distinctly separate bands.⁶ The fact that the bands are adjacent and the licenses in each band are governed by some of the same rules and, in some cases, were sold at the same FCC auction, does not change this. The two bands are separate and distinct in much the same way that the Cellular and the PCS bands are separate and distinct. And, just like the Cellular and PCS bands, decisions about which bands to include in devices that are being built and sold are made independently.

The Lower and Upper 700 MHz bands include separate U.S. FCC licenses for paired spectrum that will accommodate frequency division duplex ("FDD") operation, *i.e.*, transmission ("Tx") and reception ("Rx") via separate frequency blocks. Unlike the PCS band, for example, both Lower and Upper 700 MHz bands cannot be considered as a single contiguous band of spectrum because the frequencies used for mobile transmission are not all contiguous. (*See* Figure 1.) The spectrum used by Lower 700 MHz licensees for mobile transmission (698-716 MHz) is separated by 60 MHz from the spectrum used for that purpose by Upper 700 MHz licensees (776-806 MHz). In contrast, the mobile transmit bands for the various PCS band segments are contiguous.

⁶ *See infra* pp. 22-24 (discussing the FCC's deliberate decisions to adopt a block-specific scheme for the 700 MHz band).

Figure 1. Comparison of 700 MHz and PCS Bands



Given the configuration of the 700 MHz band,⁷ it is not possible to support both the Lower and Upper 700 MHz spectrum blocks in the same duplexer in the mobile device. A duplexer is a device that allows two-way communications over a single channel. It is, effectively, the combination of two radiofrequency (“RF”) filters (one for transmit and one for receive) with a common antenna port. The duplexer must be designed for operation in the frequency band used by both the receiver and the transmitter, and must provide sufficient isolation between the transmit and receive bands to prevent the transmitter from desensitizing the receiver.

Theoretically, it is possible to design a duplexer that includes a single *receive* filter that covers the Lower A, B, and C blocks, as well as the Upper C block, since these blocks are all contiguous (728-757 MHz). However, it is not possible to design a duplexer that includes a single filter that passes both of the widely separated *mobile* transmit bands (698-716 MHz and

⁷ The 3GPP standard specifies FDD operation with the Tx and Rx bands as shown in the illustration. While the FCC’s rules allow for FDD operation with the Tx and Rx bands switched, no specifications were adopted by 3GPP for that—largely because of the interference issues it would raise. Of course, TDD operation is also allowed by the FCC’s rules, but that configuration is also not supported in the existing standard.

776-806 MHz), while still providing sufficient isolation from the mobile receive (base station Tx) band.⁸ As a practical matter, therefore, it is not possible to support both the Lower and Upper 700 MHz bands in the same devices without using multiple duplexers. While it is possible to build a device with multiple duplexers, this would impose additional cost and complexity that must be weighed against other factors, including whether other bands outside 700 MHz can be included in the device.

Because of these technical realities, none of the 3GPP Band Classes for LTE combine the Upper 700 MHz and Lower 700 MHz bands. While the Alliance speculates that the development of the classes was the result of insidious conduct by Verizon Wireless and AT&T, the true reasons relate to the technical constraints on handset design resulting from the FCC's licensing plan for the 700 MHz spectrum.

C. Technical Issues Make Designing Devices Using Lower 700 MHz Spectrum, Particularly The A Block, Even More Complex.

In addition to the duplexer issue described above, the Lower 700 MHz band itself introduces challenges that complicate the design of commercial mobile devices. In particular, the band plan includes a narrow duplex gap (12 MHz), a relatively small duplex spacing (30 MHz), and the presence of strong interfering signals that could impede the deployment of two-way mobile services.⁹ Each of these features alone present challenges in designing cost effective

⁸ In contrast, the duplexer in a PCS mobile device has a single RF filter for transmitting and a single, and separate, RF filter for receiving because all of the mobile Tx spectrum is contiguous, and all of the Base Tx spectrum is contiguous. That cannot be accomplished with a "whole band" 700 MHz device because the mobile Tx bands are not contiguous. Two filters are needed for transmission. If one filter were used to cover the whole band, *i.e.*, 698-806 MHz, the transmissions would interfere with reception at 728-776 MHz.

⁹ The "duplex gap" is the amount of frequency separation between the transmit and receive bands. For the Lower 700 MHz A, B, and C blocks, the gap between the mobile transmit and base transmit bands is 12 MHz (716-718 MHz). The "duplex spacing" or "duplex distance" is

broadband wireless devices. In combination, they represent significant challenges for manufacturing Lower Band 700 MHz devices.

Interference Into Lower 700 MHz. First, the Lower D and E Blocks are unpaired licenses that are best suited to one-way broadcast-like services. Indeed, the Commission recognized this fact, and established rules that permit these blocks to be used for high-power (50 kW) broadcast services. Qualcomm is already operating its MediaFLO broadcast video service on the Lower D block, which was auctioned in 2002, and the Lower E block is expected to be used for similar services.

Operation of high-power broadcast services in the Lower E block creates a significant potential for interference into Lower A Block receivers (at 728 MHz). To operate effectively, mobile devices operating in the Lower A Block would need to have sufficient selectivity to reject the interfering E Block signal. Unfortunately, since these bands are directly adjacent, there would be little or no attenuation provided by the duplex filter in the block adjacent to the desired pass band. Lower B and C Block licensees face the same issue were they to use devices that employ duplexers covering the Lower A, B, and C Blocks. Importantly, filters and duplexers require a minimum separation in frequency between the passband and the stopband to achieve the desired out-of-band rejection. Consequently, a device designed to pass blocks A, B, and C would be less able to reject harmful interference from block E than one designed to pass only B and C. Improvements in filter technology, or the use of the band for fixed wireless systems may reduce this potential for interference.

Interference from Lower 700 MHz. The presence of broadcast TV services on channel 51 (692-698 MHz) also presents technical challenges for Lower A Band licensees. In establishing

the frequency separation between the beginning of the mobile transmit band and the beginning of the base transmit band. For the Lower 700 MHz band, this is 30 MHz.

its rules for 700 MHz, the Commission recognized the potential for mobile systems operating at 700 MHz to cause interference to a DTV receiver operating on channel 51. As a result, it established rules requiring that Lower A Block licensees meet a minimum desired signal-to-undesired signal ratio (“D/U”) within the service contour of the TV broadcaster. While this might be possible for fixed wireless services, it is likely to be difficult for mobile devices to provide such protection without significantly limiting where these devices can be used. This is especially true if the Commission allows new TV stations to be deployed in channel 51.

In short, there are technical challenges in deploying Band Class 12 equipment at this time. However, these challenges are not insurmountable and nothing prevents members of the Alliance from themselves determining how to address these issues in designing Band 12 devices. Indeed, the Alliance members are free to work (either collectively or individually) with manufacturers to build devices that operate on the spectrum its members voluntarily acquired, and those devices could include other spectrum besides Band Class 12. But those decisions have to be made by those carriers to meet their own individual business plans. Verizon Wireless has nothing to do with those decisions.¹⁰

D. The Potential Use Of Other Technologies As Well As LTE In 700 MHz Makes The Alliance’s Request Even More Problematic.

The Alliance also fails to grapple with the technical reality that not all 700 MHz licensees may use LTE as the air interface for their network. While Verizon Wireless and AT&T have decided to deploy their 700 MHz service using LTE, other carriers may choose to use another

¹⁰ According to CTIA, there are at least 33 companies that manufacture devices for the U.S. market. *See, e.g.*, Letter from Christopher Guttman-McCabe, CTIA, to Marlene H. Dortch, FCC, RM-11361, at 2 and accompanying charts (filed May 12, 2009) (available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=6520216417>). Alliance members provide no evidence about their efforts (or the apparent lack thereof) to obtain the devices they want, either individually or through a consortium, from any of these potential suppliers.

technology, e.g., WiMAX. Just as today it is technically complex for a single device to include both GSM and CDMA air interfaces for the same bands, so too would it be complex for a 4G device to include LTE and another technology for all paired spectrum bands. Yet that may be necessary if a device is to ensure service across all 700 MHz bands. For example, if a 700 A Block licensee chooses WiMAX, it would need devices that use WiMAX as the air interface. But under the Alliance's proposal, that device would also need to include the ability to use LTE on the A Block or C-Block spectrum.

The Alliance does not address this serious problem at all. It requests a requirement that all devices operating in 700 MHz band include all 700 MHz frequencies, but it will be enormously complex and expensive, if not infeasible, for equipment vendors to include multiple air interfaces selected by 700 MHz licensees so that the devices can actually function across all 700 MHz bands. This problem is reason alone not to take up the Petition.

E. Verizon Wireless' Plans To Deploy LTE Reflect The Technical Obstacles To Combining Upper And Lower Bands In The Same Devices.

Verizon Wireless holds Upper C Block licenses for the entire continental U.S. and Hawaii. The company intends to use this spectrum to deploy an advanced 4G mobile broadband network over the same geographic footprint in which it operates its Third Generation ("3G") EV-DO networks today. While it is planning an aggressive deployment of LTE, several years will be needed to overlay the LTE network over the entire 3G footprint. During this process, Verizon Wireless wants LTE customers to be able to roam onto its 3G network where LTE is not yet available. These 3G networks use spectrum in either the Cellular band or the PCS band. Consequently, the LTE devices we sell will need to include both the Cellular and PCS bands, in addition to the Upper 700 MHz C Block. Verizon Wireless is also interested in providing products and services that address the broader global market. Thus, LTE devices may also need

to support bands that are widely used in other parts of the world but do not align with U.S. band plans.

There is a practical limit as to how many bands can be supported in a single mobile device, and businesses must weigh a variety of factors in deciding which ones to support, including placement of antennas, device form factor and weight, cost, and utility to the consumer. Verizon Wireless' business needs require that it focus on devices that would operate on the three bands it will use for its EV-DO and LTE networks (850 MHz, 1.9 GHz, and 700 MHz), as well as several bands that are used in Europe and other parts of the world. Inclusion of these bands is necessary to facilitate interconnectivity between 3G and 4G networks and to promote greater scale economies for LTE equipment. Each of these bands requires a separate duplexer, and thus, each adds increased complexity and cost to wireless devices. Given that Verizon Wireless does not plan to deploy its Lower A Block spectrum in the near term, it makes no sense for it (or its 4G customers) to bear the burden of additional cost associated with including that band in its initial LTE devices, or for its customers to sacrifice the benefits they will gain from greater coverage through roaming onto the 3G network and lower equipment costs in order to include a band that is not needed at this time.

The Alliance's undocumented assertion that Verizon Wireless does not want mobile device manufacturers to develop and market handsets capable of working on 700 MHz A Block spectrum is nonsensical. Verizon Wireless holds A Block licenses for markets that cover over half the U.S. population. Verizon Wireless purchased 25 licenses in the 700 MHz A Block during Auction 73 at a cost of nearly \$2.57 billion to cover major metropolitan markets such as New York, Los Angeles, Philadelphia, Washington, DC, and Miami, among others. These licenses cover 147,921,370 pops. (By contrast, the Alliance's members invested \$420 million

during Auction 73 for their A Block licenses, and their A Block licenses cover 71,805,348 pops, or less than half the population covered by Verizon Wireless' A Block footprint.) If the Alliance's assertion were correct, Verizon Wireless would be taking steps to block development of equipment that is essential to capitalize on the company's \$2.57 billion investment. This makes no sense, and the Alliance offers no plausible suggestion for why such a state of affairs would be true.

II. THE PETITION SHOULD BE DENIED BECAUSE THE RULES IT SEEKS WOULD CONFLICT WITH KEY COMMISSION POLICY GOALS.

A. Granting The Petition Would Impede 4G Broadband Services.

The Federal Government is focused on promoting the rapid deployment of 3G and 4G mobile broadband services to all Americans. Congress directed the Commission to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability.”¹¹ And, under the American Recovery and Reinvestment Act of 2009, Congress charged the Commission with developing a national broadband plan that “shall seek to ensure that all people of the United States have access to broadband capability and shall establish benchmarks for meeting that goal.”¹² In adopting the 700 MHz service rules, the Commission declared that the “[r]apid deployment and ubiquitous availability of broadband services across the country are among the Commission’s most critical policy objectives.”¹³ And earlier this month, the Commission released its National Broadband Plan, which lays out numerous recommendations designed to meet what it described as “the great infrastructure challenge of the early 21st

¹¹ Section 706(a) of the Telecommunications Act of 1996, 47 U.S.C. § 1302(a).

¹² See American Recovery and Reinvestment Act of 2009, § 6001(k)(2), Pub. L. No. 111-5, 123 Stat. 115 (2009).

¹³ *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands*, 22 FCC Rcd 15289, 15362 (¶ 196) (2007) (“700 MHz Second Report and Order”).

century” – expanding the availability and affordability of broadband.¹⁴ Deployment of service on the 700 MHz spectrum is a lynchpin for achieving the Commission’s broadband objectives.

In contrast, the Alliance has asked the Commission to effectively halt progress on 4G mobile broadband networks using 700 MHz, to serve the interests of four companies who did not even participate in the 3GPP standard process. The action they demand – forcing equipment manufacturers to cobble together devices that will work in all 700 MHz spectrum bands – would not only take the Commission into equipment design but impose a technically invalid mandate that would block the development of 700 MHz 4G devices – and thus the deployment of wireless broadband services.

As the Commission is well aware from the massive record it developed on the National Broadband Plan, 700 MHz licensees, network infrastructure vendors and equipment manufacturers are working aggressively to develop the hardware, software and infrastructure necessary to deploy 4G services. That work depends heavily on regulatory certainty – that companies can work with existing rules and focus on building wireless broadband for consumers. Granting the Alliance’s Petition and commencing a rulemaking to consider whether to impose radical and unprecedented device mandates on 700 MHz licensees would create enormous and disruptive uncertainty in the wireless market as to the Commission’s ultimate plans. While the rulemaking was pending, decisions about designing and deploying 700 MHz devices would necessarily be frustrated and could well be put off. In short, the uncertainty that would result from granting the Petition would be antithetical to achieving the enormous promise the Commission has declared that 700 MHz holds for expanding consumers’ access to broadband and thereby contributing to the goals of the National Broadband Plan.

¹⁴ FCC, *Connecting America: The National Broadband Plan*, at xi, 3 (rel. March 16, 2010).

B. Granting The Petition Would Undo The Successful Policy Of Allowing Technical Differentiation To Drive Benefits To Wireless Consumers.

The FCC has fostered technological differentiation among mobile providers as one important facet of wireless competition and innovation, and has repeatedly declined to intervene into technology choices.¹⁵ It has, for example, refrained from dictating the air interfaces that wireless providers must use or the capabilities that their devices must contain (with few exceptions not relevant here such as E911 capability). It has declined to impose standards for wireless technologies, correctly determining that standards-setting organizations can more efficiently and effectively engage in that work.

The Commission's decision to allow technical diversity has fostered significant innovation in the U.S. wireless industry, and has benefited consumers by providing more choices among more technologically-advanced devices.¹⁶ The most innovative and top-selling

¹⁵ See *Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, 17 FCC Rcd 1022, 1023 (¶ 1) (2002) (“The flexible allocation we adopt for the Lower 700 MHz Band will allow service providers to select the technology they wish to use to provide new services that the market may demand.”); see also *Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, 18 FCC Rcd 25162, 25163-64 (¶ 1) (2003) (“Licensees in these bands will have the flexibility to provide any fixed or mobile service that is consistent with the allocations for this spectrum”); *Amendment of the Commission's Rules to Establish New Personal Communications Services*, 9 FCC Rcd 6908, 6919 (¶ 66) (1994) (FCC declined to impose technical standards on nascent PCS because “imposition of a rigid technical framework at this time could stifle the introduction of important new technology”); *Implementation of Sections 3(n) and 332 of the Communications Act—Regulatory Treatment of Mobile Services*, 9 FCC Rcd 7988, 8069-70 (¶¶ 165-166) (1994) (declining to adopt standards for wireless interoperability); *Amendment of Parts 2 and 22 of the Commission's Rules to Permit Liberalization of Technology and Auxiliary Service Offerings in the Domestic Public Cellular Radio Telecommunications Service*, 3 FCC Rcd 7033, 7040 (¶ 51) (1988) (declining to intervene in standards setting process for next generation cellular systems: “Industry is in a better position to evaluate the technical advantages and disadvantages of the various advanced cellular technologies and develop approaches to compatibility”).

¹⁶ See, e.g., Letter from Christopher Guttman-McCabe, CTIA, to Marlene H. Dortch, FCC, RM-11361, Attachment: “The United States and World Wireless Markets,” at 11 (May 12, 2009) (noting that U.S. consumers have access to over 630 device models from 33 different manufacturers, whereas consumers in the United Kingdom have access to 147 models total)

smartphones all got their start in the United States, where technology competition reigns,¹⁷ rather than in the numerous mandated technology environments around the globe. The Commission itself has recognized this impact of its decision not to mandate technology standards.¹⁸ It would be inconsistent with decades of decisions on similar issues to find now that the Communications Act mandates technological uniformity in the way the Alliance requests.¹⁹ The Commission must reject the Petition to preserve for consumers the innovation in wireless devices and products that diversity among wireless technologies has fostered.

C. Granting the Petition Would Hinder The Open Platform Goal For The 700 MHz C Block.

When it adopted the “open platform” rules for the 700 MHz C Block spectrum, the Commission identified as one of its objectives to promote the design and development of devices by third parties, not merely by carriers and existing OEMs. But it also found that the open platform rules should be limited to the C-Block, finding that this spectrum would be best suited

(“Wireless Markets Report”); *see also* Mark Lowenstein, Innovation and the U.S. Wireless Industry, GN Docket Nos. 09-51 and 09-157, at 13-14 (filed Sept.30, 2009).

¹⁷ *See* Letter from Christopher Guttman-McCabe, CTIA, to Ms. Marlene H. Dortch, FCC, GN Dkt. No. 09-191; WC Dkt. No. 07-42, Attachment: “Updating Assumptions,” at 7 (Feb. 5, 2010) (noting that the most advanced wireless devices available in the world have all been launched in the United States, including the Apple iPhone 3GS, Google Nexus One, Motorola Droid, BlackBerry Pearl, Tour, and Bold).

¹⁸ *See, e.g., In the Matter of Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993*, Thirteenth Report, 24 FCC Rcd 6185, 6250 (¶ 127) (2009); *In the Matter of Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993*, Twelfth Report, 23 FCC Rcd 2241, 2297-98 (¶¶ 125-26) (2008); *In the Matter of Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993*, Eleventh Report, 21 FCC Rcd 10947, 10989-90 (¶¶ 102-03) (2006); *In the Matter of Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993*, Tenth Report, 20 FCC Rcd 15908, 15949-50 (¶¶ 106-07) (2005).

¹⁹ There are legal as well as policy reasons why the Commission cannot reverse course in this way. *See infra* p. 25 (discussing the robust limits on the FCC’s ability to depart from prior precedents).

to the innovation it sought to promote.²⁰ That goal would be undermined by a requirement that any 700 MHz device – and in particular, as the Alliance wants, any device built to operate on the C-Block – include all frequencies throughout the band. Today, third-party device developers are free to design devices to operate only on the C Block. In turn, Verizon Wireless must publish technical standards that provide these developers with the information they need to develop innovative devices for customers to purchase and bring to Verizon Wireless for activation on the company’s C-Block network. They can focus on designing these innovative devices for the C-Block, without having to go to the huge additional expense and technical complexity (discussed above) of attempting to design them to operate on all other 700 MHz bands as well. But that model for innovation would be undercut by the mandate the Alliance requests – that all devices operate throughout the 700 MHz band. Third-party developers would have to figure out how to ensure their devices meet the “all-frequency” mandate the Alliance wants. The inevitable result would be to discourage precisely the third-party innovation the Commission envisioned in adopting its open platform rules for the C-Block.

III. THE PETITION SHOULD BE DENIED BECAUSE IT LACKS A VALID LEGAL BASIS AND THE RULES IT SEEKS WOULD VIOLATE THE APA.

A. The Alliance’s Claims of Violations of the Communications Act Are Meritless.

The Alliance bases its request for a rulemaking on its claim that Verizon Wireless’ business decision to build its initial 700 MHz band devices using one of the 3GPP band classes violates Sections 1, 201(b), 202(a), 254(b)(3), and 307(b) of the Communications Act.²¹ The Alliance is wrong. None of these provisions apply, nor do they provide a basis for the intrusive regulation of the technical design of wireless devices that the Alliance requests.

²⁰ 700 MHz Second Report and Order, 22 FCC Rcd at 15363-65 (¶¶ 202-206).

²¹ Petition at iii, 7-9.

Section 1 of the Act establishes the Commission’s subject matter jurisdiction and acknowledges the Commission’s general authority over “communication by wire and radio.” “Communication by radio” refers to “the *transmission* by radio of writing, signs, signals, pictures, and sounds of all kinds, including all instrumentalities, facilities, apparatus, and services (among other things, the receipt, forwarding, and delivery of communications) *incidental to such transmission.*”²² Section 1 thus empowers the Commission “to promote the accessibility and universality of *transmission.*”²³ A requirement that manufacturers design handsets, or carriers procure handsets, capable of operating across the entire 700 MHz block, however, will do nothing to advance the accessibility of transmission. In fact, it will have the precise opposite effect: it will *impede* deployment of broadband mobile devices for 4G services to utilize the 700 MHz spectrum.²⁴ In any event, Section 1 does not confer upon the Commission plenary authority to regulate handsets. Indeed, such an interpretation of Section 1 would render superfluous other provisions in the Act that delegate authority to the Commission to implement Congressional objectives in laws authorizing Enhanced-911 (“E-911”)²⁵ and

²² 47 U.S.C. § 153(33) (emphases added).

²³ *Motion Picture Ass’n of Am. v. FCC*, 309 F.3d 796, 804 (D.C. Cir. 2002) (“MPAA”) (emphasis added); *id.* (“Under § 1, Congress delegated authority to the FCC to expand radio and wire transmissions, so that they would be available to all U.S. citizens.”); *Am. Library Ass’n v. FCC*, 406 F.3d 689, 703 (D.C. Cir. 2005) (“The statute does not give the FCC authority to regulate *any* ‘apparatus’ that is associated with television broadcasts. Rather, the statutory language cited by the FCC refers only to ‘apparatus’ that are ‘*incidental to . . . transmission.*’ In other words, the language of § 153(33) and (52) plainly does not indicate that Congress intended for the Commission to have general jurisdiction over devices that can be used for receipt of wire or radio communication when those devices are not engaged in the process of radio or wire transmission.”) (second emphasis added).

²⁴ *See supra* pp. 12-16.

²⁵ 47 U.S.C. § 615 (directing the Commission to “encourage and support efforts by States to deploy comprehensive end-to-end emergency communications infrastructure and programs . . . including seamless, ubiquitous, reliable wireless telecommunications networks and enhanced wireless 9-1-1 service”). The Commission’s E-911 regulation provides that carriers can comply

hearing aid compatibility requirements,²⁶ for example. Thus, where accessibility of transmission is *not* at issue, which is the case here, the Commission must rely upon some other, more specific grant of statutory authority to sustain handset regulation.

Sections 201(b) and 202(a) of the Act similarly do not authorize rules of the kind requested here. Sections 201 and 202 of the Act govern the relation between a common carrier and its customers, not what radio chipsets are placed into CPE.²⁷ These provisions set forth the conditions under which a common carrier offers “communication service” to its customers²⁸ and prohibit unjust or unreasonable practices or discrimination among customers. These provisions do not authorize the Commission to require carriers to order (or manufacturers to build) mobile equipment with specific frequency capabilities.

Section 254(b)(3) of the Act sets forth the universal service principle that consumers should have access to telecommunications and information services, but it contains no grant of regulatory authority to the Commission, and in any event includes no provisions for regulating telecommunications *equipment*.

Section 307(b) of the Act concerns “the distribution of licenses, frequencies, hours of

with location information requirements either via network-based or handset-based location technology. *See* 47 C.F.R. §§ 20.18(e)-(h).

²⁶ *See* 47 U.S.C. § 610 (authority to require and establish technical standards for telephone hearing aid compatibility).

²⁷ *See* 47 U.S.C. § 201(b); *see also id.* § 202(a).

²⁸ 47 U.S.C. § 201(b) (“All charges, practices, classifications, and regulations for and in connection with such *communication service*, shall be just and reasonable, and any such charge, practice, classification, or regulation that is unjust or unreasonable is declared to be unlawful.” (emphasis added)); 47 U.S.C. § 202(a) (“It shall be unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services for or in connection with like *communication service*, directly or indirectly, by any means or device, or to make or give any undue or unreasonable preference or advantage to any particular person, class of persons, or locality, or to subject any particular person, class of persons, or locality to any undue or unreasonable prejudice or disadvantage.” (emphasis added)).

operation, and of power” in radio station licensing.²⁹ It directs the Commission to ensure “a fair, efficient, and equitable distribution” of radio station licenses across the United States.³⁰ This provision plainly concerns the geographic distribution of radio station licenses to ensure nationwide radio communication services,³¹ and nowhere addresses engineering wireless devices. Section 307(b) does not authorize regulation of equipment to implement or operate those radio stations, which is what the Petition requests.

The Alliance also makes passing reference to Sections 4(i) and 303(r) of the Act as additional bases for the requested rules.³² But these provisions merely grant rulemaking authority to the Commission to carry out the substantive provisions of the Act, and contain no substantive grant of authority themselves. They cannot be the basis for substantive regulations.

In short, the Petition’s asserted legal bases for Commission action are meritless.

B. The Alliance’s Reliance On The 1981 Cellular Compatibility Rule Is Misplaced.

The Alliance claims that the situation at 700 MHz today should be equated to 1981 when the FCC required that both A and B Cellular bands be included in all handsets. But, that situation was radically different. The Cellular bands did not trigger the kinds of technical issues explained above for several reasons. First, for the Cellular band, all of the spectrum used for mobile transmit is contiguous and all of the spectrum used for base transmit (or mobile receive) is contiguous, so there is no need for multiple duplexers. Moreover, all of the Cellular A Band

²⁹ 47 U.S.C. § 307(b).

³⁰ *Id.*

³¹ See *Community Television, Inc. v. FCC*, 216 F.3d 1133, 1146 n.11 (D.C. Cir. 2000) (noting that Section 307(b) “directs the FCC to ensure equitable distribution of radio service among communities” and “applies to the FCC’s consideration of ‘applications for licenses’”); *FCC v. Allentown Broadcasting Corp.*, 349 U.S. 358 (1955) (discussing application of Section 307(b) in award of broadcast licenses).

³² Petition at 1.

and B Band are not contiguous. For Mobile transmit, for example, there is 11 MHz for A Band, 10 MHz for B Band, 1.5 MHz for A Band, and 2.5 MHz for B Band. So, in order to effectively cover the entire A Band spectrum, the device has to cover most of the B Band as well. Thus, (unlike 700 MHz) there was no technical or economic penalty for covering the entire Cellular band, and there was also every incentive to do so because of the way the band was configured.

Second, unlike 700 MHz, when cellular was first developed there was no concern about which other bands to include in devices. There were no other bands being used, unlike today, when there are multiple bands that could be selected for inclusion into a single device. The diversity of today's mobile services, with operators holding licenses for a number of different bands and the need for multi-band devices, as described above, was not present in 1981. The FCC has in fact promoted this diversity in licensing and technologies, and going backwards to a regime relevant to 1981 would be a totally unjustified—and unjustifiable—shift in regulatory policy.

Third, in 1981, cellular was an incipient service that the FCC wanted to promote through consistent standards. Such mandated consistency is neither appropriate nor necessary for mobile broadband networks today because there are now dozens of established mobile equipment manufacturers and other mobile-service-related industries for planning and deploying a mobile network. The Commission must also note that the members of the Alliance are either operational wireless providers or entities whose investors include entities or persons with communications industry experience. All were sufficiently sophisticated participants in the wireless industry to bid on and win spectrum licenses in Auction 73.

Fourth, when the FCC awarded Cellular A and B block licenses, all licensees knew

beforehand that their customer equipment would have to include both bands.³³ The FCC imposed no such condition on the 700 MHz licenses awarded in Auction 73. In contrast, the rules the Commission adopted for the 700 MHz band, consistent with previous auctions of commercial mobile spectrum, allowed successful bidders flexibility to develop devices based on their spectrum holdings and business plans, as long as they complied with the emissions limits and other technical rules. The auction participants based their bids on guidelines that allowed the opposite of the Alliance's demand. For the FCC more than two years later to take up whether to impose severely-limiting restrictions on the equipment deployed using the spectrum purchased in Auction 73 would constitute a substantial and significant reversal of the Commission's rules for that auction and undercut bidders' reliance on those rules, and create additional serious legal concerns as discussed immediately below.³⁴

C. The Requested Rules Would Be Inconsistent With The APA's Ban On "Arbitrary And Capricious" Decisionmaking.

Under the APA, an agency may not issue any rule that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."³⁵ The APA also requires a federal

³³ See, e.g., *In the Matter of An Inquiry Into the Use of the Bands 825–845 MHz and 870–890 MHz for Cellular Communications Systems*, Report and Order, 86 F.C.C.2d 469, 482 (¶ 26) (1981) (setting forth the operational requirements for customer equipment).

³⁴ The Alliance also ignores the explicit language in the Commission's auction notice for the 700 MHz band that "Potential bidders are reminded that they are solely responsible for investigating and evaluating all technical and marketplace factors that may have a bearing on the value of 700 MHz band licenses." FCC, Public Notice, *Auction of 700 MHz Band Licenses Scheduled for January 24, 2008*, 22 FCC Rcd 18141, 18156 (¶ 40) (2007). The Commission also noted that its start date for the auction "will provide interested parties with additional time after this announcement of competitive bidding procedures to develop business plans, assess market conditions, and evaluate the availability of equipment for new 700 MHz Band services." *Id.* at 18158 (¶ 53) (emphasis added).

³⁵ 5 U.S.C. § 706(2)(A).

agency to support any rule it promulgates with substantial record evidence.³⁶ To satisfy its obligations under the APA, therefore, the Commission “must examine and consider the relevant data and factors, ‘and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.’”³⁷ That is, the decision must be “rational” and “based on a consideration of the relevant factors.”³⁸ Here, the Commission could not grant the relief requested by the Alliance without violating this governing APA standard in a number of independent ways.

As explained above,³⁹ when the Commission established the 700 MHz band plan, it deliberately divided the spectrum into different blocks.⁴⁰ Moreover, the Commission adopted a number of block-specific requirements, including block-specific power limits, licensing areas, and build-out requirements. The Commission’s decision to divide the 700 MHz spectrum in this manner was not happenstance—rather, the agency recognized that certain blocks were better suited for the provision of particular services, and it adopted block-specific rules for the express purpose of encouraging different licensees to use them for different purposes.

For example, the Commission created certain blocks that, based on their technical characteristics, would be conducive to broadcast-type operations, while at the same time it

³⁶ 5 U.S.C. § 706(2)(E); *see also Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962).

³⁷ *Verizon Tel. Cos. v. FCC*, 570 F.3d 294, 301 (D.C. Cir. 2009) (quoting *Motor Vehicle Mfrs. Ass’n, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

³⁸ *State Farm*, 463 U.S. at 42-43; *see also Am. Fed’n of Gov’t Employees, Local 2924 v. FLRA*, 470 F.3d 375, 380 (D.C. Cir. 2006); *Simms v. National Highway Traffic Safety Admin.*, 45 F.3d 999, 1004 (6th Cir. 1995).

³⁹ *See supra* pp. 4-7.

⁴⁰ *See, e.g., 700 MHz Second Report and Order*, 22 FCC Rcd at 15293 (¶ 4).

created other blocks that would be more conducive to the provision of mobile services.⁴¹ The Commission also adopted block-specific power limits, determining that licensees could operate in some blocks at relatively high power levels, while it required licensees to operate at much lower power levels in other blocks.⁴² Moreover, in light of its recognition that the different 700 MHz blocks presented unique technical challenges, the Commission adopted block-specific interference protection criteria.⁴³ And for similar reasons, the Commission applied “open platform” requirements in the Upper 700 MHz C Block, but it did not apply those requirements in other spectrum blocks.⁴⁴ The Commission likewise adopted block-specific geographic service areas and bandwidth sizes for the stated purpose of providing “an appropriate mix of licenses” that, in turn, would offer varying services.⁴⁵

In terms of block-specific build-out requirements, the Commission applied one set of performance requirements for blocks of 700 MHz spectrum auctioned off before Auction 73, but it adopted another set of “significantly more stringent performance requirements” for the blocks auctioned off during Auction 73.⁴⁶ And even within the blocks of Auction 73 spectrum, the agency imposed different build-out requirements.⁴⁷ In this way, the Commission specifically

⁴¹ *In the Matter of Service Rules for the 698-746, 747-762 and 777-792 MHz Bands*, 22 FCC Rcd 8064, 8100 (¶ 95) (2007) (“700 MHz First Report and Order”).

⁴² *See, e.g., 700 MHz Second Report and Order*, 22 FCC Rcd at 15326 (¶ 88).

⁴³ *See 700 MHz First Report and Order*, 22 FCC Rcd at 8099-8101 (¶¶ 92-97).

⁴⁴ 47 C.F.R. § 27.16; *700 MHz Second Report and Order*, 22 FCC Rcd at 15361, 15364 (¶¶ 195, 204-05).

⁴⁵ *See, e.g., 700 MHz Second Report and Order*, 22 FCC Rcd at 15318-19, 15321, 15323 (¶¶ 69, 71, 75, 80).

⁴⁶ *Id.* at 15348 (¶ 153); *see also id.* at 15354-55 (¶ 176).

⁴⁷ *Compare id.* at 15349 (¶ 157) (setting forth the build-out requirements for CMA block licenses (*i.e.*, the Lower 700 MHz B and C blocks) and for EA block licenses (*i.e.*, the Lower 700 MHz A and E blocks)), *with id.* at 15351 (¶ 162) (setting forth the build-out requirements for REAG block licenses (*i.e.*, the Upper 700 MHz C block)).

contemplated that devices operating in some 700 MHz spectrum blocks would be available before devices operating in other 700 MHz blocks.

In drawing these block-based distinctions, the Commission adopted an entirely different approach than the one it employed in 1981 when it required all handsets to carry both Block A and Block B cellular bands.⁴⁸ Unlike the FCC's 1981 cellular plan, its 700 MHz plan did not contemplate that the band would be used for one—and only one—technology. Instead, the Commission adopted a more flexible approach that contemplated different uses for different blocks.

At bottom, there was a clear and fundamental logic behind the Commission's decision to divide the 700 MHz spectrum into diverse blocks. Indeed, the Commission's decision to create different 700 MHz blocks took account of the complex technological issues surrounding the distribution of this band of spectrum. Yet the rules the Alliance seeks would undermine the agency's plan by erasing the block-based distinctions it drew in favor of a new all-frequency mandate. Grant of the Petition would thus be vulnerable to an APA challenge because making that decision would require the Commission to violate one of the basic "dictates" of "[r]ational decisionmaking"—namely, that an agency not "employ means that actually undercut its own purported goals."⁴⁹ Moreover, in light of the evidence presented about the technical obstacles associated with combining certain blocks in a single mobile device,⁵⁰ it would be irrational for the Commission to require all 700 MHz mobile units to operate in all spectrum blocks.

⁴⁸ See *In the Matter of An Inquiry Into the Use of the Bands 825–845 MHz and 870–890 MHz for Cellular Communications Systems*, 86 F.C.C.2d 469, 482 (¶ 26) (1981); see also *supra* pp. 19-21 (discussing the Alliance's reliance on the FCC's 1981 decision).

⁴⁹ See, e.g., *Office of Commc'n of United Church of Christ v. FCC*, 779 F.2d 702, 707 (D.C. Cir. 1985).

⁵⁰ See *supra* pp. 4-10.

Similarly, adopting the interoperability rules the Alliance requests would run afoul of the APA by requiring the Commission to depart from agency precedent without a sufficient basis for doing so. “When an agency undertakes to change or depart from existing policies, it must set forth and articulate a reasoned explanation for its departure from prior norms.”⁵¹ “Sharp changes of agency course constitute ‘danger signals’ to which a reviewing court must be alert.”⁵² The Petition does not provide a reasoned basis for departing from the block-based scheme for the 700 MHz band that could survive APA review. More broadly, Commission precedent both in this proceeding and outside the 700 MHz context firmly established that it is the agency’s policy to foster technological differentiation by allowing licensees and wireless providers a substantial degree of flexibility.⁵³ Granting the Petition, however, would require the Commission to intervene in the standards setting process and mandate technological uniformity. The Petition offers no explanation, nor could it, that would justify such an abrupt departure from longstanding Commission policies.⁵⁴

⁵¹ *Telecommunications Research and Action Center v. FCC*, 800 F.2d 1181, 1184 (D.C. Cir. 1986); *State Farm*, 463 U.S. at 57; *FCC v. Fox Television Stations, Inc.*, 129 S. Ct. 1800, 1810-12 (2009); see also *Verizon Tel. Cos. v. FCC*, 570 F.3d 294, 300 (D.C. Cir. 2009) (“If the FCC changes course, it ‘must supply a reasoned analysis’ establishing the prior policies and standards are being deliberately changed.” (citation omitted)); *Wisc. Valley Improvement v. FERC*, 236 F.3d 738, 748 (D.C. Cir. 2001) (“[A]n agency acts arbitrarily and capriciously when it abruptly departs from a position it previously held without satisfactorily explaining its reason for doing so.”); *Mazza v. Dep’t of Health & Human Servs.*, 903 F.2d 953, 959 (3d Cir. 1990).

⁵² *Natural Resources Defense Council v. EPA*, 683 F.2d 752, 760 (3rd Cir. 1982).

⁵³ See *supra* note 15 (collecting relevant FCC precedents); see also *700 MHz Second Report and Order*, 22 FCC Rcd at 15318, 15320 (¶¶ 59, 72) (emphasizing the importance of allowing wireless providers technological flexibility).

⁵⁴ Following Congress’s lead, the Commission has consistently determined that it will apply a light regulatory touch to the wireless industry, preferring to rely on market forces rather than regulatory intervention. See, e.g., *Petition of the Connecticut Department Public Utility Control To Regulate Control of the Rates of Wholesale Cellular Service Providers in the State of Connecticut*, 10 FCC Rcd 7025, 7033-34 (¶ 14) (1995) (“The framework of our CMRS regulatory policy [is] . . . moderate regulation, symmetrical regulation of all services as

The APA would be violated for an additional reason: It requires that the administrative record demonstrate the existence of an actual problem in need of a regulatory solution.⁵⁵ Indeed, “a regulation perfectly reasonable and appropriate in the face of a given problem may be highly capricious if that problem does not exist.”⁵⁶ As indicated above, however, the Petition is entirely devoid of any evidence of a problem in need of agency intervention.⁵⁷ The Petition’s premise is that Verizon Wireless seeks to prevent handsets from being manufactured that would operate on spectrum licensed to Alliance members. But the Alliance not only fails to provide facts that support this assertion, it ignores the established facts to the contrary—*e.g.*, nothing prevents Alliance members from working with manufacturers to design devices that operate on their spectrum,⁵⁸ and the band classes established by the 3GPP do not limit the operation of devices to particular bands⁵⁹—that prove that there is no problem that could justify Commission action. Moreover, as noted above, Verizon Wireless has purchased far more Block A spectrum than the Alliance members and thus would have no conceivable interest in attempting to deter device manufacturers from developing and marketing handsets capable of working on 700 MHz A

appropriate, and a preference for curing market imperfections by lowering entry barriers in order to encourage competition rather than by regulating existing licensees . . .”). Thus, were the Commission to grant the Alliance relief by imposing heavy-handed rules on wireless licensees, such agency action could amount to an unjustifiable repudiation of the agency’s precedent demanding a light touch with respect to wireless regulation.

⁵⁵ See, *e.g.*, *Burlington Truck Lines*, 371 U.S. at 168 (“The agency must make findings that support its decision, and those findings must be supported by substantial evidence.”).

⁵⁶ *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 36 (D.C. Cir. 1977) (internal quotation marks omitted); see also *California v. FCC*, 985 F.2d 1217, 1238 (9th Cir. 1990).

⁵⁷ See *supra* note 10 and accompanying text.

⁵⁸ See *supra* note 10 and accompanying text (citing evidence that there are at least 33 companies that manufacture devices for the U.S. market and noting that the Alliance provides no evidence about their efforts (or apparent lack thereof) to obtain the devices they want).

⁵⁹ See *supra* p. 4.

Block spectrum.⁶⁰ In sum, it is clear that an administrative record could not be developed in this proceeding that would support a decision to grant the relief requested by the Alliance.

Finally, the Alliance includes in its Petition an extraordinary and unprecedented request that the Commission impose an immediate “freeze” on equipment authorizations is itself not supported by any facts or law. Although the Commission’s rules allow interested persons to file properly framed petitions for rulemaking “for the issuance, amendment or repeal of a rule or regulation,” the rules do not contemplate the issuance of injunctive-type relief,⁶¹ let alone the issuance of injunctive relief on a nonexistent factual and legal record. In addition, to the extent the Alliance is asking the Commission to enter a stay of equipment authorizations while the agency considers its Petition, the Alliance has failed to carry its heavy burden of establishing that such relief is warranted in this case. Indeed, other than asserting in conclusory fashion that the Commission should enter a freeze, the Alliance has made no effort to meet that burden. Furthermore, if (in seeking an immediate equipment authorization freeze) the Alliance is seeking a substantive change in the FCC’s equipment authorization rules, the APA would prohibit the Commission from granting this form of relief without first following APA notice and comment rulemaking requirements.⁶² There is thus no possible legal or factual basis to consider the

⁶⁰ See *supra* pp. 11-12.

⁶¹ See 47 C.F.R. § 1.401(a). Moreover, to the extent that the Commission’s rules speak directly to the question, they make clear that the Commission will not consider hybrid requests for relief of the kind set forth in the Petition. See 47 C.F.R. § 1.44(e) (providing that a request for a stay shall be filed as a separate pleading).

⁶² See 5 U.S.C. §551(5) (“‘rule making’ means agency process for formulating, amending, or repealing a rule”); see also *SBC Inc. v. FCC*, 414 F.3d 486, 497-98 (D.C. Cir. 2005) (“Legislative rules are subject to the notice and comment requirements of the APA because they work substantive changes in prior regulations, or create new law, rights, or duties. . . . Furthermore, if an agency’s present interpretation of a regulation is a fundamental modification of a previous interpretation, the modification can only be made in accordance with the notice and comment requirements of the APA.” (citations and quotation marks omitted)).

Alliance's request for a stay.

IV. CONCLUSION

For the reasons set forth above, the Commission should deny the Petition.

Respectfully submitted,

VERIZON WIRELESS

By: John T. Scott III

John T. Scott, III
Vice President & Deputy General Counsel

William D. Wallace
Senior Counsel

Verizon Wireless
1300 I Street, N.W.
Suite 400 West
Washington, D.C. 20005
(202)589-3760

March 31, 2010

Certificate of Service

I hereby certify that on this 31st day of March copies of the foregoing "Comments of Verizon Wireless" in RM-11592 were sent by US Mail to the following party:

David L. Nace
Lukas, Nace, Gutierrez & Sachs, LLP
1650 Tysons Blvd., Suite 1500
McLean, VA 22102
Counsel for 700 MHz Block A Good Faith Purchasers Alliance



Sarah E. Trosch
Sarah E. Trosch