BROADCASTING BOARD OF GOVERNORS
STRATEGIC SPECTRUM PLAN

November 30, 2007

I. Overview of the Broadcasting Board of Governors

The Broadcasting Board of Governors (BBG) supports 65 broadcast languages through over 90 language services to more than 125 markets worldwide. Congress has highlighted the need for the BBG to concentrate on supporting democracy and cover issues related to the establishment of democratic institutions. The focus is clear: U.S. international broadcasting should prioritize those countries and regions that lack democracy or are still making the transition to democracy and are consequently still vulnerable.

The BBG supervises all civilian, non-military international broadcasting funded by the U.S. government, including Voice of America, Radio Free Europe/Radio Liberty, Radio Free Asia, the Office of Cuba Broadcasting (Radio and TV Marti), Radio Farda, and the Middle East Broadcast Network's Services, Radio Sawa and Alhurra Television. The Board became an independent Federal entity as of October 1, 1999. As of FY 2005, BBG operated with approximately 3,524 employees and a budget of approximately 592 million dollars.

Mission and Vision
The BBG mission is: To promote and sustain freedom and democracy by broadcasting accurate and objective news and information about the United States and the world to audiences overseas.

The long-term vision for the BBG is: A flexible, multi-media, research-driven U.S. International Broadcasting System, incorporating regional networks and single-country operations, that reaches mass audiences by programming the distinct content of the Voice of America and the surrogate services through state-of-the art formats and the distribution channels - AM, FM, audio and video satellite, shortwave, and the Internet -- that our audiences use and we control.

Broadcast Language Priorities
In its broad support of U.S. foreign policy, the BBG sets three major priorities in the post-9/11/01 time frame:

- to provide accurate and objective news and information to priority areas in support of the war against terrorism;
- to provide clear and accurate information to regions of the world where freedom of information is suppressed or denied, or to areas that lack freedom and democracy;
- to serve humanitarian efforts by assisting nations in crisis, or are suffering epidemics and illiteracy.

Strategic Goals
The over-arching aim of the Broadcasting Board of Governors is to achieve an increasingly effective international broadcasting system that reaches significant audiences where most needed in support of U.S. strategic interests. It is in the context of this broad purpose that the following goals should be considered.

Goal I – Design a Broadcasting Architecture for the 21st Century.

Goal II – Expand the U.S. International Broadcasting System through Regional Networks and Single-Country Priority Initiatives
Goal III -- Employ Modern Communication Techniques and Technologies
Goal IV – Preserve our Most Precious Commodity – Credibility – and Ensure Overall Programming Excellence
Goal V – Revitalize "Telling America's Story" to the World
Goal VI – Shore up Our Surge Capability.

Below is a brief description of BBG broadcasters.

The Voice of America
Each week, the Voice of America (VOA) broadcasts in 53 languages to an estimated worldwide audience of 94 million people. VOA programming is carried on shortwave and medium wave (MW or AM) from 13 IBB transmitting stations around the world, and is rebroadcast through a global network of more than 1,300 affiliate stations. VOA's more than 1,000 hours of weekly programming is also available on the Internet and includes 28 hours of original television shows.

Since it's first broadcast on February 24, 1942, VOA has provided its audience with accurate and objective programming. The VOA charter requires VOA broadcasts to be accurate, objective, and comprehensive, to represent all segments of American society, to present a balanced and comprehensive view of significant American thought and institutions, and clearly present the policies of the United States.

The Office of Cuba Broadcasting
The Office of Cuba Broadcasting directs the operations of Radio and TV Martí, the broadcast services that provide Spanish-language news, features, and entertainment programs to Cuba. Both stations follow Voice of America's journalistic standards and guidelines for presenting news and information in an accurate and objective manner.

Radio Martí broadcasts seven days a week, 24 hours a day, on medium wave (MW or AM) and shortwave. TV Martí broadcasts four-and-a-half hours daily, including newscasts as well as programs about public affairs, culture, music, sports, and entertainment. The commentary and information broadcast by the stations promote the free flow of information and ideas in Cuba.

***AeroMarti:** TV Marti is also broadcast via the AeroMarti airborne transmission platform based at the Boca Chica facility of Naval Air Station Key West, Florida. The first airplane began flying in October 2006, the second in January 2007. The planes fly and transmit a total of five hours a day six days a week – alternating days to allow one plane to undergo maintenance while the other is active. The aircraft operate at full transmission strength on UHF Channel 20 and provide better than Grade A service to the target areas for the five hours broadcast period that includes live news broadcasts at 6:00 PM and 10:00 PM. During FY-2008, one of the aircraft will be enhanced to provide VHF Channel 13 television

transmission capability. These broadcasts provide an over-the-air signal and no special equipment is necessary for reception. Cuban jamming has proven to be much less of an obstacle to overcome with AeroMarti's strong signal and the capability of moving around and reaching almost half of the Island.

Commando Solo: Since May 2003, DOD's Commando Solo platform has provided additional support for the broadcast to Cuba mission by delivering both TV Marti programming on Channel 13 and Radio Marti programming on AM frequency 530 kHz. These services, which are provided periodically during scheduled real-world training missions, have proven very useful in enhancing our program delivery to the Cuban people.

Radio Free Europe/Radio Liberty (RFE/RL)

Radio Free Europe/Radio Liberty (RFE/RL) is a U.S. government-funded, non-profit corporation broadcasting to the former Soviet Union and Eastern Europe. With the recent addition of Radio Free Afghanistan, RFE/RL broadcasts in 32 languages for more than 1,000 hours per week. Most programs are available on FM and medium wave (MW or AM) frequencies on local radio stations in countries throughout the broadcast area.

Radio Farda

Radio Farda, which means "Radio Tomorrow" in Persian, is a joint effort of two BBG entities: Radio Free Europe/Radio Liberty (RFE/RL) and Voice of America (VOA). Operated from Washington, D.C. and Prague, Czech Republic, Radio Farda produces fresh news and information at least twice an hour, with longer news programming in the morning and the evening. Radio Farda also broadcasts a combination of popular Persian and Western music. The station operates 24 hours a day on medium wave (AM 1593 and AM 1539), digital audio satellite, and on the Internet as well as 21 hours a day on shortwave. Radio Farda complements the VOA's Persian-language radio and television broadcasts into Iran.

Radio Free Asia

Like RFE/RL, Radio Free Asia (RFA) is a U.S. government funded, non-profit corporation. RFA broadcasts in 10 languages to China, Tibet, Burma, Vietnam, Laos, Cambodia, and North Korea. RFA broadcasts about 200 hours per week, and also streams audio broadcasts in all 10 languages over the Internet. RFA broadcasts news, information, and commentary, and provides a forum for a variety of opinions and voices from within Asian countries.

Middle East Broadcast Network (Radio Sawa and Alhurra Television)

Radio Sawa, a 24-hour, seven-day-a-week Arabic-language network, is unique in the Middle East. It broadcasts an upbeat mix of Western and Arabic pop music along with up-to-the-minute news, news analysis, interviews, opinion pieces, sports, and features on a wide variety of political and social issues. Radio Sawa (www.radiosawa.com) originates its programming from Washington and is broadcast across the region, using a

combination of medium wave (AM) and FM transmitters, digital audio satellite, shortwave and Internet. Radio Sawa will ultimately have six streams tailored to specific parts of the region.

Alhurra (Arabic for "The Free One") is a commercial-free Arabic-language satellite television channel for the Middle East devoted primarily to news and information. In addition to reporting on regional and international events, the channel broadcasts discussion programs, current affairs magazines and features on a variety of subjects including health and personal fitness, entertainment, sports, fashion, and science and technology. Alhurra is dedicated to presenting accurate, balanced and comprehensive news.

International Broadcasting Bureau (IBB)
Under the supervision of the Broadcasting Board of Governors (BBG), the International Broadcasting Bureau (IBB) provides the administrative and engineering support for U.S. government-funded non-military international broadcast services. Broadcast elements include the Voice of America (VOA), Radio Sawa, Radio and TV Martí (Office of Cuba Broadcasting), and VOA television. In addition, the IBB provides engineering and program support to Radio Free Europe/Radio Liberty, Radio Free Asia, Radio Sawa, Radio Farda and Alhurra Television.

The IBB was formed in 1994 by the International Broadcasting Act, which also created a nine-member, bipartisan Broadcasting Board of Governors (BBG). The IBB was initially part of the U.S. Information Agency (USIA). When USIA was disbanded in October 1999, the IBB and BBG were established as independent federal government entities.

Office of Engineering and Technical Services
The IBB Office of Engineering and Technical Services manages, operates, and maintains a complex network of domestic and overseas transmitting stations, including both owned and leased facilities. Engineering is also responsible for an extensive network of satellite and other international communications systems, including the rapidly growing Internet delivery system. This network broadcasts the programs of the Voice of America, VOA Television, Radio and TV Martí, Radio Free Europe/Radio Liberty, Radio Sawa, Radio Free Asia and Alhurra Television to transmitting stations and to AM, FM, shortwave, and cable broadcasters worldwide. In addition, the office supports construction and monitoring functions overseas; plans, develops, and implements renovations and new technical facility projects throughout the world; and maintains, repairs, and upgrades equipment and technology for modern, cost-effective transmissions around the globe.

Spectrum Management Division
The Spectrum Management Division, within IBB Engineering's Operations Division, is responsible for long-term, medium term and day-to-day management of the IBB's use of the radio frequency spectrum. This entails several major aspects: assistance in the preparation of U.S. proposals and positions to international organizations, with a view toward benefiting broadcasting; fostering research and development of digital modulation and broadcasting techniques; leasing transmission facilities; developing and maintaining

frequency schedules; and monitoring the reception of our broadcast signals in the specific target areas for each language service.

II. Identifying Agency Spectrum Usage and Requirements

IBB Engineering identified BBG spectrum requirements by researching the Government Master File (GMF), the International Telecommunication Union (ITU) file and the Schedule Development System (SDS). The SDS is a local system used within the Spectrum Management Division to reflect actual FM, Medium Wave and Shortwave frequency usage.

Spectrum Usage and Requirements

FM Stations
The BBG has increased its number of FM stations over the last several years. FM has become an important medium of broadcasting due to the changing media markets, clarity of the transmission and the numbers of listeners within populated areas. FM stations are primarily located within the larger cities of target countries. BBG currently has 41 stations that are operated 24/7 in 20 different countries. The countries in which we are currently operating FM stations are: Afghanistan, Bahrain, Burkina Faso, Djibouti, Ghana, Iraq, Ivory Coast, Jordan, Kenya, Kosovo, Kuwait, Mongolia, Morocco, Palestine, Qatar, Romania, Rwanda, Sao Tome, Sierra Leone, and United Arab Emirates. There are current plans to add additional stations in the countries of: Cameroon, Egypt, Guinea, Mauritania, Oman, Sudan, Uganda, Yemen, and Zambia.

Medium Wave Stations
The medium wave band roughly covers the 530-1610 kHz frequency range and targets listeners beyond the FM station range. It is not intended for reliable broadcast beyond several hundred miles. The BBG currently has 40 frequency assignments internationally servicing 28 different languages.

High Frequency (HF) Broadcast
The HF band covers the 2-30 MHz frequency range and is used for long distance communications. The BBG broadcasts to listeners from 13 transmitting stations located around the world. The following are the authorized HF broadcast bands:

5950-6200 kHz	15100-15600 kHz
7100-7300 kHz	17550-17900 kHz
9500-9900 kHz	21450-21850 kHz
11650-12050 kHz	25670-26100 kHz
13600-13800 kHz	

Frequencies within the authorized bands are used in 5kHz increments and shared with other broadcasters from around the world.

Very High Frequency (VHF) Systems

The BBG currently utilizes ten VHF frequencies on 18 separate assignments. Four of the authorizations are used throughout the United States for wireless microphone operations during special news events such as Presidential elections and other stories which warrant international attention. Three of the assignments are used within the BBG headquarters in the Washington DC area for operations and maintenance of broadcasting equipment. The remaining assignments are used as repeater operations for equipment and antenna maintenance personnel at our transmitter sites at Greenville, NC and Delano, CA. Although Delano is in mothball status, we continue to maintain LMR communications due to safety concerns of our radio maintenance and antenna riggers.

Within BBG headquarters in Washington DC, we have migrated out of VHF wideband and moved into the UHF narrowband frequency range. We are currently utilizing US Postal Service frequencies as we have no narrowband frequencies allocated for our use. These frequencies have recently been renewed and are valid until 2009. At our transmitter site in Greenville, we are migrating to VHF narrowband operations and hope to be converted soon.

Ultra High Frequency (UHF) 400MHz Systems

The BBG uses UHF Land Mobile Radio systems as their primary means of voice communications within the headquarters. We utilize our UHF systems for security, operations and maintenance, and the computer help desk. BBG also operates 25 frequencies on 65 separate assignments at 10 different locations; 37 of the 65 assignments operate at 16 kHz voice for administrative, radio maintenance, antenna maintenance, antenna riggers and operations nets and 27 operate at 40 kHz voice and are used for live coverage of significant international events. Field reporters communicating back to the studio utilize these frequencies. One 10 kHz channel is used for a site alarm system located in Marathon, Florida.

Ultra High Frequency (UHF) 900MHz Systems

The BBG has 35 assignments at 6 locations in this band. Four of the 35 assignments operate at 33 kHz for wireless microphones throughout the US for live coverage events. 13 of the 35 assignments operate at 56 kHz for wireless microphones throughout the US for live coverage events. 18 of the 35 assignments operate at 110 kHz for communications from the studio to reporters for live coverage reports.

Satellite Systems (5GHz)

The BBG has five bands assignments from 5.925 GHz to 6.425 GHz. These assignments are operational at Delano, CA, Washington, DC, Miami, Florida, Tinian, Guam, and Greenville, NC. These are up and down links on the Intelsat, Galaxy, and NewSkies satellites. These links are used to transmit digitized audio signals between the various sites. The assignment at Delano, CA will be deleted once it has been determined the station will close permanently.

Microwave Systems

BBG currently utilizes 27 frequencies on 48 different assignments at 15 separate locations. Two frequencies are used to link facilities in Delano, CA, four frequencies are

used to transfer information between Saipan and Taiwan. The remaining frequencies are used to link facilities in DC, MD, VA, and NC. In the near future approximately 27 assignments will be deleted due to a realignment of the network.

SHF Microwave Systems

The BBG's television system maintains 32 frequencies on 37 assignments at 10 separate locations. The majority of these microwave links transmit video programming to other agencies throughout the DC area. These agencies and locations include: Patrick Henry building, Department of State, Pentagon, and the Smithsonian. The Office of Cuba Broadcasting maintains two links, one in Marathon, Florida and one in Saddlebunch Key, Florida for Radio/TV Marti operations.

III. Future Requirements and Upgrades

HF Broadcasting

Future HF broadcasting is difficult to predict as it depends on the current political environment of a given geographical area. As a result of the BBG's changing global mission to meet current U.S. government broadcast requirements, along with reduced budgets and changes in technology, the IBB has ceased broadcasting from it's Delano, CA transmitting station and it is currently in mothball status. Over the past year and a half, IBB has also ceased broadcasting from its Kavala, Greece and Ismaning, Germany facilities. As of March 30, 2008, our transmitting station in Morocco will also cease broadcasting.

In April 2007, BBG began utilizing the additional 200 kHz of spectrum that was allocated to the broadcasting service as a result of WARC 92. Even with this additional spectrum, the statistics made by ITU-R for analog emissions show that in the bands below 10 MHz, around 250 kHz of additional spectrum is needed to clear the co-channel collisions and up to 800 kHz to clear both the co-channel and adjacent channel collisions. These new bands have provided the following number of additional frequencies (5kHz channel spacing);

5MHz - 10 frequencies
7MHz - 10 frequencies
9MHz - 20 frequencies
11MHz - 10 frequencies
12MHz - 10 frequencies
13MHz - 20 frequencies
15MHz - 40 frequencies
17MHz - 14 frequencies
18MHz - 25 frequencies

Digital HF Broadcasting

Currently, the BBG is not willing to commit a significant investment to digital broadcasting, Digital Radio Mondiale (DRM). They are waiting for digital receivers to become a realistic option for listeners within the appropriate target area. The impact of DRM on spectrum requirements is unknown, although more spectrum is likely to be needed while both systems operate simultaneously.

VHF Land Mobile Radio (LMR) Systems

The LMR system at Greenville, NC is currently being upgraded to conform to the narrowband mandate. All VHF systems within the headquarters in Washington, DC are being converted to UHF.

UHF LMR Systems

The Headquarters Technical Support Division has upgraded to a narrowband system. It was determined that it was not financially feasible to join existing federal systems. This

system will insure that radio technicians maintain reliable communications amongst themselves and the studios.

IV. Current Use of Commercial Spectrum-Dependent Licensed Systems

This information is currently being gathered and validated and will be included in the next BBG update,

V. Future Planned or Anticipated Use of Commercial Spectrum-Dependent Licensed Systems

BBG has no current plans for future use of commercial spectrum-dependent licensed systems.

VI. Agency Current and Anticipated Use of Unlicensed Systems and Devices

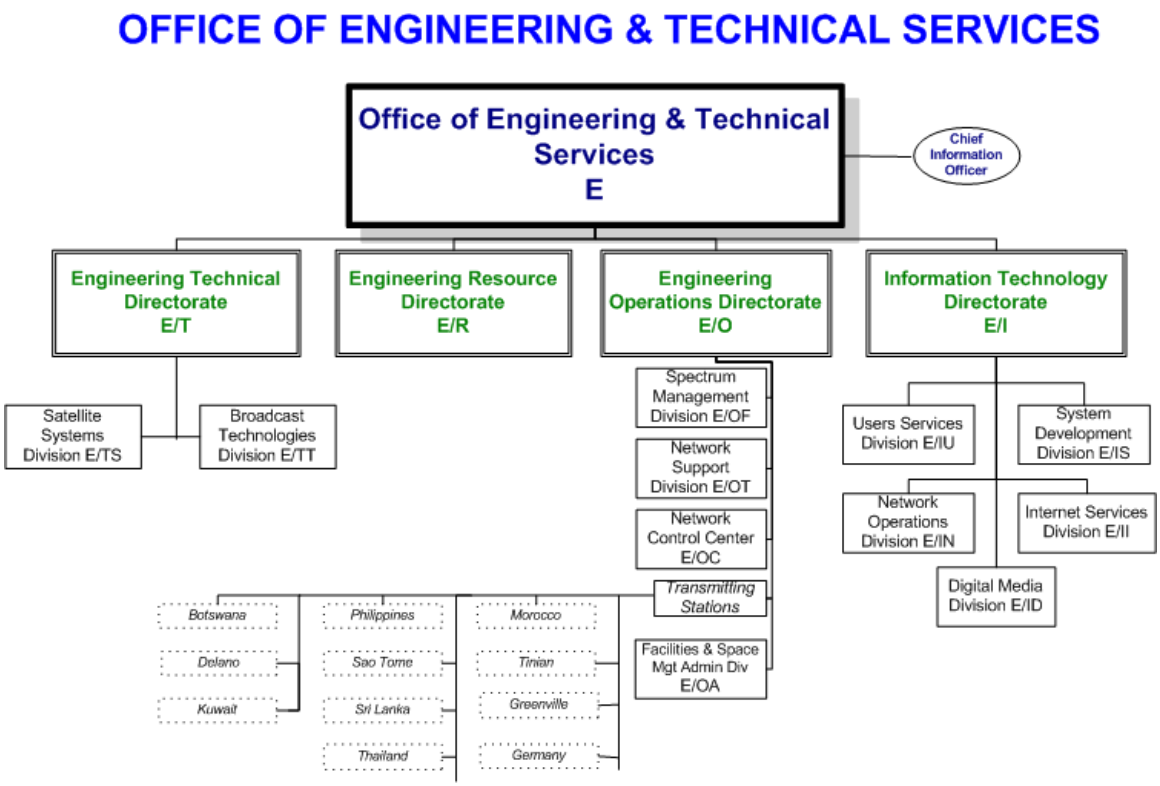
BBG has no current or anticipated plans for use of unlicensed systems or devices.

VII. Evaluation of New Technologies for Potential Use in Federal Agency Spectrum-dependent Systems

BBG currently has no other plans for upgrading major operating systems within the near future. As new technologies emerge, systems could be upgraded or replaced depending on the operating and economical environment.

VIII. Spectrum Management Organization and Integration with Agency Strategic Planning and Capital Planning

A. Engineering Organizational Chart:



IX. Recommended Actions for NTIA

We currently do not have any additional recommendations for NTIA action.