

August 4, 2017

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

Re: *WiMAX Forum Petition Proposing Rules for the Aeronautical Mobile
Airports Communications Systems, RM-11793*

Dear Ms. Dortch:

On behalf of Siemens USA, I write to express my strong support for the Petition filed by the WiMAX Forum proposing services rules for the Aeronautical Mobile Airports Communications Systems (AeroMACS).¹ The widespread and expeditious deployment of AeroMACS holds the potential to bring significant benefits to American airports, air travelers, and equipment manufacturers. The Commission should therefore move quickly to adopt a Notice of Proposed Rulemaking proposing services rules for AeroMACS.

AeroMACS is an airport surface communications system that will allow for increased volumes of data exchanges at airports around the country. As the demand for high-bandwidth, data intensive services and applications continues to grow, the global aviation community has adopted AeroMACS to help meet these needs for airport surface communications. The FCC has adopted globally harmonized allocations for AeroMACS in the 5000-50230 MHz and 55091-5150 MHz bands, but the lack of service rules has hindered the widespread deployment of this service in the United States.

The deployment of AeroMACS will result in a multitude of benefits for American airports and air travelers. First and foremost, the higher bandwidth communications services and applications provided by AeroMACS will establish a new framework for airport surface communications designed to advance the safety and regulatory of flight. For example, AeroMACS can assist in providing pilots up-to-date information on flight plans, maps, and weather forecasts. In addition, airport operations personnel will be able to use AeroMACS networks to perform a host of tasks ranging from coordinating gate operations to snow removal to support for emergency services.

The adoption of service rules will also help promote manufacturing and investment in new AeroMACS products and services. Siemens is one of several vendors which have commercial AeroMACS kits available, but large-scale manufacturing remains contingent upon

¹ See WiMAX Forum Petition for Rulemaking to Adopt AeroMACS Service Rules (filed Mar. 31, 2017) (“Petition”).

the adoption of services rules. Moreover, the adoption of service rules will spur investment in new and innovative products and services that can be deployed on AeroMACS networks.

For more than 169 years, the name Siemens has been synonymous internationally with technical excellence, innovation, quality and reliability. With operations spanning 190 countries, and a workforce of over 370,000 employees, we support our customers by supplying innovative technology and comprehensive expertise. The backbone of Siemens Industry's integrated portfolio of automation systems is our extensive offering for industrial communication in every environment, from the factory floor to the harshest outdoor conditions. Within the Process Industries and Drives Division of Siemens Industry resides the RUGGEDCOM product portfolio of rugged communications networking solutions designed for mission-critical applications in harsh environments. Our RUGGEDCOM IEEE 802.16e WiMAX solution with purpose-built features essential to Critical Infrastructure customers is the basis for our AeroMACS focused wireless solution, and is already certified by the FAA FTI program.

The Public Notice released by the Commission seeks comment on a number of issues proposed in the Petition.² Siemens USA responds to each of these issues as follows:

Licensing Scheme and use of a Channel Manager to determine eligibility and coordinate non-Federal channel usage. We support the proposal that non-Federal eligible users share available channels under the auspices of a single Commission-appointed nationwide Channel Manager. This licensing scheme is the most efficient way of optimizing the limited spectrum in these bands. A Channel Manager, with oversight from industry participants such as the airport and airline communities, is best positioned to allocate spectrum fairly on a non-discriminatory basis. Relatedly, we support the proposal that non-Federal eligible users be "licensed by rule" under Part 95 and be able to register sites and secure AeroMACS channels by applying to the Channel Manager. This licensing approach seems to us as the most economical way to assign AeroMACS channels. Moreover, this approach reduces the possibility that an entity "warehouses" spectrum it does not need at a particular airport.

Eligibility of non-Federal entities to use AeroMACS. We support the Petition's proposed non-exhaustive list of eligible users, which includes airports, airlines, airline navigation service providers, and aeronautical communications network providers. This list of eligible users includes all of those entities who are likely to utilize the spectrum in furtherance of the safety and regularity of flight mandate for which the spectrum was originally allocated. Robust access to this spectrum by a variety of users will ensure that we realize the envisioned benefits of safety and regulatory of flight.

Appropriate technical characteristics and equipment certification requirements. We support the proposed technical characteristics and equipment certifications rules. These

² See *Wireless Telecommunications Bureau Seeks Comment on WiMAX Forum Petition Proposing Rules for the Aeronautical Mobile Airport Communication System*, Public Notice, DA-17-696 (rel. Jul. 19, 2017 WTB) ("Public Notice").

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proposed rules are based on the internationally adopted standards and technical rules for equipment that will be certified to operate in the band. Specifically, the technical rules for AeroMACS are derived from Standards and Recommended Practices of the International Civil Aviation Organization and Radio Technical Commission for Aeronautics published documents. Adoption of such rules will aid in efforts to globally harmonize operations in this band, thus speeding deployment of AeroMACS networks worldwide.

Thank you for seeking comment on the important issues raised in the Petition. In light of the significant benefits that will be realized by the swift and widespread deployment of AeroMACS networks, Siemens USA urges the Commission to expeditiously adopt a Notice of Proposed Rulemaking proposing services rules for AeroMACS.

Sincerely, Michel Jabbour

A handwritten signature in black ink, consisting of a stylized 'M' followed by a horizontal line.

Business Segment Manager CI
Process Industries and Drives Division
Siemens Industry

cc: Chairman Ajit Pai
Commissioner Mignon Clyburn
Commissioner Mike O'Rielly
Donald Stockdale, Chief, Wireless Telecommunications Bureau
Julius Knapp, Chief, Office of Engineering and Technology