

GAO

United States General Accounting Office

Report to Congressional Requesters

January 1994

VOICE OF AMERICA

Station Modernization Projects Need to Be Justified



1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the experimental procedures and the statistical analysis performed.

3. The third part of the document presents the results of the study, including a comparison of the experimental findings with the theoretical predictions. It also discusses the implications of the results for future research.

4. The fourth part of the document provides a summary of the key findings and conclusions of the study. It highlights the strengths and limitations of the research and offers suggestions for further investigation.

5. The final part of the document contains a list of references and a list of figures. The references cite the works of other researchers in the field, and the figures provide a visual representation of the data presented in the text.

National Security and
International Affairs Division

B-255840

January 24, 1994

The Honorable Lee H. Hamilton
Chairman, Committee on Foreign Affairs
House of Representatives

The Honorable Neal Smith
Chairman, Subcommittee on Commerce,
Justice, State, the Judiciary, and
Related Agencies
Committee on Appropriations
House of Representatives

Because of your continuing interest in the Voice of America's (VOA) radio construction program, we are sending you this report on the need for VOA to justify its modernization plan. Shortly after the President's February 1993 announcement of his intentions to consolidate U.S. international broadcasting activities, we began a review of the costs and issues associated with consolidating Radio Free Europe/Radio Liberty (RFE/RL) and VOA within the U.S. Information Agency's (USIA) Bureau of Broadcasting. Our objectives were to determine whether VOA had (1) adequately considered changing world conditions and new technology in its plans to build new stations and modernize existing ones and (2) supported its modernization projects with fully documented cost-benefit analyses.

Background

VOA's broadcasts originate in Washington, D.C., and are sent to 29 leased and owned relay stations worldwide via satellite channels. These stations rebroadcast the VOA programs in shortwave and medium wave. Shortwave is the primary signal used in international broadcasting because it can be transmitted thousands of miles and is the only way to reach certain VOA audiences. The key drawback to shortwave broadcasts is the variable signal, which can at times result in poor sound quality or an inaudible broadcast.

In 1982, VOA embarked on an estimated \$1.3 billion network modernization program. The modernization program was intended to increase the reliability and strength of the broadcast signal into areas of political importance and defeat the jamming of VOA's shortwave broadcasts. In 1983, VOA developed a plan to achieve this goal by refurbishing existing relay stations and constructing new ones. This plan has been changed and

delayed often in response to changing circumstances, and much of the modernization program has not yet begun.

In 1992, we reported on VOA—specifically, its station modernization efforts, audience research, foreign language broadcasts, and the changing world environment.¹ In that report, we noted that as technology improves and local broadcast media become more reliable, the incentive for people to tune to shortwave broadcasts declines.

Results in Brief

Major political changes, advances in communications technology, and organizational changes in U.S. government international broadcasting may render some of VOA's planned shortwave modernization projects obsolete before they are finished. Democracy is spreading in many parts of the world; host country media have become more reliable broadcast sources; and VOA and RFE/RL audiences have declined. In response to the President's plan to consolidate broadcasting, VOA and RFE/RL cut back their direct broadcast hours and are planning to eliminate redundant language broadcasts. In several locations, they are using alternatives (such as providing programs to local stations for rebroadcast) to supplement or replace direct broadcasts. By the turn of the century, direct broadcasts from satellites delivering high-quality signals may be available. Despite these changes and the fact that fewer people in target audiences are listening to shortwave broadcasts, VOA plans to continue to construct new shortwave stations and modernize existing ones. Over half of the \$900 million VOA plans to spend on modernization between 1994 and 2003 is for shortwave projects that have not yet begun.

The planned shortwave modernization projects are not supported by cost-benefit analyses. In 1992, we recommended that VOA analyze the costs and benefits of its new construction projects. Although VOA agreed to do so for new projects, it did not make this analysis for the existing shortwave modernization projects, asserting that they were previously approved and justified in other planning documents. However, the proposed consolidation of VOA and RFE/RL and the changing political and technological environment present different circumstances than when earlier approvals were granted.

¹Voice of America: Management Actions Needed to Adjust to a Changing Environment (GAO/NSIAD-92-150, July 24, 1992).

Impact of Political, Technological, and Organizational Changes on VOA's Modernization Plans

VOA continues to implement a plan to modernize existing facilities and build new shortwave broadcasting facilities. VOA's plan has been delayed and changed since 1983 due to budget restrictions and delays in negotiating operating agreements with foreign governments for new stations. Therefore, many of these modernization efforts are taking longer to complete. For example, VOA's plan to expand facilities in Sri Lanka was approved in December 1983. However, reduced funding delayed its construction. The new station, which has been redesigned in response to changing circumstances and moved to a different location, is now scheduled for completion in June 1995.

Construction has not started on a proposed station in Tinian, and the station will not be ready for broadcasting until 1997. Planned modernization has not begun at many existing stations. In the meantime, political changes, advances in communications technology, and impending organizational changes have created a dramatically different environment for U.S. government international broadcasting. What follows are descriptions of these changes.

Political Changes

Countries that VOA has broadcast to have changed politically and are now open to a freer flow of information. Both RFE/RL and VOA are providing more programs to local broadcasters for rebroadcast in Eastern Europe and the Commonwealth of Independent States and reducing the number of direct shortwave broadcasts. Although VOA now broadcasts in two more languages than in 1991, its direct broadcasts have decreased by about 10 percent (113 hours a week), due primarily to placement of its programs. VOA has allocated increased resources to place its programs on local stations and networks and established new offices to implement the placement program.

In the past 2 years, VOA has placed its programming on more national networks and local stations than ever before. For example, in the 17 Spanish speaking countries of Latin America, hundreds of local commercial stations and networks broadcast segments of VOA's 20 weekly hours of Spanish programming. In Thailand, VOA sends programming segments each week to scores of networks and local stations. Some VOA programming is broadcast on a majority of African countries' official networks and on several large regional stations. Similar examples exist in other regions of the world.

According to a VOA report, the trend in Eastern Europe and some parts of the Commonwealth of Independent States is toward Western listening and viewing habits—direct international radio listening drops off to single digit percentages when there are more than six choices of local programs available. However, in countries where the pace of democratic change is measured or uncertain, VOA believes that the retention of its crisis shortwave broadcast capability is vital to U.S. national interests. It is important to note, however, that there are other, less expensive alternatives to building or maintaining large shortwave stations to respond to crisis situations. For example, after its Liberia station was taken over by rebels, VOA built a mobile shortwave facility. In response to the Persian Gulf crisis, VOA established a new broadcast capability within 4 months of its agreement with Bahrain.

Advances in Technology

According to a VOA study, direct broadcasts via satellite will emerge for limited application before the end of the decade and will ultimately revolutionize radio program delivery. Satellite radio is the most promising emerging technology for international radio broadcasting.

As currently envisioned, VOA would lease satellite channels from system operators. As time goes on, VOA might augment its shortwave and medium wave delivery in certain parts of the world with satellite radio transmissions. The pace of availability will differ among various regions of the world. In some places, these transmissions may eventually replace traditional shortwave broadcasting methods, depending on characteristics, such as the availability of inexpensive receivers.

In 1992, delegates at a world conference allocated frequencies for satellite radio and, as a delegate, VOA favored this action. A VOA report states that VOA may want to lease a few experimental circuits as early as 1995. However, VOA does not believe full-scale use of satellite radio by international broadcasters will occur any earlier than near the end of the decade.

VOA has been working with the National Aeronautics and Space Administration (NASA) to develop a prototype satellite radio receiver. It hopes to give designs for the prototype to industry to encourage companies to manufacture the radios. In June 1993, using a prototype indoor radio, VOA successfully demonstrated reception of a stereo quality signal from a NASA satellite. According to a VOA report, in some parts of the world, by 1995, digital radio receivers compatible with satellite broadcasts

are expected to be available for sale. Therefore, according to a VOA plan, there could be an incentive to lease a few experimental satellite circuits as early as 1995. The widespread use of satellites to beam radio and television across national borders directly into homes is expected near the end of the decade.

According to a USIA research report, inexpensive transistorized electronics and the widespread use of communications satellites have given much of the world access to more and more broadcast programming. Much of it is televised to the world's 1 billion plus television sets. Most USIA surveys show that, where it is available, television has become the primary source of news.

Organizational Changes

The President's proposed consolidation of RFE/RL and VOA includes the merger of 35 owned and leased relay stations worldwide. According to a VOA consolidation study, elimination of all head-to-head competition, updated assessments of audience needs, and overall budget constraints dictate that the combined radios broadcast fewer total hours than the sum of today's schedules.

VOA and RFE/RL are already cooperating in the delivery of their programs. For example, facilities are jointly leased to supplement the coverage provided by owned and operated stations. As a result, RFE/RL has allowed VOA to lease excess capacity on its owned shortwave transmitters at one of its six European relay stations.

In February 1993, the U.S. Advisory Commission on Public Diplomacy reported the potential benefits of consolidation,² including efficiencies in the use of transmitters, broadcast frequencies, staff, and facilities. The Commission noted that the United States does not need two government-funded radio stations competing for the same audiences, placement opportunities, frequencies, and scarce resources.

VOA Has Not Conducted Needed Cost-Benefit Analyses

Our 1992 report recommended that USIA require fully documented cost-benefit analyses before approving any future VOA modernization project proposals. We recommended that these analyses consider (1) project alternatives, including no action, refurbishment, replacement, expansion, and new construction; (2) the potential audience improvement

²The U.S. Advisory Commission on Public Diplomacy, a bipartisan commission created by the Congress, oversees international broadcasting, public affairs, and educational exchange activities.

that could be achieved by each project alternative based on audience research data; and (3) the risks to project completion, such as political unrest and future funding shortfalls.

In response to our recommendation, VOA developed what it referred to as a project alternatives assessment process to be used in the development of any new project. This process included analyses of (1) broadcast requirements, (2) audience data, (3) existing facilities, (4) the threats to potential new locations, and (5) project costs and alternatives. The intent was to ensure that VOA use the most cost-effective method of fulfilling its mission. VOA has not applied this analytical technique to any of its existing construction projects, asserting that they were approved and justified before the technique was developed and reviewed in annual planning reports. However, five shortwave modernization projects planned between 1994 and 2003 and costing about \$500 million have not yet begun.³ Although earlier approvals had been granted, cost benefit analyses could now produce different plans considering the proposed consolidation of VOA and RFE/RL and other changes.

A VOA official told us of his concerns about the cost of doing needed audience research in support of the assessment process. We recognize that research will add to VOA's costs. However, audience research costs little (about \$650,000 in fiscal year 1993) relative to the construction of new stations. For example, VOA's new Morocco station cost over \$200 million. Other international broadcasters spend between 1 percent and 2 percent of their total budget on audience research. A July 1993 VOA report suggests that it should have a budget of \$2 million a year for audience research.

Recommendations

In light of the changes in world conditions, technology, and the organization of U.S. government broadcasting, we recommend that the Director of USIA direct the Associate Director, Bureau of Broadcasting, to require fully documented cost-benefit analyses for all VOA shortwave modernization projects where construction has not yet begun. We further recommend that USIA use the project alternatives assessment process developed in response to our 1992 report.

³VOA had planned to build a \$144-million station in Kuwait. This station has been withdrawn from the executive branch's budget. However, VOA believes another station will be needed to satisfy this shortwave broadcasting requirement.

Agency Comments and Our Evaluation

USIA provided written comments on a draft of this report and generally agreed with its contents (see app. I). However, detailed comments suggested that we recommend that VOA perform cost analyses of their modernization projects rather than cost-benefit analyses. We did not make this change and believe that cost-benefit analyses are needed. Without such analyses, VOA lacks any reasonable assurance that (1) after spending millions of dollars on new and upgraded facilities its audience will increase or (2) given the variety of methods VOA uses to deliver programs to target audiences, such as program placement, that the planned modernization is the best, most effective, and efficient way to achieve its objectives.

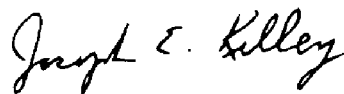
Scope and Methodology

We performed our work at VOA and the Bureau for International Broadcasting headquarters in Washington, D.C., and at overseas facilities. We interviewed officials at VOA, USIA, and USIA's Office of the Inspector General and reviewed VOA plans, reports, and studies. We interviewed officials and reviewed documents at VOA's relay station in Ismaning, Germany, and its Marketing Office in Munich, Germany. We interviewed officials and obtained documents from RFE/RL in Munich, Germany, and from relay stations in Biblis, Lampertheim, and Holzkirchen, Germany.

We performed our work between April and November 1993 in accordance with generally accepted government auditing standards.

We are sending copies of this report to the Director, U.S. Information Agency; the Director, Office of Management and Budget; and other interested congressional committees. Copies will also be made available to others upon request.

Please contact me on (202) 512-4128 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix II.



Joseph E. Kelley
Director in Charge
International Affairs Issues

Comments From the U.S. Information Agency

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



OFFICE OF THE DIRECTOR

UNITED STATES INFORMATION AGENCY
WASHINGTON, D.C. 20547

January 12, 1994

Mr. Frank C. Conahan
Assistant Comptroller General
United States General Accounting Office

Dear Mr. Conahan:

I appreciate the opportunity provided to this Agency to review and comment on the draft GAO report "VOICE OF AMERICA: Station Modernization Projects Need to be Justified" (GAO/NSIAD 94-69).

The comments which follow were prepared by members of the Management Team of the Bureau of Broadcasting. The comments are in two sections: Enclosure A contains general comments; Enclosure B includes specific line-by-line comments and clarifications.

Please let us know if additional information is needed.

Sincerely,

A handwritten signature in dark ink, appearing to read "Joe Duffey".

Joseph Duffey
Director

See comment 1.

ENCLOSURE A

GENERAL COMMENTS

GAO Draft Report "VOICE OF AMERICA: Station
Modernization Projects Need to be Justified"
(GAO/NSIAD-94-69)

As the international broadcasting arm of the United States Information Agency (USIA), the Bureau of Broadcasting strives to operate a highly effective global broadcasting network to meet mission goals. An array of factors force international broadcasting requirements and capabilities to change over time, and to address these changing conditions, the Bureau updates its plans regularly. The Bureau thoroughly justifies network plans in comprehensive annual reports, budget submissions, and other documents--many of which have been used as references for this draft report. Moreover, the Bureau has agreed to perform cost analyses for all VOA shortwave modernization projects where construction has not yet begun even though the projects had been approved and justified in the past. The Bureau will use the project alternatives assessment process developed in response to the 1992 GAO report.

The frequent changes in the world's political landscape provide much of the substance for the Bureau's program content, and the Bureau applies its network resources prudently to mirror and interpret these developments to the world. The events of the past few years in China, the Middle East, Russia, Somalia, the Balkans, and many other areas of the globe attest to the continuing vigor and value of effective international broadcasting.

Technology is continually changing as well. The Bureau attempts to use the most appropriate mix of available media to reach desired audiences--including radio from U.S. Government-owned and private stations, television, and data services--all supported by an extensive international satellite system. Shortwave radio remains a vital component of the Bureau's media mix because of its unique propagation characteristics. With a shortwave capability, the Bureau can ensure delivery of its programs under almost all conditions. Consequently, shortwave will remain a useful broadcast medium in many areas of the world for many years to come. The Bureau also operates regional medium wave stations that provide powerful signals on the popular "AM radio band." The Bureau plans to maintain and upgrade all of these important station capabilities in areas where they provide effective service.

See comment 2.

See comment 3.

-2-

The Bureau also caters to audience preferences by placing VOA programs on hundreds of local AM and FM stations throughout the world and, in a few carefully selected circumstances, by leasing transmission time from local broadcasters. Research suggests that these activities can substantially increase VOA audience share. However, because of the risks involved in politically turbulent societies, placement is generally not yet seen as a substitute for direct broadcasting.

Emerging technologies will join the Bureau's media mix as they become viable. VOA has been recognized as a world leader in DBS-Radio through our work encouraging appropriate international business and regulatory arrangements and through our support of development of appropriate new radio receivers. Feasible DBS-Radio services, however, do not yet exist. It will be years before such services emerge in some areas and even longer before enough new receivers are in use to justify extensive use by VOA.

Organizational arrangements for international broadcasting are changing too. The Bureau is working closely with representatives from the Board for International Broadcasting and Radio Free Europe/Radio Liberty on the initial stages of consolidation planning so that both organizations will be well prepared to implement any legislation Congress may enact.

All of these changing environments--political, technological, and organizational--provide a challenging context for responsible network planning. The Bureau carefully considers all of these factors and their economic ramifications in comprehensive engineering planning efforts that are undertaken annually and through other analyses conducted by both the Bureau of Broadcasting and USIA. As the Bureau moves into the twenty-first century, more focused plans for future new projects will be developed to demonstrate clearly how this overall planning applies to each proposed initiative.

GAO Comments

1. We have not reprinted USIA's line-by-line changes and clarifications. However, we have made suggested editorial changes and clarifications throughout the report, as appropriate.
2. USIA's line-by-line comments suggested deleting the word "benefit" from our recommendation and the discussion here refers only to cost analyses. As discussed in this report, we believe cost-benefit analyses are needed. The project alternatives assessment process developed in response to our 1992 recommendation provides for the analysis of audience data as a measure of the potential benefits of modernization projects.
3. Our report does not address VOA's upgrade of its medium wave stations. However, USIA research indicates that listeners prefer medium wave over shortwave broadcasts.

Major Contributors to This Report

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