



Request for Information

**Transition of Educational Broadcast Service Spectrum
to Digital Technology and Its Use
in a Wide Area Broadband Network**

Requested by:

Miami-Dade County Public Schools

All responses must be addressed and returned to:

School Board of Miami-Dade County
Attn: Mr. Felipe Noguera
Chief Communications Officer
1450 NE 2nd Avenue, Room 250
Miami, Florida 33132

Please follow the guidelines for submission under "How To Respond."

Please note that all responses are requested by June 1, 2007.

The deadline for response submission is extended to June 22, 2007.

I. INTRODUCTION

As technology continues to be integrated within every part of our lives today, the impact on schools and education is one of the most important. The effective development, implementation and distribution of broadband connectivity, content and services throughout the educational system empower students, faculty and the community to enhance the ongoing process of gaining knowledge. From distance learning experiences to witnessing world events unfold and interacting with people around the globe in real-time, broadband capabilities uncover new opportunities in education.

The purpose of this Request for Information (RFI) is to obtain insight on behalf of the members of the *Miami-Dade County Educational Broadband Service (EBS) licensees* (“the Consortium”). This information will supplement the existing knowledge base and set the foundation for a comprehensive plan for the transition of their EBS spectrum to digital technology, securing the most effective and efficient use of that spectrum to serve both schools and the community.

Why should we do this?

As technology progresses, students and teachers are finding access to information and educational materials in new places and innovative ways. Educators are constantly changing their networks, systems, applications and services in order to provide the best learning environment possible. The Federal Communications Commission has provided educators, including the Consortium, licensed wireless spectrum for distance learning. New FCC rules and regulations allow educators to use this spectrum to provide advanced wireless services. The Consortium wishes to use its EBS spectrum for services that will improve the quality of education in South Florida, and thereby improve the community.

We thank all of you for taking the time to assist us with these important efforts. As leaders in the technology, education, publishing, broadcasting, financial, not-for-profit and government arenas, your guidance will allow us to enhance opportunities throughout the Miami-Dade County Public Schools and the community. We encourage respondents to provide information about these areas and other alternatives that would lead to the most effective solution possible.

II. BACKGROUND AND GENERAL INFORMATION

To better acquaint respondents with the structure of the existing broadband system and services in Miami-Dade County and the school environments, we've briefly outlined current infrastructure and capabilities for your review.

1. Educational Broadcast Service Spectrum in Miami-Dade County

The School Board of Miami-Dade County (Florida) and its Consortium partners, Friends of WLRN, Inc. and South Florida Instructional Television, Inc., hold licenses for twenty EBS channels in Groups "A," "B," "C," "D" and "F." The Consortium plans to comply with the FCC established deadline for transition of EBS spectrum to digital technology. The Consortium is currently examining its transition options and conducting extensive research to determine current and future applications, technologies, services, and the means for financing that will provide the maximum benefits to the Consortium over a multi-year period (to be determined).

The Consortium currently provides a twenty channel, five day per week educational video program service that includes both scheduled programming and video-on-demand offerings to over 400 district sites including 343 public schools. Programming is viewed on televisions installed in approximately 20,000 classrooms, with many rooms having multiple displays. EBS signals are received in a central location and distributed to classrooms over a coaxial cable closed circuit system. Two of the EBS channels are available to cable television subscribers throughout Miami-Dade County.

In 1995, WLRN, via Friends of WLRN, entered into an agreement to lease excess capacity on these channels with National Wireless Holdings, who later transferred the lease to BellSouth, for a wireless cable system. The FCC has recently changed its rules with respect to these channels to allow the lease of excess capacity for new wireless systems called WIMAX. In addition, AT&T (formerly BellSouth) has sold its entire 2.5 GHz spectrum portfolio to Clearwire Corporation, including the lease between Friends of WLRN and AT&T (formerly BellSouth).

The Consortium plans to comply with the FCC established deadline for transition of EBS spectrum to digital technology and is currently examining its transition options. The Consortium is conducting extensive research to determine current and future applications, technologies, services, and means for financing that will provide the maximum benefits to the Consortium over a multi-year period, to be determined.

Other Communications Assets

a. Broadcast

Miami-Dade County Public Schools (M-DCPS) is the licensee of WLRN-TV

Channel 17, WLRN-DTV Channel 20, WLRN-FM 91.3, WLRN-FM 91.3 HD, WHWY-FM 91.5 licensed to Marathon in the Florida Keys, and WHWY-FM 91.5 HD (also licensed to Marathon). Construction on the WHWY stations will begin this summer.

WLRN-TV is a Public Broadcasting Service (PBS) member station.

In addition to its analog broadcasting service, WLRN-TV broadcasts two digital television services. The first service is a high-definition simulcast of WLRN-TV Channel 17. The second service is *The Florida Knowledge Network*, a K-12 service offered from the Florida Department of Education. WLRN-TV has the future ability to operate two more digital television channels.

WLRN-FM is a National Public Radio (NPR) member station.

WLRN-FM broadcasts two digital radio channels, in addition to its analog channel. One digital channel is a high-definition simulcast of the analog service. The second channel is dedicated to a 24x7 classical music service.

Additionally, WLRN-FM operates a 24x7 Radio Reading Service for the visually impaired. This service operates on one of the station's analog sub-carriers.

b. Cable

WLRN-TV programs and operates one non-commercial cable channel carried by all cable operators in Miami-Dade County. *WLRN Learn* is managed and programmed as a public service of M-DCPS. WLRN Learn provides viewers with a diverse program schedule that includes public television's favorite cooking, renovation, painting, crafts, travel and gardening genres. The channel also features international news, exercise, talk and student-produced videos from talented students involved in the Miami-Dade school district's technical and visual arts programs.

WLRN-TV also provides an interconnection to local cable systems for the *Miami-Dade County Cable Television Access Project (Cable-TAP)*, a public service of Miami-Dade County and Miami-Dade College. Cable-TAP provides non-profit organizations, educational institutions and governmental agencies with television production and programming opportunities at no charge.

c. Non-Broadcast

The *M-DCPS Information Technology Services (ITS)* maintains a filtered interconnection with each of the districts' 343 schools via leased 10 Mbps capacity fiber "pipes" and networking, with the contractual ability to increase capacity to 100 Mbps per connection (as needed).

2. Miami-Dade County Public Schools

The School District of Miami-Dade County (in the state of Florida) is the fourth largest school system in the nation. The District has approximately 340 schools that includes:

- a. Alternative schools
- b. Exceptional student education centers
- c. 363,2888 students
- d. More than 57,372 full and part-time employees
- e. A \$6.5 billion operating and capital budget.

The student population is economically, ethnically, and linguistically diverse, with the largest ethnic group being Hispanic students.

The District provides a full range of educational services that are appropriate to students in early childhood, pre-kindergarten through 12th grade levels and adult/vocational education programs that include:

- a. Basic, regular and enriched academic education
- b. Bilingual education
- c. Special education for handicapped children
- d. Vocational education
- e. Countless individualized programs, such as special instruction for disadvantaged students (Title I) and those with limited English proficiency.

Because of the extensive geographic area it serves, the District maintains a fleet of school buses and has a highly mobile work force that maintains the buildings and equipment.

Miami-Dade County Community

Miami-Dade County, with an area of more than 2,000 square miles, is the largest metropolitan area in the State of Florida. Often referred to as the "Gateway to Latin America and the Caribbean," the community is located along the southeast tip of the Florida peninsula and is bounded by Biscayne Bay and the Atlantic Ocean to the east, Everglades National Park to the west, the Florida Keys to the south and Broward County to the North.

More than one million people live in the unincorporated area of the county, with the remainder of the population residing in municipalities. The total population of the 35 municipalities was approximately 1,217,896 in 2003. The City of Miami is the largest municipality, followed by Hialeah, Miami Gardens, Miami Beach, North Miami and Coral Gables.

III. PURPOSE OF THE REQUEST FOR INFORMATION

The Consortium recognizes that the knowledge base for the development of broadband systems and services is widespread and not necessarily readily available from any single source - or even a limited number of informants. Therefore, in order to capture and aggregate the most relevant and current information, the Consortium has issued this RFI with the belief that the members of both the for-profit and non-profit communities that have a stake in the successful development of broadband services will find it in their best interest to respond. The Consortium expresses its appreciation for all responses and agrees that it will share the final report, conclusions, plans and other relevant documentation with those parties that have cooperated through their involvement.

The Consortium seeks replies from interested parties, which may include—but are not limited to:

- ◆ Commercial providers of wireless broadband services
- ◆ Non-profit entities that currently—or plan to—provide wired or wireless broadband service
- ◆ Equipment manufacturers and/or vendors
- ◆ Software developers/vendors
- ◆ System integrators
- ◆ Educational or other foundations
- ◆ Financial institutions.

The Consortium will use the information it receives to develop a comprehensive plan for the transition of its EBS spectrum to digital technology, as well as identifying those applications and services that it deems beneficial (to end-users) for implementation.

IV. DESCRIPTION OF INFORMATION REQUESTED

This section, “Description of Information Requested,” covers specific areas of interest or concern to be addressed when the Consortium implements the transition of the EBS spectrum to digital technology – as well as the various utilizations for wide area broadband network services. We have provided both a brief background for each area and the requested information with them.

The information provided may include, but is not limited to, copies of Requests for Proposals (RFPs) and Requests for Information (RFIs), conceptual or actual system designs, descriptions and/or specifications for equipment of systems, plans in progress for wired, wireless or broadband systems, project histories or descriptions, or any other processes that would be relevant to the questions raised in the RFI *and* may be provided in print or electronic formats from the respondent(s).

A. Integration of the *EBS Wireless Spectrum* with Other Broadband Distribution Assets and Resources

Background

The Consortium is aware of existing situations and possible circumstances where wireless EBS could be (or has been) integrated (or used in conjunction) with other wired and/or wireless broadband distribution assets.

Information Requested

The Consortium is requesting information describing any such mixed systems, whether existing or in the planning stage. The goal is to receive suggestions for the appropriate circumstances with such use and the role of EBS wireless spectrum in such arrangements.

B. Alternative Financing Options for the Transition of the Consortium's EBS Spectrum to Digital Technology and Implementation of Specific Broadband Technology Applications

Background

The Consortium fully recognizes that self-financing an undertaking of this nature is unlikely due to the tremendous costs associated with the transition and subsequent introduction of various broadband applications on a grand scale.

Therefore, the Consortium would like to determine potential means of financing all, or portions of, the transition from public and non-public sources—as well as the related financial and/or service benefits. The expectation is that information like this could be provided by various sources (including equipment manufacturers, commercial broadband service providers, governmental agencies, non-profit foundations, financial institutions and others in the field).

Information Requested

The Consortium seeks to identify potential sources for such financing, which encompasses a general statement of conditions and relative benefits of such options.

C. Conversion of Digital Video to Analog at the Receive Site

Background

EBS programming is viewed on televisions installed in approximately 20,000 classrooms.

EBS signals are received in a central location and distributed to classroom over a coaxial cable closed circuit system.

Information Requested

The Consortium is requesting information concerning reliable and economical means for:

(1) continued use of the analog classroom receivers after transition until the expiration of their useful life and their replacement with digital receivers and

(2) solutions that employ technology that is compatible with the mixed use of digital and analog receivers during the transition period, including IP video.

D. Providing Broadband Access for Students and Parents at Home

Background

The lack of a free or inexpensive broadband connection in the home is the major barrier to maintaining the continuity between classroom instruction and the independent learning that can take place in the student's home environment. The Consortium seeks to provide equal access to learning activities and materials, both within the school and at home. This broadband connection must be within the control of the educational authority and filtered to prevent student access to inappropriate online materials.

Information Requested

The Consortium is requesting information that would describe appropriate methods for utilization of EBS broadband to provide free or inexpensive equal access for students with learning activities and materials, both within the school and at home. Accessibility must be both secure and filtered to prevent access to inappropriate online materials.

E. Services to Education

Background

The School Board of Miami-Dade County and the Consortium recognize that their first priority for use of the EBS spectrum is to deliver and provide current and future instructional and educational programming and applications.

Information Requested

The Consortium wishes to receive information regarding existing and future instructional and educational applications that can be provided, in whole, or in conjunction with other

frequencies or technologies, to the schools, teachers, students, parents and School Board facilities and vehicles.

F. Services to Government and the Community

Background

While the Consortium members realize that their first priority with the EBS spectrum is to deliver and provide support for instruction and education, they recognize that there are many unmet broadband connection needs within government, business and throughout the community at large. In the event that the EBS spectrum can be used in such a manner that will fulfill existing and future educational needs, the Consortium believes it has a responsibility to consider these other needs within the context of providing effective support for education and instruction.

Information Requested

The Consortium is requesting information that describes existing or planned broadband services that are designed to fulfill the needs of education, government and the broader community. Information requested may include descriptions of the community, population and institutions served, the capacity of the system to provide services, the government services that are supported by broadband, technology or combination of technologies employed, business plans, and financial statements.

V. HOW TO RESPOND

In order to respond to established deadlines, the Consortium requests that all responses be submitted by **June 1, 2007**. While we prefer information to be sent in printed format, electronic submissions are also acceptable to facilitate a broad response. Please select the appropriate option below.

- ◆ Print:

Please submit two (2) copies of the response to:

Mr. Felipe Noguera
Chief Communications Officer
Miami Dade County Public Schools
1450 NE, 2nd Avenue, Suite 250
Miami, Florida 33132

- ◆ Electronic (RFI is available online at www.wlrn.org)

A. Submit Responses Online:

Log on to: <http://www.iccwfs.com/RFI/rfiresponse.html>

Provide the information requested on the Consortium RFI Response Form

Check the box for Web Document or E-mail Attachment.

Web Pages or Web Documents – Insert the Webpage URL; click *Submit*.

E-Mail Attachments – E-mail documents to ebs@dadeschools.net. Be sure to include the responder's name, title and organization in the e-mail.

B. CD-ROM or DVD

CD-ROMs or DVDs may be mailed to the address above, and should be accompanied by a description of relevance for the specific section(s) of the RFI being addressed.

Respondents are requested to use the attached Consortium RFI Response Form.

VI. ADDITIONAL INFORMATION

Additional information regarding proposal procedures may be obtained from:

John LaBonia
General Manager WLRN and Director for the Division of Media Programs
Miami-Dade County Public Schools
172 NE 15th Street
Miami, Florida 33132
(305) 995-2259
jlabonia@dadeschools.net

VII. DISCLAIMER

This RFI is issued solely for information and planning purposes. This correspondence and future communications do not constitute a solicitation or binding contract. Please note that responses to this RFI will not be returned.

Public Records Law: Respondents should be aware that all documents or other materials submitted in response to this RFI will be open for inspection by any person in accord with Chapter 119, Florida Statutes.

Thank you again for assisting the School Board of Miami-Dade County with these initiatives.

Attachment A

Consortium RFI Response Form

Name:

Title:

Organization:

Tel:

Fax:

Email Address:

Response Format

Print CD DVD Web Document URL: _____

E-Mail Attachment

Relevant to:

The information being submitted is relevant to the following Section(s)

All IV.A IV.B IV.C IV.D IV.E IV.F

Please provide a brief statement describing the relevance of the information being submitted.