



ORIGINAL

LEVENTHAL, SENTER & LERMAN PLLC

March 10, 2006

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VIA HAND DELIVERY

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
Room TW-B204
445 Twelfth Street, S.W.
Washington, DC 20554

Attention: OET Experimental Licensing Branch - MS 1300E1

Re: WD2XJG Experimental Authorization Progress Report

Dear Ms. Dortch:

Transmitted herewith in triplicate on behalf of Educational Broadcasting Corporation, licensee of experimental station WD2XJG, New York, NY, is its third progress report as required by the station authorization (FCC File No. 0090-EX-PL-2004).

Respectfully submitted,

John W. Bagwell

Enclosures

thirteen

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March 9, 2006

Experimental Licensing Branch
MS 1300E1
Office of Engineering and Technology
FCC
Washington, DC 20554

Re: Experimental Authorization WD2XJG

Dear Sir/Madam:

EBC intends to continue to use the above-referenced experimental authorization in its current form for the next 6-month period. The experimental authorization has been used to date to support the GUARD program. The attached FCC Progress Report summarizes the achievements to date and the plans for going forward with the next phase of the GUARD project. We continue to maintain our EBS educational service with a group of schools who historically have been receiving this service and will continue to do so. Moreover, we will continue to coordinate all experimental activity in compliance with our obligations as an EBS licensee.

Respectfully submitted,



Attachments

EBC 24272 v2



GUARD Status and Key Accomplishments

March 2006

Educational Broadcasting Corporation, licensee of WNET and WLIW in the New York Metropolitan Area, has been spearheading a project over the past two years called GUARD that uses our licensed EBS (ITFS) spectrum for two-way, mobile, broadband, non-line-of-site, wireless communications for first responders. We have received our funding from Congress via the US Dept of Defense in a program called the National Technology Alliance (NTA), managed by Rosettex Technology and Ventures Group. We have coordinated our tests here in NYC with DoITT, FDNY and NYPD and have also done live demos connected via satellite to Washington DC so that interested Congressional and Federal stakeholders could observe our activities for themselves.

GUARD uses our single 6 MHz C4 EBS spectrum channel allocation in the 2.5 GHz band. We obtained an experimental license from the FCC to do this work. We use COFDM modulation and a sectorized architecture (WiMAX-Ready 802.16e) using time division duplex multiplexing (TDD). We can cover large market areas with fewer hubs than traditional cellular systems require, and because the hubs are light (under 30 pounds and getting lighter all the time), we can saturate neighborhoods that are faced with downed fixed-location hub sites with mobile vans equipped with hubs mounted on masts. This would be an ideal capability in natural disaster situations such as Hurricane Katrina.

Any number of commercial vendors can be used to integrate an overall system based on the GUARD model, but the bottleneck is spectrum. With wideband EBS channels provided by licensees such as Educational Broadcasting Corporation, first responders will be able to send video, in-band, in both directions to first responders on the move in high multipath environments - the killer app that first responders are thirsting for. Large data files can be sent and received, such as blueprints and 3-D relief images. Sensor information for situational awareness can be sent and received. Critically important public safety applications such as electronic command boards, automatic vehicle location tracking and mass casualty patient tracking can be delivered wirelessly between command and control and field operations.

The City of New York will soon begin pilot tests for a Citywide Mobile Wireless Network procurement. WiMax transport systems like the one modeled in GUARD figure to be a part of the mix. In St Louis, GUARD is planning to install a simple demonstration system at KETC-TV just like the one that has been built by Educational Broadcasting Corporation at its station Thirteen/WNET New York. Mississippi could be the next location for a major demonstration of the GUARD prototype harnessing the statewide educational network licensed to Mississippi PTV.

We will also soon be participating in the Association of Public Television Stations Digital Emergency Alert System Pilot being conducted in association with the Department of Homeland Security. GUARD and DEAS are complimentary activities that make use of television channels for public safety communications. Taken together, these programs present a perfect opportunity to put public television DTV spectrum to use for public warning and educational EBS spectrum to use for mobile, 2-way, first responder communications in the field. Since many PTV stations across the country have EBS licenses in addition to their DTV licenses, public television is in a unique position to serve our country's homeland security communication needs nationwide. Public television has a powerful message that can focus national attention on the use of licensed television spectrum for public warning, public preparedness and emergency response communications for first responders.

THIRTEEN IS BREAKING NEW GROUND IN HOMELAND SECURITY

The GUARD Program

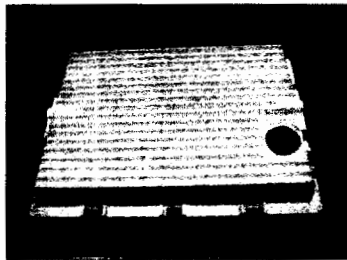
(Geospatially-aware Urban Approaches for Responding to Disasters)

Key Accomplishment: *Demonstrated Value of Unique, Nationally Relevant, Educational Broadband Service (EBS) Spectrum*

The EBS spectrum provides dramatically wider, licensed bandwidth than conventional emergency response communications systems, enabling broadband voice, video and data to mobile response vehicles and individual First Responders. This spectrum is licensed across the country to educational institutions, not-for-profit organizations, and public broadcasters, each dedicated to serving their local communities. By taking advantage of this in-place, national infrastructure, GUARD enables rapid, lower cost implementation of advanced systems to protect our communities.



Key Accomplishment: *Urban Mobile Communications with Advanced WiMAX (802.16) Network*



Communications in “urban canyons” is notoriously difficult. GUARD proved the ability of WiMax networks to deliver reliable two-way broadband data and video in New York City, one of the most severe urban communications environments in the world. Within the coverage area, connectivity is maintained even through tunnels from a single rooftop antenna. Special Forces users



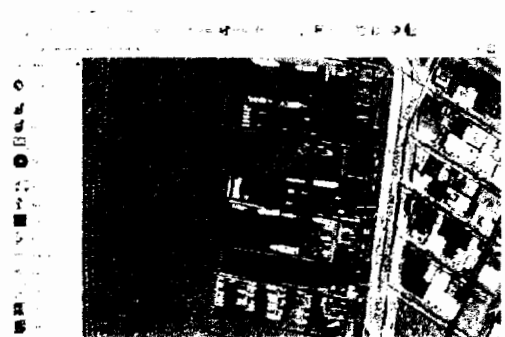
and emergency responders are exploring adopting the demonstrated capability.

Key Accomplishment: *Inter-Regional Connectivity via Global Broadcast Service*

A nationally relevant regional model requires connectivity between regions and the ability to easily bring supplemental communications to an emergency scene. GUARD has shown live transmission of two-way “emergency” video and data to/from the streets of New York over DISA’s Global Broadcast Service (GBS) to a simulated control room in Washington, DC.

Key Accomplishment: *Demonstrated Power of Open System to Easily Integrate Third Party Vehicle Tracking and Decision Support Applications*

The Fire Department of New York (FDNY) has established requirements for Electronic Command Boards (ECBs) for Incident Commanders, and the ability to track FDNY vehicles and resources at an incident site. GUARD proved the ability of its open architecture to rapidly integrate third party applications into the GUARD infrastructure. GUARD allows local communities to make technology selections that fit local needs, in the context of a larger operational infrastructure.



Key Accomplishment: *Emergency Preparedness Exercises at West Point and University of Missouri Validate Technical Architecture*



Live exercises with emergency response communities in West Point, NY and the State of Missouri (hosted by the University of Missouri, Columbia) delivered important training opportunities for the local and State responders and validated the technical needs and operational approaches for the developing architecture. More exercises and tests of the operational prototype are planned as GUARD matures and expands its reach.