

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of	)	
	)	
Petition for Rulemaking Regarding 700 MHz	)	RM No. 11592
Band Mobile Equipment Design and	)	
Procurement Practices	)	
	)	

**REPLY COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY  
ASSOCIATION**

**INTRODUCTION.**

The Telecommunications Industry Association (TIA) hereby submits comments to the Federal Communications Commission (Commission) in the above-captioned proceeding.<sup>1</sup> TIA appreciates the opportunity to discuss the request made by the 700 MHz Block A Good Faith Purchasers Alliance (Alliance) that the Commission freeze any 700 MHz mobile device approval while it establishes rules to require that all 700 MHz mobile equipment be capable of operating on all paired commercial 700 MHz frequency bands. TIA urges the Commission to reject this petition, as it will present significant technical and interference problems, severely delay the availability of wireless devices in the 700 MHz spectrum, and violate the Commission's policy of technology neutrality.

---

<sup>1</sup> See Wireless Telecommunications Bureau Seeks comment on Petition for Rulemaking Regarding 700 MHz Band Mobile Equipment Design and Procurement Practices, Public Notice, DA 10-278, 75 Fed. Reg. 9210 (rel. Feb. 18, 2010). See also Petition for Rulemaking of the 700 MHz Block A Good Faith Purchasers Alliance, RM-11592 (filed Sept. 29, 2009) (Alliance Petition).

TIA represents the global information and communications technology (ICT) industry through standards development, advocacy, tradeshow, business opportunities, market intelligence and world-wide environmental regulatory analysis. Its 500 member companies manufacture or supply the products and services used in the provision of broadband and broadband-enabled applications. Since 1924, TIA has enhanced the business environment for broadband, mobile wireless, information technology, networks, cable, satellite and unified communications. Members' products and services empower communications in every industry and market, including healthcare, education, security, public safety, transportation, government, the military, the environment and entertainment.

**SUMMARY.**

The Alliance Petition seeks to impose severe restrictions on the development of wireless devices that could operate in the 700 MHz band. In its effort to ensure that every 700 MHz device operates on all paired commercial 700 MHz frequency blocks, the Alliance ignores technological and marketplace realities that will stall progress to make 700 MHz devices rapidly available at reasonable cost. Further, forcing carriers to develop devices capable of operating on each band in the 700 MHz band severely discourages a licensee's prerogative to change air interfaces. Thus, the technology-neutral policy of allowing carriers to change air interfaces would be thwarted. For these reasons, the Commission should deny the Alliance Petition.

## **DISCUSSION.**

### **I. GRANTING THE ALLIANCE PETITION WILL STALL PRODUCTION OF WIRELESS DEVICES IN THE 700 MHZ BLOCK.**

The Alliance Petition seeks to impose a mandate that all 700 MHz mobile equipment be capable of operating on all paired commercial 700 MHz frequency blocks and freeze any 700 MHz mobile device approval while it establishes such a mandate.<sup>2</sup> As Commenters make clear, technical and market-based concerns will result in stifled innovation, slowed introduction of devices capable of operating in the 700 MHz block, and increased cost to consumers.<sup>3</sup>

Should the Alliance Petition be granted, device manufacturers face significant technical hurdles to create devices that can operate across all 700 MHz bands. For example, additional components, such as filters, power amplifiers, and switches would need to be inserted into wireless devices. This concern is exacerbated by the fact that, in order to ensure compliance with the Alliance Petition mandate, handsets may be unable to roam onto other bands for national and international service. The number of bands which can be supported by a wireless device are limited, and a handset likely cannot support both roaming and the operation across all 700 MHz bands.

---

<sup>2</sup> See Alliance Petition at 1-2.

<sup>3</sup> See, e.g., Comments of Qualcomm at 1-2; see also Comments of Motorola at 2-3 (noting that the “Alliance petition, by increasing the complexity of these devices and potentially nullifying efforts that are well underway, would delay the development of mobile broadband devices and would threaten mobile broadband network deployment.”); see also Comments of Verizon Wireless at ii (“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.”).

As a result of these factors, the granting of the Alliance Petition will delay production of 700 MHz wireless devices. Moreover, the development of new designs and technical attributes of such devices will dramatically escalate the cost of these devices and also significantly delay introducing them into the market. As AT&T has made clear, improved handset technologies cannot evolve under a strict regulatory regime: “designing, manufacturing, and deploying handsets is not a process that is conducive to regulatory mandates, as it requires a balancing of many factors, such as a carrier’s business plans, spectrum holdings, desired handset form and size, and cost.”<sup>4</sup>

Additionally, there is a possibility that interference will result from requiring handsets to operate in all 700 MHz bands, as there is almost no guard band between any of the individual frequency blocks in the Lower and Upper 700 MHz bands.<sup>5</sup> Further, as Qualcomm notes, “...the duplex spacing and gap within the Lower and Upper 700 MHz bands is relatively narrow. This interference can be mitigated through the use of narrower filters in the duplexer(s).”<sup>6</sup> Such filters will be used to support the Lower and Upper 700 MHz band operations. However, the requirements of the Alliance Petition necessitate using wider filters, which increase the potential for interference. Once again, such concerns and the resulting redesign of wireless devices make the Alliance Petition’s proposed relief impractical and costly.

---

<sup>4</sup> Comments of AT&T at 8.

<sup>5</sup> See Comments of Qualcomm at 6.

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

**II. THE PROPOSED MANDATES VIOLATE THE COMMISSION'S POLICY OF TECHNOLOGY NEUTRALITY.**

Should the Alliance Petition's requests be granted, the Commission will reverse its policy of technology neutrality. If the Commission requires all wireless devices to operate in all of the 700 MHz bands, licensees will be limited in the ability to change air interfaces.

Under this proposal, should a licensee of a paired 700 MHz block change its air interface and thereby preclude the use of devices not compatible with the air interface of another band, those devices would become unlawful. Thus, the technology-neutral policy of allowing carriers to change air interfaces would be thwarted.<sup>7</sup> Thus, granting the Alliance Petition will limit the ability of manufacturers and carriers to create and deploy innovative products for the benefit of consumers.

---

<sup>7</sup> See Comments of Qualcomm at 6-7.

**CONCLUSION.**

For the foregoing reasons, TIA encourages the Commission to take action in this proceeding consistent with the recommendations set out above.

Respectfully submitted,

TELECOMMUNICATIONS INDUSTRY  
ASSOCIATION

By: \_\_\_/s/\_\_\_\_\_

Danielle Coffey  
Vice President,  
Government Affairs

Patrick Sullivan  
Director, Technical and Government Affairs

TELECOMMUNICATIONS INDUSTRY  
ASSOCIATION  
10 G Street N.E.  
Suite 550  
Washington, D.C. 20002  
(202) 346-3240

April 30, 2010