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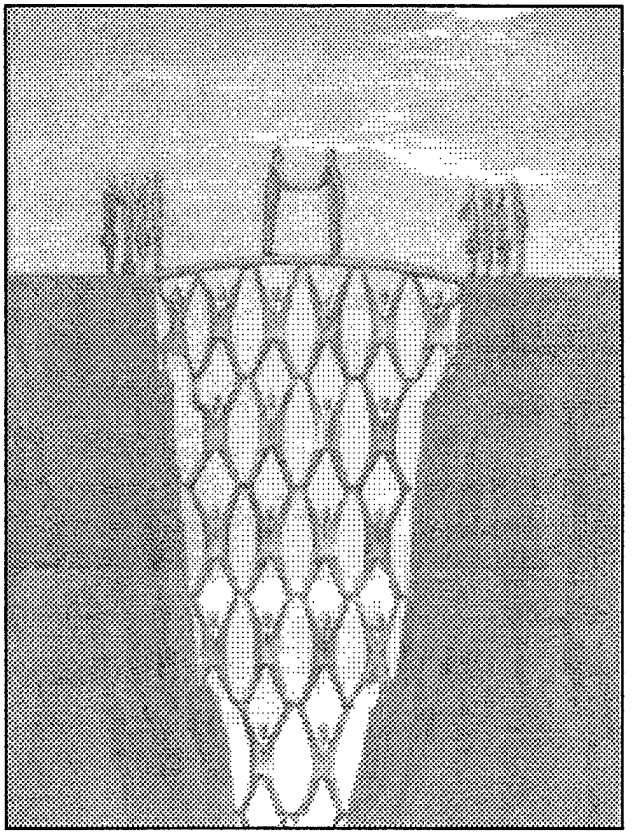
Innovative Techniques and Tools for Public Participation in U.S. Department of Energy Programs



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Prepared by the
Communications Techniques and Technology Committee
of the Hanford Public Involvement Network
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Summary

The Communications Techniques and Technology Committee of the Hanford Public Involvement Network investigated innovative techniques and tools that could be used for Hanford public involvement efforts. The U.S. Department of Energy (DOE) Richland Operations Office, External Affairs, requested the work.

The Committee contacted the major DOE operations offices and other organizations from government and industry in the United States and Canada to compile a listing of successful and innovative public involvement tools and methods. These are shown in the box below.

In deciding which of these tools to use, alone or together, it is important to consider the following factors:

- stakeholder needs and issues
- public involvement objectives for the program or project
- coordination with other Hanford programs/projects and other public involvement efforts
- the effectiveness of each method balanced against the resources required to implement it.

Tools and Methods for Public Involvement Discussed in this Report

Computer
- Internet
  - home pages
  - E mail
- Bulletin boards
- CD ROM applications, including multimedia
- Computers in Reading Rooms
- Software that tracks and analyzes comments and responses
- Software that analyzes and displays group views in meetings
- Computerized mailing list linked to a database

TV, Radio, Satellite
- Satellite uplink
- Public Service Announcements
- Radio talk shows

Video

Phone and Fax
- 1-800 and 1-900 numbers
- Automated telefax

Videoconferences

Committees and Groups

Stakeholder Needs Analysis and Information Product Testing
- Stakeholder surveys
- Readability and usability tests for information materials
- Research on stakeholder perceptions

Getting the Most out of Public Meetings
- Interactive approaches
- Increasing participation through tested advertising

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1.0 Introduction

In early 1995, Jon Yerxa, Public Involvement Team Leader in the Office of External Affairs at the U.S. Department of Energy (DOE) Richland Operations Office, identified the need to "provide Hanford's Public Participation Program with input and advice concerning public involvement issues at Hanford."[(a)]

Yerxa identified the following committees: 1) Training, 2) Tri-Party Agreement/NEPA/ Environmental Justice, 3) Program, 4) Performance Evaluation, and 5) Communications Techniques and Technology. These committees were to be staffed by public involvement and communications staff from DOE and its contractors on the Hanford Site.

This report describes the activities and recommendations of the Communications Techniques and Technology committee.

1.1 Committee Background, Purpose, and Membership

The Hanford Site has a long history as a plutonium production site in support of weapons creation for World War II and the subsequent Cold War. In the 1980s, the mission shifted to environmental cleanup and research. Currently, formulating approaches for, extent of, and timing of remediation-related activities requires many decisions. Stakeholder input is often part of the decision-making process.

The Hanford Advisory Board, comprising representatives of key local and regional interests, makes recommendations on key policy issues to the DOE, the U.S. Environmental Protection Agency, and the Washington State Department of Ecology. Other stakeholders continually provide input to Hanford programs and projects.

Hanford managers and stakeholders have expressed concerns regarding the large number of public participation opportunities. The May 1995 DOE letter introducing the "Public Participation Guidance for Hanford Site"[(b)] stated that, "public involvement costs have risen in the last three years. At the same time, effective citizen involvement in Hanford decisions has decreased. The Hanford stakeholders repeatedly say that opportunities for public involvement far exceed their ability to participate in an effective manner."

One problem has been the number of public meetings held to discuss the wide variety of issues at Hanford. Some of these meetings are required by law, such as the National Environmental Policy Act, or by legal agreements, such as the Hanford Tri-Party (cleanup) Agreement (Washington State Department of Ecology et al. 1994).

Public meetings, though useful for certain kinds of formalized processes, are limited in effectiveness. By their nature, public meetings often limit depth and breadth of interaction and

(a) DSI, February 9, 1995, from Jon Yerxa to the Hanford Public Involvement Network, "Public Involvement Network Committees."

(b) Letter from J.D. Wagoner, DOE-RL Manager, to S.J. Matheson, Hanford Environmental Health Foundation; W.J. Madia, Pacific Northwest Laboratory; and A.L. Trego, Westinghouse Hanford Company, May 5, 1995, "Guidance for Public Participation."

discussion among interested parties. Timing and/or location are inconvenient for many stakeholders. Some people feel intimidated by public meetings; they are less likely to speak up for fear of appearing ignorant or being publicly criticized for their views.

With shrinking federal budgets, DOE and others are evaluating the costs and benefits of public meetings and other involvement methods. For example, according to Deirdre McCarthy Gallagher of DOE's Office of Public Accountability (EM-5), more than $300,000 was spent to host 12 public hearings across the country for the Draft Spent Nuclear Fuel and Idaho National Engineering Laboratory Environmental Impact Statement. Attendance was extremely low. A meeting in Arlington cost $48,158, and only four people submitted comments.

DOE and stakeholders are looking at ways to increase the effectiveness of required public meetings, as well as augmenting and replacing them with other participation methods. The chartering of the Communications Techniques and Technology Committee was one approach to investigating alternative methods. As described by Jon Yerxa[a], the Committee's purpose was to "develop proposals to improve and utilize outreach resources other than the traditional public meeting approach. The goal will be to develop an inventory of public involvement resources which go beyond the traditional methodologies to reach a broader public on Hanford issues."

The Committee was co-chaired by Dianne Henrich of DOE's Office of Technology Management and Andrea McMakin of the Pacific Northwest Laboratory's Communications Directorate. Committee members included Craig Kuhlman of Westinghouse Hanford Company, and Gary White, formerly of Westinghouse Hanford Company and now self-employed.

1.2 Report Preview

Section 2.0 describes the Committee's approach. Section 3.0 summarizes public participation processes, technologies, and products that DOE may wish to consider for new or expanded use at Hanford. Section 4.0 presents conclusions and recommendations. Section 5.0 contains references and a bibliography of resources. A proposal for development of a satellite uplink and other information provided by resources contacted by the committee are included as appendices.

2.0 Approach to Identifying Techniques and Technologies

To gather information about existing, proven techniques, the Committee first interviewed public participation managers at the major DOE sites. Table 2.1 lists those people.

Table 2.1. Public Participation Experts Contacted at DOE Operations

Location	Person Contacted
Albuquerque Operations Office (Albuquerque, NM)	Gloria Inlow, Director, Office of Intergovernmental and External Affairs, DOE
Chicago Operations Office (Chicago, IL)	Gary Pitchford, Director, Office of Communications, DOE
Nevada Operations Office	Nancy Harkess, Public Affairs Officer, DOE
Oak Ridge Operations Office (Oak Ridge, TN)	Sandy Perkins, Mgr, Community Relations for Oak Ridge Environmental Management Programs, DOE
Oakland Operations Office (Oakland, CA)	John Belluardo, Acting Director, Office of Public Affairs, or designate
Rocky Flats Field Office (Colorado)	Carla Sanda, Mgr, EG&G Community Relations
Savannah River Operations Office (Savannah River, SC)	Leah K. McNeill, Public Involvement Specialist, Public Relations, Westinghouse Savannah River Company
DOE Waste Management Programmatic Environmental Impact Statement (national program based in Germantown, MD)	Karen Martin, SAIC, Community Relations for the Programmatic Environmental Impact Statement
DOE-Headquarters (Washington, DC)	Deirdre McCarthy Gallagher, Office of Public Accountability (EM-5)
Richland Operations Office (Richland, WA)	Lois Thiede, Westinghouse Hanford Company public involvement team leader
DOE's FUSRAP (Formerly Utilized Sites Remedial Action Program; national program based in Oak Ridge, TN)	Sandra Plant, Manager, Community Relations at Oak Ridge

We also consulted representatives of business, industry, and federal agencies who had submitted proposals to present information about innovative technologies at an upcoming annual conference of the International Association of Public Participation Practitioners. Table 2.2 lists those people and their companies.

We asked questions to discover which innovative methods they used, under what circumstances, and what the costs were, if known. Several people sent materials (fliers, manuals, videos, survey results). This report summarizes the results of those conversations and materials.

This report is not intended to be a comprehensive survey of all potential methods used by government and industry; rather, it discusses a range of current and promising techniques and tools for public participation.

Table 2.2. Public Participation Experts Contacted at Other Organizations

Organization	Person Contacted
Regional Municipality of Ottawa-Carleton (Ottawa, Ontario, Canada)	Chris Bradshaw, Community Relations Officer
Boston Federal Reserve Bank (Massachusetts)	Richard Walker
U.S. Dept. of Agriculture, Forest Service (Missoula, Montana)	Cheryle Zwang, Public Affairs Specialist, Northern Region
International Institute for Sustainable Development (Winnipeg, Manitoba, Canada)	Frank Cosway, Partnerships Officer

3.0 Summary of Innovative Processes, Technologies, and Tools

Many organizations use standard outreach and participation activities (such as tours and speakers' bureaus) and products (such as newsletters and fact sheets). Many of these work well and should continue to be used. However, because our charter was to go beyond the traditional participation methods, we chose to focus on innovative or perhaps under-used methods that could prove most effective for Hanford activities.

We summarize our findings in these categories:

- computer
- TV, radio, and satellite
- telephone and telefax
- videoconferences
- community committees
- stakeholder needs analysis and product testing
- ways to get the most out of public meetings.

Some of these methods are already in use at Hanford but could be expanded to replace other approaches, or used more effectively.

3.1 Computer Applications and Methods

In considering the use of electronic media, it is essential to consider stakeholder needs and desires. For example, at DOE's Oak Ridge Site, most stakeholders live within a 50-mile radius and want personal, one-on-one interaction rather than computerized information. However, sites or programs with more broadly distributed stakeholders, such as Hanford or programmatic environmental impact statements, can typically benefit from wider use of computer applications.

This section describes some computerized tools and processes that are increasingly being used to augment or improve various aspects of public participation.

3.1.1 Internet Overview

Internet is a huge network of computers that spans the globe, connecting thousands of interconnected networks that in turn connect millions of computers. People who wish to access the Internet must be connected to a service provider that is connected to the Internet. In many government, industry, and academic organizations, the organization pays this fee so the Internet access is free to those inside the organization. Private users need a modem and a service provider such as Compuserve or America Online to access Internet.

People can communicate through the Internet through forums such as the World Wide Web (electronically linked information), electronic mail, and through newsgroups on electronic bulletin boards.

Internet has many advantages for public involvement:

- accessible worldwide
- immediate
- easily updated to keep current
- easy to use
- eliminates printing costs and materials
- can show text and graphics; can use multimedia (sound, animation, video clips, etc.)
- can link to an unlimited number of other electronic "sites"

- can be interactive with the use of a feedback feature
- can be interactive with an electronic link to a bulletin board for informal discussions

Disadvantages:

- not everyone has Internet access or the hardware needed to run it
- currently used *primarily* one-way, that is, to give information rather than to receive it
- adds costs of converting information to Internet-friendly format
- not suitable for all types of information--though hypertext and hyperlinks help make electronic documents easier to use, large, complex documents are generally too unwieldy on the Internet.

Important notes for the use of Internet:

- Information on the Internet must also be made available in other ways for those who do not have electronic access.
- Its purpose must be clearly stated to users: information provided only, informal comment, formal comment, etc.
- If a feedback feature is used, decision makers and other appropriate people must commit to providing answers to questions or addressing issues.
- Users must be told how their comments will be addressed in the decision- making process.
- People must be given adequate time and funding to gather and update the electronic information.

3.1.2 Home Pages

One feature on the World Wide Web of the Internet is electronic "home pages" for sharing and receiving information. Used for years by universities and other organizations, home pages are just beginning to be used in public involvement. The Hanford Home Page (http://www.hanford.gov), for example, includes a calendar of public involvement activities and is being considered for sharing other public involvement information.

The U.S. DOE Environmental Management (EM) Internet home page (http://www.em.doe.gov.) is becoming more widely used for sharing information. For example, the community relations staff supporting DOE's Waste Management Programmatic Environmental Impact Statement (PEIS) are electronically linking their information materials on that home page for stakeholders who wish to access them that way. The Internet application is particularly suited for the PEIS, which involves stakeholders across the United States. PEIS staff are using the feedback option on the DOE EM home page to receive comments.

The PNL-developed software tool called Protech is also linked to the DOE EM home page for stakeholder use. Interested stakeholders from DOE sites across the country are using the tool to improve their understanding of the pros and cons of existing and on-the-boards environmental cleanup technologies. Stakeholders use this information to help develop criteria that will ensure greatest success of new technologies.

3.1.3 Electronic Newsletters

Electronic newsletters are ubiquitous on the Internet. They can be an effective route for public information and involvement. The DOE EM home page, for example (URL number http://www.em.doe.gov), includes the *EM Progress* and *EMformation* newsletters. An especially well done Internet newsletter is published by the International Institute for Sustainable Development (Winnipeg, Manitoba, Canada). Their *Earth Negotiations Bulletin,* which reports on worldwide environmental and development negotiations, includes photos and remarks made by heads of

state and other officials at leading world conferences and events.

3.1.4 Electronic Mail

Electronic mail (E mail) is another tool for disseminating information on the Internet. For example, through the White House Electronic Publication Service, the White House disseminates press notices, reports, briefings, policies, testimony, and speeches via electronic mail. Anyone with E mail can request to receive regular press releases on science/technology or the environment.

E mail has many advantages over traditional mail or the telephone:

- can automatically send the same (consistent) message to multiple recipients
- can be sent anywhere in the world in a matter of minutes to hours
- can be sent across the world while users pay for the local connection only--no long-distance phone charge (with a local connection to an Internet access provider)
- can automatically save copies of your messages (for documentation) and provide return receipts from recipients.

One limitation of using E mail this way is that it has been used primarily as a one-way medium, to provide information rather than hearing back from stakeholders.

3.1.5 Local Area Networks and Computer Bulletin Boards

A local area network (LAN) enables electronic communication among users within an organization or area such as a neighborhood. All those who are hooked up to the LAN can communicate with each other. Users of a LAN aren't necessarily on the network. The Savannah River Site is considering placing documents for comment, meeting notifications, and other announcements on a LAN bulletin board.

An electronic bulletin board can be internal to an organization, on a LAN, or on Internet. Newsgroups, or collections of people with a common interest, talk to each other via bulletin boards that focus on specific topics. Everyone who logs onto the bulletin board can see all the other messages in the discussion, and jump into the discussion as well. For those who have access, bulletin boards are a good way to get the current "pulse" on an issue, share information, and correct misinformation.

3.1.6 Using Computers in Reading Rooms

Computers are increasingly used to make the traditional Public Reading Room more effective. DOE staff have made its Waste Management PEIS available on CD ROM in a searchable, menu-driven format (not multimedia). One-third of DOE's 120 Reading Rooms nationwide requested the CD ROM version. (Another third wanted it in microfiche; the rest, in hard copy.) Several sites use on-line computers and databases at their Public Reading Rooms.

3.1.7 Tracking and Analyzing Comments and Responses

Software applications are increasingly being used to track stakeholder comments and issues and the organization's responses. The idea is to track who commented, when, what they said, and what the response was.

At Hanford, for example, the PC-based Access software application supports the public involvement process of the Tank Waste Remediation System privatization effort. The software is being used to record briefing and stakeholder comment information during the public consultation process.

Database fields include date, commenter, affiliation, commenter's location, briefer, recorder (note-taker at briefing), comment summary, comment category (topic), and followup actions and dates. These fields can be searched and summary reports can be generated. The software took about two days to set up. Database input and maintenance time depends on the number of briefings, comments, and responses.

Similar software applications are also in use at the Pacific Northwest Laboratory for tracking comments and suggestions of internal stakeholders (employees) regarding two laboratory initiatives. Databases in Excel and Access software can be searched by name of commenter, date, name of PNL organization, comment or suggestion, name of respondent, or date of comment or response. It took only a few hours to set up the databases. Depending on comments and the difficulty in getting responses, maintenance can take 2 to 15 hours per month.

The U.S. Forest Service has adapted the commercially available Oracle software for objective and systematic analysis of public input (U.S. Department of Agriculture 1994). This process groups comments by subjects and categories and reports the information back in a concise display for consideration in the decision-making process.

The approach involves coding comments into categories, such as which type of organization is commenting, how the comment was received (e.g., letter, phone call), subject, and responses. The software can report and sort by numerous fields. Direct quotes from comments and responses are easily selected for use in response letters to commenters. The Forest Service also uses the software to generate a summary report containing comments and responses that can be placed directly into final summary documents, such as Environmental Impact Statements.

This level of detail is especially useful for formal public involvement processes, such as those required by NEPA or CERLA. Because the process is so thorough, it is also labor intensive and requires skilled clerical support to run it. A content analysis team needs two weeks to several months to set up the coding structure, code responses, input them to the database, run the software, and report the summary results.

3.1.8 Analyzing and Displaying Viewpoints in Group Meetings

The increase in community and technical advisory panels, as well as public and technical workshops, means that many viewpoints must be fairly considered and balanced, especially to reach consensus. This is made more difficult when viewpoints are polarized and issues are complex.

Several companies offer a software-based process that summarizes group viewpoints quickly and in graphic form, in real time. FUSRAP uses a software called Innovator (made by Wilson Learning Corporation) for ranking criteria, voting, and other similar activities. It shows visual results (bar charts, etc.) immediately. It costs about $20K and uses remote touchpads for recording group input and votes. Sandra Plant, Manager of Community Relations for FUSRAP, researched several existing public participation software applications before deciding on this one. She says the FUSRAP task force uses and is pleased with the software, and that it has saved hours of discussion time.

CH2M Hill, a U.S. environmental engineering firm, created a PC-based software application that they use to help groups reach consensus. They use the software in conjunction with a nominal group technique, a structured method for discussing and evaluating issues. The process involves developing criteria that capture the salient points of the

issues, assigning weights to the criteria (each participant does this), conducting a statistical analysis of the weights, and discussing the results as a group. This process can be repeated several times, in which group members often move closer together in their views as they carve out common ground. This process requires not only mastery of the software that conducts the statistical analysis, but excellent facilitation skills to capture and clarify viewpoints while keeping the process moving.

3.1.9 Effectively Using Public Contact Listings

The Regional Municipality of Ottawa-Carleton (Ottawa, Ontario) has adapted for public consultation a commercial software originally designed for managing sales and telemarketing contacts. The Municipality is a regional government responsible to 750,000 citizens for transportation, environmental services, health, social services, and planning.

The commercial software, called Maximizer, is a Microsoft Windows-based application originally designed for businesses to manage their sales contacts. The Municipality has adapted the software to make a 3,500+ mailing list available to 4,500 staff and have criteria to determine when and how to contact them regarding policy and program consultation. The software also keeps track of who was contacted and can track public comments. The database outputs addresses to mailing labels and reports.

The Municipality is putting the database on Freenet, a community based net system, so that all constituency groups in a particular area can access the database. Freenet also enables people to send E mail to the Municipality.

The software is $150 for a single copy, with a sitewide license of $65 per copy for 10 users.

The Regional Municipality has asked the software developer to modify the Maximizer to make it even more useful for public consultation. Suggestions included incorporating modules for faxing and Internet E mail reading. The Municipality also wants the software to link to other electronic systems, such as public input analysis, invoicing orders for publications, and booking of rooms for public events. The Municipality also requested that the software summarize and analyze public comments and assign list owners who have sole authority to change the information.

3.1.10 Multimedia

A task force led by Beth Brainard of Rocky Flats developed initiatives that could serve as a template for a multimedia approach for public information and public involvement. Hanford developed a CD ROM that highlights Hanford happenings with video clips, photos, graphics, and short text pieces. That CD ROM has been in use in the Washington, D.C., Forrestal Building and has been sent to a stakeholder distribution list. Pantex has the lead in developing a site-specific multimedia presentation.

3.2 Television, Radio, and Satellite

A satellite uplink makes it possible to send signals to multiple locations, such as cable access TV in peoples' homes, not just to where videoconference equipment is located. This makes public involvement even more accessible to the average person, who wouldn't normally take time to attend a public meeting (i.e., most of the general public). Appendix A is a proposal to install a satellite uplink in the Tri-Cities for Hanford public information and public participation activities. DOE-RL is planning a pilot study to test the effectiveness of this concept.

Staff involved with DOE's Waste Management PEIS are using radio Public Service Announcements to advertise the availability of the PEIS for comment.

Rocky Flats' use of radio talk shows, where people call in and ask questions, was evaluated as partially successful. Organizers emphasized that using this forum successfully requires that the talk show be well targeted and have a specific purpose and goals--or else it can get out of hand.

Sandia National Laboratories routinely invites the public to attend the closed-circuit satellite or telephone conferences between the DOE sites and DOE-Headquarters.

3.3 Video

Several sites use videos for public information and as introductions for public participation events. The Rocky Flats Site created a set of videos on various topics, which are loaned to community groups and individuals. Staff report that the videos "demystify" a lot of things about the site by showing what it looks like, for example. Rocky Flats attempts fair portrayal of all sides of disagreements on tape, for example, by having regulators appear on camera when appropriate. Rocky Flats reports that typical production costs for videos run about $750-$1K per minute, including labor and off-site talent. Videos using internal staff cost substantially less.

Community affairs staff at the Boston Federal Reserve Bank work with stakeholders to communicate such issues as fair lending laws and anti-discrimination policies. They provided a training video on the American Bankers' Association satellite link, called American Financial Skylink. The video has been shown on local access TV, and banks use it for training. This saved costs of sending people out to do training. The video increased awareness and interest, and saved training costs; the demand for the video and for similar training increased.

DOE's Nevada Site is planning an extensive video news release program about its activities, which they plan to provide directly to TV network affiliates.

3.4 Telephone and Telefax

Here, we highlight the use of toll-free and 1-900 numbers as well as automated telefax services.

3.4.1 Toll-free and 1-900 Numbers

Several sites provide 1-800 numbers for people to ask questions, make comments, or request information. These numbers can be for a specific time or ongoing.

DOE's Center for Environmental Management Information (1-800-736-3282) is a free-to-the public information clearinghouse. Callers can request information or ask questions. Public involvement efforts, especially nationwide ones, can use the Center at no cost to help disseminate information and track issues raised. For example, DOE Waste Management PEIS staff have provided the Center with fact sheets and other information that stakeholders can request through the 1-800 number. The Center's order form for the PEIS asks people in which form they want to receive it (hard copy, CD ROM, etc.). The Center also keeps track of callers and their interests for the PEIS. The Center also sends out material for FUSRAP upon request.

PEIS staff are using an unstaffed 1-800 recording (separate from the Center for Environmental Management) to record verbal comments on the PEIS. The recording provides a fax number for faxed comments.

DOE's FUSRAP has used a 1-900 line for three years. They have received an average of five calls per week, and up to 30 per week if major decisions are coming up.

3.4.2 Telefax

The Hanford and Rocky Flats sites (and perhaps others) use an automated telefax that sends current information to key stakeholders. At Rocky Flats, about 200 people have signed up; at Hanford, it is sent to key and targeted stakeholders. Notices could include current happenings, reminders of public meetings or workshops, pertinent legislation, or other information.

3.5 Videoconferences

Videoconferences have proven effective for some DOE projects. Instead of travel to several meeting sites, videoconferences through satellite downlinks or phone line links enable members to see and talk to each other in real time, though they can see only one site at a time.

Advantages of videoconferencing:

- eliminates substantial travel and living expenses
- consistency - everyone hears the same discussion at the same time

Disadvantages:

- lack of videoconferencing capability at some locations may exclude certain stakeholders or make their attendance inconvenient
- requires a more formal structure than public meetings because of the nature of a videoconference--only people from one site at a time can talk; only one site at a time is visible.

The DOE conducts quarterly videoconferences to share public involvement information among sites. An interagency public meeting on environmental justice, held January 20, 1995, included a downlink to other sites for 500 people to participate in a two-hour televised segment; another 500 stakeholders participated on site in Atlanta, Georgia. According to the publication *DOE This Month*, DOE Assistant Secretary Tom Grumbly moderated the public meeting, which also included representatives from 12 agencies and five Executive Offices involved in environmental justice implementation.

That evening, a televised panel discussion was held on the same issue. Stakeholders could participate by calling a number given on the screen, and panel participants answered the questions.

The Bureau of Land Management and the U.S. Forest Service, with the help of Boise State University, have successfully used videoconferences for scoping meetings. The meetings were held to consider EIS alternatives for management of federal lands in the Upper Columbia River Basin. Satellite downlink reached 978 stakeholders from 27 sites in four states. People registered for site video-conferences through a 1-800 number to attend the site videoconferences or could view the conferences through their home satellites. Stakeholders could see and hear the meeting discussion. At prearranged times, sites would call and fax questions and comments through computers that were linked through a network.

A nominal group technique was folded into the event. Facilitators from the agencies were present at each site. After a general overview of the project, the facilitator split the people into small groups for brainstorming of scoping issues. The groups reconvened in the video-conference format later in the day. Participants were pleased that they could see how their comments were addressed.

The meeting was broadcast on three public access TV stations for those who could not attend the videoconference or did not own personal satellite receivers. Videotapes of the meeting were also made available for checkout by the public.

Total costs for the videoconference were $33K, including $10K for satellite and room reservations, $7K to train the site facilitator, $13K for a preproduced "purpose and need" video shown at the conference, $1700 for preregistration via the 1-800 number, $6K for printing documents, and $3K for miscellaneous expenses, such as meeting advertisements.

Almost all meeting participants liked the videoconference format. The BLM staff member who oversaw the event noted that scoping was accomplished in one day, versus the normal two months of traveling to public meeting sites.

3.6 Community Committees and Other Groups

Many sites use formal Site-Specific Advisory Boards, Technical Review Groups, task groups, informal citizens' advisory committees, or community roundtables. Some of these are funded by DOE; others are volunteer. For a FUSRAP task force, DOE funds a professional facilitator that the group selects.

One-on-one briefings with key stakeholders keep them informed between more formal interactions. At Hanford and other sites, conference calls are frequently held among board members and other stakeholders between board meetings.

Government and contractor employees often attend other community groups (for example, the Chamber of Commerce and other civic clubs) to share information, answer questions, or take the "pulse" of the community.

The Fernald Envoy Program has proven effective for stakeholder interaction at DOE's Fernald Site. DOE representatives serve as liaisons between DOE and various parts of the stakeholder community, providing a consistent route of communication between many groups and individuals and DOE.

3.7 Stakeholder Needs Assessment and Communications Testing

Part of choosing more effective methods is understanding what stakeholders need and want. Another part is understanding their views and perceptions about the issues being discussed.

3.7.1 Needs Assessment

Several sites do community surveys to assess stakeholder needs and viewpoints. The Rocky Flats Site, with the help of the University of Denver, used a statistical survey of their community to elucidate the needs and concerns of their local stakeholders (Belsten 1994). They asked 60 randomly chosen people plus representatives from nine environmental groups how they received information, whom they trusted, how they wanted to be involved, and what their concerns were.

This survey provided valuable information for Rocky Flats. For example, more than 90% of respondents had *never* gone to a public meeting and didn't want to. Instead, they wanted regular information to be mailed to their home and to have the option of seeing it on videotape and TV.

3.7.2 Communications Testing

The Savannah River Site has a research project planned with their state medical university to develop a risk communications model for their annual Environmental Monitoring Report data. Historically, they have communicated this information indirectly to the public through a press conference. Based on the results of focus groups and a pilot public meeting, they will customize the report data for communities near the site.

FUSRAP tests its public information materials with a readability test in Word for Windows. If it scores grade 13 or higher, staff consider rewriting to bring the reading level down. FUSRAP staff also contracted a readability study on their fact sheets, using 100 students at four high schools and about 100 adults. DOE provided a grant of $500 to each school; the total cost for the readability study was about $12K.

Hanford staff pretested environmental information booklets with local community members and key stakeholders (health professionals, agricultural representatives, business leaders, students, teachers, etc.); the pretest and resulting revisions cost about $4K.

Hanford staff have also conducted research to identify the perceptions and beliefs of target groups regarding specific technical topics. The idea of this work, pioneered by Carnegie Mellon University, is to portray the "mental models" of people and thereby identify any factual misperceptions or important information gaps. Communications can then be tailored to target those areas.

3.8 Ways to Get the Most out of Public Meetings

Public meetings can be effective, and some communities want them. The Oak Ridge Site, for example, holds quarterly public meetings for the entire EM program. They cover no more than seven topics each time. Stakeholder desire for this forum is evidenced by the fact that 200 to 300 people attend each meeting.

Several DOE sites try to make large-group meetings as interactive as possible. This is often done with breakout groups, posters, exhibits, workshops, summits, and open houses. Argonne National Laboratory, for example, holds educational open houses every two years, at which they get 30,000 visitors. A team of a public involvement person and a technically knowledgeable person can be present at each "station" at an open house to answer questions and record comments.

The Rocky Flats Site uses five video monitors around a room so everyone can see easily. People can also take the videos home.

The Savannah River Site conducted a pilot project in 1994 to test alternative advertising methods for two environmental impact statements. They evaluated ads on the radio, cable TV, newspaper, posters, fliers, and onsite electronic messages in terms of numbers of people who attended hearings and number of comments received. Attendance and comments moderately increased as a result of the ads that were determined most effective.

4.0 Conclusions and Recommendations

- The techniques listed here, though current, represent a snapshot in time. Some will undoubtedly evolve or disappear while others are developed to take their places. Society adapts the methods to change with the times. This is especially true for new technologies such as computerized and electronic approaches.

- We caution that the list of techniques not be used as a menu from which to "plug in" techniques to meet public involvement requirements. As the DOE public participation guidance for the Hanford Site[b] states, public involvement is not required for all decisions or issues--only those with major policy implications or that have generated strong public interest.

- Not every technique is useful for every situation. It is important to analyze stakeholders, needs, issues, public involvement objectives, and the budget. Match the technique to the objective. For example, Appendix B shows the matrix of public participation techniques and objectives used by the U.S. Forest Service.

- Coordinate activities with other public involvement activities and appropriate program managers at DOE.

- Evaluate how well each technique worked and adapt future ones accordingly. Hanford is doing this with the pilot-scale video conferences through a portable satellite uplink. The U.S. Forest Service uses a matrix and list of questions to evaluate how well various methods worked. Another Hanford Public Involvement Network committee, Performance Evaluation, is tasked with developing proposals for evaluation of public involvement activities at Hanford.

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Appendix A

Televised Meeting Proposal

Appendix A

Televised Meeting Proposal

Proposal

To conduct one set of meetings using satellite uplink technology instead of travelling to hold meetings at a variety of regional locations. This uplink would be a pilot project to determine feasibility. Based on measured results of the pilot project, DOE-RL could make an informed determination regarding future use of this technology.

Background

The PIN Communications Techniques and Technology Committee has been challenged to identify new, better, and more economical methods for conducting meaningful Public Involvement. One of the techniques identified in a planning discussion was to contact a variety of publics via telecommunications.

To do this from the Tri-Cities, or anywhere, a satellite uplink is required. An uplink is simply sending a signal from its point of origination to multiple locations. There is currently no uplink capability in the Tri-Cities. However, both TCI Cable and WSU Tri-Cities are considering installing the equipment if they can identify on-going users (customers) of the system. To install the capability would cost around $100,000.

The proposal calls for a "test run" to determine feasibility of the concept. TCI Cable would rent mobil equipment to conduct a test. Note: Keep in mind that renting mobil equipment is a different cost scenario than having equipment "hard wired" for repeated use. Once equipment is permanently installed, costs would diminish significantly.

In this proposed test of technique and technology, TCI Cable will make equipment arrangements for a mobil van uplink and schedule distribution of predetermined "downlinks" to receiving stations. TCI has a production studio which can accommodate a "live" audience of approximately 50. To provide interaction capabilities with the issue panel, a 1-800 line will be installed by TCI. In addition, a facsimile number and address will be televised at different times during the program to encourage people to submit comments.

Benefits

Several benefits to using the uplink technology have been identified. They include:

- Cable TV has access to 80,000 northwest subscribers. About one half of one percent (400 people) are likely to view the meeting. This would be a substantial increase over current meeting attendance and we could anticipate increased levels of participation by these viewers.

- More people are likely to actively participate because they can do so from the comfort of their home.

- As viewers call in, only voices would be broadcast, therefore more people are likely to feel free to express their opinions, resulting in a broader representation of views.

- The meeting could be taped and broadcast additional times thus increasing the number of people reached. Additional airings would not provide interactive participation

opportunities unless the viewer chose to submit a written comment.

- A cost comparison estimates a substantial reduction in cost of conducting public meetings.

- Using the telecommunications technology meets a stakeholder objective of holding fewer meetings.

- There would be a significant savings in time and resources when meeting presenters/participants don't have to travel. The impact of their time away from their normal work and offices is hard to measure.

- The proposed method would encourage employees to participate.

- If held regularly, meetings could be set up and aired at a predetermined time allowing stakeholders to plan their time more effectively.

- Various entities, i.e., Governor Lowry and Kadlec Medical Center have used this technique with good success.

Issues

- Stakeholders may see this as an attempt by DOE to control format of, and participation at, meetings. As with all public involvement techniques, the affected stakeholders must agree with the proposal for it to be successful.

- Having the meeting televised would likely require an experienced facilitator/emcee. Stakeholders could influence this aspect of the meeting and associated costs.

- If all the meetings originated from the Tri-Cities, regional stakeholders may object to having to travel to participate in person. This could lead to a request to hold evening meetings in conjunction with the Hanford Advisory Board meetings.

- Stakeholders may request that meetings be initiated from various locations around the region.

- Hanford presenters would need extensive training in good "TV manners." Without good preparation, presenters could erode DOE's image in the community.

- TCI Cable will not book a meeting without a firm date/time commitment if they are to meet their commitments. DOE-RL cannot back out of the commitment without a significant cost penalty.

- The video-meeting format would need to be carefully thought out and designed to accommodate the live broadcast format. Doing a meeting under present format guidelines allows for informal breaks and discussion one-on-one. The proposed scenario would not allow for past formats to continue, because the meeting is a live broadcast with dollars-per-minute costs.

Cost Comparison

The following table outlines the anticipated expenses associated with the current method of holding public meetings and the proposed method using the televised format. This comparison assumes the current method would require meetings in four locations: Tri-Cities, Seattle, Portland, and Spokane.

Cost Components	Current multi-meeting option (Used TPA annual meetings as baseline)	Televised Meeting option (Used estimates from TCI Cable)
Uplink Equipment	$ 0	$ ~ 10,000
Facility Rental	$ 1,193	$ 0
Advertising	$ 55,337	Some advertising will come free; estimate rest is reduced 33% $ 36,522
AV Support	$ 1,620	0
Travel, per diem	$ 5,498	$ 0
Handouts	$ 1,388	$ 500 (As needed)
Preparation time	$ 33,280	$ 33,280
Staff time at meetings	$ 7,800	$ 1,950
Presentation mat'ls	$ 525	$ 525
Facilitation support	$ 25,000	$ 10,000
TOTAL	**$131,641**	**$ 92,777**

Note: The test uplink proposed in this document requires bringing a mobil truck uplink capability and two-person crew from Boise, Idaho, to the TCI Cable studio. The cost is a one-time only scenario. If a permanent uplink were established, the only costs associated would be buying time on the link and advertisement/logistics associated with conducting the meeting. A verbal quote for using a permanently installed uplink at TCI Cable using today's rate charts is approximately $500 per hour.

Appendix B

Matrix of Public Participation Techniques and Objectives (U.S. Forest Service)

METHODS MATRIX

	Relationship building	Inform	Involve	Problem Solve	Consensus	See project as they do	Identify solutions	Identify problems	Depolarize	Evaluate
1. Meetings										
- Working meeting - small groups to focus on agenda of work without resolving problems.	●	●	●	●			●	●	●	
- "Open" meeting - like a working meeting but with an audience observing.		●				●		●		
- Forum - informal sessions to air certain issues, hear different points of view, and shed light on a subject.	●	●				●		●		
- Public meeting - open meeting to inform the public about a subject or to solicit comments.		●						●		
- Public hearing - formal hearing for people to present statements for a formal record.						●	●	●		
- Open house - informal meeting utilizing information stations for explaining a topic and for informed discussion with the public.	●	●	●	●		●	●	●		
- Brainstorming session - session for gathering many comments and ideas without any value judgments.						●	●	●		
- Sunshine meeting - administrators do everything in their power to have the public understand their work as they do it e.g., updates, progress reports.	●	●						●		
- Internal family meeting - meeting with employees for information sharing.	●	●								
- Internal family meeting - for building ownership and support.	●	●	●	●			●	●	●	
2. Group Interactions										
- Sounding boards - groups of people (citizens, employees, etc.) for testing ideas.	●		●			●	●	●		
- Interest group coalitions - work out action plans to accomplish specific activities.	●	●	●	●				●		
- Consensus-building - facilitate diverse groups getting together to develop mutual solutions.	●			●	●		●		●	
3. Information Dissemination										
- Producing materials (written, video, etc.) for internal communication.		●								
- Producing materials for release to media.		●								
- Producing briefing papers for interest groups and public officials.		●								
- Producing materials (written, video, newsletters) to keep organizations, interest groups informed.		●								
- Paid ads, legal notices.			●							
4. Developing Full Range of Choices for Working with Diverse Interest Groups	●				●	●	●		●	
5. Tapping into Existing Networks, Organizations and Institutions										
- Employees.	●	●	●			●				
- Clubs, service groups, other organizations.	●	●	●			●				
- Tribal governments.	●	●	●			●				
- School systems.	●	●	●			●				
- County Commissioners.	●	●	●			●				

	Relationship building	Inform	Involve	Problem Solve	Consensus	See project as they do	Identify solutions	Identify problems	Depolarize	Evaluate
- State agencies.	●	●	●			●				
- Using other planning efforts to develop common messages and disseminate information, and to provide input to others' efforts.	●	●	●	●			●	●		
6. Roving Ambassador (making contact with forest visitors at campgrounds, trailheads, field information stations, etc.)	●	●				●				
7. Employing an Advocate or Intervenor (one who advocates on behalf of an interest group)	●					●			●	
8. Running Trap-Lines (establishing regular schedule to touch base with interest groups, elected officials, agency officials, and opinion leaders)	●	●				●	●	●		
9. Identifying Opinion Leaders (those who are listened to and whose counsel you trust; meet with and/or visit by phone as often as possible)	●	●				●	●	●		
10. Field Information Stations for Information Dissemination		●								
11. Reviewing and Monitoring Media (to learn about values, priorities, issues and concerns of interest groups)						●		●		
12. Partnership Building (using local citizens/organizations for projects meeting mutual objectives)	●			●	●	●	●		●	
13. Issues Identification (identifying emerging issues)						●	●	●		
14. Conflict Mediation (mediating conflicting interests to reach resolution)	●				●				●	
15. Sensing/Surveys										
- Conducting public opinion poll/survey						●				●
- Validity model for public involvement						●				●
- Demographic/psychographic surveys						●				●
- Public perception analysis (surveying public on perception of agency activities).						●				●
- Collaborative social assessment projects						●				●
16. Identifying and Developing a Community of Interest	●		●	●	●	●	●	●	●	
17. Identifying and Segmenting Public and Groups (identifying potentially affected interests)						●				
18. Citizen Oversight Group (key interests to review and focus on process and related concerns)	●	●		●		●	●	●		●
19. Seminars		●								
20. Brown Bag Lunch Sessions		●								
21. Field Trips/Show-Me Trips	●	●								
22. Using Audio-Visual Materials (video, displays, etc.)		●								
23. Communication										
- Active listening, recording, and documentation.	●	●	●	●	●	●	●	●	●	
-. Accessible language (lay terminology, Braille, TTY, bilingual)	●	●	●	●	●	●	●	●	●	
Additional methods are described in the Forest Service Public Participation Handbooks and in the Citizen Participation Handbook (see reference section in back).										

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