



**Teligent**  
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May 6, 1998

**VIA HAND DELIVERY**

Federal Communications Commission  
Experimental Licensing Branch  
P.O. Box 358320  
Pittsburgh, PA 15251-5320

Re: *Request for Special Temporary Authority*  
Teligent, Inc.  
Digital Electronic Message Service  
Expedited Treatment Requested

Dear Ladies and Gentleman:

Pursuant to Section 5.56, 5.57(a) and 5.202(i) of the Commission's Rules, 47 C.F.R. §§ 5.56, 5.57(a) and 5.202(i), Teligent, Inc. and its wholly owned subsidiaries FirstMark Communications, L.L.C. ("FirstMark"), Teligent License Company I, L.L.C. ("Company I") and Teligent License Company II, L.L.C. ("Company II") (collectively "Teligent"), hereby request an additional Special Temporary Authority ("STA") to operate non-type accepted equipment in the 24 GHz Digital Electronic Message Service ("DEMS") band for six months. Teligent's current STA to conduct the type of experimental testing requested in this application will expire on June 9, 1998.<sup>1</sup> Grant of this request is consistent with the Commission's March 14, 1997 order that required: (1) the relocation of 18 GHz band DEMS licenses to the 24 GHz DEMS band to satisfy national security requirements; (2) the discontinuance of 18

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<sup>1</sup> Teligent's current STA was granted on December 9, 1997. See FCC File Number S-3123-EX-97.

GHz DEMS operations in the Washington, D.C. market and Denver, Colorado areas as of June 5, 1997; and (3) the discontinuance of 18 GHz DEMS operations in all other areas by January 1, 2001.<sup>2</sup>

Specifically, Teligent seeks an authorization for six months to continue the following operations related to DEMS relocation in markets where it currently holds 24 GHz DEMS licenses: (i) testing of various non-type accepted equipment for the 24 GHz DEMS band; and (ii) provision of commercial service to customers using non-type accepted equipment for the 24 GHz DEMS band until such time as type accepted equipment is available. Grant of this STA serves the public interest by facilitating DEMS relocation to the 24 GHz band on an expedited basis, enabling Teligent to continue providing service to existing customers, and to continue marketing competitive local telecommunications services to other potential customers using its fixed wireless, 24 GHz licenses. Currently, only one vendor has type accepted point-to-point equipment for the 24 GHz band and there is no type accepted point-to-multipoint equipment for the 24 GHz DEMS band. Therefore, grant of this STA is needed as soon as practicable to facilitate the continued development of radio technique, equipment, operational data, and engineering data related to DEMS as discussed further below.

## I. BACKGROUND

Teligent holds licenses to construct and operate DEMS systems in the 24 GHz frequency band in more than 70 markets. A list of FirstMark's, Company I's and Company II's DEMS licenses is attached hereto as Exhibit 1.

On March 14, 1997, pursuant to a request by the National Telecommunications and Information Administration ("NTIA") to alleviate potential interference between DEMS operations and U.S. government military satellite operations, the Commission adopted the *DEMS Relocation Order* relocating DEMS from the 18 GHz band to the 24 GHz band to accommodate these sensitive national

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<sup>2</sup>Amendment of the Commission's Rules to Relocate the Digital Electronic Message Service From the 18 GHz Band to the 24 GHz Band and to Allocate the 24 GHz Band for Fixed Service, *Order*, ET Dkt. 97-99, FCC 97-95 (Released March 14, 1997) ("*DEMS Relocation Order*"). The effective date of the *DEMS Relocation Order* is June 5, 1997.

security interests. The Commission also adopted amended service rules for 18 GHz and 24 GHz DEMS and directed the Wireless Telecommunications Bureau ("Wireless Bureau") to issue modified DEMS licenses authorizing operations in the 24 GHz band. To ensure the protection of government satellite operations, the Commission required incumbent DEMS licensees to cease operations using the 18 GHz band within a 150 kilometer area of the government's earth station facilities in Washington, D.C. and Denver, Colorado as of June 5, 1997, the effective date of the Commission's amended DEMS rules.<sup>3</sup> In all other areas, incumbent DEMS licensees must cease operations using the 18 GHz band by January 1, 2001. The Commission also requires coordination between DEMS systems and existing Federal Aviation Administration ("FAA") radio navigation radar facilities in the Washington, D.C. and Newark, New Jersey areas until such facilities are decommissioned.<sup>4</sup>

Although one vendor has obtained type acceptance for specific types of point-to-point DEMS equipment at 24 GHz, equipment suppliers are still in the process of obtaining type acceptance for both point-to-point and point-to-multipoint 24 GHz DEMS equipment. Therefore, Teligent will continue to need to use non-type accepted equipment to provide commercial service to customers prior to the Commission's grant of additional type acceptance for 24 GHz DEMS equipment, including customers in those areas where relocation of operations from the 18 GHz band to 24 GHz band was mandated by June 5, 1997.

## II. THE INSTANT REQUEST

Teligent seeks an additional six month STA for the following operations related to DEMS relocation in markets where Teligent currently is licensed. First, Teligent will test non-type accepted equipment to determine its viability for the 24 GHz DEMS band and all DEMS service areas and frequencies. Second, Teligent will provide commercial service to customers using non-type accepted equipment for the 24 GHz DEMS band. In accordance with the *DEMS Relocation Order*, Teligent will certify coordination with the FAA to ensure that its use of 24 GHz equipment does not cause any harmful interference.

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<sup>3</sup>*DEMS Relocation Order* at ¶ 14. Teligent has ceased 18 GHz operations and commenced 24 GHz point-to-point operations in these licensed areas.

<sup>4</sup>*Id.* at ¶ 15.

In light of the extraordinary circumstances surrounding the mandatory relocation of DEMS from the 18 GHz band to the 24 GHz band on an expedited basis, grant of Teligent's STA request is clearly warranted under Section 101.31 of the Commission's Rules. It would be inefficient and costly for Teligent to deploy 18 GHz equipment that will have to be removed before the end of its useful life. Such a requirement would impose an unnecessary financial burden on Teligent as they transition to 24 GHz. Moreover, in order to facilitate the transition to 24 GHz, Teligent must continue to conduct testing of the newly designed DEMS equipment in a variety of weather conditions and environments. In any event, it is Teligent's understanding that vendors are no longer pursuing type acceptance for point-to-multipoint radios in the 18 GHz band. Thus, Teligent's only option to deploy and test point-to-multipoint equipment is in the 24 GHz band.

The need for an additional STA is particularly compelling within the 150 kilometer area around Washington, D.C. and Denver, Colorado. Teligent is providing commercial service to customers in the Washington, D.C., Baltimore, Maryland and Denver, Colorado market and requires an STA to ensure that service to such customers can continue using point-to-point and point-to-multipoint equipment. Moreover, non-type accepted 24 GHz equipment is currently available from manufacturers for deployment. Therefore, failure to grant this STA will prejudice the public interest which according to Section 5.56, 5.57(a) and 5.202(i) of the Commission's rules justifies expedited processing of an STA request.

The Commission recognized the "need to move DEMS as quickly and with as little impact as possible" in the *DEMS Relocation Order*.<sup>5</sup> Grant of the instant STA request serves the public interest by facilitating the continued relocation of Teligent's DEMS operations to satisfy national security requirements. Specifically, the STA will enable Teligent to continue to serve customers at 24 GHz with point-to-multipoint equipment, rather than deploying point-to-point equipment for some interim period which will eventually need to be replaced. Furthermore, Teligent will be able to provide continued service to its existing customers in the Washington, D.C., Baltimore, Maryland and Denver, Colorado area during the transition from the 18 GHz band to the 24 GHz band. The STA also serves the public interest by allowing Teligent to test non-type accepted equipment in various real world environments where the equipment ultimately will be deployed commercially to determine

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<sup>5</sup> *Id.* at ¶ 12.

whether it functions properly. This testing will foster a "quick" relocation to 24 GHz with "as little impact" to the public as possible, consistent with the Commission's goals set forth in the *DEMS Relocation Order*.

The following information is provided pursuant to Section 5.56(b) of the Commission's rules:

**1) Address and Points of Communications:**

Teligent, Inc.  
8065 Leesburg Pike  
Suite 400  
Vienna, VA 22182  
Contact: Terri Natoli

Operations will occur at various points and in various real-world environments.

**2) Equipment:**

24 GHz point-to-multipoint microwave equipment.

**3) Frequencies Desired:**

24.25-24.45 GHz and 25.05-25.25 GHz bands.

**4) Transmit Power Output:**

The equipment will operate at a maximum output of 1000 mW (+30 dBm).

**5) Type of Emission:**

The equipment tested will have a maximum bandwidth of 10 MHz and the following types of emissions: D7W and G1D.

**6) Overall Height of Antenna Structure Above Ground:**


Teligent will transmit to and from receivers located on existing antenna structures and new structures. To the extent new structures are required, Teligent will obtain FAA no-hazard determinations and satisfy related Commission obligations.

- 7) **Type of Operation to be Conducted:**  
Transmission on various DEMS channels between DEMS nodal stations and customer sites.
- 8) **Purpose of Operation:**  
Teligent requires special temporary authority in order to (i) test non-type accepted point-to-multipoint equipment for the 24 GHz DEMS band and (ii) provide commercial service to customers using non-type accepted point-to-multipoint equipment for the 24 GHz DEMS band until such time as type accepted equipment is available.

Teligent certifies that no party to this application is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862.

If you have any questions regarding this matter, please call Teligent's communications counsel, Jay L. Birnbaum, Esq., Skadden, Arps, Slate, Meagher & Flom, 1440 New York Avenue, N.W., Washington, D.C.; (202) 371-7288.

Sincerely,



Terri Natoli, Assistant Secretary  
Teligent, Inc.  
First Mark Communications, L.L.C.  
Teligent License Company I, L.L.C.  
Teligent License Company II, L.L.C.

cc: Carl Huie

## DEMS Licenses

<u>Market</u>	<u>Licensee</u>	<u>Call Sign</u>
New York, NY	TLCI	WMT307
New York, NY	TLCI	WMT315
Los Angeles, CA	TLCI	WMT337
Los Angeles, CA	TLCI	WMT314
Chicago, IL	TLCI	WMT332
Chicago, IL	TLCI	WMT318
Philadelphia, PA	TLCI	WMT339
Philadelphia, PA	TLCI	WMT313
Detroit, MI	TLCI	WPJD309
Detroit, MI	TLCI	WPJD304
Dallas, TX	TLCI	WMT331
Dallas, TX	TLCI	WMT340
Houston, TX	TLCI	WMT330
Houston, TX	TLCI	WMT322
Washington, DC	TLCI	WMT338
Washington, DC	TLCI	WMT312
San Francisco, CA	TLCI	WMT336
Boston, MA	TLCI	WMT333
Boston, MA	TLCI	WMT328
Atlanta, GA	TLCI	WMT335
Atlanta, GA	TLCI	WMT317
San Diego, CA	TLCI	WMF844
Minneapolis, MN	TLCI	WMT310
Minneapolis, MN	TLCI	WMF845
St. Louis, MO	TLCI	WMF846
St. Louis, MO	TLCI	WMT324
Baltimore, MD	TLCI	WMF850
Phoenix, AZ	TLCI	WMF851
Phoenix, AZ	TLCI	WMT309
Seattle, WA	TLCI	WMF854
Seattle, WA	TLCI	WMT323

## DEMS Licenses

<u>Market</u>	<u>Licensee</u>	<u>Call Sign</u>
Pittsburgh, PA	TLCI	WMF852
Pittsburgh, PA	TLCI	WMT319
Denver, CO	TLCI	WMT329
Miami, FL	TLCI	WMT334
Miami, FL	TLCI	WMT327
Tampa, FL	TLCI	WMT308
Tampa, FL	TLCI	WMF849
Cleveland, OH	TLCI	WPJD853
Cleveland, OH	TLCI	WMT341
Portland, OR	TLCI	WMT321
Portland, OR	TLCI	WMF842
San Jose, CA	TLCI	WPJC396
Cincinnati, OH	TLCI	WMF847
Kansas City, MO	TLCI	WMF848
Kansas City, MO	TLCI	WMT325
Sacramento, CA	TLCI	WMF843
Sacramento, CA	TLCI	WMT320
Milwaukee, WI	TLCI	WMT311
Milwaukee, WI	TLCI	WMF840
San Antonio, TX	TLCI	WPJC397
San Antonio, TX	TLCI	WMT326
Indianapolis, IN	TLCI	WMT316
Indianapolis, IN	TLCI	WMF841
Columbus, OH	TLCI	WMT342



## DEMS Licenses

<u>Market</u>	<u>Licensee</u>	<u>Call Sign</u>
Columbus, OH	TLCII	WPNH318
Salt Lake City, UT	TLCII	WPNH283
Orlando, FL	TLCII	WPNH299
Buffalo, NY	TLCII	WPNH315
New Orleans, LA	TLCII	WPNH288
Hartford, CT	TLCII	WPNH295
Nashville, TN	TLCII	WPNH325
Norfolk, VA	TLCII	WPNH284
Rochester, NY	TLCII	WPNH316
Memphis, TN	TLCII	WPNH323
Jacksonville, FL	TLCII	WPNH298
Oklahoma City, OK	TLCII	WPNH319
Greensboro, NC	TLCII	WPNH306
Louisville, KY	TLCII	WPNH302
West Palm Beach, FL	TLCII	WPNH300
Las Vegas, NV	TLCII	WPNH313
Birmingham, AL	TLCII	WPNH289
Austin, TX	TLCII	WPNH324
Honolulu, HI	TLCII	WPNH301
Dayton, OH	TLCII	WPNH314
Albany, NY	TLCII	WPNH311
Charlotte, NC	TLCII	WPNH305
Richmond, VA	TLCII	WPNH286
Tulsa, OK	TLCII	WPNH320
Raleigh, NC	TLCII	WPNH307
Fresno, CA	TLCII	WPNH291
Tucson, AZ	TLCII	WPNH290
Allentown, PA	TLCII	WPNH287
Ventura, CA	TLCII	WPNH293
Syracuse, NY	TLCII	WPNH317
Akron, OH	TLCII	WPNH312

## DEMS Licenses

<u>Market</u>	<u>Licensee</u>	<u>Call Sign</u>
Greenville, SC	TLCII	WPNH321
El Paso, TX	TLCII	WPNH297
Omaha, NE	TLCII	WPNH308
Wilmington, DE	TLCII	WPNH309
Albuquerque, NM	TLCII	WPNH310
Springfield, MA	TLCII	WPNH304
Baton Rouge, LA	TLCII	WPNH303
Charleston, SC	TLCII	WPNH322
New Haven, CT	TLCII	WPNH296
Stockton, CA	TLCII	WPNH294
Newport News, VA	TLCII	WPNG641
Santa Barbara, CA	TLCII	WPNH292
Trenton, NJ	TLCII	WPNH285

## DEMS Licenses

<u>Market</u>	<u>Licensee</u>	<u>Call Sign</u>
Los Angeles, LA	FirstMark	WMT306
San Francisco, CA	FirstMark	WMT348
New York, NY	FirstMark	WMT304