



1200 EIGHTEENTH STREET, NW  
WASHINGTON, DC 20036

TEL 202.730.1300 FAX 202.730.1301  
WWW.HARRISWILTSHIRE.COM

ATTORNEYS AT LAW

31 July 2008

**BY ELECTRONIC FILING**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re: *Notice of Ex Parte Presentation*, WP Docket No. 07-100, WT Docket No. 06-150, and PS Docket No. 06-229**

Dear Ms. Dortch:

On Thursday, July 30, 2008, Richard Taylor, Senior Principal Engineer of Tyco Electronics M/A-COM, Inc. ("TE M/A-COM") presented at the Commission's en banc hearing on "Public Safety Interoperable Communications – the 700 MHz D Block Proceeding" in the Brooklyn Borough Hall, New York.

In addition to the full Commission, present at the hearing were Aaron Goldberger, legal advisors to Chairman Martin, Bruce Gottlieb, legal advisor to Commissioner Copps, Wayne Leighton, wireless legal advisor to Commissioner Tate, and Cristina Chou Pauze, legal advisor to Commissioner McDowell. Present at the hearing from the Public Safety and Homeland Security Bureau were Deputy Bureau Chief Erika Olsen and Senior Legal Counsel Jeff Counsel. In addition, Julius Knapp, Chief of the Office of Engineering and Technology and Jim Schlichting, Acting Chief of the Wireless Bureau were present at the hearing.

TE M/A-COM is a subsidiary of Tyco Electronics Ltd. and provides critical radio communications systems for EMS, firefighters, police, federal law enforcement and other private radio user segments, and is a leading manufacturer of devices for the commercial wireless,

aerospace and defense industries. TE M/A-COM discussed the need to amend Part 90 to provide primary status to permanent fixed 4.9 GHz links that are part of a public safety network.<sup>1</sup>

Mr. Taylor noted the interrelation of broadband applications for public safety at 4.9 GHz, allocated five years ago, and maximizing efficient use of the 700 MHz band for public safety broadband applications. With respect to the D Block, Mr. Taylor noted that the Commission has envisioned the 700 MHz broadband network as a wide-area, mobile broadband data solution. The amount of spectrum available to this network (10 MHz or 20 MHz during emergencies) will satisfy many public safety mobile broadband needs.<sup>2</sup> Nonetheless, in response to the Commission's question regarding "how does the use of 10 or 20 megahertz of shared spectrum affect the throughput of the broadband network and the functions it can support,"<sup>3</sup> Mr. Taylor noted that 10 MHz may be insufficient to accommodate many of the envisioned uses. Broadband networks are expected to carry surveillance video from fixed surveillance cameras throughout a city to public safety vehicles in the field.<sup>4</sup> Since typical IP surveillance video operates at 500 kbps–1.5 Mbps,<sup>5</sup> the available 5 MHz of public safety uplink spectrum can accommodate only a small number of cameras per cell before these fixed wireless video applications exhaust the spectrum. The 700 MHz mobile broadband spectrum should be used for mobile operations — such as carrying the video to the vehicles in the field. Public safety can use the 50 MHz of spectrum in the 4.9 GHz band for fixed applications such as wide-area fixed video surveillance. The use of 4.9 GHz can therefore complement the 700 MHz network and, thus, Mr. Taylor stated that TE M/A-COM continues to encourage the Commission to make all

---

<sup>1</sup> See *Clarification of Sections 90.1207(c), 90.1207(d), and 90.1215 of the Commission's Rules to Conform with Findings and Conclusions in WT Docket No. 00-32*, Amended Petition for Clarification or, in the Alternative, Petition for Rulemaking of M/A-COM, Inc., WT Docket No. 00-32 (filed Aug. 23, 2005); see also Reply Comments of M/A-COM, WP Docket No. 07-100 (Sept. 9, 2007).

<sup>2</sup> See *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band*, Second Further Notice of Proposed Rulemaking, WT Docket No. 06-150 and PS Docket No. 06-229, 23 FCC Rcd 8047, 8070-71 ¶ 59 (2008) (mandating "[s]pecifications for a broadband technology platform that provides *mobile* voice, video, and data capability that is seamlessly interoperable across agencies, jurisdictions, and geographic areas") (emphasis added).

<sup>3</sup> *Id.* ¶ 34. See also *id.* ¶ 208 ("Will the 10 megahertz of public safety spectrum allocated for broadband be sufficient to support a nationwide, interoperable broadband network for public safety?").

<sup>4</sup> See The SAFECOM Program, Department of Homeland Security, Statement of Requirements for Public Safety Wireless Communications & Interoperability 48 (2004), [http://www.safecomprogram.gov/NR/rdonlyres/3FFFBFBA-DC53-440E-B2EF-ABD391F13075/0/SAFECOM\\_Statement\\_of\\_Requirements\\_v1.pdf](http://www.safecomprogram.gov/NR/rdonlyres/3FFFBFBA-DC53-440E-B2EF-ABD391F13075/0/SAFECOM_Statement_of_Requirements_v1.pdf) (explaining that an incident commander should be able to "access video from private, non-public safety sources, such as schools, banks, area surveillance cameras, news cameras, traffic cameras").

<sup>5</sup> See Bosch, *Estimating Bandwidth: White Paper*, [http://www.boschsecurity.us/pdf/EN/Estimating%20Bandwidth%20WP%20low\\_res.pdf](http://www.boschsecurity.us/pdf/EN/Estimating%20Bandwidth%20WP%20low_res.pdf); John Honovich, *Convergence Review: Bandwidth Tutorial for IP Video Surveillance Systems*, IP Video Market Info, June 8, 2008, <http://ipvideomarket.info/reviews/show/122>; Cisco Systems, *Cisco Systems IP Network-Centric Video Surveillance*, [http://www.cisco.com/en/US/prod/collateral/vpndevc/ps6918/ps6921/ps6938/prod\\_white\\_paper0900aecd804a3e89\\_ps6937\\_Products\\_White\\_Paper.html](http://www.cisco.com/en/US/prod/collateral/vpndevc/ps6918/ps6921/ps6938/prod_white_paper0900aecd804a3e89_ps6937_Products_White_Paper.html).

fixed 4.9 GHz links that are part of a public safety network primary to allow this band to be fully and flexibly used by public safety.<sup>6</sup>

Similarly, the Commission has emphasized its desire for a D-Block licensee to have access to public safety broadband spectrum on a secondary basis,<sup>7</sup> creating further potential for straining the capacity of the D-Block spectrum to satisfy public safety broadband needs. In this regard, in his written submitted comments for the hearing Mr. Taylor noted that the Commission seeks comment on whether there are services or applications that are “too inefficient” or too “far removed” from public safety needs to justify their use in the D-Block spectrum to the exclusion of a D-Block licensee’s access on a secondary basis. As an example, the Commission asked in the *Second FNPRM* whether it would be appropriate to prohibit or restrict continuous or routine video surveillance in the D-Block spectrum.

TE M/A-COM believes that the Commission should afford public safety agencies maximum flexibility in the use of the D-Block spectrum. Continuous or routine video surveillance is inherently spectrum “inefficient.” Rather, certain applications—which may find critical use in some instances—are more bandwidth “intensive” than others. Even with access to the entire 20 MHz of potentially available D-Block spectrum, competition for access to such spectrum among commercial and public safety users with potentially large bandwidth requirements could result in congestion.

The 4.9 GHz band is prime spectrum for supporting such applications and all 4.9 GHz links, including permanent fixed links that could be used for video surveillance or other fixed applications should be granted primary status. Such status would encourage public safety agencies to deploy 4.9 GHz for appropriate, bandwidth-intensive applications, which would in turn conserve capacity on any 700 MHz broadband network.

---

<sup>6</sup> See Petition for Clarification or, in the Alternative, Petition for Rulemaking of M/A-COM, Inc., WT Docket No. 00-32 (filed July 22, 2005, amended Aug. 23, 2005) (“Amended Petition”); M/A-COM Ex Parte Letter, WP Docket No. 07-100 (filed Apr. 22, 2008); M/A-COM Ex Parte Letter, WP Docket No. 07-100 (filed Mar. 13, 2008).

<sup>7</sup> See *Second FNPRM* ¶ 78 (stating “[o]ne of the key elements of the 700 MHz Public/Private Partnership is the D Block licensee’s access to the public safety broadband spectrum on a secondary basis to defray the cost of building a nationwide network serving both commercial and public safety users”).

Marlene H. Dortch

31 July 2008

Page 4

Pursuant to Section 1.1206 of the Commission's rules, a copy of this letter has been filed via ECFS with your office and served on the Commission staff noted below. Should you have any questions, please do not hesitate to contact me by telephone at +1 202 730 1314 or by email at [tpaoletta@harriswiltshire.com](mailto:tpaoletta@harriswiltshire.com).

Sincerely,

A handwritten signature in black ink, appearing to read 'Patricia Paoletta', with a long horizontal flourish extending to the right.

Patricia Paoletta  
*Counsel for M/A-COM, Inc.*

cc: Erika Olsen  
Julie Knapp  
Jim Schlichting  
Aaron Goldberger  
Bruce Gottlieb  
Renee Crittendon  
Wayne Leighton  
Angela Giancarlo  
Jeff Cohen