

To Be Where the Audience Is

Report of the Special Committee on the Future of Shortwave Broadcasting



**Broadcasting
Board of
Governors**

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Executive Summary

The Broadcasting Board of Governors oversees U.S. government-funded civilian international media. Under various statutory authorities, including the Smith-Mundt Act and the International Broadcasting Act, the BBG is required to be a responsible steward of tax resources, “to effectively reach a significant audience,”¹ and to support the requirements of U.S. foreign policy. The Board is also authorized to “ensure that all broadcasting elements receive the highest quality and cost-effective delivery services.”² Given these statutory mandates, the Board must ensure that the work of this agency is efficient and effective.

In October 2013, the Board established the Special Committee on the Future of Shortwave Broadcasting to undertake a comprehensive review of the efficacy of shortwave radio as a distribution platform for U.S. international media. Taking an audience-first approach, the Committee found that shortwave use is heavily concentrated in a limited number of countries; that other means of delivery are used and preferred by many of the BBG’s target demographics across most markets; that audiences tend to migrate to other media as they become available; that audiences do not return to shortwave in a crisis; and, use of the medium trends downward as audiences eagerly adopt other platforms as they become available.

The BBG, with our limited resources, must choose from a wide variety of media used by our current and future audiences to fulfill our mission to the maximum extent possible. Radio now comes in many formats beyond shortwave: medium wave (AM), FM, satellite and cable delivery, and Internet streams. These modes often overcome many of the traditional shortcomings of shortwave, such as fading, variability in sound quality, and difficulty of tuning. We must also embrace television, as many of our audiences now turn to TV first for news and information and, of course, entertainment. The explosion of social media provides us with exciting new opportunities to complement information delivery with rich interaction and greater audience interaction, including content contribution by the audience. For many around the world, the next electronic media they acquire will be a cell phone or similar mobile device. The BBG must choose to have a commanding presence the media where our audiences are today and in the future.

The BBG is committed to maintaining its shortwave broadcasting to regions where a critical need for the platform continues while also being diligent to ensure the BBG networks are reaching audiences on the appropriate media. The BBG gratefully acknowledges the strong historical foundation created by shortwave radio broadcasting as we invest in the necessary capabilities for the evolving media environment. The result of this inquiry, arguably the most in-depth and comprehensive to-date, is that the Committee recommends substantial “right-sizing” of the BBG’s shortwave broadcasting to be more focused and effective.

¹ United States International Broadcasting Act, Public Law 103-236, §303(a)(7).

² *Id.* §305(a)(7).

Introduction

The Broadcasting Board of Governors (BBG) oversees all U.S.-government funded civilian international media, which includes the Voice of America (VOA), Office of Cuba Broadcasting (OCB), Radio Free Europe/Radio Liberty (RFE/RL), Radio Free Asia (RFA), and Middle East Broadcasting Networks (MBN). Our mission is to deliver accurate and timely news and information where access is limited by censorship or a lack of free media; create access to news and information and support for freedom of expression for people threatened by censorship and intimidation; counter propaganda and extremist rhetoric that threatens peace, stability, and freedom with credible news and information that empowers audiences to positively contribute and participate in a civil society; and to be a leading channel for information about the United States, our people, society, government, and policies. We empower people with knowledge, enabling them to know more about their situation, hold their government accountable, know the facts about their adversaries, understand and develop the rule of law, support human security, develop commerce, and more. We tell the American story to develop an understanding of U.S. policies and provide reflective moments for audiences to compare our present and our past with their situations. Collectively, these activities are in support of U.S. national security and foreign policy goals.

Media environments around the world are undergoing significant disruptions with the introduction of new consumer technologies, the evolving needs and demands of changing demographics, political instability and aggressive behavior, and increased censorship and propaganda. Markets, even in the most remote parts of the planet, are experiencing technology revolutions. Media channel disruption, while fueled by technological advances, is deeply linked to fundamental changes in the demographics of the audience. Younger demographics, are adopting mobile, social, and other digital means of delivery in addition to using television and FM radio. More broadly, where shortwave once dominated, audiences moved to satellite, cable, and terrestrial television, FM and AM, or other digital platforms as they became available.

The BBG continues to evolve our distribution strategy to serve our core mission and to be effective in today's dynamic media environment. Each week, BBG's networks engage over 200 million people across a wide variety of technologies: satellite radio and TV, terrestrial radio (FM, medium wave (AM), shortwave) and TV, mobile platforms and social media. We reach audiences through our own transmissions and Internet sites and through a rapidly growing and extensive affiliate network. Unlike other media organizations, the BBG is not driven by commercial goals; rather, we select the best means of delivery or tools to reach and empower our target audiences.

The BBG has several statutory requirements to be a responsible steward of tax resources, "to effectively reach a significant audience"³ and to support the requirements of U.S. foreign policy. The Board is also authorized to "ensure that all broadcasting elements receive the highest quality and cost-effective delivery services."⁴ To these ends, the Board directs the agency to conduct regular reviews of the efficacy, efficiency, and performance of our distribution channels and how these fit within the overall agency strategy, specific network strategies, and evolving target markets and audience assessments.

³ United States International Broadcasting Act, Public Law 103-236, §303(a)(7).

⁴ *Id.* §305(a)(7).

SECTION ONE: BACKGROUND & COMMITTEE ESTABLISHMENT

Background

Shortwave was a transformational technology that reached into areas denied access to news and information by the tyranny of distance, censors, and propaganda. It permitted the sending of sounds across vast distances, to be received and relayed by transmitters and listeners alike. Knowledge was (and remains) power, which is why the adversaries of freedom rely on propaganda and shutting down free media. The U.S. has long used shortwave and other technologies to counter propaganda and ignorance by providing the true news about our policies, events both in the U.S. and abroad, and the truths about our adversaries. Shortwave radio has long been the foundation of international broadcasting. In 1923, commercial stations in the U.S., followed by the U.S. government, began using this magical medium to economically transport countless news, information, and entertainment programs across thousands of miles to audiences around the world. Throughout past decades, the U.S. Government has used this versatile tool to widely disseminate policies, speeches, events (such as inaugurations), news, and programs related to culture, technology, and education. Shortwave spans huge distances and is easily relayed, readily flowing from one country to another irrespective of national boundaries. A single broadcast can blanket an entire country or broad regions. Shortwave radios, and kits to make the radios, were relatively inexpensive and widely available. Users could tune in to hear the news and languages of faraway lands. Newspapers printed broadcast schedules and dedicated columns to programs discovered on the air. Some towns even instituted “silent nights” where local radio stations went off the air to reduce interference and improve reception of long distance shortwave signals.

The BBG’s broadcasters have used shortwave radio transmissions over many years to fulfill their missions. VOA has used shortwave to deliver news and information to countries or regions where press freedom is lacking or absent in the wake of a natural disaster or coup. Shortwave delivered to audiences Willis Conover’s jazz programs and Leo Sarkisian’s “Music Time in Africa.” Broadcasting by Radio Free Europe and Radio Liberty has been a powerful torch of hope and freedom to inform, enlighten, and inspire audiences throughout Eastern Europe, Russia, and the former Soviet Union. Reports from political prisoners and dissidents in China attest to the potent effect of Radio Free Asia’s programming, while generations of listeners in Cuba have tuned in to Radio Martí throughout the years. Displaced populations in Sudan hear Radio Sawa on shortwave.

The media landscape around the world continues to change radically and with increasing speed. Shortwave was revolutionary for nearly all of the twentieth century and, in the eyes of governments that strived to eliminate freedom of expression and information, it was also disruptive. Shortwave was the common means of delivery to directly reach people around the globe. Over the past several decades, other communication technologies have become more popular, more available, richer in content options, asynchronous to allow delayed consumption, and easier to share, enhance, or reply.

Shortwave continues to have a role in delivering news and information and overcoming censorship to select audiences, but it is a diminishing role in terms of impact and increasing

opportunity costs. Shortwave deserves credit for helping win the Cold War, but when considering factors ranging from current audience use of media to budgets, today is not like yesterday.

The Shortwave Committee's Process

The BBG Board established the Special Committee on the Future of Shortwave Broadcasting (the "Committee") to undertake a comprehensive review of the efficacy of shortwave radio as a distribution platform for USIM.

The Committee began with an audience-first approach, including a thoughtful analysis of user experiences and user choices. It then considered opportunities and limits of the medium and contemplated the associated direct and opportunity costs of utilizing the medium. This section details the process by which the Committee conducted its exhaustive review of the current role of shortwave and how the Committee evaluated the information that led to the Committee's formal recommendations.

This process began with a necessary "step back" to understand the audience's experience with the medium. The next step was questioning and then validating whether the BBG's target audiences use shortwave. While the Committee proceeded with this data collection and analysis, the Committee also sought input from stakeholders and the global public. The Committee then considered the costs of maintaining and broadcasting on shortwave from the BBG's ten stations around the world.⁵

The first Committee meeting, held in November 2013, included presentations on the listening experience of the shortwave user in our target markets and the use of shortwave radio by the BBG's networks as part of their respective engagement strategies; a description of the networks' success in reaching their target audiences through shortwave; and an overview of the cost of operating shortwave BBG's transmitting facilities.

The Committee's second meeting, in January 2014, was devoted to analyzing the BBG's research on shortwave radio, with an emphasis on the characteristics of the shortwave audience, where shortwave is being used, and its impact. A panel of external experts offered their views on our research and our markets to provide additional perspectives and to identify potential limitations of the BBG's existing research.

A third planned meeting intended to hear comments from three to four stakeholders was cancelled in favor of a broader and more inclusive public Request for Comment. In March 2014, the Committee published a formal request for comments from stakeholders, experts, and general members of the public to provide facts or opinions on the role of shortwave radio broadcasting. The Committee heard from BBG supporters, former employees, industry experts, academics, shortwave listeners, and other stakeholders.

The Committee requested and received substantial input from the State Department's overseas posts. The posts were provided the BBG's goals and methods of engagement on a country-by-country basis to collect insights from the posts on the importance and impact of shortwave as a

⁵ BBG operates the following shortwave stations: Greenville, Sao Tome & Principe, Botswana, Biblis, Lampertheim, Kuwait, SriLanka, Tinang (Philippines), Udon (Thailand), Saipan and Tinian (Marianas)

means of reaching target audiences in their respective countries. The responses were very helpful and were cross-referenced with the BBG's own research and provided to the Committee.

SECTION TWO: ASSESSING THE EFFICACY OF SHORTWAVE

The Committee's ultimate task was to understand and report on the efficacy of shortwave broadcasting as both a stand-alone technology and relative to other means. Like any other medium, shortwave has its advantages, disadvantages, and relative costs. The combination of today's austere budgets and the availability of other content mediums to our audiences calls for a depth of analysis that has, arguably, not been required before. An examination of the historical record and interviews with those that served in the BBG's networks in the 1980s and earlier provide testimony to the past importance and impact of shortwave broadcasting, direct connection with U.S. national security and foreign policy, and expansive budgets. While the demands for the availability of factual news and information to our audiences have increased in more places, on more platforms and across more languages,⁶ the BBG's funding levels have continued to decrease, including in the FY 2014 Omnibus funding appropriation. Present and anticipated future fiscal realities mean the relative impact and value of shortwave must be considered. However, regardless of the funding situation, the Board is required to determine the right approach to reach and empower our audiences in support of the mission of the networks and the agency.

Understanding the Platform

During the first meeting, the Committee members sought a foundational understanding of how shortwave radio functions and how each of the BBG's networks uses shortwave to reach their audiences. This gave the Committee insight into the end user experience with the technology, including the opportunities it creates and the limitations it suffers, as well as awareness that not all shortwave users are reliant on shortwave to access BBG content.

The Technology, Services and Innovation's Director of Broadcast Technologies presented an overview of how shortwave functions and how it performs differently than FM and AM. The fundamental value of shortwave is its potential of reaching very long distances and covering vast areas. Shortwave transmission does not require a presence within the target countries or in nearby countries, and thus is not subject to the political constraints of some other broadcast technologies. For comparison, FM coverage is "line of sight," thereby providing only local coverage. AM radio transmissions can cover large areas, but are more subject to interference from signal "pollution." Furthermore, AM transmissions may not reach as far as needed for targeted audiences (shortwave can cover larger areas); have their longest reliable range during nighttime hours; and are further hampered by a dearth of availability in some of the most desirable areas. Perhaps most important is that under international agreement, FM and AM are considered "domestic" transmission platforms and are therefore subject to national licensing

⁶ Freedom House, 2014: "For the eighth consecutive year, *Freedom in the World* recorded more declines in democracy worldwide than gains." <http://www.freedomhouse.org/report/freedom-world/freedom-world-2014>

regimes and spectrum regulatory law. In contrast, shortwave is recognized by the International Telecommunications Union (ITU) as an “international broadcast service” intended for cross-border broadcasting.

There are several drawbacks and weaknesses associated with this means of delivery. Audio quality is substantially limited by the medium itself and is also somewhat volatile and subject to degradation by external factors (e.g. electrical noise, electronic devices, etc.), thereby making it difficult to produce a consistent and rich audio experience for listeners. Necessary seasonal changes in frequencies, and sometimes broadcast times, also differentiate shortwave from using FM or AM.

Historically, transmissions to some of the BBG’s most important shortwave targets have been heavily jammed by local governments (e.g. China, Cuba, and Iran) both by using local transmission of noise patterns that distort and overwhelm the original signal and often, in large urban areas, by the hijacking of the frequency with a stronger local signal that effectively overwhelms the BBG’s longer distance transmissions and replaces them with the local government signal. The BBG’s licensed international frequencies in cities like Beijing, Shanghai and Hong Kong, for example, are completely and intentionally overwhelmed by National China Radio signals.

Digital Shortwave and Consumer Demand

The Committee reviewed digital shortwave, known as Digital Radio Mondiale (DRM). The Committee heard in several forums that DRM has matured over the past decade, and now has the ability to provide the listener with almost CD quality audio, as well as deliver text, images, and low motion video over a standard shortwave broadcast channel.

Despite these capabilities, DRM has failed to capture any significant market share due to a lack of affordable receivers inside and outside of our target markets, a general downtrend in shortwave usage, and the concomitant lack of adoption by the overwhelming majority of broadcasters.

For comparison, a full satellite reception setup in China that includes a Ku Band dish, the satellite receiver and all necessary cabling, receives video, audio and data and costs less than \$50, whereas the price for DRM receivers starts at twice that while offering access to substantially less content in few formats.

While Russia appears interested in DRM for domestic use and possibly international use (there are also suggestions that China is exploring DRM for domestic use), it is the Committee’s estimation that it is unlikely that DRM will become an established mass media distribution methodology in enough of the BBG’s current or future markets to justify the costs of updating our infrastructure to support this technology. The Committee learned that while India is investing in DRM for both domestic and international use (including Russian to Russia and Russian-language territories), it intends to end this investment because the technology does not support their mission or goals.

The Committee does not believe that the BBG’s networks will generate enough consumer demand for DRM hardware to cause the necessary decrease in the cost of receivers or to drive other broadcasters to our current and future target markets to increase availability of other digital programs. The richness of experience from Internet material on fixed and mobile platforms,

satellite distribution of TV and radio, and the constantly dropping price points associated with these technologies strongly suggests DRM adoption by our current and anticipated future audiences will be minor and most likely by those with access to other technologies.

Shortwave Alternatives for Certain Markets

In markets for BBG priority languages, BBG programs are available through several mediums. In broad terms, shortwave has a decreasing user base in most countries, often to the point of marginal access and impact. In a number of our priority markets, BBG programming is accessed primarily through television, reflecting these audiences' desire for visuals. In other priority markets where the bulk of our audience comes from radio, FM is the most popular waveband for tuning in, when it is available.

Meanwhile, the expansion of the satellite TV/radio installed base continues to grow exponentially in most of the BBG target markets. Satellite dishes, especially smaller and affordable Ku Band dishes, are now ubiquitous in the Middle East and spreading rapidly throughout Africa, Central, East and Southeast Asia.

Internet access via fixed, and especially mobile, platforms continues to experience dramatic growth in these areas as well and, despite substantial effort by some regimes to censor access to the Web and other Internet-based resources, usage of Internet firewall circumvention tools and techniques continues to grow. The BBG's substantial efforts in this arena continue to demonstrably enable unfettered access to online information for large numbers of individuals in places like China, Vietnam, Iran, Syria, Saudi Arabia and many other countries that censor the Internet.

Many of BBG's target audiences tend to use multiple platforms and are not exclusive to one means of delivery. In Nigeria and Burma, for example, it is evident that while young adults use shortwave at similar rates as the overall population, they are at least equally, if not more, likely as the overall population to also use other platforms, such as television and Internet. Politically engaged adults in these markets, as another example, are likely to use shortwave radio, but they are also more likely to use it in conjunction with other means of delivery. Research across countries and regions strongly suggests a pattern of multi-platform consumption developing in markets where shortwave is used.

In markets where in-depth and reliable data is not yet available, there are strong inferences that many of BBG's audiences who appear to rely on shortwave actually have other mediums available to them. In many of these references, the top three target demographics are unlikely to use shortwave exclusively or at all.

Data received as this report was being completed provide dramatic illustration of the rapid decline of shortwave even in markets where it historically has been robust. New data from Burma, where media choices have expanded rapidly since that country's recent political opening, indicate that weekly shortwave use has declined from 34 percent to 15 percent in a space of some 18 months. New data from Nigeria, the country with the largest known population of shortwave users in the world, shows weekly usage of shortwave declined from 25 percent two years ago to 15 percent today.

Target Audiences, Goals, Use of Other Platforms, Young People & Shortwave

Nigeria, 2014

Past Week Use in Percent of:	TV	Internet	Radio	FM radio	SW radio
All adults	63	27	78	71	15
Hausa Speakers	56	17	87	70	31
Men	69	34	86	78	17
Women	56	18	71	62	13
15-24 year olds	64	42	77	71	14
Politically engaged ⁷	63	30	83	77	19
Urban	75	34	78	69	15
Rural	54	22	79	72	16

Burma, 2014

Past Week use.../in Percent of	TV	Internet	Radio	FM radio	SW radio
All adults	46	5	51	25	15
Men	46	6	55	26	18
Women	46	4	47	25	12
15-24 year olds	50	10	55	30	13
Politically engaged	55	5	61	33	22
Urban	72	13	38	22	8
Rural	34	2	56	27	18

A Valuable Medium for Some Markets

Shortwave continues to be a relevant means of delivery in several African markets, namely Sudan's Darfur region, Ethiopia, Zimbabwe, Guinea, DRC, and Northern Nigeria. In Sudan, shortwave use has increased as their security situation has declined. In Zimbabwe, VOA's weekly radio reach was measured at 9.2 percent (9.9% including all other means of delivery) in October 2013. Eighty percent of weekly VOA Zimbabwe listeners usually tune in via shortwave. Shortwave continues to be essential for Sudan and Zimbabwe as alternate means of

⁷ Defined as "very" interested in politics.

accessing VOA (e.g. audio via satellite, the Internet, or mobile) have not yet been embraced by a critical mass of VOA users in these markets.

In Burma, Tajikistan, and with some qualifications, Belarus, shortwave continues to be widely used. While Belarus still has 23 percent of its weekly BBG audience attributable to shortwave, most of those who use shortwave to listen to RFE/RL Belarusian use other means of delivery to consume BBG media and are unlikely to be lost if shortwave were unavailable. A drawdown of shortwave transmissions in this market would result in a decrease in BBG's weekly audience of 0.4 percent of adults, unless they migrate to other means of delivery if shortwave is discontinued. This is based on an extremely small sample size (7 cases), making it impossible to determine more about the demographics or media use of shortwave listeners, but research shows that weekly Belarusian shortwave users are likely to also use AM radio weekly (57%) and the Internet weekly (58%), and that some have satellite dishes (18%), which means they could watch BBG's TV currently broadcast to Belarus.

In no surveyed market, other than those mentioned above, is the audience that uses shortwave exclusively a large component of the overall audience (greater than 20%) or in one of our top three targeted demographics for a particular market.

Even in countries with currently significant levels of shortwave usage, available evidence suggests that audiences turn to other more convenient and user-friendly means of delivery when those become available. As illustrated in the charts in Appendix E, many countries that once had robust shortwave audiences have seen dramatic declines in the usage of that medium over the past decade. Moreover, with the very rapid spread of FM, terrestrial and satellite television, and digital and mobile technologies, the pace of this migration appears to be accelerating. The evidence of sharp declines cited above in such historical bastions of shortwave as Burma and Nigeria illustrate both the speed of the migration away from the shortwave platform and the near ubiquity of alternatives. Given the current pace of change, it seems likely that within the next 2-5 years, very few of BBG's current and anticipated future markets will have sizable audiences in target demographics that rely exclusively on shortwave to receive BBG programming.⁸

Public Comment

The Committee posted a request for public comment (in English) on the BBG's use of shortwave and sent out individualized solicitations to many experts and stakeholders for their views. The Committee received 157 responses over a nearly three-week period.

Respondents self-reported diverse backgrounds and varied connections to the platform. Some said they listened to shortwave, while many were shortwave enthusiasts or amateurs. Others worked in the shortwave industry or were academics researching the use of shortwave. Only 15.3 percent indicated that they listen to BBG shortwave programming. Forty-one percent reported that they live in the U.S. Overall, 91.1 percent of the respondents indicated support for the BBG's continued use of shortwave though the vast majority of these recommendations did not include fact-based arguments and often referenced past consumption. The Committee values the interest and input of those who responded.

⁸ Data trends point to a precipitous drop in shortwave usage around the world. As a thought exercise, if the BBG assumes an annual 20 percent reduction in weekly shortwave usage and applies that forecast to all countries where there are current research-based estimates, there would be no countries where weekly shortwave usage exceeds 8 percent in five years' time, and in most places it would be far less.

Shortwave as a Crisis Platform

The Committee heard from many, including 16 percent of the respondents to the public request for comment, that shortwave is a go-to means of delivery for a crisis, such as military invasion, civil war or natural disaster, which results in a cessation or interruption of pre-crisis media and communication technologies. While every crisis is different, especially with respect to the impact on media and information availability, the BBG has found no recent evidence that shortwave usage in fact increases in such situations. There have been very few crises in recent years in which all means of communication other than shortwave have been interrupted for any substantial period.

In Egypt, for example, in a survey run just a few months after the start of the 2011 revolution, only 1 percent of respondents said they were using SW radio; no radio station of any type was named as one of the top sources of information. In Syria, early in that country's civil war, only 7 percent said they were using SW at all, and no international radio station was among the top three information sources (over 90% said they relied on TV to follow the crisis).

In Haiti, VOA achieved huge audiences in the aftermath of the 2010 earthquake in spite of the destruction of all local FM stations. VOA broadcast's to Haiti were in FM, the dominant medium in Haiti, by way of the Commando Solo aircraft, which the Department of Defense made available to the BBG as a relay platform.¹⁰

In the aftermath of the disputed 2009 elections in Iran, when satellite TV broadcasts and international websites were being blocked by the authorities, only 5 percent reported turning at all to international radio stations to follow the news. This figure is not higher than that of previous years.

Advocates of the argument that shortwave is used and needed in crisis situations note that shortwave receivers are affordable and no third party infrastructure is necessary. However, the general assumption that people own or could easily purchase a receiver is not supported by events over the past decade. In cases where the local government sent shortwave radios to disaster zones, there is no evidence of increased use of shortwave beyond the recovery or the resumption of service of other technologies.

Anecdotal evidence from trips to BBG's target markets where shortwave is or recently was an effective medium, as well as similar anecdotal evidence from other Western broadcasters, suggests that shortwave-capable radios are decreasingly available for purchase in many of these markets. The BBG's research over many years shows that ownership of shortwave radios, or shortwave-capable radios, does not necessarily mean that owners know how to use shortwave or access our content on shortwave. In Iran, while 36 percent report having a shortwave-capable radio, actual weekly usage of shortwave has consistently remained at 5 percent or below, in spite of jamming and interference with satellite TV and significant Internet censorship. As reported by research from the BBC and the BBG, it is difficult to purchase a shortwave radio in Iran because of an overall lack of consumer demand for the sets has resulted in severe lack of

¹⁰ There persists a myth that shortwave was used to broadcast to Haiti in the aftermath of the earthquake. This is not true. Shortwave was used to transmit programming to the Commando Solo aircraft. This aircraft retransmitted the programming to Haiti in FM, which was the far and away dominant medium on the island. Commando Solo has since been updated to receive programming through other means.

availability. Past consumer behavior and anecdotal evidence strongly indicate that once a market loses touch with shortwave, the consumer is unlikely to return to the medium.

At the same time, younger audiences, a substantial portion of populations in our current and future target markets, are decreasingly likely to purchase or use shortwave devices. Across the globe, young news consumers are turning to television, FM radio, mobile devices and social networks to access news information. This remains true in today's crisis situations – such as Syria, Ukraine, Venezuela and the Central African Republic – where there have been significant interruptions of Internet services and, in some cases, broadcast services. Because of the essential nature of the Internet and other communication services, in all cases these interruptions were short-lived and measured in hours to, at most, a few days. In that time, audiences did not rush to shortwave, which is -- or is quickly becoming -- an unfamiliar technology.

Shortwave as a Method for Overcoming Censorship

The Committee assessed the effectiveness of using shortwave as a means for overcoming censorship or outright interdiction of other content distribution platforms. We must accept that there is no foolproof methodology for content to reach audiences that cannot be censored, interfered with, or even completely blocked.

In those countries where open and free information is anathema, regimes use a wide range of methods to censor or interfere with the distribution of content, ranging from taking physical control of point of origination, including reporters and studios, to obstructing distribution pathways, such as broadcast towers and telecommunication links. We recently witnessed some of these scenarios in places like Crimea and Eastern Ukraine. Interference with cross-border radio signals can be made by transmitting noise or other content locally on the same frequency. Local regimes may interfere with television and radio signals from satellites either by up-linking a signal to the satellite with exactly the same set of technical specifications of the targeted channel (often called double illumination) or through more brute force disruption of an entire set of signals that often affect many channels at once. Due to the enormous collateral economic impact of these activities, these measures have come to be widely condemned by most nations and therefore have become methods of last resort mostly used by either rogue regimes or failed states dealing with tremendous political or military crisis.

To avoid the political consequences associated with interfering with a shared resource protected by ITU regulations and located outside of their sovereign territory, such regimes will occasionally deploy local, ground-based, interference that disrupts satellite radio and television signal distribution in a specific neighborhood or suburb.

Telephone networks, including mobile distribution, can experience interference through direct interference with any of the physical distribution architecture (e.g. central offices, local switches and/or towers), as well as via signal interference in specific locations.

Finally, Internet-based distribution can be interfered with through a variety of means, including physically blocking international or regional gateways through redirection of specific Web addresses, either to alternate addresses more acceptable to the censoring regime or to dead-ends from which there is no response (commonly referred to as “sink-holing”). Other methods include highly targeted removal of specific topics while allowing anodyne content through, blocking of specific types of traffic (i.e. encrypted sessions), and even highly sophisticated low

level traffic analysis that attempts to identify the identity of the end user, the content of the traffic, or the targeted address (“deep packet inspection”).

In the past, with a very limited number of cross-border transmission media, the only way to respond to deliberate interference was to effectively escalate the number and power of frequencies aimed at the target audiences in the hope that, eventually, one would overwhelm the ability of the targeted country to block so many powerful signals. It takes far more power to place a broadcast-quality signal in a distant location than it takes to locally block or even completely replace that signal. With specific targets, the BBG has in the past deployed as many as fourteen simultaneous frequencies into the same market only to see each and every one of those frequencies jammed within minutes.

Today’s multi-channel distribution strategies work on a completely different level, making signal interdiction a far more complex, expensive, and internally disruptive proposition. Rapidly expanding and extremely inexpensive Direct-to-Home satellite distribution, ubiquitous mobile phone ownership, and the increasingly economical imperative of providing one’s population with universal access to the Internet have combined to create a media environment where only the most repressive and economically stagnant regimes can effectively control foreign content consumption within their borders. In order to reach audiences in this complex media environment, the BBG must continue to play a game of “cat and mouse.” When interference is detected on one channel, the BBG quickly moves or surges to other mediums. If a television or radio affiliate carrying our content is shut down, we must shift to the appropriate replacement medium, including satellite or the Web. If the Web is blocked, including one of our sites, we surge awareness of our existing and proven circumvention tools and programs.

Overcoming signal interference and interdiction is costly. The BBG continually explores new ways to overcome this censorship, while also pro-actively educating our audiences on the existence, purpose, and use of the tools and programs that will provide them access to the information they need.

While there is long-standing awareness of interference with radio and satellite distribution, the past three to four years have demonstrated the power of governments to interfere, even shut down digital communications. In high profile cases in Syria (Nov. 2012, May 2013, Feb. 2014 & March 2014), Egypt (Feb. 2011), Gambia (March 2014), Sudan (Sept. 2013) and even recently in the Central African Republic (June 2014), critical digital and mobile services were shut down. While these events were very public, it is not widely known that the digital and mobile services were quickly turned back on by the same people that shut them down.

In Syria, Internet and mobile service blackouts have been more frequent than in most countries. It is difficult to identify which blackouts were caused by damage from the conflict and which were deliberately caused by the Assad regime or by enemies of the Assad regime. For example, on March 20, 2014, starting at 12:26 UTC, 84 networks (95% of the country’s capacity) experienced an outage in Syria. According to the Syrian government-owned news agency SANA, the outage was caused by “a breakdown in the optical fiber cable in Damascus.” Service was restored seven hours later. The longest blackouts were in November 2012 (nearly 48 hours) and May 2013 (19 hours).

The Committee found that Internet blackouts, in general, followed a similar pattern. When a country shuts off the Internet it quickly, and quietly, turns it back on. One of the most common

reasons is that the blackout was designed to thwart or hide a specific event, such as a regime military operation or a popular mass protest. Another reason is that the Internet, despite the best efforts of some countries, has become a critical backbone to the economic, communication, and social infrastructure of a country. A government, even one in open conflict, must continue to conduct business, and a significant portion of today's business requires constant access to the Internet.

Despite efforts by these regimes to curtail access to information via modern methodologies, populations continue to gravitate to them because of both the richness of content available and the opportunity for interaction that so many repressed populations desperately want.

In Iran, systematic efforts to confiscate and destroy satellite dishes have rapidly been followed by the installation of even more dishes, to the point that the Iranian regime now openly acknowledges that large swatches of the population regularly watch foreign "prohibited" content distributed by foreign broadcasters such as VOA, RFE/RL, and the BBC.

The increased efforts at information filtering, traffic restrictions, and identification and prosecuting of Chinese web users has not resulted in lower number of attempts to circumvent these measures but rather a tremendous growth in the usage of BBG-sponsored tools. These tools, including Ultrasurf and Psiphon, routinely serve billions of hits each day to populations on the Chinese mainland.

There is no evidence that, even in the midst of complete cutoffs or natural disasters, repressed populations revert to the usage of legacy platforms such as shortwave. The evidence demonstrates audiences continue to use their existing technologies, such as TV or FM or Internet, or seek out anti-censorship tools, including Internet circumvention to private chat software to thumb drives and DVDs that all enable access to the desired content sources.

Assessing Audience Use of Shortwave

The Committee sought to develop an understanding of the size and demographics of the shortwave audience, the countries where programming is consumed over shortwave, and shortwave's contribution to the BBG's overall impact. The research indicates that listeners are heavily concentrated in only a few countries or markets. There are sixteen markets in which shortwave accounts for more than 10 percent of the local BBG audience, and approximately 80 percent of the global shortwave audience is in five countries.⁹ Moreover, evidence for the decline of shortwave's contribution to the BBG's audiences continues to accumulate. New data from Bangladesh, for example, indicates that the percentage of VOA's Bangla audience relying on shortwave has declined from an already low 17 percent in 2012 to 5 percent today.

Almost by definition, the majority of the BBG's target markets are in environments that make accurate understanding of consumer behavior difficult, with many very challenging to measure, such as Cuba, Tibet, and North Korea. These denied environment markets are not easily accessed and surveyed. When we can collect data, it is often anecdotal, collected via exit interviews with travelers or people escaping the regime. In most cases, there is little to no need for the BBG to intentionally place its networks and their content in countries where media use and impact are reliably measured. In such markets, the use of shortwave is demonstrably low, to

⁹ "Shortwave Radio Audiences and the BBG," Presentation to the Broadcasting Board of Governors' Shortwave Committee at its January 23, 2014 meeting. (Set forth in Appendix D).

the point of being immeasurable among our target demographics, due to the availability of and preference for other means of delivery. As a result, the Committee must rely on anecdotal or qualitative data, consider historical trends based on the quantitative data we are able to collect, and monitor listeners' behaviors. This is especially true in the case of shortwave use.

The research suggests that there is an inflection point, or sunset period, for shortwave in every market. Audiences tend to migrate to other more convenient and accessible means of delivery as relevant content becomes available through other media. Kenya serves as a solid example of this trend. The media market in Kenya has grown richer and more competitive over the past ten years, with many FM stations coming on the air and more widespread access to television. At the same time, weekly use of shortwave (to receive any content, not just BBG materials) has declined from 46percent of adults surveyed in 2003 to just 5 percent in late 2013. As recently as 2011, half of the sample still claimed to own a shortwave radio, but just 14 percent were using one weekly, suggesting that it is the availability of high-quality content on preferred platforms that is responsible for the decline, not any inability to access content on shortwave. A number of other examples of this trend are shown in the chart included in Appendix E.

Audio programming—music, news, call-in or talk, storytelling—remains a vital medium around the world and continues to draw significant audiences. The proliferation of choice, the convenience of new technology platforms, and the relevance of local content have created an effective competitor to traditional long-format radio. Again, we have seen significant audience shifts away from the broad, long-format, low audio quality content found on shortwave and suited for shortwave to intimate, local, convenient content formats. This shift is exemplified by the move to AM, then FM (driven by local news and higher quality music), as well as the growing popularity of podcasts (on-demand), and now mobile streaming (broad selection, on-demand, social). Put another way, audiences of all ages are turning away from thirty or sixty-minute programs in favor of highly programmed, segmented and on-demand content. Traditional formats of straight talk, long-form news programs or news readers are losing to sophisticated programming that offers a mix of well-segmented streams, segments and formats.

The BBG is completing a strategic review at the country-level to develop goals, performance metrics, as well as sharp audience statements for FY 2015. The Committee utilized these audience statements in countries where shortwave is currently used as a distribution channel to assess shortwave usage by primary targeted audience(s). The core questions the Committee considered were “Was the audience that utilized shortwave as means for accessing news and information content a strategic audience for the BBG?” and “Did that audience have a more preferred or viable alternative(s) to access BBG content?”

As an example, this is the audience statement from Russia: “The BBG target audience consists of active, digital consumers of all ages but with a focus on 20-45 year olds. They are generally well educated and urban, and they have the potential to be change agents on a large or small scale in society. Most are open to information that offers a different perspective on a wide range of political, social, civic, cultural and human rights issues that are not reported by other news outlets.”

However, in a number of countries there are audience segments that the BBG specifically aims for with shortwave. For example, the shortwave target audience in Lao (similar for RFA and

VOA): independent minded Laotians and Laotian officials, primarily in rural areas too far from the Thai border to be reached by cross-border FM.

When the Committee reviewed these audience statements it could assess the usage of shortwave as a key means of delivery and determine whether there were other channels that were more effective or preferred by the audience to access news and information.

It should be clearly noted that the small size of the shortwave-using population in many of the BBG's markets makes it nearly impossible to undertake the sort of statistically reliable analysis that would enable the Committee to ascertain whether the remaining pool of shortwave users has any characteristics that would fit the BBG's strategic audience targets. This is a general challenge of the BBG considering the regions in which we operate. Where only fragmentary analysis is available, it suggests that shortwave users tend to be both more rural and older than the population as a whole.

There were only a few markets where BBG research found a sufficient number of shortwave radio users to draw any statistically sound conclusions about the ways in which they differ from the general population. In a set of markets where there were enough users to draw distinctions (Burma, Nigeria, the Democratic Republic of the Congo, and Afghanistan), shortwave radio users are more likely than the general population to be male, live in rural areas, lack access to television, and express a high level of interest in political news. Their interest in political news, in particular makes them a desirable target for international broadcasting content.

Nigeria is another special case. While shortwave use has experienced rapid decline (dropping from 25% weekly in 2012 to 15% weekly in 2014), it remains notably higher among Hausa speakers – 31 percent weekly. Hausa speakers are an important target for VOA broadcasts – they live primarily in the North, where the terrorist group Boko Haram operates – and shortwave remains an extremely effective method to reach this population.

Interviews with traveling Tibetan monks suggest that they use shortwave radio and satellite television to receive information from BBG networks, information they then share with other Tibetans, thereby dramatically increasing the reach and impact of the programming. In the case of highly repressive Eritrea, which the BBG lacks research data for, information on media usage in similar neighboring countries suggests that shortwave could be effective; however, the Embassy indicated that there is “absolutely no demand for SW in Eritrea.” The post also stated that satellite TV is widely available.

The Committee found that, in large measure, the profile of shortwave users is not well-aligned with the target audiences that most BBG networks are trying to attract and that these users generally had viable alternative means in accessing USIM content. The Committee's review of target audiences, and their likely preference for and access to a variety of mediums, indicates a sharper than expected reduction in potential impact of shortwave and thus a reduced relative value of shortwave to the agency.

Weekly Audience Reach Via Shortwave

	Weekly USIM Reach	Weekly USIM Audience Mainly on...	% Of Weekly Radio Audience Using SW to Tune In	BBG (Proposed) SW Action
Arabic in Darfur (Sudan)	46.1%	Radio	No data available, but likely the bulk of audience	No MBN reductions.
Dari in Afghanistan	30.9%	Radio (all)	9% RFE/RL, 5% VOA	Reduced VOA SW during sequestration—not to be restored. No RFE/RL reductions.
Hausa in Nigeria	10.8%	Radio	VOA: 34%	No VOA reductions.
Mandarin in China	0.03%	Radio and Internet equally	Unknown due to small sample size	Reduced RFA SW during sequestration—not to be restored
Pashto in FATA (Pakistan)	15.9%	Radio (all)	RFE/RL: 16%. VOA: unknown	No RFE/RL or VOA reductions.
Pashto in Afghanistan	35.5%	Radio	3% VOA. RFE/RL unknown	Reduced VOA SW during sequestration—not to be restored. NO RFE/RL reductions.
Persian in Iran	27.9%	TV	15% RFE/RL. VOA: unknown due to small sample size	Ended VOA SW transmissions during sequestration—not to be restored. Reduced RFE/RL SW as per FY14 Operating Budget
Russian in Russia	2.3%	TV, radio, Internet equally	RFE/RL: 8% VOA: no radio.	No RFE/RL reductions.
Urdu in Pakistan	6.4%	TV	VOA: 9%	Ended VOA SW transmissions during sequestration—not to be restored.

Cost of Shortwave

At present, the fixed costs of operating the BBG's network of shortwave transmission stations exceed \$32 million. The specific costs associated with the actual transmissions (e.g. electricity, diesel fuel, and consumables, like tubes and capacitors) exceed \$11 million, with the remaining costs allocated to the operation of the transmission facilities themselves.

Unlike other technologies where expenses such as maintenance and technology refresh decline over time, the cost of maintaining these transmitters continues to rise as the equipment and antenna fields age. The declining number of other broadcasters also reduces the demand for and thus supply of spare parts for equipment that is decades old.

The Committee studied the impact of maintaining and updating shortwave transmissions in the context of the medium's effectiveness and ability to reach our target demographics, as well as the opportunity costs in today's limited budget environment. Naturally, as ineffective transmissions are eliminated, the fixed costs per actual transmission hour of the remaining broadcasts will increase. Identifying the "price/performance" ratio should never be a definitive rejection or acceptance of shortwave or any other medium, but it is necessary to know when prioritizing requirements and capabilities in support of U.S. foreign policy.

The Committee did consider that operating costs could be slightly lowered with a substantial investment in modernization of transmission equipment. However, the Committee does not believe this investment, which would require a substantial appropriation from the Congress and additional investments across the BBG, would be commensurate with the current or future impact of either shortwave or DRM, which modernization could include.

The Committee also examined opportunities to reduce the size of the BBG's transmission station network. In this analysis, several factors were considered, including: whether some broadcasts are only permitted from specific stations; whether some stations also have satellite downlink and uplink duties; whether overall costs vary greatly between stations; and whether a station will be best positioned to serve key remaining shortwave audiences. Station closings can take up to a full year, with fixed cost savings accrued in the following year.

SECTION THREE: RECOMMENDATIONS

The Committee's review was a highly complex exercise. It involved combining research and assessments in ways that have not been done before, challenging the agency and the networks' strategies and perceptions of reach, and comparing existing shortwave audiences to country-level strategies and target audiences.

The recommendations of the Committee are based on present realities of our current target audiences, evolving communication environments, how our content is consumed today and in the near future, consideration of disruptive acts that are willful or result from acts of nature, the requirements of U.S. foreign policy, and the need to prioritize the use of taxpayer funds.

Ultimately, the recommendations are based on two related questions:

- Is shortwave used by the audiences we are trying to reach?

- What are the opportunity costs of using shortwave to reach these audiences?

These questions address the audience-first approach of the Committee, the need for the BBG to be effective in reaching and empowering these audiences, the present and future reality of limited budgets that require focus in support of U.S. foreign policy, and ultimately the need to be wise stewards of U.S. taxpayer dollars.

Several themes became clear during this comprehensive review process:

- Audiences will migrate to other platforms as they become more accessible
- There is a critical need for shortwave in some countries
- Shortwave is a medium of marginal impact in most markets
- Shortwave is a relatively expensive platform to operate

The BBG must use shortwave where it is most effective. In the past, shortwave audiences were larger with greater dependency on the platform. However, many shortwave consumers today do not use the medium exclusively. As other platforms, such as FM, television, and the Internet, become available, shortwave users demonstrably migrate quickly to these newly preferred mediums. Today, the audiences are waning and the BBG is faced with diminishing returns in a more restrictive budget environment.

The Committee acknowledges that small numbers of unusually significant individuals – too small to be picked up in surveys but nevertheless important due to their level of influence – may presently be reached by BBG shortwave broadcasts. To the extent that such individuals may exist – which can be determined only by anecdotal information – a judgment must be made as to whether their importance and influence is sufficient to justify the high cost of maintaining shortwave broadcasts, which are intended by their nature to reach a mass audience.

The Committee recommends that BBG take an aggressive approach to reduce or eliminate shortwave broadcasts where there is either minimal audience reach or the audience is not a target audience based on our support of U.S. foreign policy.

As such, the Committee recommends that for the remainder of FY14 and for FY15, and subject to re-evaluation during the upcoming FY16 budget formulation process by utilizing the same audience-based criteria, other shortwave transmissions are continued at the FY14 Operating Plan levels. This includes:

- Mandarin (RFA/VOA)
- Cantonese (RFA/VOA)
- Persian (RFE/RL)

In consideration of the current situation in Ukraine and other proximate states with large Russian speaking populations, the Committee further recommends that, revising the FY14 Operating Plan, and subject to re-evaluation during the upcoming FY16 budget formulation process by

utilizing the same audience-based criteria, shortwave broadcasts in Russian be continued to those target areas for a period of time. This includes:

- Russian (RFE/RL)
- Russian to the Caucasus (RFE/RL)

Shortwave broadcasts previously approved by the Board for discontinuation under sequestration and the implementation of the FY14 Operating Plan would be shuttered, subject to shifting conditions in each target location, which the agency would monitor. The research which supports the following recommendations is set forth in Appendix B. They are as follows:

- **RFA Khmer: two (2) hours and VOA Khmer: one and a half (1.5) hours** ^{*}
 - *(The target audience is essentially similar for RFA and VOA)* Fewer than 2 percent of the target audience uses shortwave in an average week. The target audience uses TV and FM radio at significantly higher rates than other Cambodians. There is still a modest audience for cross border MW, which might prove useful in a crisis. BBG will continue to build on its digital and social media efforts, though these platforms are at present best suited to urban audiences rather than the traditional SW target.
- **RFA Lao: two (2) hours and VOA Lao: thirty (30) minutes** ^{*}
 - *(The target audience is essentially similar for RFA and VOA)* Zero percent of the target audience reported using SW weekly. Though the research suggests that shortwave does not appear to be an effective way of reaching audiences in Laos, within our specific target or otherwise, FM radio usage appears fairly common across all Lao provinces. Expanding local FM affiliations, if possible, and exploiting the prospects for delivery of our audience content via satellite, given the remarkably large penetration of satellite technology and the already significant numbers who listen to radio via satellite, may be a logical approach to reaching the target audience.
- **RFA Vietnamese: two (2) hours**
 - Zero percent of the target audience reported using SW weekly. The massive growth of digital technology in Vietnam provides opportunities for reaching BBG's target audience in a multitude of ways that were not previously possible. This trend is only likely to grow in the future, and the widespread usage of social media will encourage additional onward distribution of BBG content.
- **RFE/RL North Caucasus (Avar, Chechen and Circassian): two (2) hours**
 - Two percent or less of the target audience use SW weekly, which is data from 2010. There is high penetration of satellite TV and growing use of mobile devices to access news and information.

^{*} Discussions with the State Department and BBG Networks about these recommendations have resulted in a temporary delay in implementing the proposed reductions, due to local circumstances.

- **RFE/RL Tajik: three (3) hours**
 - 0.2 percent of the target audience use SW weekly. Radio in general plays but a minor role for news consumption, which is dominated by television use. Forty-one percent of the target audience has a satellite dish at home which enables them to receive RFE/RL.
- **RFE/RL Turkmen: two (2) hours**
 - Five percent of the target audience use SW weekly. Radio plays a minor role among the target audience—TV is a far more prominent platform. The target audience is less likely to use the Internet than the non-target audience, but high mobile phone ownership could be leveraged in the future.
- **RFE/RL Uzbek: two (2) hours and VOA Uzbek: thirty (30) minutes**
 - *(See Appendix B for target audience information for the each network)* One percent (RFE/RL) and 2 percent (VOA) of the target audience use SW weekly. TV use among both target audiences is higher than among the non-targets, and RFE/RL's target audiences is also more likely to own a satellite dish. VOA's target audience is more likely to use radio in general, and FM in particular, than the non-target group, which allows those in border regions to tune in via cross-border affiliates. Mobile technology could also be leveraged to reach both entities' target audiences.
- **VOA Azerbaijani: thirty (30) minutes**
 - Two percent of the target audience use SW weekly. The target audience relies primarily on TV for news, while radio plays only a minor role. The target audience can also be reached by digital media. They use the Internet and social networking at approximately twice the level of non-target Azerbaijanis.
- **VOA Bangla: one (1) hour**
 - One percent of the target audience use SW weekly. Shortwave usage is negligible among all population segments, including the target audience, and the platform therefore is not a viable means of reaching Bangladeshis of interest to VOA in large numbers. Overall, an expanded television presence will continue to be the best way to deliver content to our target audiences, especially women. For the younger demographic, while TV and radio will probably deliver the most robust audience in the short term, expanded digital outreach is likely to pay off over the next few years.
- **VOA English to Asia: six and a half (6.5) hours**
 - Nine percent (Vietnam) and 20 percent (Burma) of the target audience use SW weekly. There is still modest use of shortwave in the region, although, with the exception of Burma, half or more of the target audience turns to the Internet for news daily and social media.

- **VOA Kurdish: three (3) hours**
 - Four percent (Iraq), 4 percent (Turkey) and 5 percent (Iran) of the key geographic target use SW weekly. All three markets display certain commonalities: widespread access to satellite television, heavy Internet use, relatively modest levels of radio use in general and very low levels of SW use. In terms of sheer numbers, the best means of reaching Kurdish speaking audiences appears to be via satellite television, given that platform's strong installed base throughout the region. However, the best way forward throughout the Kurdish world is probably on the Internet, as it allows for better customization of content for diverse Kurdish speaking populations
- **VOA Special/Learning English: five and a half (5.5) hours**
 - Eight percent (Nigeria) and 2 percent (Kenya) of the target audience use SW weekly. There are still substantial audiences for broadcast media, especially in Africa. FM radio and TV will continue to be key components of BBG's distribution efforts in the region, but it is evident that target audience members are migrating to digital media in substantial numbers.

In addition to the transmission costs, full implementation of these recommendations will enable the thoughtful and methodical closing of four BBG transmitting stations generating, in FY18, fixed and variable cost savings in excess of \$14.4M or approximately 44 percent of our current SW related expenses. These recommendations are based on careful review of existing research, which shows that the number of shortwave users in the countries concerned is extremely small and the current shortwave broadcasts contribute only trivially, if at all, to the total BBG strategically targeted audiences.

Future Evaluations

The Committee recommends that annually or during each review of country and audience review, an assessment of audience use of various technologies be made, including but not exclusive of shortwave. We must be available on the platforms the audience is using, whether shortwave or satellite TV or mobile or whatever the future brings.

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Media Use among Target Audiences

Kurdish

Target audience for SW: Not defined beyond general population of Kurdish speakers – key geographic target is Iraqi Kurdistan; secondary targets are Kurds in Turkey, Iran, and Syria. Analysis (key media/use access data for target audience):

	Iraq	Turkey	Iran
Use TV daily for news	86	90	76
Use radio daily for news	14	14	17
Use Internet daily for news	13	42	23
Use SMS daily for news	27	22	17
Use social media daily for news	31*	26	5
Own satellite dish	96	87	32
Watched TV at all “yesterday”	94	90	94
Listened to radio at all “yesterday”	10	20	20
Used Internet in past week	41	56	48
Own mobile	85	81	63
Used FM in past week	24	30	28
Used MW in past week	7	4	7
Used SW in past week	4	4	5

*In Iraq, social media figure is daily use of that platform for any purpose

Narrative: All three markets display certain commonalities: widespread access to satellite television (close to universal in the cases of Iraq and Turkey), heavy Internet use, relatively modest levels of radio use in general and very low levels of SW use. Given the broad definition of the target audience and the niche character of the SW-using population, it is apparent that other media are better suited to delivering audiences for BBG products.

In terms of sheer numbers, the best means of reaching Kurdish speaking audiences appears to be via satellite television, given that platform’s strong installed base throughout the region. In principle it would be possible to reach very large audiences via placement on existing Kurdish language channels, though there would be at least two obstacles to be overcome: (1) VOA’s limited ability to produce high quality TV products in Kurdish at present; (2) the affiliations of most Kurdish channels with various political parties and actors, which would make many of them inappropriate partners.

Given these considerations the best way forward throughout the Kurdish world is probably on the Internet. In both Iraqi Kurdistan and Turkey, VOA Kurdish already reaches more people on Internet than radio, and recent surveys found no SW listeners to VOA Kurdish in either country. The universe of Kurdish Internet users in all the countries is now on the order of 50 percent. In addition, Internet based delivery allows for better customization of content to reach the highly diverse Kurdish populations, who speak different variants of the language and have different news interests.

Cambodia

Target audience for SW: (essentially similar for RFA and VOA) rural, less educated, proactive news seekers

Data points used to isolate target audience: Live in rural area, partial secondary education or lower, accesses news at least daily

Analysis (key media use/access data for target audience):

	Target	Non-Target
Use TV daily for news	61	40
Use radio daily for news	51	24
Own satellite dish	8	5
Watched TV at all “yesterday”	52	41
Listened to radio at all “yesterday”	45	24
Own mobile	61	60
Used FM in last week	65	40
Used MW in last week	9	3
Used SW in last week	2	<1
Listened to radio via mobile in last week	21	20

Narrative: Like other Cambodians, the target audience we have historically tried to reach via shortwave hardly ever uses that platform today. Fewer than 2 percent of the target audience uses SW in an average week. In contrast, the target audience uses TV and FM radio at significantly higher rates than other Cambodians. As a result our strategy to reach that audience will rely on expanded outreach to more FM affiliates outside of the capital, as well as continued placement of customized television programming on local TV outlets, which continue to expand their reach.

There are of course dangers in relying exclusively on local affiliate stations in an environment where the government has shown a willingness to muzzle local information sources, but even in the event of a crackdown on local partners, the extremely low current knowledge of SW makes a return to that platform unlikely. There is still a modest audience for cross border MW, which might prove useful in a crisis. BBG will continue to build on its digital and social media efforts, though these platforms are at present best suited to urban audiences rather than the traditional SW target.

Bangladesh

Target audience for SW: rural, proactive news seekers

Data points used to isolate audience: Live in rural area/ small town, express some level of distrust of national broadcasters (independent-minded), Access news at least daily

Analysis (key media/use access data for target audience):

	Segment 1 (Age 15-29)	Segment 2 (Women aged 15-39)	Segment 3 (Remaining)
Use TV daily for news	58	51	49
Use radio daily for news	7	4	3
Use Internet daily for news	7	1	2
Own satellite dish	1	1	1
Watched TV at all “yesterday”	59	51	47
Listened to radio at all “yesterday”	7	4	4
Used Internet in past week	13	3	3
Own mobile	64	53	57
Used FM in past week	20	9	5
Used MW in past week	2	2	2
Used SW in past week	1	1	1
Listened to radio via mobile past week	23	11	5
Social networks for news past week	6	2	1

Narrative: Radio usage has declined to very low levels among the Bangla population overall, though it is a bit more widely used by young people (7% “yesterday,” 21% past week) who comprise one of the two broad target audiences for VOA Bangla. Shortwave usage is negligible among all population segments, including the target audience, and the platform therefore is not a viable means of reaching Bangladeshis of interest to VOA in large numbers.

To the extent that VOA continues to rely on radio to reach its target audiences, presence on FM is critical, as that is the only waveband widely used, and this in turn means affiliations with local stations. The current affiliate Radio Today – now in 8 cities across the country is responsible for most or VOA’s current radio reach. Moreover, most (around 75%) of radio listening in Bangladesh today occurs on mobile devices, which reinforces the importance of FM.

Overall, an expanded television presence will continue to be the best way to deliver content to our target audiences, especially women. While young Bangladeshis are starting to take up the Internet and listen to radio at higher rates than others, neither of these phenomena holds true for women. For that portion of the target audience the most viable way forward is via television, with continued development of attractive content that will get placed on prime local stations. For the younger demographic, while TV and radio will probably deliver the most robust audience in the short term, expanded digital outreach is likely to pay off over the next few years.

Laos

Target audience for SW: (essentially similar for RFA and VOA) independent minded Lao citizens and officials, primarily in rural areas too far from Thai border to be reached by cross border FM.

Data points used to isolate audience: Live in rural area/ small town, express some level of distrust of national broadcasters (independent-minded), access news at least daily; N.B. Given the data at hand it is impossible to isolate those individuals too far from the Thai border to be reached via cross-border broadcasts.

Analysis (key media/use access data for target audience):

	Target	Non-target
Use TV daily for news	87	66
Use radio daily for news	12	18
Use Internet daily for news	2	2
Own satellite dish	79	69
Watched TV at all “yesterday”	76	66
Listened to radio at all “yesterday”	12	18
Used Internet in past week	3	4
Own mobile	61	57
Used FM in past week	24	29
Used MW in past week	6	7
Used SW in past week	None reported	0.8
Listened to radio via satellite	10	14

Narrative: No reported past week shortwave usage was found among the target audience members in the last survey, and among the population as a whole, shortwave usage was less than 1percent. This medium therefore does not appear to be an effective way of reaching audiences in Laos, within our specific target or otherwise. Indeed, radio usage in general is at fairly low levels, a bit more so among the target audience than otherwise. However, given that available resources are unlikely to permit the development of BBG television products in Lao, and given the low rates of Internet penetration at present, radio may remain BBG’s prime medium for reaching the target audience for at least the next several years.

Since FM radio usage appears fairly common across all Lao provinces (and not just those close to the Thai border) a logical approach to reaching the target audience would be expanding local FM affiliations if possible (though this may prove politically difficult), and exploiting the prospects for delivery of our audience content via satellite, given the remarkably large penetration of satellite technology and the already significant numbers who listen to radio via satellite. Should the production of Lao language television products become feasible, direct distribution to home dishes appears to be a promising possibility. Simultaneously, BBG will continue development of its digital products to reach officialdom and urban audiences more likely to have access to that platform.

Vietnam

Target audience for SW: (essentially similar for RFA and VOA) Rural, activists and those who share information with others, interest in “forbidden” topics.

Data points used to isolate audience: Live in rural area/small town, express some level of distrust of one or more national broadcasters, shares news with others at least daily

Analysis (key media/use access data for target audience):

	Target	Other
Use TV daily for news	91	83
Use radio daily for news	24	18
Use Internet daily for news	33	20
Use SMS daily for news	43	30
Use social media daily for news	26	11
Own satellite dish	28	32
Watched TV at all “yesterday”	82	82
Listened to radio at all “yesterday”	23	17
Used Internet in past week	41	26
Own mobile	80	78
Used FM in past week	28	22
Used MW in past week	1	3
Used SW in past week	None reported	0.4
Listened to radio via mobile past week	23	

Narrative: Usage of shortwave radio appears to be virtually non-existent in Vietnam today. As of BBG’s last survey of that country (early 2013), only 13 out of more than 3000 respondents nationwide had used SW in the previous week, and no member of the BBG target audience for SW had done so. Other platforms, however, are promising.

In particular, the massive growth of digital technology in Vietnam provides opportunities for reaching BBG’s target audience in a multitude of ways that were not previously possible. 41percent of the target audience use Internet at least weekly; 33 percent use Internet daily for news, and 26 percent report using social media for news daily. While the Vietnamese authorities have periodically blocked international news sites, including both RFA and VOA, news hungry Vietnamese increasingly find their way to BBG content on the Web regardless, to the extent that Vietnamese is already one of the best performing language services for both services. This trend is only likely to grow in future, and the widespread usage of social media will encourage additional onward distribution of BBG content.

North Caucasus

Target Audience (no specific SW or radio audience defined): The RFE/RL North Caucasus Languages Service targets primarily urban, educated 25-45 year olds who speak one of the three broadcast languages and seek objective and in-depth reporting on both local and national issues to augment the extremely limited news coverage, views and opinions offered by the official media.

Data points used to isolate target audience: Urban, secondary or higher education, age 25-45, somewhat/very interested in news about their republic, and speak at home or understand all/most of a broadcast in Avar, Circassian, or Chechen. The target constitutes 16% in Dagestan and 9 percent in Chechnya.

	Target Dagestan	Non-Target Dagestan	Target Chechnya	Non-Target Chechnya
Use TV daily for news	93	91	83	73
Use radio daily for news	13	11	12	11
Use Internet daily for news	20	13	19	19
Use SMS daily for news	28	18	10	18
Own satellite dish	48	40	36	30
Watched TV at all “yesterday”	90	86	80	84
Listened to radio at all “yesterday”	25	19	19	17
Used Internet in past week	40	27	44	34
Own mobile	100	98	96	96
Used FM in past week	37	31	35	29
Used MW in past week	2	2	2	2
Used SW in past week	2	4	1	1
Listened to radio via mobile past week	21	14	15	15

Narrative: As of the most recent BBG surveys in the region (2010), weekly SW use among the target audiences in Dagestan and Chechnya was very low (between 1% and 2%). Given the global declining trend in the decline of SW use and the 4 years that have elapsed since this survey, it can be assumed that the current level of SW use is even lower. Target audiences distinguish themselves mainly in two areas of platform use/ access: They are more likely to own a satellite dish, which enables them to receive USIM TV broadcasts in Russian, and they are more likely to be weekly Internet users, which enables them to access USIM online products in

Russian. Russian is understood by over 80 percent of the target audience in Chechnya and over 90 percent of the target audience in Dagestan.

Tajikistan

Target audience for radio (no specific SW audience defined): Tajiks aged 25-45 who are students, civil servants, politicians, teachers, intellectuals and are the current and future “influentials” in society.

Data points used to isolate target audience: Age 25-45, at least secondary education (which would be required for the various occupations listed for the target audience), engaged in any of the following activities during the past 12 months (attended a public meeting on local or school affairs, written or called a politician, been an active member of a local organization or community group, written a letter to the editor of a newspaper or magazine or called a live radio or TV show to express an opinion, written an article for a magazine or newspaper, served as an officer for a club or organization, donated money to a charity, given a speech, volunteered your time to an organization, run for or held a political office. (N.B. This target audience constitutes 22% of adults in Tajikistan.)

	Target	Non-Target
Use TV daily for news	85	80
Use radio daily for news	14	18
Own satellite dish	41	40
Watched TV at all “yesterday”	78	73
Listened to radio at all “yesterday”	17	15
Own mobile	84	61
Used FM in last week	31	24
Used MW in last week	2	2
Used SW in last week	0.2	0.6
Listened to radio via mobile in last week	10	7

Narrative: Virtually no members of the target audience use SW radio. Radio in general plays but a minor role for news consumption, which is dominated by television use. Forty-one percent of the target audience has a satellite dish at home, which enables them to receive RFE/RL via satellite.

Turkmenistan

Target audience for radio (no specific SW audience defined): Urban Turkmen aged 25-45

Data points used to isolate target audience: Turkmen ethnic background, age 25-45, urban (not necessary to isolate, as it was an urban survey). (N.B. The target audience constitutes 29% of urban adults in Turkmenistan.)

	Target	Non-Target
Use TV daily for news	89	85
Use radio daily for news	19	12
Own satellite dish	88	89
Watched TV at all “yesterday”	90	88
Listened to radio at all “yesterday”	20	15
Own mobile	95	94
Used FM in last week	6	5
Used MW in last week	1	1
Used SW in last week	5	3
Listened to radio via mobile in last week	4	3

Narrative: Radio plays a minor role among the target audience—TV is a far more prominent platform. Satellite ownership is virtually ubiquitous, and since RFE/RL is available via satellite, TV makes a viable alternative delivery platform. Just 5% used shortwave radio in the past week. The target audience is less likely to use the Internet than the non-target audience, but high mobile phone ownership could be leveraged.

Uzbekistan

Target audience (no specific radio or SW audience defined):

VOA: Age 25- 50, students, those with an education and employed citizens across Central Asia and Afghanistan, who express great interest in public and international affairs, including US foreign policy, economy and culture.

RFE/RL: People who are active, engaged and seek dialogue and change, while interacting thoughtfully within the confines of a fearful society. These potential "change agents" are mainly young people between 25-35, who are either students or educated professionals, working inside or outside Uzbekistan in private or government positions, who use the Internet.

Data points used to isolate VOA target audience: age 25-50, speak Uzbek at home or understand all/most of a broadcast, with at least secondary education, students or employed, "very" interested in news about Uzbekistan, “somewhat” or "very" interested in news about the United States. (N.B. This target audience constitutes 10% of adults in Uzbekistan.)

Data points used to isolate RFE/RL target audience: age 25-35, student or employed, at least secondary education, annual Internet users (weekly would have resulted in an n of just 35). (N.B. This target constitutes 3% of adults in Uzbekistan. (Small “n” of 50)

	VOA Target	VOA Non-Target	RFE/RL Target	RFE/RL Non-Target
Use TV daily for news	87	70	80	71
Use radio daily for news	30	22	33	23
Own satellite dish	14	13	28	12
Watched TV at all “yesterday”	76	77	82	77
Listened to radio at all “yesterday”	34	26	35	26
Own mobile	89	58	100	60
Used FM in last week	61	49	61	50
Used MW in last week	7	4	9	4
Used SW in last week	2	2	1	2
Listened to radio via mobile in last week	23	20	52	19

Narrative: Weekly shortwave use among the USIM target audiences is negligible with 1-2 percent. TV use within both target audiences is higher than among the non-targets, and RFE/RL’s target audiences is also more likely to own a satellite dish. RFE/RL’s target audience (Internet users by definition) can also be on social media, which 86 percent of the target group use weekly. VOA’s target audience is more difficult to reach through alternate platforms. The target audience is not more likely to have a satellite dish at home and is not more likely to use the Internet than those not targeted by VOA. VOA’s target audience is more likely to use radio in general, and FM in particular, than the non-target group, which allows those in border regions to tune in via cross-border affiliates. Mobile technology could also be leveraged to reach both entities’ target audiences.

Azerbaijan

Target audience (no specific radio or SW audience defined): Individuals interested or involved in politics. The service also targets the youth.

Data points used to isolate target audience: Age under 35, “very” interested in political news. (N.B. The target constitutes 6% of adults in Azerbaijan.)

	Target	Non-Target
Use TV daily for news	81	72
Use radio daily for news	14	10
Own satellite dish	56	53
Watched TV at all “yesterday”	74	73
Listened to radio at all “yesterday”	13	11
Own mobile	92	79
Used FM in last week	40	25
Used MW in last week	4	1
Used SW in last week	2	2
Listened to radio via mobile in last week	33	13

Narrative: SW use among the target audience is very low with 2 percent weekly. The target audience relies primarily on TV for news; radio plays a minor role. Over half of the target audience has a satellite dish at home, allowing them to receive USIM broadcasts. The target audience can also be reached by digital media. They use the Internet and social networking at approximately twice the level of non-target Azerbaijanis.

English to Africa; English to Asia

Targets audience:

- In Africa; Competent English speakers, urban/peri-urban; mid-upper level of education, age 35 or under.
- Elsewhere similar, but the small number of competent English speakers in many target countries (e.g. Vietnam and Burma, as examined here) remains extremely small (1-2% of the population) and are almost by definition urban and better educated.

Data points used for analysis: Africa: urban, secondary education or higher; understand all/most of an English language newscast. Elsewhere: all English speakers (can understand all/most of an English newscast)

	Africa				Global			
	Nigeria		Kenya		Vietnam		Burma	
	Target	Other	Target	Other	Target	Other	Target	Other
Use TV daily for news	67	39	79	35	95	92	64	25
Use radio daily for news	50	57	70	70	37	18	30	27
Use Internet daily for news	50	13	47	10	70	20	40	3
Use SMS daily for news	48	24	64	35	63	30	33	4
Use mobile apps daily for news	28	4	25	5	42	9	13	1
Use social media daily for news	43	9	51	9	54	9	33	1
Watched any TV “yesterday”	67	38	81	35	93	84	60	24
Listened to any radio “yesterday”	50	54	72	64	40	17	41	24
Used Internet “yesterday”	53	13	52	16	70	18	36	3
Used Facebook last 7 days	63	21	70	17	67	12	38	3
Used SW last 7 days	8	17	2	12	9	1	20	17
Have satellite dish	18	12	20	9	19	30	30	7
Have mobile phone	98	80	95	62	100	82	80	35

Narrative: The countries chosen above are illustrative of media consumption patterns in key markets targeted by VOA’s English service. The data speak eloquently for themselves; while there is still some modest degree of shortwave use, that platform is dwarfed by the level of usage of other media among the target audience.

The usage of digital media is particularly striking. With the exception of Burma, half or more of the target audience is using the Internet for news daily or almost. Even in Burma, where Internet access until a few years ago was almost unheard of, that figure now stands at 40 percent. Similarly, use of social media for news is quite high, providing a means of reaching and engaging audiences that, until quite recently barely existed.

There are still substantial audiences for broadcast media, especially in Africa, and FM radio and television will need to continue as key parts of BBG’s overall mix in that part of the world, but it is evident that target audience members are turning to digital media so rapidly and in such substantial numbers as to easily substitute for any cut back in shortwave, while yielding significant benefits both in terms of reach and engagement.

END APPENDIX A

RESOLUTION

RESOLUTION ESTABLISHING A SPECIAL COMMITTEE ON THE FUTURE OF SHORTWAVE RADIO BROADCASTING

OCTOBER 23, 2013

WHEREAS, after performing a yearlong strategic review, in October 2011, the Board issued its 5-year Strategic Plan in which the Board noted the importance of reaching audiences on their preferred media. The Board committed itself to “devoting resources to the platforms global media-use strongly favors—television, Internet, FM, and social media—as well as maintaining shortwave broadcasts in regions where it remains a critical platform.” The Board confirmed, “Where shortwave is vital, it will remain. Elsewhere, resource reallocations will support the platforms audiences use;” and

WHEREAS, the Board desires to undertake a comprehensive review on the future of shortwave radio broadcasting as an element of the suite of distribution platforms used by the Broadcasting Board of Governors.

NOW, THEREFORE, BE IT RESOLVED that the Broadcasting Board of Governors hereby establishes the Special Committee on the Future of Shortwave Broadcasting (the “Shortwave Committee”). The Board further decides as follows:

- The Shortwave Committee members shall be Governor Matthew Armstrong (who shall also serve as Committee Chair), Governor Michael Meehan, and Governor Ryan Crocker.
- The Shortwave Committee shall undertake a comprehensive review on the efficacy of shortwave radio as a distribution platform for United States international broadcasting, including the challenges associated therewith. The Committee shall review research on the use of shortwave radio broadcasting and consider the views of various stakeholders associated with this distribution platform.

END APPENDIX B

SUMMARY OF THE SHORTWAVE COMMITTEE MEETING

November 19, 2013
7:30 A.M. - 9:30 A.M. EDT
BBG Headquarters – Washington, D.C.

Members
Governor Matthew Armstrong, Committee Chair
Governor Ryan Crocker, Committee Member
Governor Michael Meehan, Committee Member
Governor Kenneth Weinstein, Committee Member

Meeting Summary

This meeting of the Special Committee on the future of shortwave radio broadcasting (“Shortwave Committee”) took place on November 19, 2013 at the BBG Headquarters in Washington, DC. The meeting was attended by Governors Matthew Armstrong, Ryan Crocker (via telephone), Michael Meehan, Jeffrey Shell and Kenneth Weinstein.

The agenda of the meeting is set forth in Attachment 1 to this report.

Chairman Armstrong opened the meeting with remarks as set forth in Attachment 2.

Housekeeping Matters

The Committee established a tentative meeting schedule (January 23 or 24, March 11, May 21, and June 20), highlighting that the meeting schedule coincides with the budget process. The Committee Chair noted its intent to report on a regular basis to the plenary Board on the Committee’s progress and to deliver a comprehensive presentation with formal recommendations at the final meeting of the Committee in June 2014.

Assessing the Shortwave Audience

The Director of Broadcast Technologies presented an overview of shortwave radio, including a review of how the technology functions and the audience’s listening experience. The Committee also received information on the advantages and disadvantages of the medium, including intentional and environmental interface comparison of the coverage capacity of shortwave versus other broadcast platforms. A copy of this presentation is set forth in Attachment 3.

BBG Networks' Perspectives on the Use of Shortwave

The Committee heard from each of the BBG-sponsored broadcasters on how they use shortwave radio to engage their respective audiences, including descriptions of the target 'market' or audience, the role of shortwave in their respective engagement strategy with that audience or market, and the impact of this medium on their audience.

The Committee requested Radio Free Asia (RFA) to provide additional information on the demographics of its shortwave audience and a detailed breakdown of how RFA conducts its audience research.

Shortwave Technology Primer

The Committee received a briefing from the Director of Technology, Services and Innovation on the variable and fixed costs of operating shortwave transmitting facilities. The director also spoke to the challenges of maintaining those facilities in the current budget environment, and briefly discussed anticipated savings from migrating to different distribution platforms. A copy of this presentation is set forth in Attachment 4.

Other attendees: Richard Lobo, IBB Director; Jeff Trimble, IBB Deputy Director; Suzie Carroll, Executive Director; Paul Kollmer-Dorsey, General Counsel and Board Secretary (via telephone); Leslie Hyland, Chief Financial Officer (CFO); Lynne Weil, Director of Communications & External Affairs; Oanh Tran, Director of Board Operations; Andre Mendes, Director of Technology, Services and Innovation; Gerhard Straub, Director of Broadcast Technologies; Bruce Sherman, Director of the Office of Strategy and Development (OSD); William Bell, Director of Research; Kathryn Neeper, OSD Program Analyst; Paul Marszalek, OSD Media Strategist; David Ensor, Director of the Voice of America (VOA); Steve Redisch, VOA Executive Editor; Rebecca McMenamin, Acting Senior Advisor of VOA Strategy; Carlos Gacia-Perez, Director of the Office of Cuba Broadcasting (OCB) (via telephone); Irv Rubenstein, OCB Director of Administration (via telephone); Oscar Rodriguez, Director of Radio Marti; Libby Liu, President of Radio Free Asia (RFA) (via telephone); Betsy Henderson, RFA Director of Research, Andrew Janitschek RFA Director of Program and Operation Support, Kelu Chao, Director of the Office of Performance Review (OPR); Dan Sreebny, Senior Advisor for the Under Secretary for Public Diplomacy and Public Affairs; Kevin Klose, President of Radio Free Europe/Radio Liberty (RFE/RL) (via video conference); Adam Gardner, IBB Regional Marketing Officer for Eurasia (via video conference); Paul Tibbits (via video conference), RFE Director of Market Insight and Evaluation (via video conference); Luke Springer, Director of Technology (via video conference); Christine Fetzko, Director of Corporate Strategy and Operations (via video conference); Brian Conniff, President of Middle East Broadcasting Networks (via telephone)

ATTACHMENT 1

MEETING OF THE SHORTWAVE COMMITTEE

November 19, 2013

7:30 A.M. - 9:30 A.M. EDT

BBG Headquarters – Washington, D.C.

Members
Governor Matthew Armstrong, Committee Chair
Governor Ryan Crocker, Committee Member
Governor Michael Meehan, Committee Member
Governor Kenneth Weinstein, Committee Member

AGENDA

- Agenda Topic 1* **Housekeeping Matters**
- Review of Committee Mandate
 - Scheduling
 - Reporting Procedures
- Agenda Topic 2* **Assessing the Shortwave Audience**
- Shortwave Audience Overview
 - Audience Interaction with the Medium
- Agenda Topic 3* **BBG Networks' Perspectives on the Use of Shortwave**
- VOA Perspective
 - OCB Perspective
 - RFA Perspective
 - RFE/RL Perspective
- Agenda Topic 4* **Shortwave Technology Primer**
- Transmission Facility Overview
 - Platform Comparison: Shortwave, Medium Wave, FM and Satellite
 - Digital Shortwave Availability and Cost
- Agenda Topic 5* **Next Steps and Action Items**

SUMMARY OF THE SHORTWAVE COMMITTEE MEETING

January 23, 2014

9:00 A.M. – 11:00 A.M. EDT

BBG Headquarters – Washington, D.C.

Members Governor Matthew Armstrong, Committee Chair
Governor Ryan Crocker, Committee Member
Governor Michael Meehan, Committee Member
Governor Kenneth Weinstein, Committee Member

Meeting Summary

This meeting of the Shortwave Committee took place on January 23, 2014 at the BBG Headquarters in Washington, DC. The meeting was attended by Governors Matthew Armstrong, Ryan Crocker (via telephone), Michael Meehan, Jeffrey Shell and Kenneth Weinstein.

The agenda of the meeting is set forth in Attachment 1 to this report.

Understanding the BBG Research on Shortwave

William Bell, the International Broadcasting Bureau (IBB) Director of Research, presented an overview of the BBG research on shortwave radio, specifically focusing on the characteristics of the shortwave audience, where shortwave is being used and its contribution to BBG's overall impact. The IBB Director of Research also provided a detailed analysis of countries with the highest shortwave consumption and briefly spoke to audience trends, stating that history suggests that audiences will migrate to other media as they become available. In closing, he noted that shortwave radio remains critically important in a limited number of countries.

Analyzing the BBG Research

The Committee convened a panel of external experts to analyze the BBG research, identify its potential limitations, and assess whether the BBG has sufficient data to make informed decisions on the use of shortwave radio. The bios of the external experts are set forth in Attachment 2.

The panelists discussed the value of shortwave, contemplating the cost per listener in markets outside of the top five markets (Nigeria, Burma, Ethiopia, Sudan [Darfur] and the Democratic Republic of Congo), which make up about 80% of the total shortwave audience. Andre Mendes, Director of Global Operations, also spoke to the budget implications of maintaining shortwave radio at its current levels. There followed a robust discussion on how to define the concept of impact. The panelists noted that determining what impact means to the BBG and gaining a better understanding of that concept is imperative when considering the reach, efficacy and ultimately the use of shortwave.

Dan Sreebny, Senior Advisor for the State Department's Under Secretary for Public Diplomacy and Public Affairs, addressed the Committee's request for input from the State Department's overseas posts on their perceptions of the BBG's shortwave efforts in various countries, noting that the embassies' feedback may offer some insight on the impact of shortwave.

Next Steps and Action Items

Governor Armstrong, the Committee Chair, requested feedback from the full Committee, as well as the Office of Strategy and Development on the State Department's proposed document to be sent to overseas posts in order to obtain their perspectives on BBG shortwave broadcasts. The Committee also indicated that the focus of the Committee's meeting in March will be on shortwave stakeholders.

Other attendees: Suzie Carroll, Executive Director and Director of Global Communications; Andre Mendes, Director of Global Operations; Robert Bole, Director of Global Strategy; Paul Kollmer-Dorsey, General Counsel and Board Secretary; Leslie Hyland, Chief Financial Officer (CFO); Lynne Weil, Director of Communications & External Affairs; Oanh Tran, Director of Board Operations; Bruce Sherman, Director of the Office of Strategy and Development (OSD); William Bell, Director of Research; David Ensor, Director of the Voice of America; Carlos Gacia-Perez, Director of the Office of Cuba Broadcasting (via telephone); Oscar Rodriguez, Director of Radio Marti (via telephone); Kevin Klose, President of Radio Free Europe/Radio Liberty (RFE/RL) (via video conference); Nenad Pejic, RFE/RL Editor-in-Chief of Programming (via video conference); Paul Tibbitts, RFE/RL Director of Market Insight and Evaluation (via video conference); Luke Springer, Director of Technology (via video conference); Christine Fetzko, Director of Corporate Strategy and Operations (via video conference); John Giambalvo, RFE/RL CFO; Libby Liu, President of Radio Free Asia (RFA); Brian Conniff, President of Middle East Broadcasting Networks (via telephone); Dan Sreebny, Senior Advisor for the Under Secretary for Public Diplomacy and Public Affairs, State Department; Ashley Lancaster, Board Operations and Policy Adviser; Gerhard Straub, Director of Broadcast Technologies; Kathryn Neepser, OSD Program Analyst; Paul Marszalek, OSD Media Strategist; Karen Larson, OSD Program Analyst; and Theresa Beatty, Senior Management Analyst, CFO.

ATTACHMENT 1

MEETING OF THE SHORTWAVE COMMITTEE

January 23, 2014

9:00 A.M. – 11:00 A.M. EST

BBG Headquarters – Washington, D.C.

Members
Governor Matthew Armstrong, Committee Chair
Governor Ryan Crocker, Committee Member
Governor Michael Meehan, Committee Member
Governor Kenneth Weinstein, Committee Member
Governor Jeffrey Shell, Committee Member, *ex officio*

AGENDA

Introductory Remarks by the Committee Chair

Questions Framing the Discussion

1. Who are we reaching and are they our target audience?
2. How much of the target audiences are accessible through other mediums?
3. What is the impact of the content format on the medium and its audience?

Agenda Topic 1 **Understanding the BBG Research on Shortwave**

Agenda Topic 2 **Analyzing the BBG Research**

- What is missing in the research or what are its limitations?
- Do we have data we need to make properly informed decisions on shortwave?

Experts:

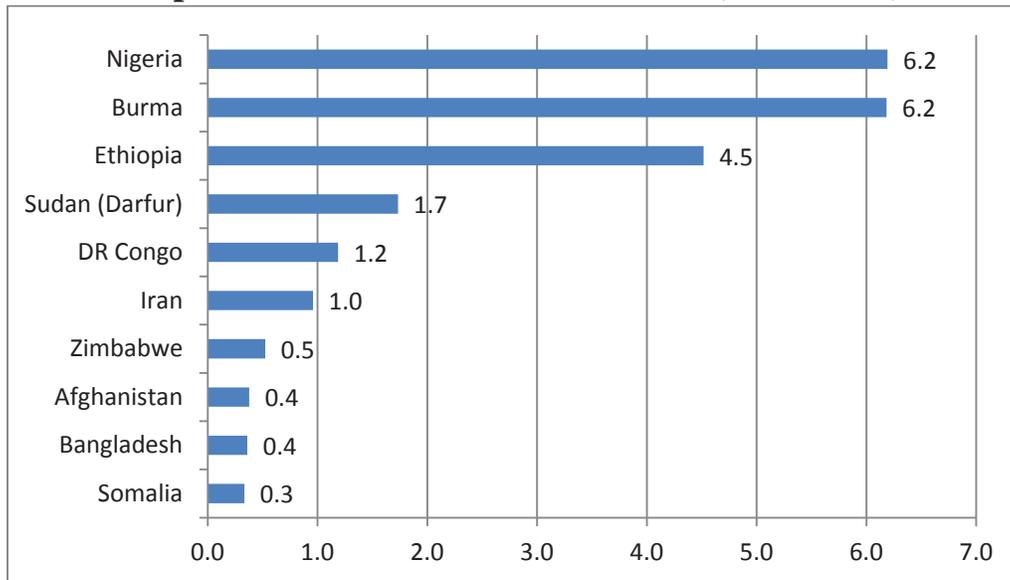
- Guido Baumhauer, Director of Strategy, Marketing and Distribution, Deutsche Welle
- Mike Cronk, Senior Partner, Marquis Media Partners
- Shawn Powers, Associate Director of the Center for International Media Education & Assistant Professor of Communication at Georgia State University

Agenda Topic 3 **Next Steps and Action Items**

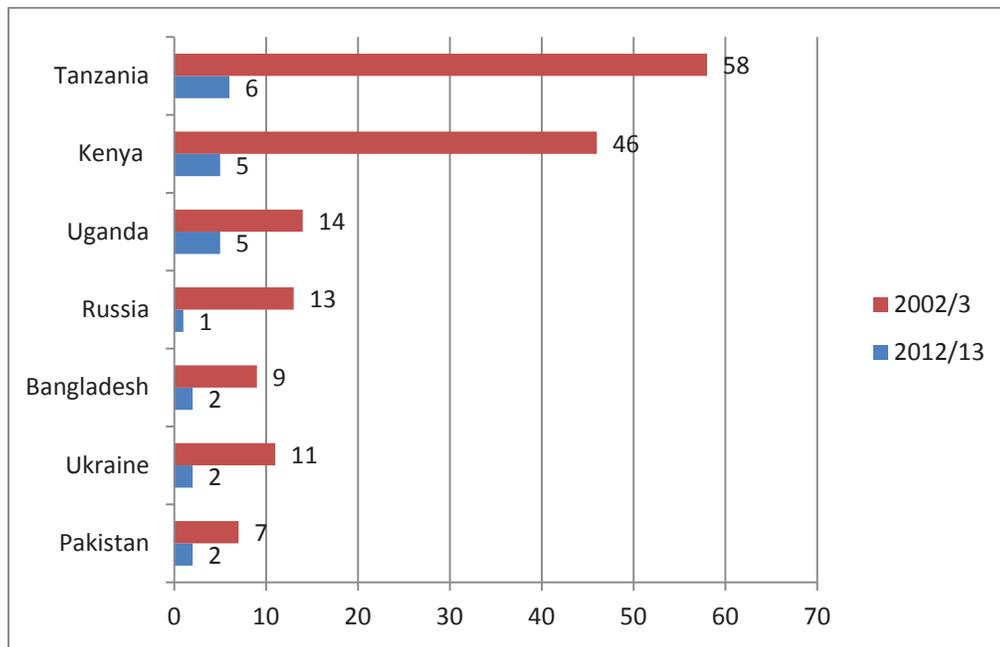
- What further research, if needed, do we need?
- Preview of Meeting 3

END APPENDIX C

Top Ten BBG Shortwave Audiences (in millions)



Sample Changes in Weekly Shortwave Use (percentages of adults), 2002-2013



END APPENDIX D

Request for Public Comment

Shortwave radio has been a mainstay of U.S. international media since the 1940s. Over time, however, the number of countries in which shortwave is the medium of choice for audiences overseas has been shrinking. In many places, people are increasingly turning to other means to get news and information - including but not limited to FM radio, satellite television, websites, social media, and their mobile phones.

The Broadcasting Board of Governors (BBG), the independent federal government agency that oversees U.S. civilian international media, has been adjusting to these changes over the years and now delivers news and information programs on a wider variety of platforms in more languages than any other media organization. To support its commitment of reaching audiences on their preferred media, the Board recently established a Special Committee on the Future of Shortwave Radio Broadcasting, which has been conducting a thorough review of the agency's use of shortwave radio as a distribution platform, the associated costs, and the likely reliance on it by next-generation audiences.

This Committee is now seeking feedback from external experts and stakeholders on their perspectives on the role of shortwave radio broadcasting as a BBG distribution platform. Given your interest and involvement in international media matters, we would very much appreciate hearing from you. We are particularly interested to hear views that consider the evolving media consumption of target audiences, changing access to shortwave and other platforms, and the need to prioritize in an austere federal budget environment.

The BBG is committed to sustaining shortwave broadcasting to regions where a critical need for the platform remains.

The Shortwave Committee has held two meetings focused on the shortwave audience's listening experience, the BBG networks' success in reaching target audiences, the role of shortwave in the networks' engagement strategies in various markets, the cost of operating shortwave transmitting facilities, and the BBG's research into how shortwave is being used and its impact on audiences.

Your input will better inform the Committee's recommendations and could help shape its comprehensive report to the plenary Board.

I would appreciate hearing from you at your earliest opportunity, but I am hoping to have all views by March 14, 2014. Please let me know if that will not work for you. Your submission need not be longer than a thousand words or so; send it to ShortwaveCommittee@bbg.gov

The news and information provided by our networks helps bring the light of truth to some of the darkest corners of the world. By supporting the free flow of news and information, including

combatting Internet censorship and providing news and information tailored for specific audiences, developing local media, and creating access to global media, we purposefully support the freedom to speak, the freedom to listen, and the freedom of expression.

If you are aware of anyone with a particular interest in this topic, I encourage you to forward this letter to them.

Thank you for your interest in taking part in this process to help the BBG become more efficient and effective in supporting U.S. national security and foreign policy.

Sincerely,



Matthew C. Armstrong
Chairman

BBG Special Committee on the Future of Shortwave Broadcasting

END APPENDIX E