

**ASSESSMENT OF INFORMATION  
MANAGEMENT PRACTICES  
FOR THE BIOFUELS SYSTEMS DIVISION**

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## EXECUTIVE SUMMARY

Information dissemination and associated information management systems must be structured to improve program responsiveness and effectiveness impacting internal and external markets, address legislative and executive directives which influence program operations, and provide for the timely execution of project/policy initiatives.

The thrust of the nation's biofuels transportation program is focused within the U.S. Department of Energy's (DOE) Office of Transportation Technologies (OTT) led by the Biofuels Systems Division (BSD).

BSD, as a center of excellence, seeks to consistently maintain programmatic (e.g., information management) objectives in light of Department and OTT goals. And, as such, it is crucial the BSD Director, in concert with his program staff, adequately and effectively collect, process, store, retrieve, and distribute information vital to the technical and programmatic needs of BSD.

There was a definitive need to identify, assess, and evaluate the varied types and sources of information flowing into BSD (e.g., via telephone; departmental correspondence; inter-agency inquiries; congressional requests; private sector dispatches) for the purpose of enhancing overall operational effectiveness.

The objectives of this assessment were: to identify the type of information requests made to BSD, to assess the number and frequency of these requests, evaluate the current procedures used to respond to such requests, and recommend improvements in the information management process.

The assessment was comprised of four elements:

- *Identification of Information Requests and Data Collection*
- *Assessment of Programmatic and Technical Information Requests*
- *Evaluation of Current Administrative Management Procedures*
- *Findings and Recommendations*

The focus of the first element, *Identification of Information Requests and Data Collection*, was to review specific BSD project objectives; develop a data collection framework to track the type of information requests received by BSD, the requesting organizations, the subject of the requests, and the appropriate actions taken; and to develop and implement a taxonomy (classification) of information types and sources. There were 75 information requests collected and analyzed during the six-week data collection period of April 18 to June 3, 1994.

Element two, *Assessment of Programmatic and Technical Information Requests*, categorized the volume and frequency of all data requests made during the data collection period, assessed the requesting sources, and performed a frequency/volume analysis of all information requests to identify which types of requests/requesting sources/actions were encountered most frequently by BSD.

Element three, *Evaluation of Current Administrative Management Procedures*, was accomplished by conducting an audit of BSD's existing information processing procedures, records management processes, and organizational communication flows through internal and external operational channels. Further, interviews were conducted with the BSD director, his staff, and his support contractors at the national laboratories to gain insight into the effectiveness (strengths and weaknesses) of current information processing procedures, records management processes, and data flows emphasizing information planning, organizing, implementing, controlling, and customer satisfaction structures.

It is important to note that relative to strengths and weaknesses identified within BSD's information management processes, a key strength was BSD's current well-defined tracking system for handling formal requests (i.e., controlled correspondence). Another major strength, though not specifically mentioned during the interviews, is the staff's ability to produce relatively high quality responses in the presence of extreme time constraints.

The weaknesses of the current information management practices that were identified were the time, energy, and resource constraints that BSD constantly encounters, all of which effect the quality and timeliness of responses. Additional weaknesses mentioned include: not enough staff meetings, necessity for clearer guidance and information on controlled correspondence requests, providing support staff with required information to respond to requests, and the excessively bureaucratic process of information flow/requests.

The fourth element of the assessment, *Findings and Recommendations*, are the result of a comprehensive exchange of ideas, concerns, issues, and applications focused on the need to develop and implement improvements in current BSD information management practices. Within the structure of the overall information management assessment, five key findings and 23 recommendations were put forth for further consideration and action by the BSD Director, his immediate staff, and at the national laboratories where appropriate.

**FINDING 1: IMPROVED COMMUNICATION BETWEEN BSD STAFF, OTT, OTHER OFFICES WITHIN EE, AND BSD SUPPORT ORGANIZATIONS, WOULD ENHANCE BSD'S ABILITY TO RESPOND TO INFORMATION REQUESTS.**

### **RECOMMENDATIONS:**

- *BSD technical staff should provide appropriate public releases/papers to BSD support staff before major events.*
  
- *More BSD, OTT/DAS and OTT program directors, and overall OTT staff meetings need to be held than scheduled with a specific agenda item devoted to discussing issues related to responding to information requests. This will allow for greater communication, flow of information, and participation from the office level down to the program staff levels.*

- *Feedback mechanisms are needed between BSD and its support organizations. In addition, feedback mechanisms (informing BSD staff of what is done with information forwarded to other DOE personnel) need to be established so that the OTT/DAS provide evaluations to all programs of various information request responses (both formal and informal requests) and illustrate to OTT division personnel the value of committing limited resources to weekly highlight reports.*
  
- *To improve the flow of information between BSD and other Offices within EE, weekly activity reports, compiled at the OTT/DAS level, could be consolidated into a monthly report and distributed to other components of EE. These EE components should also be encouraged to compile and distribute parallel monthly reports to OTT and its counterparts.*
  
- *Establish/improve lines-of-communication between BSD and the DOE policy office. Subsequently, develop and implement guidelines/procedures for handling policy oriented questions by BSD and OTT staff. BSD and OTT should, internally, develop similar guidelines for handling requests that are directly sent to their offices (as opposed to being sent "down" from policy).*
  
- *Develop an attachment sheet which details background information relating to the respective information request (needed more for formal requests coming down from OTT and higher levels).*
  
- *Incorporate the use of pre-existing and planned publications for developing standardized responses. Both the questions and responses could then be included in the publication, thereby potentially reducing the volume of information requests handled by BSD. Furthermore, requesting sources can be referenced to such publications to obtain the answers to their questions as well as other information that might be pertinent to their needs.*
  
- *Conduct a detailed evaluation of the current software and computer systems used by BSD and their support organizations to determine compatibility across all organizations. Furthermore, encourage BSD staff participation in DOE-offered/sponsored courses which enhance personal computer skills, especially in the areas of spreadsheet and electronic communications software.*

**FINDING 2: LACK OF WRITTEN INFORMATION MANAGEMENT PROCEDURES**

**RECOMMENDATIONS:**

- *Develop a document that outlines BSD staff member technical areas of responsibility which would also include written procedures specifying BSD/OTT document format for responding to various information requests (controlled and noncontrolled).*
- *Develop and distribute a listing of other relevant government agencies, and specific points of contact within these agencies which handle technical areas similar or akin to those under BSD (and possibly other divisions within OTT). This will help BSD staff in forwarding certain information requests to the appropriate individuals in other government agencies as well as potentially alleviating a portion of the problems relating to misdirected phone calls.*
- *BSD should provide guidance to external DOE organizations, specifically to support and national laboratory contractors, in order to establish a hierarchical system for responding to information requests. This will lead to more efficient utilization of limited resources while simultaneously improving the timeliness of responses.*
- *Encourage OTT/DAS to develop the "OTT Standard" that is to be used when responding to information requests. Without a set of guidelines, there is nothing from which actual performance can be measured. The standard should emphasize a general philosophy while providing concrete examples and means by which performance will be measured.*
- *Develop BSD guidelines on areas such as funding criteria for unsolicited projects. Likewise, tracking of information request repeat phone calls may result in identification of other areas where written guidance is needed.*
- *Develop a new employee briefing package. This package would include many of the recommendations described in this report, guidelines that new employees are expected to follow when handling information requests, and checklists for quality control. Additionally, these briefing packages should be sent to BSD support organizations for their internal use.*
- *Encourage the continued use of data collection forms, notebooks and checklists developed for this information management assessment. This will serve as a tracking system for information requests.*

**FINDING 3: THE DEVELOPMENT AND IMPLEMENTATION OF FILE MANAGEMENT PROCEDURES AND STANDARDIZED RESPONSES FOR FREQUENTLY RECEIVED INFORMATION REQUESTS WOULD ASSIST BSD IN PLANNING FOR, OR ANTICIPATING REQUESTS.**

**RECOMMENDATIONS:**

- *A binder/notebook containing standardized responses could be maintained by the BSD secretary. This could assist in providing coverage when individuals are away on travel thereby providing a mechanism to curtail referrals, while creating a resource tool so that staff are cognizant of events in other program areas. In circumstances where customizing the response is necessary, standardization and centralization provide fundamental information that is fairly generic to a wide array of requests.*
- *The development and implementation of file management procedures and manual would assist BSD staff and BSD support organizations in planning for, anticipating, and responding to information requests. These procedures would ensure that all staff members have access to the same information and would reduce the number of duplicative responses and/or individuals involved in addressing a given request.*

**FINDING 4: LONG-TERM PLANNING WOULD ENHANCE BSD'S ABILITY TO RESPOND TO INFORMATION REQUESTS.**

**RECOMMENDATIONS:**

- *Increase planning/coordination between other EE Offices, the Offices directly supporting EE's Assistant Secretary (e.g., OPA, OMR), OTT/DAS, BSD, and the national laboratories.*
- *Develop, within BSD, a system that keeps track of when events associated with information requests will occur (e.g., hearings, budget excercises; major meetings). One possible way to address these events, is to include them in a "BSD Calendar of Events."*
- *Ensure information management topics receive the appropriate level of attention as part of the program management (Goal 2) and the analytical needs (Goal 3) portions of the BSD Strategic Plan.*

**FINDING 5: LACK OF CUSTOMER SATISFACTION ASSESSMENT  
METHODOLOGIES**

**RECOMMENDATIONS:**

- *Develop and implement criteria, survey questionnaires, and metrics capabilities which will be used to measure customer satisfaction as it relates to information request responses.*
- *Develop and maintain a list that will provide a mechanism for avoiding potential repeat customer satisfaction problems.*
- *Based on the customer satisfaction assessment criteria and actual evaluations, BSD staff performance reviews could include an evaluation of their performance in this area. Each individual would be evaluated based on pre-determined criteria relevant to their respective position. This flexibility in criteria should allow for fair and equitable evaluations based on varying levels of responsibility for all staff members.*

Overall, it was found that the BSD Office performs adequately, given current operating constraints. Due to some of these current operating restrictions, time has not been available to institute more comprehensive planning, organizing, controlling, and implementing mechanisms for responding to information requests. While there are some mechanisms that can improve the current process, the full effectiveness of these mechanisms to reduce "fire-drills" is constrained by outside factors that require the cooperation of other Offices within DOE, especially EE. However, there are several areas of improvement that can be incorporated into BSD's information management and response network. As a result of implementing the previously mentioned recommendations, the BSD program should realize an increase in quality and ability to meet information requests through anticipation and standardization. Likewise, a more efficient system should reduce technical staff's time requirements for handling information requests (especially if a combination of a reduction in misdirected information requests and increased support staff handling capability are realized), thereby allowing time for new information coordination/dissemination efforts of importance to the program by technical staff members. Consequently, these recommendations build upon BSD's strengths while reducing their current weaknesses, thereby alleviating many of the current problems.

## CHAPTER 1. INTRODUCTION

As the direction of the U.S. government's (e.g., U.S. Department of Energy -- DOE) transportation research and development program has continued to evolve, critical communication linkages have continued to present the extreme need to effectively manage all elements of the public/private sector information exchange process.

Information dissemination, and associated information management systems, must be structured to improve program responsiveness and effectiveness impacting internal and external markets, address legislative and executive directives which influence program operations, provide for the timely execution of project/policy initiatives, and enhance the application of total quality management in all facets of transportation technology research and development (R&D).

The Biofuels Systems Division (BSD), located within DOE's Office of Energy Efficiency and Renewable Energy (EE), Office of Transportation Technologies (OTT), sponsors long-term, high-risk R&D focused on technologies that will provide domestically-produced renewable alternative fuels as well as improve the efficiency of the U.S. transportation sector.

BSD, as a center of excellence, seeks to consistently maintain programmatic (e.g., information management) objectives in light of EE and Department goals. Therefore, it is crucial that the Division Director, in concert with his program staff, respond to information requirements, by adequately and effectively collecting, processing, storing, retrieving, and distributing information vital to the technical and programmatic needs of BSD.

Under the direction of the National Renewable Energy Laboratory, and in conjunction with BSD, DynCorp•Meridian was commissioned to conduct an assessment of the current information management practices within BSD.

There was a definitive need to identify, assess, and evaluate the varied types and sources of information requirements flowing into and out of BSD for the purpose of enhancing overall operational effectiveness. The objectives of the assessment were to identify the types of information requests made through BSD, to assess the number and frequency of these requests, to evaluate the current procedures used to respond to such requests, and to recommend improvements in the information management process.

This study will discuss the approach employed in identifying information requests, the process developed to assess these varied requests, and the evaluation methods utilized to address current information management procedures. The findings and recommendations to be considered by BSD will be addressed as the concluding element.

**CHAPTER 2. IDENTIFICATION OF INFORMATION REQUESTS  
AND DATA COLLECTION**

This chapter discusses the approach employed to identify the varied sources of information requests and the resultant taxonomy developed to describe information requests received by BSD.

**2.1 DATA ACQUISITION PROCESS**

A four step process was utilized in order to establish a baseline for project execution. Each of these steps, as inputs/outputs to the overall approach, addressed the following:

**Orientation Activities**

This step involved performing a range of review activities designed to support the development of the data collection framework. Specific activities included reviewing project objectives and requirements, holding discussions with BSD staff, and reviewing a wide range of program information regarding BSD.

**Development of Data Collection Framework**

The objective of this step was to develop a data collection framework to help track the following information:

- The name of the individual receiving the information request
- The date the information request was received
- The request medium (e.g., phone, letter)
- The requesting source (internal or external)
- The date the request is due
- The name, company, and address of the requesting source
- The subject of the information request
- The name of the individual(s) to whom the information request is referred to for action
- The action taken in response to the information request
- The date the request was forwarded

The data collection framework was designed to encompass both international and domestic information requests (3 international requests were identified). Specific activities in the development of the data collection framework included reviewing relevant background information on BSD; developing draft data collection forms; and, based on discussions with the

Division Director and his staff, revising the data collection forms; and developing instructions for the completion of the data collection forms.

The data collection form developed for this task (Exhibit 1) was used to record information requests received via electronic-mail, letter, fax, meetings, phone, or personal delivery. All BSD staff were responsible for completing the data collection form (this includes the division secretary).

### Data Collection

This third step focused on information requests received by the Division Director and his staff for approximately a six week period. *The data collection period went from April 18, 1994 to June 3, 1994.* A total of 75 data entry forms were collected, however, a total of 94 information requests are recorded in the database.<sup>1,2</sup> The majority of the data collection forms completed by BSD were for information requests received during the first three weeks of the data collection period. Only a few forms were received during the last week to week and one-half of the data collection period. Unfortunately, there were instances where gaps in information existed and were unable to be closed in consultation between Meridian and BSD staff. As a result, "best guesses" were made on the part of the respective BSD staff personnel to which the request was addressed. Appendix A presents the consolidated information from all BSD data collection forms.

### Analysis of Information Requests

The final step in the data acquisition process involved the analysis, and reporting on, of all information from the data collection forms. Specific analysis and report development activities included developing a database using Micro-Soft Excel; inputting all data on information requests received; and developing a taxonomy as referenced in Section 2.2 to describe: the subject of the information requests, the source of the information requests, and the actions taken in response to the information requests.

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<sup>1</sup> These "extra" information requests are a direct result of actions relating to the forwarding of information requests (i.e., **Referred For Action**) to secondary sources such as other BSD staff, other DOE offices, and organizations external to DOE. The result of expanding this analysis to include such actions will allow for a more complete and accurate assessment of the informational flow within BSD.

<sup>2</sup> The relative low number of observations collected was a major reason why the data collection was extended from four to six weeks. Upon discussions with BSD staff, it was felt that the sample was representative. Furthermore, BSD staff members were asked questions during the follow-up interviews which tried to adjust for the size of the sample.

EXHIBIT 1  
DATA COLLECTION FORM  
FOR INFORMATION REQUEST

NAME: JOHN FERRELL

DATE: \_\_\_/\_\_\_/\_\_\_ TIME REC'D: \_\_\_:\_\_\_ am / pm

REQUEST FORM: E-Mail Meeting Phone  
(circle one) Letter Fax Individual

REQUEST SOURCE: (check one) \_\_\_ INTERNAL (to include Germantown Office and Contractors working directly with/for BSD)  
\_\_\_ EXTERNAL (includes national labs.)

DUE DATE \_\_\_/\_\_\_/\_\_\_

NAME: \_\_\_\_\_

AGENCY/COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: (\_\_\_\_) \_\_\_\_\_

SUBJECT: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REFERRED TO: Costello Nguyen Reed Sprague  
(circle one) Ferrell Overton Santos-Leon  
OTHER (please specify): \_\_\_\_\_

ACTION TAKEN: (check one)  
\_\_\_ Set-up/attend meeting \_\_\_ Referred for action  
\_\_\_ Status on proposal, letter, etc. \_\_\_ Received information - no action req'd  
\_\_\_ Provided BSD documents \_\_\_ Returned phone call, unable to contact  
\_\_\_ other (please specify) \_\_\_\_\_  
\_\_\_\_\_

DATE FORWARDED: \_\_\_/\_\_\_/\_\_\_

## 2.2 TAXONOMY (CLASSIFICATION) OF INFORMATION REQUESTS

A detailed taxonomy for all of the 94 actions taken during the data collection period was developed which addressed the following four elements: the requesting medium, the subject of the information request, the requesting source, and the classification of actions taken.

### Classification of the Subject of the Information Request

The subjects of the information requests were grouped into the following 9 categories:

- **Program Management Issues**
- **General Program Information Requests (Reports and Studies)**
- **Conferences/Workshops**
- **Proposals**
- **Feedstock Program**
- **Ethanol Program**
- **Methanol Program**
- **Biodiesel Program**
- **Other**

In the first four categories, the subjects of the information requests were broadly grouped according to topical areas. Dividing the requests in this manner provides insight into the general categories of the types of information requests handled by the BSD on a daily basis.

With one exception (**Program Management Issues**), the first four categories are self-explanatory and do not require a description of their contents. The **Program Management Issues** grouping includes key information requests for BSD-related activities that fit into such diverse areas as program management overview training, quality improvement recommendations, and strategic planning issues.

The next four categories are fairly specific in that type of information requested was of a more technical nature. Although the scope of the division is not limited to these four subject areas - **Feedstock, Ethanol, Methanol, and Biodiesel** -- the categories are an exact replication of the BSD program's structure. Again, the categories are self-explanatory in the types of information that are contained within each so no elaboration on such will follow.

Within the **Other** category, miscellaneous information requests can be found such as a request for promotions (National Laboratory level), notices for position openings within BSD, and recommendations for International Energy Agency Bioenergy Agreement activity leaders.

### Classification of the Requesting Source

The sources of the information requests were classified into the following nine categories:

- **EE**
- **OTT**
- **Other DOE**
- **Other Government Agencies**
- **National Laboratory**
- **Industry**
- **Trade Association**
- **Consultants**
- **Other**

The first three categories, **EE**, **OTT**, and **Other DOE**, represent information requests originating from individuals within DOE. The distinction between these three categories is that the first category includes requesting sources from other program offices within EE, the second category includes requesting sources within OTT, and the third category includes other DOE offices outside of EE.

The next four categories, **Other Government Agencies**, **National Laboratory**, **Industry**, **Trade Association**, and **Consultants**, refer to requesting sources outside of DOE. The **Consultants** and **National Laboratory** categories are self-explanatory and do not require a description of their contents. The **Industry** grouping contains organizations from industries with an interest in Biofuels such as, Engine Fuels Emissions, and James River Corporation, while the **Trade Association** grouping contains organizations such as law firms, and the American Plywood Association, which represent various industries and/or specific companies. Within the **Other Government Agencies** category can be found agencies such as the U.S. Department of Agriculture (USDA) and the U.S. Department of Transportation (DOT).

The last category, **Other**, is a catch-all for requesting sources that do not fall within any of the previously described groupings. Examples of requesting sources in this category are private citizens, country clubs (regarding potential bioenergy technology opportunities), and news media.

The actions taken in response to information requests were grouped into the following seven categories:

- **Set Up/Attend Meeting**
- **Status on Proposal, Letter, etc.**
- **Provided BSD Documents/Information**
- **Referred for Action**
- **Received Information - No Action Required**
- **Returned Phone Call - Unable to Contact**
- **Other** (information specified)

Exhibit 2, below, depicts a representative composite of the entire taxonomy which is provided in Appendix B.

The first category, **Set Up/Attended Meeting**, includes actions in which BSD staff set up or attended meetings with the requesting source to further discuss and/or present the information relating to the request. In most cases, this action represented a staff member, or members, attending a conference or workshop.

The second category -- **Status on Proposal, Letter, etc.** -- required BSD staff to provide specific information pertaining to the status of various contract agreements with industry, proposals for industry agreements, letters of intent (LOI), and memoranda of understanding (MOU).

The third category listed above (**Provided BSD Documents/Information**) represents cases in which BSD staff provided or sent documents/information to the requesting source. This category includes actions that required BSD staff to send either new or pre-existing documents to the requesting source (e.g., summaries of BSD programs, copies of reports, letters, and memos) or verbally (e.g., over the telephone) providing information.

EXHIBIT 2  
TAXONOMY OF INFORMATION REQUESTS

DYNCORP-MERIDIAN

BSD STAFF	REQUEST FORM	REQUEST SOURCE	SUBJECT CATEGORY	ACTION	GEOGRAPHIC SECTOR	
1	John Ferrell	E-Mail	DOE/EE/OTT/DAS	Ethanol	Referred for action - BSD Staff (Reed)	Domestic
2	John Ferrell	Letter	DOE/EE/OTT/OAF	Program Management Issues	Other - Approved Request	Domestic
3	John Ferrell	E-Mail/Phone	National Laboratory (ORNL)	Other	Other - will provide requested letter	Domestic
4	John Ferrell	Letter/Phone	Trade Association	General Program Information Requests	Referred for action - National Lab (Lynn Wright)	Domestic
5	John Ferrell	Meeting	Other DOE - Field Office	Program Management Issues	Referred for action - BSD Staff (Costello)	Domestic
6	John Ferrell	Individual	DOE/EE/OTT/BSO	Program Management Issues	Other - Copy for staff/discuss at next office meeting	Domestic
7	John Ferrell	Letter	Trade Association	Conferences/Workshops	Referred for action - BSD Staff (Sprague and Overton)	Domestic
8	John Ferrell	Phone	National Laboratory (ORNL)	Proposals	Status on proposal, letter, etc.	Domestic
9	John Ferrell	Letter	Industry	General Program Information Requests	Referred for action - BSD Staff (Gearson)	Domestic
10	John Ferrell	Phone	DOE/EE/OTT/DAS	Ethanol	Received information - no action req'd	Domestic
11	John Ferrell	Phone	National Laboratory (NREL)	Conferences/Workshops	Referred for action - EE Offices (Moorer)	Domestic
12	John Ferrell	Phone	National Laboratory (NREL)	Conferences/Workshops	Referred for action - National Lab (R. Overend)	Domestic
13	John Ferrell	Phone	Industry	Conferences/Workshops	Referred for action - BSD Staff (Overton)	Domestic
14	John Ferrell	Letter	Other DOE - EI	Conferences/Workshops	Referred for action - National Lab (ORNL/NREL)	Domestic
15	John Ferrell	Phone	DOE/EE/OTT/DAS	Other	Received information - no action req'd	Domestic
16	John Ferrell	Letter	DOE/EE/AS - Golden Field Office	Proposals	Received information - no action req'd	Domestic
17	John Ferrell	Phone	National Laboratory (NREL)	General Program Information Requests	Referred for action - BSD Staff (Overton (make copies of recomb & distr))	Domestic
18	John Ferrell	Phone	DOE/EE/OTFA	Conferences/Workshops	Referred for action - National Lab (ORNL/NREL call Theresa)	Domestic
19	John Ferrell	E-Mail	DOE/EE/AS/OMR	Program Management Issues	Referred for action - BSD Staff (Reed)	Domestic
20	John Ferrell	E-Mail/Phone	DOE/EE/OTT/DAS	Conferences/Workshops	Set-up/attend meeting	Domestic
21	John Ferrell	E-Mail/Phone	DOE/EE/OTT/DAS	Conferences/Workshops	Other - Developing talking points for C. Ervins	Domestic
22	John Ferrell	Phone	Trade Association	Program Management Issues	Received information - no action req'd	Domestic
23	John Ferrell	Fax	Other	Biodiesel	Referred for action - BSD Staff (Overton)	International
24	John Ferrell	E-Mail/Phone	DOE/EE/OTT/DAS	Conferences/Workshops	Set-up/attend meeting	Domestic
25	John Ferrell	Phone	Trade Association	Conferences/Workshops	Referred for action - BSD Staff (Reed)	Domestic
26	John Ferrell	Phone	Trade Association	Proposals	Status on proposal, letter, etc.	Domestic
27	John Ferrell	Phone	Other	Methanol	Provided BSD documents/information	Domestic
28	John Ferrell	Phone	National Laboratory (ORNL)	Proposals	Referred for action - BSD Staff (Sprague)	Domestic
29	John Ferrell	Phone	Other Govt Agencies - USDA	Conferences/Workshops	Set-up/attend meeting	Domestic
30	John Ferrell	Phone	Consultant	Biodiesel	Referred for action - BSD Staff (Sprague)	Domestic
31	John Ferrell	Phone	DOE/EE/OIT	General Program Information Requests	Provided BSD documents/information	Domestic
32	John Ferrell	Fax	Other Govt Agencies - USDA	Conferences/Workshops	Set-up/attend meeting	Domestic
33	John Ferrell	Fax	Other	Other	Other - Fax back IEA recommendations	International
34	John Ferrell	Phone	Other	Feedstock	Returned phone call, unable to contact -- left message	Domestic
35	John Ferrell	Phone	Other Govt Agencies - USDA	Other	Returned phone call, unable to contact	Domestic
36	John Ferrell	Individual	DOE/EE/OTT/BSO	General Program Information Requests	Referred for action - EE Offices (M. Reed (Biopower))	Domestic
37	John Ferrell	Phone	DOE/EE/OTT/BSO	Methanol	Referred for action - National Lab (Barbara Goodman (NREL))	Domestic
38	John Ferrell	Phone	Other	General Program Information Requests	Received information - no action req'd	International
39	Sarah Sprague	Letter	Other	Ethanol	Provided BSD documents/information	Domestic
40	Sarah Sprague	Letter	Other	Ethanol	Referred for action - Outside DOE (NAFH (Hotline)/NATAS)	Domestic
41	Sarah Sprague	Phone	DOE/EE/OTFA	Conferences/Workshops	Received information - no action req'd (L. Wright ORNL will attend wrkshp)	Domestic
42	Sarah Sprague	Letter	Other	Ethanol	Provided BSD documents/information ; letter response	Domestic
43	Sarah Sprague	Phone	Other DOE - OEB	General Program Information Requests	Provided BSD documents/information	Domestic
44	Sarah Sprague	Phone	National Laboratory (NREL)	Other	Status on proposal, letter, etc.	Domestic
45	Sarah Sprague	Phone	Trade Association	General Program Information Requests	Referred for action - Other DOE (McNutt/Policy)	Domestic
46	Sarah Sprague	Meeting	Consultant	Biodiesel	Referred for action - Outside DOE (NSDTB, Hotline)	Domestic
47	Sarah Sprague	Individual	Industry	Biodiesel	Referred for action - Outside DOE (NAFH (Hotline)/NATAS)	Domestic
48	Sarah Sprague	Individual	Industry	Biodiesel	Received information - no action req'd	Domestic
49	Sarah Sprague	Phone	Industry	Ethanol	Received information - no action req'd	Domestic
50	Sarah Sprague	Phone	Trade Association	General Program Information Requests	Referred for action - National Lab (NREL)	Domestic
51	Sarah Sprague	Letter	Other	Ethanol	Referred for action - National Lab (ORNL)	Domestic
52	Sarah Sprague	Phone	Other	Ethanol	Provided BSD documents/information	Domestic
53	Sarah Sprague	Phone	Other Govt Agencies - USDA	Ethanol	Referred for action - Other DOE (McNutt/Policy)	Domestic
54	Sarah Sprague	Phone	Other	Ethanol	Referred for action - EE Offices (OIT)	Domestic
55	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Conferences/Workshops	Set-up/attend meeting	Domestic
56	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Proposals	Other - increased funding	Domestic
57	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Biodiesel	Provided BSD documents/information	Domestic
58	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Feedstock	Referred for action - EE Offices (M. Voorhies - regnl contacts & status EIA study)	Domestic
59	Sarah Sprague	Letter	Other	Ethanol	Provided BSD documents/information Other - Info and papers from R. Tshiteya	Domestic

The fourth category, **Referred For Action**, represents instances where it was necessary for BSD staff to redirect the request to other individuals in order to obtain the necessary information. As Appendix B shows, subelements have been added to this category in order to show where BSD staff referred the information request for action. These subelements include:

- **Other BSD Staff**
- **Other Program Offices within EE**
- **Other DOE**
- **National Laboratories**
- **Outside of DOE**

In the fifth category, **Received Information - No Action Required**, the requesting source provided information (e.g., recommendations or comments of technical reports and their distribution, future funding requirements/concerns, etc.) to BSD staff and no action was required on the part of BSD.

The sixth category, **Returned Phone Call - Unable to Contact**, represents instances where BSD staff received a telephone message either from the secretarial staff or via voice mail, returned the phone call of the requesting source but were unable to contact the requesting source. While further action may have been taken by BSD staff at a later date, these actions were not recorded on the respective data collection form and therefore, could not be assigned to any one of the other five categories.

The last category, **Other** captures those instances where the BSD staff member provided a service outside of those listed on the data entry form. Under these circumstances, BSD staff were to elaborate on the actual action taken when selecting this category. Items classified under this category include reviewing documents and conducting informal discussions with other OTT and/or BSD staff.

### CHAPTER 3. ASSESSMENT OF PROGRAMMATIC AND TECHNICAL INFORMATION REQUESTS

This chapter presents the results of the categorization of the frequency and volume of all domestic and international requests made during the data acquisition phase of the assessment.

The information developed and presented herein (Exhibit 3) culminates the analysis of all information requests received by BSD staff during the six-week data collection period (April 18 to June 3, 1994). Consequently, the most frequently occurring requesting sources, geographic sectors, request medium, subject of the information request, and action taken are identified.

#### Requesting Source

Exhibit 4, which depicts the various requesting sources, shows that a substantially larger proportion of information requests originated outside DOE (61.7 percent) than within DOE (38.3 percent).

An examination of the information requests originating inside DOE, shows that the most frequently occurring requesting source was **OTT** (24.5 percent) followed by **EE** (7.5 percent), and **Other DOE** (6.4 percent). Within the **OTT** category, most of the information requests originated from BSD itself, representing over 65 percent of the **OTT** total.<sup>2</sup>

For information requests originating outside DOE, the most frequently occurring requesting source was from the **Other** category (17.0 percent)<sup>3</sup> followed by **Industry** (13.8 percent), **National Laboratory** (12.8 percent), **Trade Association** (9.6 percent), **Other Government Agencies** (5.3 percent), and **Consultants** (3.2 percent). Within **Other Government Agencies**, requests from the U.S. Department of Agriculture (USDA) were the most frequent, followed by the U.S. Department of Transportation. Regarding the National Laboratory category, the National Renewable Energy Laboratory (NREL) had the highest level of interaction with the BSD Office followed by Oak Ridge National Laboratory(ORNL).

#### Request Medium

Exhibit 5 presents the request medium in which information requests were made/received. As Exhibit 5 indicates, BSD staff received the majority of information requests over the **Telephone** (53.2 percent) followed by **Letter** (17.0 percent), **Individual or Personal Delivery** (16.0 percent),

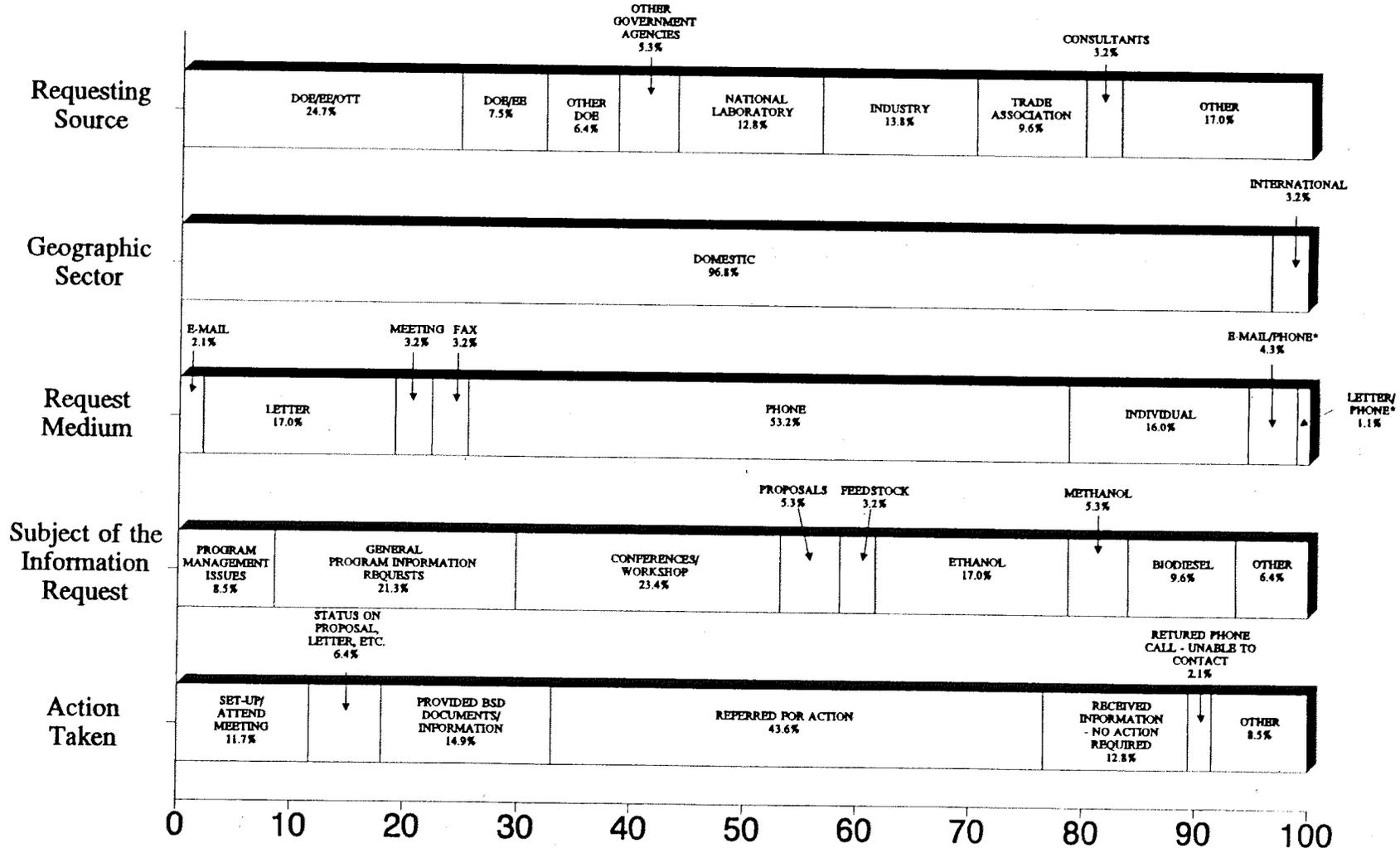
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<sup>2</sup> This is a direct result of the large quantity of **Referred For Action** responses to information requests generated within BSD.

<sup>3</sup> The **Other** category's large percentage was primarily due to a large interest on the part of private citizens pertaining to ethanol. This interest was sparked by a DOE/Argonne National Laboratory study that became publicly available during the data collection period.

### EXHIBIT 3 SUMMARY OF FREQUENCY ANALYSIS OF INFORMATION REQUESTS

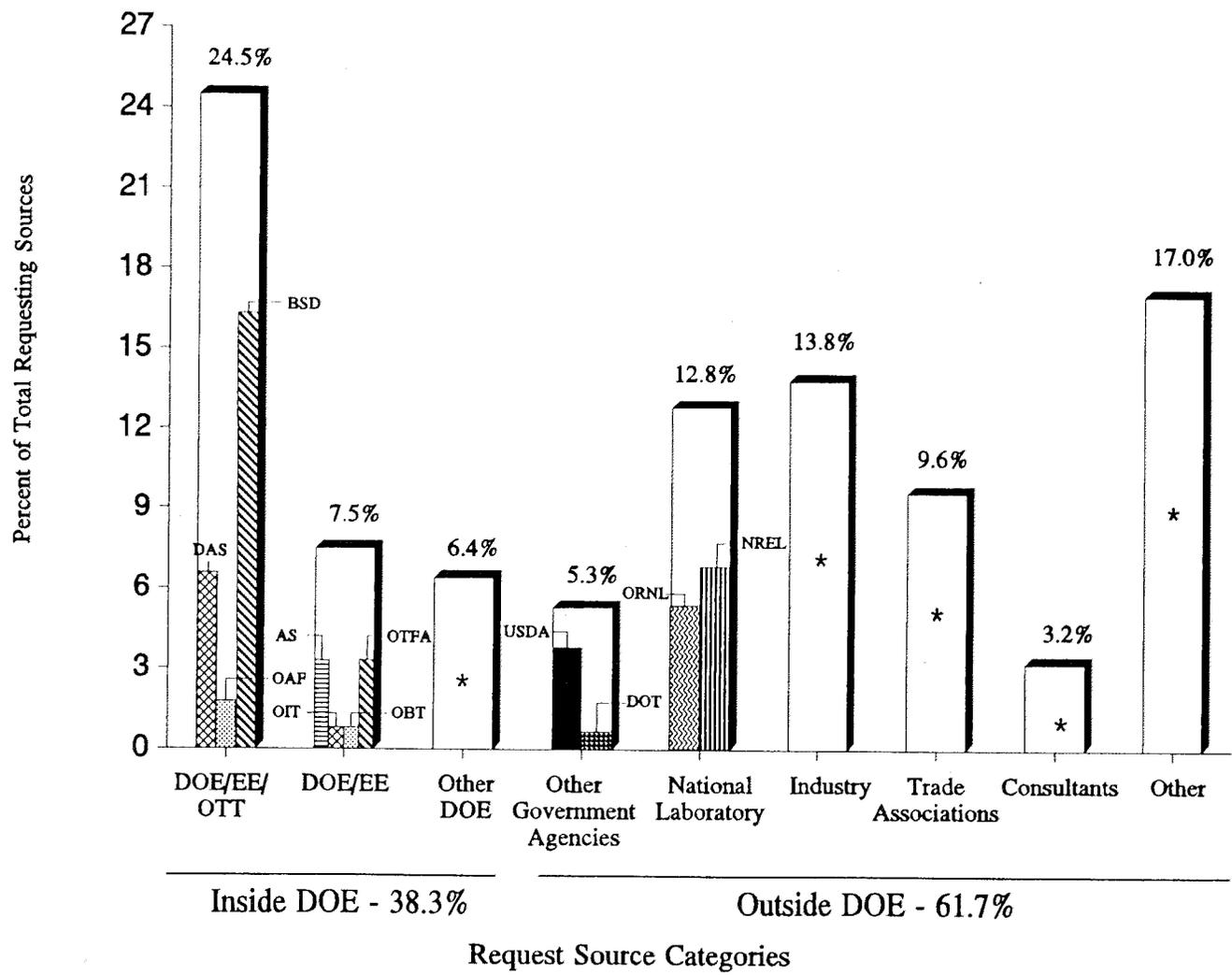
3-2



Breakdown of BSD Information Request Activities (Percent)

\*Email/Phone and Letter/Phone categories represent events when the information request was submitted via more than one medium.  
NOTE: Totals may not equal 100% due to rounding.

## EXHIBIT 4 REQUESTING SOURCE



\*This category could not be further divided into meaningful groups.  
NOTE: Total may not equal 100% due to rounding.

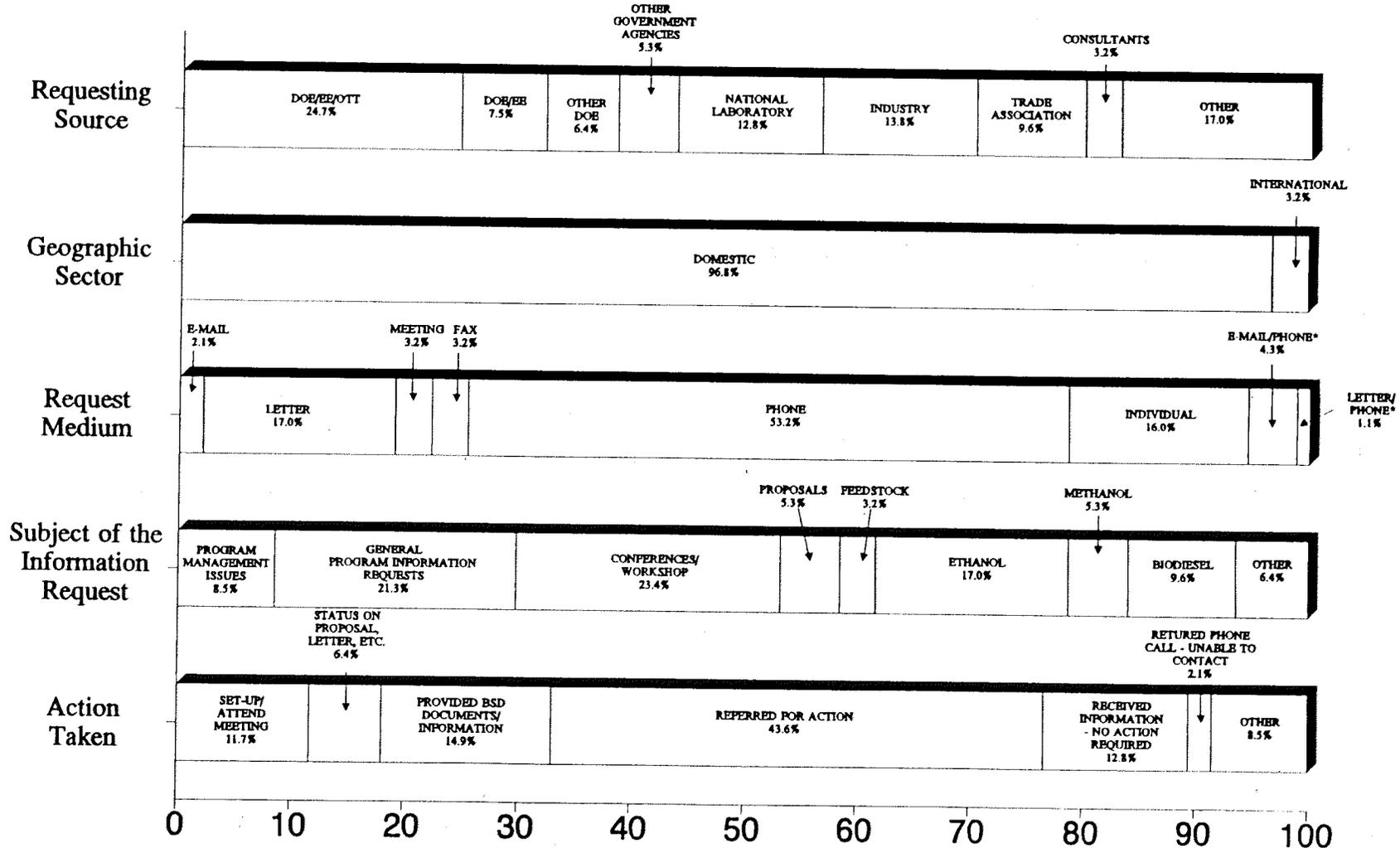
EXHIBIT 2  
TAXONOMY OF INFORMATION REQUESTS

DYNCORP-MERIDIAN

BSD STAFF	REQUEST FORM	REQUEST SOURCE	SUBJECT CATEGORY	ACTION	GEOGRAPHIC SECTOR	
1	John Ferrell	E-Mail	DOE/EE/OTT/DAS	Ethanol	Referred for action - BSD Staff (Reed)	Domestic
2	John Ferrell	Letter	DOE/EE/OTT/OAF	Program Management Issues	Other - Approved Request	Domestic
3	John Ferrell	E-Mail/Phone	National Laboratory (ORNL)	Other	Other - will provide requested letter	Domestic
4	John Ferrell	Letter/Phone	Trade Association	General Program Information Requests	Referred for action - National Lab (Lynn Wright)	Domestic
5	John Ferrell	Meeting	Other DOE - Field Office	Program Management Issues	Referred for action - BSD Staff (Costello)	Domestic
6	John Ferrell	Individual	DOE/EE/OTT/BSO	Program Management Issues	Other - Copy for staff/discuss at next office meeting	Domestic
7	John Ferrell	Letter	Trade Association	Conferences/Workshops	Referred for action - BSD Staff (Sprague and Overton)	Domestic
8	John Ferrell	Phone	National Laboratory (ORNL)	Proposals	Status on proposal, letter, etc.	Domestic
9	John Ferrell	Letter	Industry	General Program Information Requests	Referred for action - BSD Staff (Gearson)	Domestic
10	John Ferrell	Phone	DOE/EE/OTT/DAS	Ethanol	Received information - no action req'd	Domestic
11	John Ferrell	Phone	National Laboratory (NREL)	Conferences/Workshops	Referred for action - EE Offices (Moorer)	Domestic
12	John Ferrell	Phone	National Laboratory (NREL)	Conferences/Workshops	Referred for action - National Lab (R. Overend)	Domestic
13	John Ferrell	Phone	Industry	Conferences/Workshops	Referred for action - BSD Staff (Overton)	Domestic
14	John Ferrell	Letter	Other DOE - EI	Conferences/Workshops	Referred for action - National Lab (ORNL/NREL)	Domestic
15	John Ferrell	Phone	DOE/EE/OTT/DAS	Other	Received information - no action req'd	Domestic
16	John Ferrell	Letter	DOE/EE/AS - Golden Field Office	Proposals	Received information - no action req'd	Domestic
17	John Ferrell	Phone	National Laboratory (NREL)	General Program Information Requests	Referred for action - BSD Staff (Overton (make copies of recomb & distr))	Domestic
18	John Ferrell	Phone	DOE/EE/OTFA	Conferences/Workshops	Referred for action - National Lab (ORNL/NREL call Theresa)	Domestic
19	John Ferrell	E-Mail	DOE/EE/AS/OMR	Program Management Issues	Referred for action - BSD Staff (Reed)	Domestic
20	John Ferrell	E-Mail/Phone	DOE/EE/OTT/DAS	Conferences/Workshops	Set-up/attend meeting	Domestic
21	John Ferrell	E-Mail/Phone	DOE/EE/OTT/DAS	Conferences/Workshops	Other - Developing talking points for C. Ervins	Domestic
22	John Ferrell	Phone	Trade Association	Program Management Issues	Received information - no action req'd	Domestic
23	John Ferrell	Fax	Other	Biodiesel	Referred for action - BSD Staff (Overton)	International
24	John Ferrell	E-Mail/Phone	DOE/EE/OTT/DAS	Conferences/Workshops	Set-up/attend meeting	Domestic
25	John Ferrell	Phone	Trade Association	Conferences/Workshops	Referred for action - BSD Staff (Reed)	Domestic
26	John Ferrell	Phone	Trade Association	Proposals	Status on proposal, letter, etc.	Domestic
27	John Ferrell	Phone	Other	Methanol	Provided BSD documents/information	Domestic
28	John Ferrell	Phone	National Laboratory (ORNL)	Proposals	Referred for action - BSD Staff (Sprague)	Domestic
29	John Ferrell	Phone	Other Govt Agencies - USDA	Conferences/Workshops	Set-up/attend meeting	Domestic
30	John Ferrell	Phone	Consultant	Biodiesel	Referred for action - BSD Staff (Sprague)	Domestic
31	John Ferrell	Phone	DOE/EE/OIT	General Program Information Requests	Provided BSD documents/information	Domestic
32	John Ferrell	Fax	Other Govt Agencies - USDA	Conferences/Workshops	Set-up/attend meeting	Domestic
33	John Ferrell	Fax	Other	Other	Other - Fax back IEA recommendations	International
34	John Ferrell	Phone	Other	Feedstock	Returned phone call, unable to contact -- left message	Domestic
35	John Ferrell	Phone	Other Govt Agencies - USDA	Other	Returned phone call, unable to contact	Domestic
36	John Ferrell	Individual	DOE/EE/OTT/BSO	General Program Information Requests	Referred for action - EE Offices (M. Reed (Biopower))	Domestic
37	John Ferrell	Phone	DOE/EE/OTT/BSO	Methanol	Referred for action - National Lab (Barbara Goodman (NREL))	Domestic
38	John Ferrell	Phone	Other	General Program Information Requests	Received information - no action req'd	International
39	Sarah Sprague	Letter	Other	Ethanol	Provided BSD documents/information	Domestic
40	Sarah Sprague	Letter	Other	Ethanol	Referred for action - Outside DOE (NAFH (Hotline)/NATAS)	Domestic
41	Sarah Sprague	Phone	DOE/EE/OTFA	Conferences/Workshops	Received information - no action req'd (L. Wright ORNL will attend wrkshp)	Domestic
42	Sarah Sprague	Letter	Other	Ethanol	Provided BSD documents/information ; letter response	Domestic
43	Sarah Sprague	Phone	Other DOE - OEB	General Program Information Requests	Provided BSD documents/information	Domestic
44	Sarah Sprague	Phone	National Laboratory (NREL)	Other	Status on proposal, letter, etc.	Domestic
45	Sarah Sprague	Phone	Trade Association	General Program Information Requests	Referred for action - Other DOE (McNutt/Policy)	Domestic
46	Sarah Sprague	Meeting	Consultant	Biodiesel	Referred for action - Outside DOE (NSDTB, Hotline)	Domestic
47	Sarah Sprague	Individual	Industry	Biodiesel	Referred for action - Outside DOE (NAFH (Hotline)/NATAS)	Domestic
48	Sarah Sprague	Individual	Industry	Biodiesel	Received information - no action req'd	Domestic
49	Sarah Sprague	Phone	Industry	Ethanol	Received information - no action req'd	Domestic
50	Sarah Sprague	Phone	Trade Association	General Program Information Requests	Referred for action - National Lab (NREL)	Domestic
51	Sarah Sprague	Letter	Other	Ethanol	Referred for action - National Lab (ORNL)	Domestic
52	Sarah Sprague	Phone	Other	Ethanol	Provided BSD documents/information	Domestic
53	Sarah Sprague	Phone	Other Govt Agencies - USDA	Ethanol	Referred for action - Other DOE (McNutt/Policy)	Domestic
54	Sarah Sprague	Phone	Other	Ethanol	Referred for action - EE Offices (OIT)	Domestic
55	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Conferences/Workshops	Set-up/attend meeting	Domestic
56	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Proposals	Other - increased funding	Domestic
57	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Biodiesel	Provided BSD documents/information	Domestic
58	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Feedstock	Referred for action - EE Offices (M. Voorhies - regnl contacts & status EIA study)	Domestic
59	Sarah Sprague	Letter	Other	Ethanol	Provided BSD documents/information Other - Info and papers from R. Tshiteya	Domestic

### EXHIBIT 3 SUMMARY OF FREQUENCY ANALYSIS OF INFORMATION REQUESTS

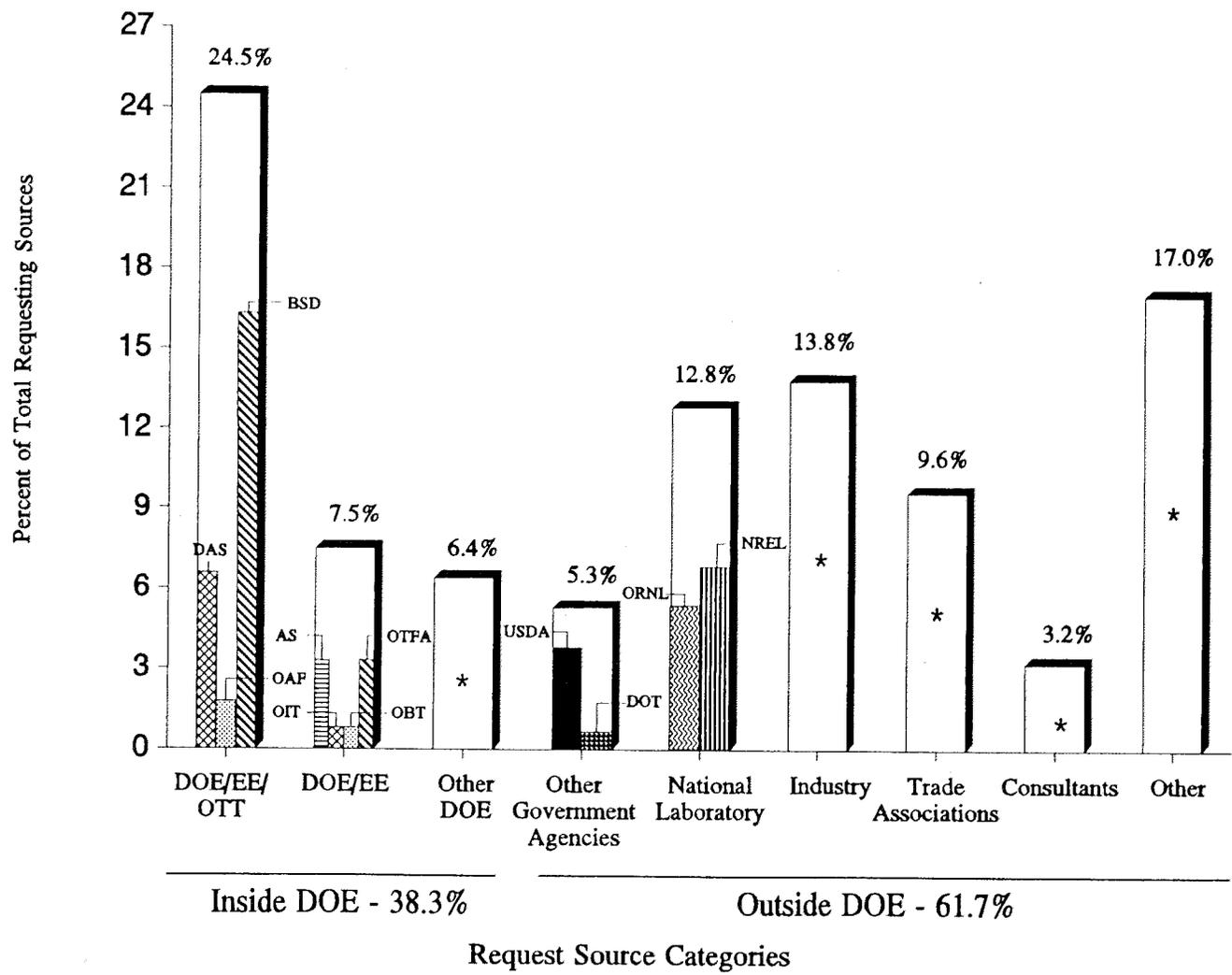
3-2



Breakdown of BSD Information Request Activities (Percent)

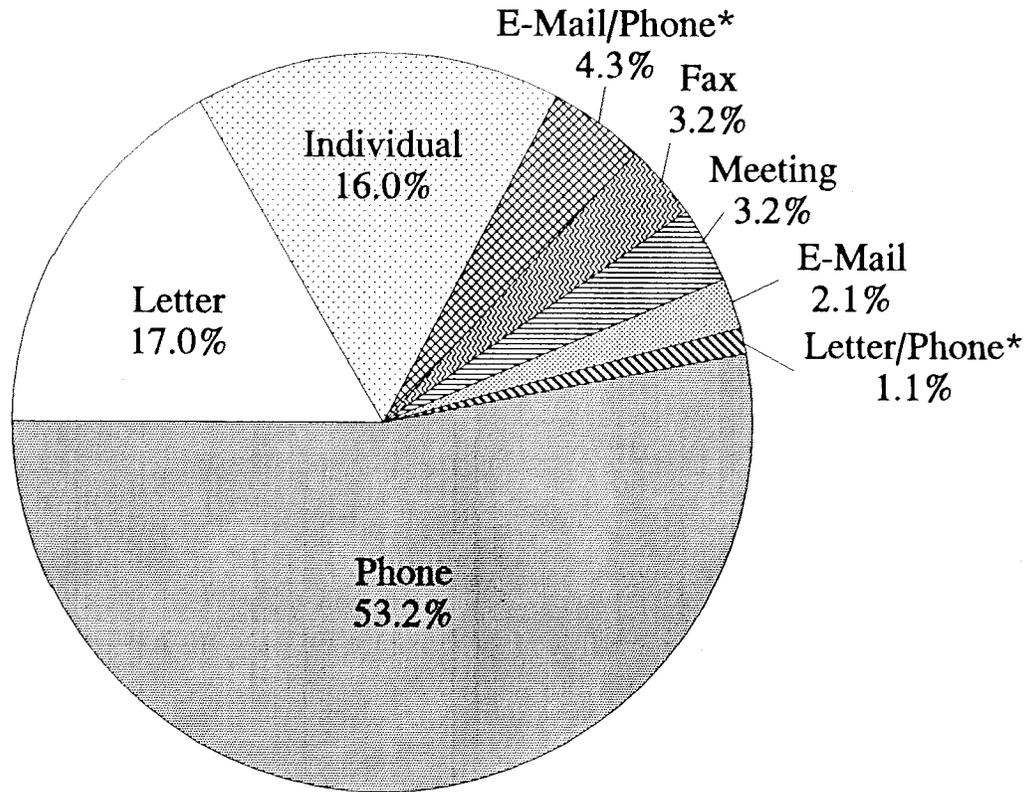
\*Email/Phone and Letter/Phone categories represent events when the information request was submitted via more than one medium.  
NOTE: Totals may not equal 100% due to rounding.

## EXHIBIT 4 REQUESTING SOURCE



\*This category could not be further divided into meaningful groups.  
NOTE: Total may not equal 100% due to rounding.

# EXHIBIT 5 REQUEST MEDIUM



\*Email/Phone and Letter/Phone categories represent events when the information request was submitted via more than one medium.  
NOTE: Total may not equal 100% due to rounding.

**E-Mail/Phone** (4.3 percent), **Meeting and Fax** (3.2 percent, respectively), **E-Mail** (2.1 percent), and **Letter/Phone** (1.1 percent).<sup>4</sup>

### Subject of the Information Request

Exhibit 6 shows the subject of the information requests. As the Exhibit illustrates, the subject of the information requests occurring most frequently concerned **Conferences/Workshops** (23.4 percent) closely followed by **General Program Information Requests** (21.3 percent). The subject category frequency analysis followed with: **Ethanol Program** (17.0 percent), **Biodiesel Program** (9.6 percent), **Program Management Issues** (8.5 percent), **Other** (6.4 percent), **Proposals and Methanol Program** (5.3 percent, respectively), and **Feedstock Program** (3.2 percent).

### Actions Taken

The actions taken in response to information requests are illustrated in Exhibit 7. As shown, the actions taken by BSD staff were overwhelmingly represented by the **Referred For Action** category (43.6 percent). This was followed by **Provided BSD Documents/Information** (14.9 percent); **Received Information - No Action Required** (12.8 percent); **Set-Up/Attend Meeting** (11.7 percent); **Other** (8.5 percent); **Status on Proposal, Letter, etc.** (6.4 percent); and **Returned Phone Call, Unable to Contact** (2.1 percent). An examination of the agencies/organizations to whom BSD referred the information request for action, shows that the majority of information requests were referred to Other BSD Staff (46.3 percent). The frequency analysis also revealed that a large quantity of requests were also forwarded for action to the National Laboratories; specifically 21.9 percent.

### Information Request Flow Characterization

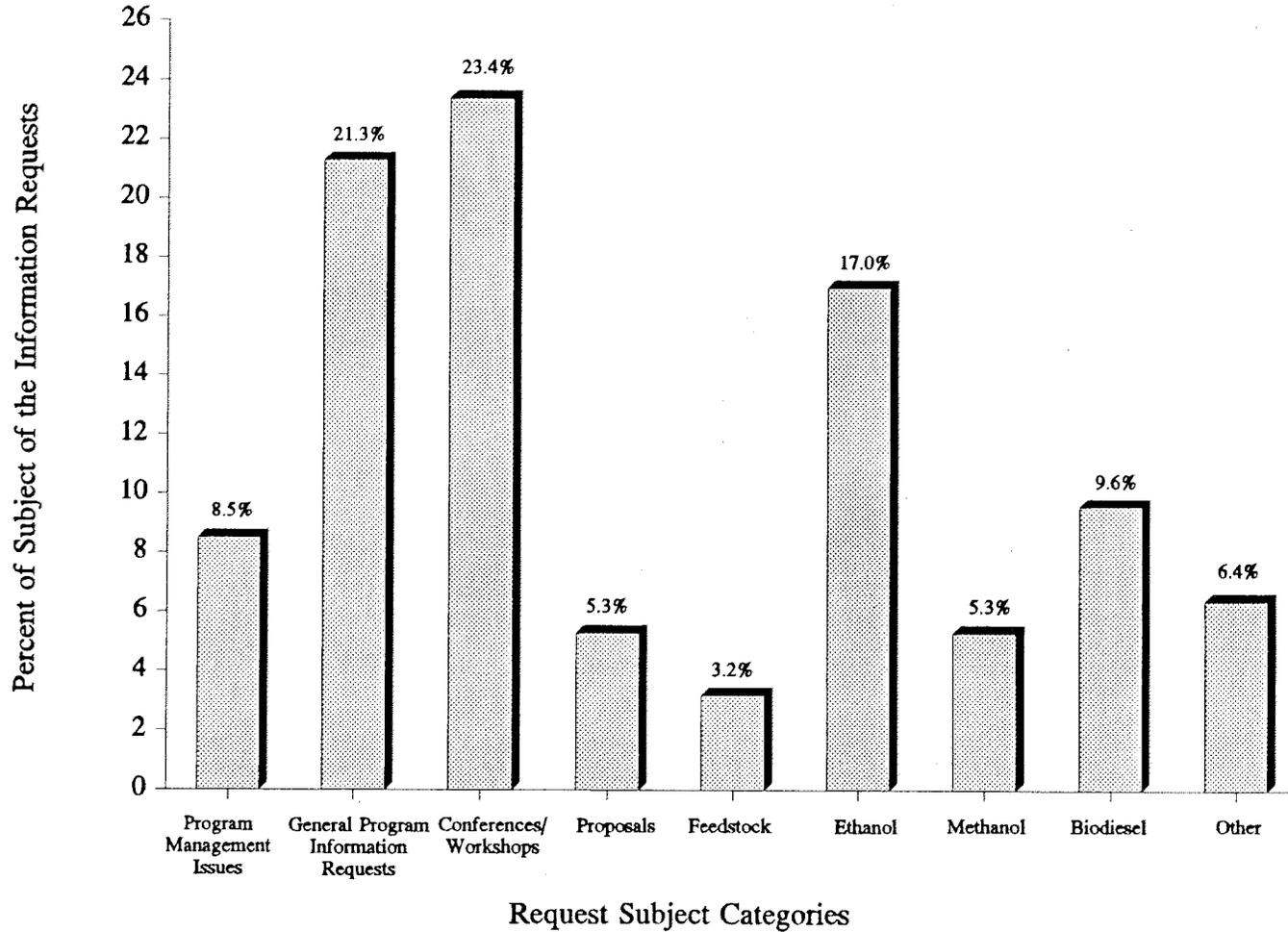
Exhibit 8 presents a cross-tabulation of the request medium and the requesting source to gain an understanding of how information is transmitted to BSD by various requesting sources. As Exhibit 8 shows, excluding requests made by DOE/EE/OTT and Industry, BSD staff received most requests via the telephone. The request medium most frequently used for requests made by DOE/EE/OTT was individual or personal delivery while Industry requests were received primarily via letter transmittal. However, Industry also transmitted a large portion of their information requests by telephone.

Appendix C provides a detailed summary and assessment of the information requests individually received by BSD staff members and their respective general observations as input/output for the frequency/volume analysis.

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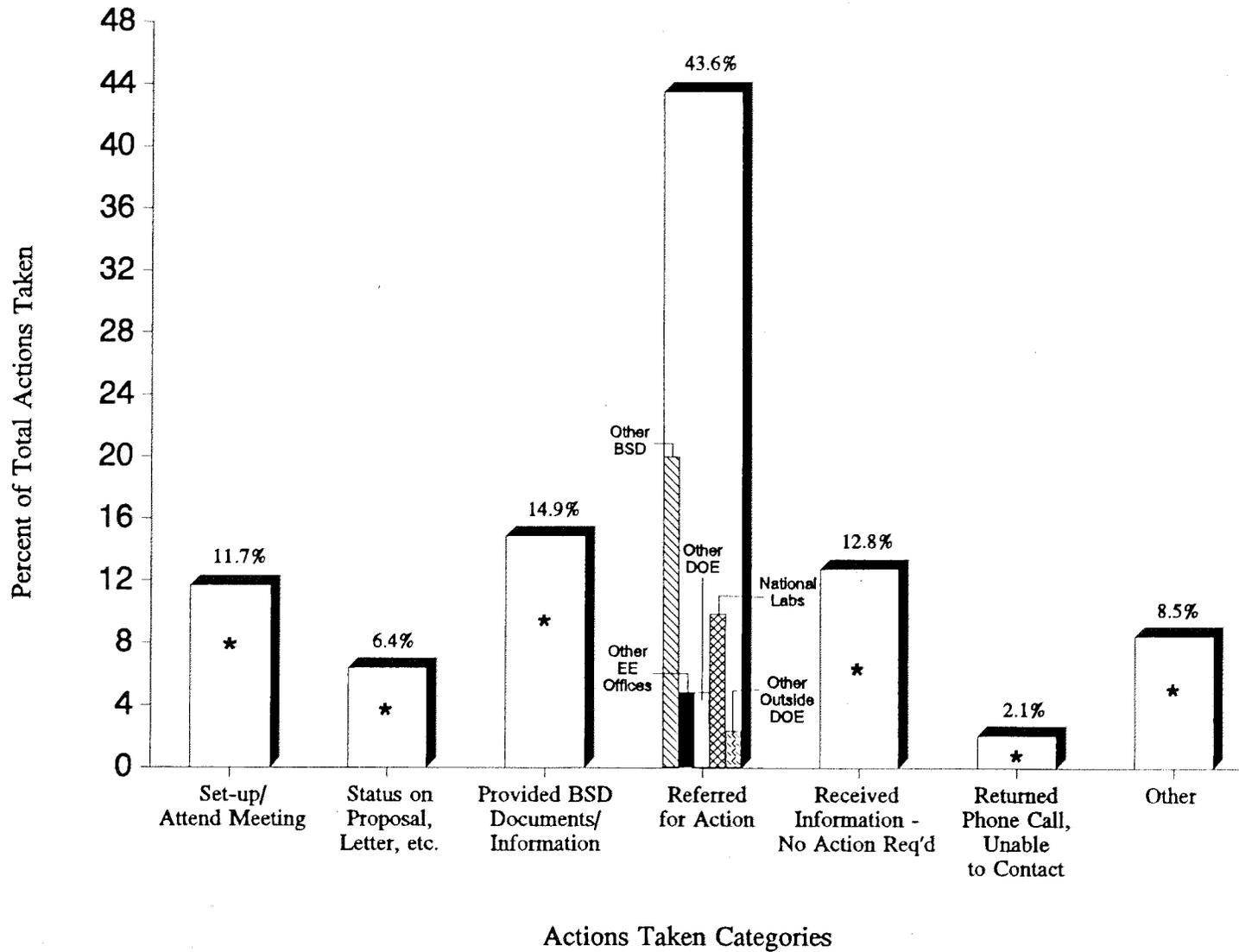
<sup>4</sup> **E-Mail/Phone** and **Letter/Phone** categories represent events when the information request was submitted via more than one medium.

### EXHIBIT 6 SUBJECT OF THE INFORMATION REQUEST\*



\*The subject of the information request categories could not be further divided into meaningful groups.  
NOTE: Total may not equal 100% due to rounding.

## EXHIBIT 7 ACTION TAKEN



\*This category could not be further divided into meaningful groups.  
 NOTE: Total may not equal 100% due to rounding.

**EXHIBIT 8  
CROSS-TABULATION OF INFORMATION REQUEST FLOW  
(REQUEST MEDIUM BY REQUESTING SOURCE)**

Request Medium	Requesting Source																		Grand Total
	DOE/EE		DOE/EE/OTT		Other DOE		Other Government Agencies		National Laboratory		Industry		Trade Association		Consultants		Other		
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	
E-Mail	1	14.3%	1	4.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2
E-Mail/Phone	0	0.0%	3	13.0%	0	0.0%	0	0.0%	1	8.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4
Fax	0	0.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	12.5%	3
Individual	0	0.0%	13	56.5%	0	0.0%	0	0.0%	0	0.0%	2	15.4%	0	0.0%	0	0.0%	0	0.0%	15
Letter	1	14.3%	2	8.7%	1	16.7%	0	0.0%	0	0.0%	6	46.2%	1	11.1%	0	0.0%	5	31.3%	16
Letter/Phone	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	11.1%	0	0.0%	0	0.0%	1
Meeting	0	0.0%	1	4.3%	1	16.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	3
Phone	5	71.4%	3	13.0%	4	66.7%	4	80.0%	11	91.7%	5	38.5%	7	77.8%	2	66.7%	9	56.3%	50
<b>Grand Total</b>	<b>7</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>6</b>	<b>100%</b>	<b>5</b>	<b>100%</b>	<b>12</b>	<b>100%</b>	<b>13</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>3</b>	<b>100%</b>	<b>16</b>	<b>100%</b>	<b>94</b>

NOTE: No. denotes the number of information requests, by respective request medium, for each respective requesting source.

**CHAPTER 4. EVALUATION OF CURRENT ADMINISTRATIVE  
MANAGEMENT PROCEDURES**

This chapter presents the outcome of the analysis of BSD's current information management procedures resulting from the audit of those procedures, records management processes, and lines of communication between external and internal organizations. In addition, interviews were conducted with the BSD staff and their support contractors at the National Renewable Energy Laboratory (NREL) and Oak Ridge National Laboratory (ORNL) to obtain their input on BSD's effectiveness in the following five major areas:

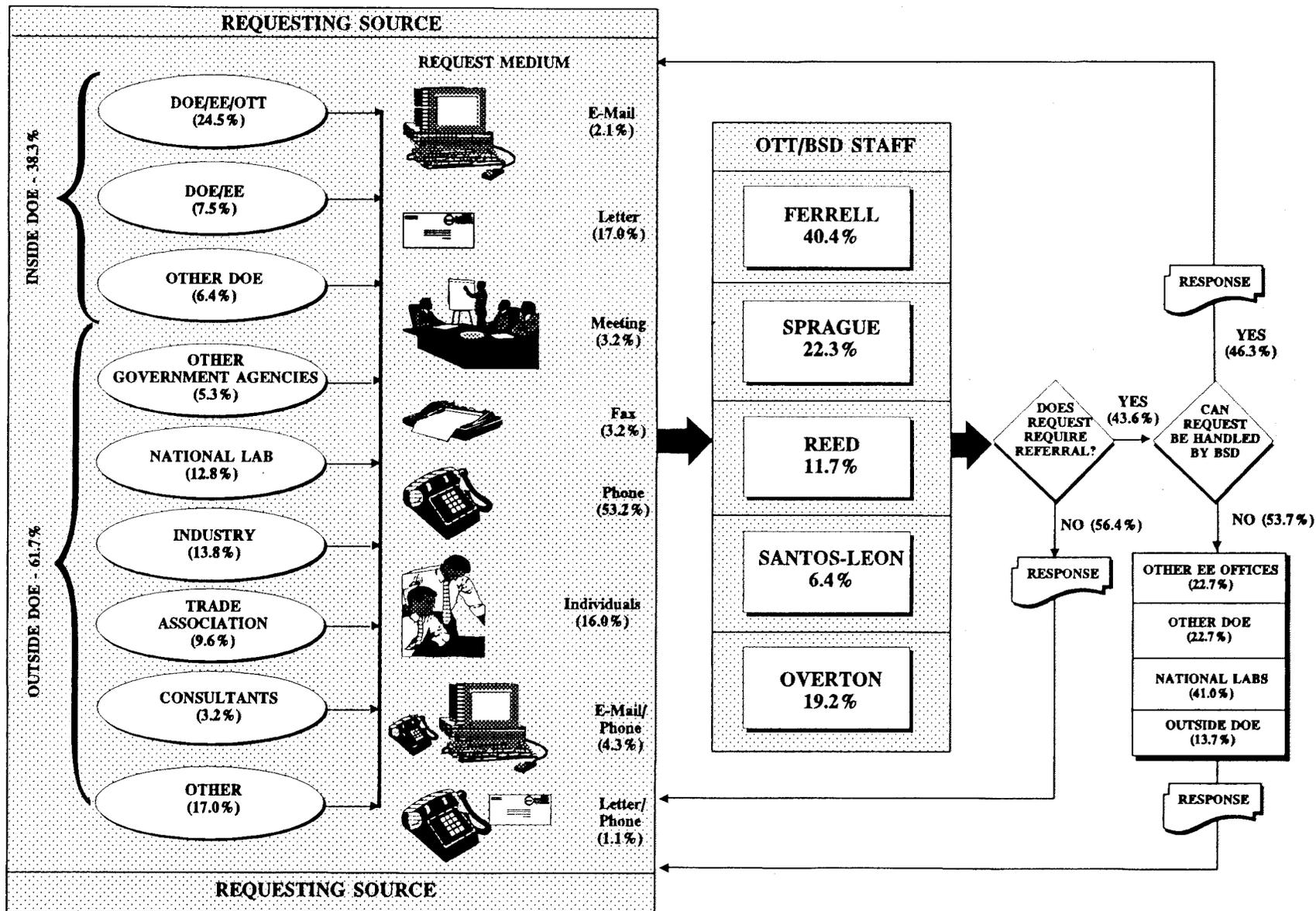
- Planning
- Organizing
- Implementing
- Controlling
- Customer Satisfaction

**4.1 INFORMATION PROCESS FLOW**

The process flow diagram (Exhibit 9) illustrates how information is managed, where information requests are received, the procedures or actions taken to respond to requests, and the complete dissemination process. As the Exhibit shows, information requests either originate within DOE or outside DOE. BSD staff members directly receive information requests through a variety of media. The primary request medium is the telephone with secondary media, individuals and letter, also being well represented. Frequently, requests are received by technical staff and are either answered directly or forwarded to the appropriate staff member or other sources. Conversely, requests received by the BSD secretary are typically forwarded to the appropriate staff member unless it can be handled directly.

As indicated above, the first decision made by BSD staff is whether they have sufficient information to respond to the request or is it necessary to defer the request to someone else. It is important to note that, for this analysis, information requests can either be forwarded to other BSD staff members, other EE offices, other DOE, National Laboratories, or outside DOE. Over 56 percent of the time, the specific BSD staff member has the information necessary to respond and can provide this information directly to the requesting source. This is reflected in the data collected, since approximately 44 percent of the time the request must be forwarded to one of the sources mentioned above. Requests referred to organizations outside BSD accounted for approximately 23 percent of the total information requests collected (or roughly 54 percent of the requests referred). One reason for the large number of referrals is that, the requesting source's point-of-contact within BSD was not necessarily the appropriate staff member. Furthermore, referrals outside BSD were usually the result of misdirected phone calls. These misdirected phone calls were due to incorrect assumptions concerning the requestor's subject (e.g., information related to the DOE/Argonne study).

# EXHIBIT 9 BSD PROGRAM INFORMATION REQUEST PROCESS FLOW



\*BSD Staff percentage break-down reflects number of information requests received during the data collection period.  
NOTE: Totals may not equal 100% du to rounding.

## **4.2 EVALUATION OF INFORMATION MANAGEMENT PROCEDURES**

This section presents the findings from the interviews conducted from July 13 - 29, 1994 with BSD staff, and their support staff at NREL and ORNL, using the questions contained in Exhibit 10. The findings are organized according to the following five areas: planning, organizing, implementing, controlling, and customer satisfaction. A summary of the strengths and weaknesses of current information management practices is also provided at the end of this section.

### **Planning**

BSD staff felt that it is often difficult to plan for or anticipate information requests. However, BSD staff has developed some materials (e.g., factsheets, reports) for frequently-received requests. Most of these materials are available on the local area network (LAN) and some are located in a Questions & Answers (Q&A) file, however, overall file management and organization are lacking. Several suggestions to improve the situation included increased utilization of the information library and development and implementation of file management practices/guidelines. It was noted that there was no tracking of non-controlled correspondences and therefore, only the person responsible for responding knew the course of action taken. Additionally, information activities such as Weekly Highlight reports for the OTT Deputy Assistant Secretary (DAS) receive little feedback concerning the usefulness of the information. A general lack of feedback between BSD and its supporting organizations was also an area of concern.

Most BSD staff members indicated that they were unsure of BSD's level of planning for responding to information requests and/or were not satisfied with the current level. This is especially true for formal information requests (i.e., controlled correspondence). For example, several instances were discussed where BSD staff are given a short period of time (48 hours or less) to respond to a request that other EE Offices may have received some time ago. Thus, it was noted that improved long-range planning and communications within EE, and/or OTT, might allow BSD staff to better anticipate and begin preparation for responding to information requests. It was also suggested that some type of briefing package for new employees be developed.

BSD staff, when asked about the mechanisms in place to evaluate the quality of responses to information requests, indicated that only very subjective impression mechanisms exist (the exceptions are controlled correspondence which are reviewed at the DAS level). In other words, staff members use informal gauges, such as requesting sources' tone of voice and number of times calling, to measure the quality of responses. Consequently, the quality of each response is essentially predicated upon the individual handling the request. There are no Division-developed newsletters to address frequently asked questions (which has been done somewhat at NREL and the Hotline, however, the process could be improved). Likewise, there are no feedback mechanisms to assess or monitor their effectiveness. It was noted that there is a tendency for requesting sources to call repeatedly before receiving the required information (i.e., either their inquiry does not receive a satisfactory response the first time or the response is not

timely). Some additional training for support staff was suggested as a possible way to reduce the number of repeat calls and referrals.

### Organizing

Although areas of responsibility for responding to information requests have not been formally assigned, BSD staff feels that everyone has a clear understanding of their technical areas of responsibility (e.g., CRADAs, Legislation). Most staff members said that there is overlap in their areas of responsibility, although, this does not necessarily present a problem. In fact, it was felt that this redundancy was essential to ensure coverage of information requests for topical issues when all staff members are not present or available. A minority of the interviewees did express some level of uncertainty with the current informal understanding of technical areas of responsibility. Possible improvements would be to define areas where some uncertainty exists. However, no mechanism exists to address this issue (some possible solutions include more detailed organizational/information charts).

Inquiries concerning the use of BSD staff meetings for communication purposes revealed first that, staff meetings are not routine and secondly, when they are held, information requests are not one of the primary topics. The consensus was that staff meetings need to occur more frequently and that better organization must be exhibited. Similarly, information requests were felt to be a topic area that should receive more attention.

BSD staff also reported that there are no formal procedures to make adjustments for responding to information requests when staff members will be away from the office, except for extended absence messages on voice mail, (e.g., vacations, conferences/workshops). As a result, BSD management often will delegate to another staff member the responsibility for responding to information requests. Additionally, it is expected that any staff members having outstanding action items, are either to complete, or make arrangements to complete, these outstanding items before departure. Typically, the process operates on an "ad hoc" basis, and adjustments are made on a resource and time constraint basis. In most instances, this leads to referrals to external BSD support sources, such as the national laboratories and information hotlines.

### Implementing

Most BSD staff members feel that they do have sufficient time to respond to non-action item requests. However, action items such as controlled correspondence -- are typically received by BSD staff just prior to the response deadline. The majority of the time, this is due to various information flow impedances at higher DOE office levels. As a result, when the controlled correspondence finally reaches the BSD Office, several days (and occasionally weeks) may already have elapsed and the deadline may now be only a few days away. Because BSD staff often does not have sufficient time to deal with controlled correspondence information requests, they feel that the quality of their responses often does suffer. They also reported that many requests are inappropriately sent to BSD from other internal DOE sources, because the subject of the request is unclear (e.g., policy questions). For example, several times information

EXHIBIT 10

**INTERVIEW GUIDE FOR THE EVALUATION OF BSD'S  
CURRENT INFORMATION MANAGEMENT PROCEDURES  
(For BSD Staff and National Laboratories)**

**PLANNING**

1. How does BSD plan for or anticipate information requests? (e.g., developing databases, standardized responses for frequently asked questions)
2. Are you satisfied with the level of planning for responding to information requests?
3. Are there any mechanisms in place to evaluate the quality of responses to information requests? If yes, what are they? Are they working as they should be?

**ORGANIZING**

1. Is there a clear delegation of responsibility for responding to requests? Is there any overlap between your areas of responsibility and that of others?
2. Are staff meetings used for communication purposes? If yes, how often are they held? What are some of the topics related to responding to information requests that have been discussed at these meetings?
3. What adjustments are made for responding to information requests when staff members will be away from the office for long periods of time (e.g., vacations, conferences/ workshops)?

**IMPLEMENTING**

1. Do you feel that you have sufficient time to respond to information requests? If no, why not? What suggestions do you have for improving the time it takes to respond to information requests?
2. Do you feel that the deadlines for responding to information requests are realistic?
3. Are you satisfied that you have all of the information (e.g., documentation, policies) needed to respond to information requests? If no, what additional information would be useful?
4. Do procedural manuals exist for responding to information requests? If yes, what do procedural and policy manuals cover?
5. Do you maintain records/files on the actions you have taken in response to information requests? If yes, how are records/files kept on actions taken? How long are records/files kept? Have you experienced any problems in finding records/files of actions you have taken when needed?
6. Are you satisfied with the flow of information between BSD and the OTT/DAS, the other Program Offices within OTT (e.g., joint staff meetings regarding information requests)? If no, what could be done to improve the flow of information?
7. What are the overall strengths and weaknesses of current information processing procedures?

EXHIBIT 10 (Cont'd)

**INTERVIEW GUIDE FOR THE EVALUATION OF BSD'S  
CURRENT INFORMATION MANAGEMENT PROCEDURES  
(For BSD Staff and National Laboratories)**

8. What could be done to improve information management practices (e.g., planning, controlling) in general, and information processing procedures in particular?
9. Are you satisfied with the quality of responses to information requests? If no, what could be done to improve the quality of responses?

**CONTROLLING**

1. Are any mechanisms/procedures in place to ensure that resources are effectively used?
2. Are any mechanisms/procedures in place to compare actual performance with OTT's expectations for responding to information requests? Is feedback provided to employees?
3. Who is responsible for monitoring the quality of responses to information requests to ensure that resources are effectively used; that actual performance matches OTT's expectations?
4. Are memos or bulletins circulated explaining plans and/or procedures for responding to information requests? If yes, is a record/file of memos or bulletins maintained? Who is responsible for maintaining the record/file of memos or bulletins?

**CUSTOMER SATISFACTION**

1. Do you feel that information request customers are satisfied with the timeliness and quality of response? If no, why not?
2. Is there any mechanism for handling customer concerns? If so, is there a defined process for addressing the concerns to ensure that the problem does not occur again? Is there a process in place to track past customer concerns?
3. Is customer satisfaction considered on performance reviews? If no, do you think it should?
4. Do you have any additional comments or suggestions that were not covered?

**Additional Questions (for BSD Staff Only)**

1. When you completed the data collection forms, did the data collected cover all of the request mediums? If no, which ones were left out?
2. Of the request mediums that were recorded, what percentage of each type would you say you captured?
3. Was the data collection period fairly typical or representative of the information requests you receive? Are there any other months of the year that have a higher volume of information requests? If yes, how much greater is the volume of information requests?
4. What is your understanding of the areas you are responsible for responding to (e.g., Energy CRADAs, Legislation, National Laboratories)?

requests have been sent to BSD simply because the word "biofuels" is mentioned, although the overall subject of the request is unrelated to the BSD program.

While BSD staff suggested that they do not always have enough time to respond to information requests, they do feel that they have sufficient information to address these requests. BSD staff typically relies on the use of previously drafted factsheets and other documents to respond to information requests. BSD has many external sources from which information can be "tapped" to fulfill the request. Thus, the lack of centralization was often cited as a hindrance to expediting the request response. One area of particular concern is information concerning policy, both at the agency and program levels, where more guidelines are needed due to the sensitivity of this area. Additionally, more centralized information on topics such as total fuel cycle analyses would also be useful.

BSD staff members also were asked whether procedural/policy manuals exist for responding to information requests. According to the individuals interviewed, procedural/policy manuals do not exist, although there was some indication that some system/manual exists for formal requests (i.e., controlled correspondence). A few BSD staff members commented that a procedural/policy manual for responding to information requests would be useful orientation material for new staff members.

Most BSD staff members do not maintain their own records/files of actions taken in response to information requests, however, controlled correspondence information requests records/files are maintained. This maintenance occurs at the OTT, as well as BSD levels and the records are kept indefinitely. Recording of these action item requests occurs prior to distribution to the appropriate staff member(s). It is the individual's responsibility and/or choice to maintain their own records of actions for information requests, and only a few members actually follow such a process. Likewise, the format for recording and maintaining responses is determined by the individual as is the length of time for which the records are kept. One staff member actually does maintain a log book that dates to their first day of work. It was felt a better system could be developed and should include an improved system of tracking what happens to action items that are "sent up the line." It was also noted that there is no internal tracking system for action items generated within BSD to the national laboratories and contractors.

When asked whether they are satisfied with the flow of information between them and the other Program Offices within OTT, BSD staff felt that the potential exists for much needed improvement in communications among offices. Furthermore, increased communication and connections will be beneficial for all offices; especially in the timeliness and efficiency for handling information requests. Consequently, most BSD staff are not satisfied with the flow of information among BSD, OTT, and other OTT Offices. Work is in progress to improve communications within OTT through such efforts as establishing guidelines for E-mail usage, bulletin boards and weekly staff meetings, as well as regularly-scheduled "all hands" meetings. However, more attention to this issue was felt to be extremely necessary.

BSD staff members provided several suggestions concerning ways to improve information management practices and information processing procedures. First, the development of an

introductory information sheet for new employees would help to expedite the learning curve process especially in handling information requests. This sheet should cover all available internal, as well as national laboratory and other contractor information determined to be appropriate for responding to specific questions. Secondly, a detailed outline/layout of the program(s)/likely questions should be provided to the secretary so that more requests can be handled by the secretary and/or transferred to the most appropriate available staff member. Finally, implementation of a tracking system similar to the pre-existing information processing sheets would help in the management, quality, and timeliness of information flow and requests.

### **Controlling**

BSD staff reported that mechanisms/procedures do not exist to ensure that resources are effectively used. Some individuals feel that the foundation is already in place from which mechanisms/procedures could be developed and implemented. However, the effectiveness of using resources is highly dependent upon the time constraints associated with each information request. Therefore, a standardized mechanism/procedure may not be applicable or useful for all requests.

According to individuals interviewed, mechanisms/procedures used to compare actual performance with OTT's expectations for responding to information requests are non-existent. Likewise, this is typically the case for feedback relating to information request. It was felt that, feedback from information requests are only provided in instances where the request was a controlled correspondence, and then only if the outcome was either largely positive or negative, with the latter being the case more often than not. In general, more feedback at all levels of the information request network was needed.

When asked who is responsible for monitoring the quality of information request responses to ensure that resources are effectively used and that actual performance matches OTT's expectations, BSD staff members were unaware of any monitoring of quality or any clearly defined OTT expectations. Although, there was some suggestion that Directors, Program Managers, and secretaries were responsible for monitoring quality.

BSD staff were asked whether memoranda or bulletins explaining plans and/or procedures for responding to requests are circulated and, if so, are records/files of these memos or bulletins maintained and who is(are) the responsible person(s). Staff commented that DOE has issued directives specifying the format to be used for some documents, specifically, controlled correspondence. Maintaining records relating to controlled correspondence items is the responsibility of the secretaries at the Division and Office level. However, beyond controlled correspondence items, no directives/guidelines exist. It was also reported that information on activities within OTT is provided to BSD staff, as well as all OTT offices, through the dissemination of an OTT Newsletter.

## Customer Satisfaction

Although BSD staff felt that it was rather difficult to assess customer satisfaction with regard to timeliness and quality of information requests, the consensus was that customers appear to be satisfied with BSD responses. This assessment is based predominately on whether customers call back for similar information or to resolve any problems encountered during the initial request. Additionally, some sense of satisfaction can be determined by evaluating the customers tone of voice and, occasionally, verbal acknowledgement of satisfaction. It was noted that very often, customers have been directed to several offices before BSD, and thus, represents an area of opportunity for improvement. Likewise, it was felt the establishment of criteria for areas such as guidelines for funding unsolicited projects could help to alleviate some requesting source frustration.

BSD staff as stated that there are no mechanisms for handling customer concerns nor is there a tracking system for past customer concerns. Consequently, no system exists which will help to avoid future mistakes. It was suggested that some form of tracking system would definitely be useful, especially for new employees.

Most members thought that customer satisfaction should be included on performance reviews both within BSD as well as at the national laboratories that support BSD. Currently, only secretaries are evaluated in this area, and in these evaluations, the focus is more toward telephone etiquette and not necessarily customer satisfaction (i.e., indirectly evaluated for customer satisfaction). It was noted that inclusion of customer satisfaction criteria on performance reviews, should be flexible enough to meet the varying levels of responsibility for BSD members.

Additional comments or suggestions provided by BSD staff members related to improved handling of information requests when individuals are absent, establishing guidelines for responding to policy oriented requests, providing more information to accompany controlled correspondence, facilitating more information exchange between OTT offices at technical and support levels, and getting BSD more involved with customers and/or industry.

The additional questions that were specifically asked of BSD personnel pertain to the data collection effort (refer to Exhibit 10) and are detailed in the previous chapter. These questions related to the data collection period and helped to assess how representative: the data type collected was typical of their activity; the volume of data provided during the period was representative of their workload; and if they provided data on all of the request mediums being studied to ensure that the data provided as accurate a picture as possible.

### 4.3 STRENGTHS AND WEAKNESSES OF INFORMATION MANAGEMENT PRACTICES

BSD's staff felt that the current information management practices benefit from a well-designed and enforced tracking method for formal requests (i.e., controlled correspondence). Another strength, though not specifically mentioned during the interviews, is the staff's ability to produce

relatively high quality responses in the presence of extreme time constraints. Though the members may not have the time to produce as high a quality product as they would like, the lack of negative feedback is the only current proxy to estimate that the responses are of an acceptable or high quality.

The weaknesses of the current information management practices mentioned are the time, resource, and repetitiveness and duplication of efforts which drain time constraints that BSD staff constantly encounter, and all of which affect the quality and timeliness of responses. Additional weaknesses mentioned include: not enough staff meetings, necessity for clearer guidance and information on controlled correspondence requests, providing support staff with required information to respond to requests, and the excessive bureaucratic process of information flow/requests.

**CHAPTER 5. FINDINGS AND RECOMMENDATIONS**

The findings and recommendations presented are the result of a comprehensive exchange of ideas, concerns, issues, and applications focused on the need to develop and implement improvements in current BSD information management practices.

Within the structure of the overall information management assessment, 5 key findings and 23 recommendations are presented for further consideration and action by BSD staff.

**FINDING 1: IMPROVED COMMUNICATION BETWEEN BSD STAFF, OTT, OTHER OFFICES WITHIN EE, AND BSD SUPPORT ORGANIZATIONS, WOULD ENHANCE BSD'S ABILITY TO RESPOND TO INFORMATION REQUESTS.**

- One of the major weaknesses realized during the interviews was that the level of BSD staff communication was not efficient. As an example, staff members, especially the secretary, are not aware of potential information requests resulting from such events as technical staff attendance/presentation at conferences and workshops.
- Increasing the frequency and consistency of BSD meetings (as well as OTT inter-office meetings) would allow for greater insight into upcoming activities directly affecting the BSD program as well as OTT in general. Currently, meetings are held approximately once a month and are not on a consistent schedule.

*Note: These represent one of the few opportunities BSD staff have to share information with one another. Inconsistency of staff meetings, at the program and departmental levels, impedes the flow and exchange of information between BSD and OTT staff -- the result is that information does not get shared.*

- BSD staff felt that the flow of information, as well as general communication, between BSD, OTT/DAS and the other Program Offices within OTT, could be improved. BSD currently feels it is viewed as the "New Kid" of the family since reorganization and is often left out of normal lines-of-communication and events occurring within OTT. Additionally, improved communications between support organizations and BSD as well as between the support organizations themselves need to be established to further enhance the flow of information. As a result of the current system, the feedback at all levels is lacking and typically is only received when negative. The lack of feedback from OTT/DAS level prevents BSD staff from determining the value of the information provided for the weekly highlights reports, quality of information request responses, etc. Additionally, a lack of feedback between BSD and its support organizations is also evident.

- BSD staff are not always aware of R&D/programmatic developments within other DOE Offices. This lack of awareness interferes with their ability to anticipate information requests that might be received from these Offices. Likewise, in several instances, BSD staff members were confronted with questions concerning DOE policy. In these situations, the DOE policy office is supposed to handle such requests, however, they forwarded the request to BSD since the subject matter related to biofuels. Consequently, there needs to be a great deal of improvement in communication and responsibilities between the DOE policy office and BSD (this may need to include OTT).
- In most instances, there was no background information provided with informal requests or controlled correspondence originating at the OTT/DAS level, or higher. This background information may include such details as format for response, type of information sought, requesting source, etc.
- There are some mechanisms, such as newsletters published by BSD support organizations, that can be used by BSD to provide answers to standardized questions and responses. However, commonly asked questions are not currently provided to these mass media mechanisms to try and reduce the volume of information requests handled by BSD.
- In many instances, the computer equipment and skills of BSD staff do not accommodate for the most efficient means of information exchange with support organizations. Enhancing the computer skills of BSD staff would help to improve the flow of information and timeliness of information request responses, especially when external DOE sources (support organizations) are involved in the request handling process.

### RECOMMENDATIONS:

- *BSD technical staff should provide appropriate public releases/papers to BSD support staff before major events such as conferences, initiatives, workshops, process development unit (PDU) ribbon cutting ceremonies, etc.*
- *More BSD, OTT/DAS and OTT program directors, and overall OTT staff meetings need to be held than scheduled with a specific agenda item devoted to discussing issues related to responding to information requests. This will allow for greater communication, flow of information, and participation from the office level down to the program staff levels.*
  - *Encourage BSD staff's input on issues related to information requests in order to set agenda for staff meetings.*
  - *Ensure each program within OTT provides a presentation/overview of current and near-term program activities at quarterly meetings involving*

*all OTT personnel. Highlight each OTT division's activities so that technical and support staff from other divisions better understand what activities are being conducted. This should lead to a reduction in internal OTT misdirected phone calls and correspondence.*

- *Develop more detailed areas of responsibility within each division to assist BSD staff, and eventually all OTT divisions, in redirecting information requests to the appropriate technical areas and disseminate/update at division staff meetings.*

■ *Feedback mechanisms are needed between BSD and its support organizations. In addition, feedback mechanisms (informing BSD staff of what is done with information forwarded to other DOE personnel) need to be established so that the OTT/DAS office can provide evaluations to all programs of various information request responses (both formal and informal requests) and illustrate to OTT division personnel the value of committing limited resources to weekly highlight reports.*

- *Need to develop quality tracking and measurement system which ranks relative importance of factors such as timeliness, whether appropriate standardized materials were available to assist in maintaining quality, appropriate resource availability, etc.*
- *Ensure that BSD and support organizations adopt and adhere to quality tracking and measurement systems and incorporate feedback mechanisms within the operational structure of BSD. Institution of feedback mechanisms should be incorporated into future BSD strategic planning efforts.*
- *Feedback to divisions should provide details on what was done with information sent up the line and whether the information was in the appropriate format.*
- *After developing a quality feedback system for BSD and its support organizations, results should be presented to OTT/DAS to encourage system adoption.*

■ *To improve the flow of information between BSD and other Offices within EE, weekly activity reports, compiled at the OTT/DAS level, could be consolidated into a monthly progress report and distributed to other components of EE. These EE components should also be encouraged to compile and distribute parallel monthly reports to OTT and its counterparts.*

- *Informal meetings/gatherings (e.g., Technology Clubs) would also facilitate the sharing of information between BSD, OTT/DAS and other Offices within EE.*
- *Establish/improve lines-of-communication between BSD and the DOE policy office. Subsequently, develop and implement guidelines/procedures for handling policy oriented questions by BSD and OTT staff. BSD and OTT should, internally, develop similar guidelines for handling requests that are directly sent to their offices (as opposed to being sent "down" from policy).*
- *Develop an attachment sheet which details background information relating to the respective information request (needed more for formal requests coming down from OTT and higher levels). This information would include such things as requesting source, format, types of information sought, etc. Encourage OTT/DAS and others to initiate the use of such information sheets.*
- *Incorporate the use of pre-existing and planned publications for developing standardized responses. Both the questions and responses could then be included in the publication, thereby potentially reducing the volume of information requests handled by BSD. Furthermore, requesting sources can be referenced to such publications to obtain the answers to their questions as well as other information that might be pertinent to their needs.*
- *Conduct a detailed evaluation of the current software and computer systems used by BSD and their support organizations to determine compatibility across all organizations. Determine the most cost-effective and efficient means of standardizing information and analytical systems' utilization for the BSD program (to include all support organizations) and work towards adopting such measures. Furthermore, encourage BSD staff participation in DOE offered/sponsored courses which enhance personal computer skills, especially in the areas of spreadsheet and electronic communications software.*

## **FINDING 2: LACK OF WRITTEN INFORMATION MANAGEMENT PROCEDURES**

- There exists a lack of written information on the delegation of technical areas of responsibility which results in a plethora of misdirected phone calls to BSD by DOE operators and/or other DOE personnel.

*Note: The frequency/volume analysis of information requests also showed that, of the referrals outside BSD, over 45 percent of requests were referred to either Other EE Offices or Other DOE Offices. This was due primarily, if not entirely, to misdirected phone calls.*

- Likewise, a lack of written information on the technical areas of responsibility external to DOE results in several misdirected phone calls to BSD, and DOE as a whole, which would be better addressed by other government agencies (e.g., USDA, DOT). Furthermore, this information is not provided to BSD support staff who would be able to refer a caller to the appropriate agency, thereby reducing the number of internal BSD referrals.
- Very little guidance exists relating to BSD information management policy/procedures. This lack of guidance extends beyond BSD to include support organizations, such as national laboratories. Additionally, the lack of an information request priority hierarchy between BSD and support organizations may lead to inefficient utilization of limited resources.
- There is no "OTT Standard" for responding to information requests which, therefore, prevents evaluations of quality and performance of the responsible division. Development of such guidelines would help to alleviate potential negative feedback from customers (increased customer satisfaction) and OTT/DAS or EE.
- The lack of written guidance on information requests relating to specific topics, such as funding for unsolicited projects, leads to an unnecessary amount of repeat phone calls by requesting sources.
- Currently, new employees must learn the techniques and guidelines for responding to information requests via trial-and-error or through direct conversations with experienced staff. This also holds true for locating the necessary information. Likewise, BSD support organizations may not be aware of new developments and standards for responses and thus, may be less effective at assisting BSD in the area of information requests.
- A strong need was demonstrated for a system which assists BSD staff in recording and maintaining information request files. These records could be used as references for future information requests which should reduce the typical time, resource, and potential duplication of effort necessary for providing responses.

### RECOMMENDATIONS:

- *Develop a document that outlines BSD staff member technical areas of responsibility which also would include written procedures specifying BSD/OTT document format for responding to various information requests (controlled and noncontrolled).*
  - *Establish formal procedures for delegating responsibility in responding to information requests when staff members will be away from the Office*

*for extended periods of time. After areas of responsibility are defined, compile a list arranged alphabetically by areas of responsibility which should be distributed to all BSD staff (especially BSD new hires) and most importantly, to those areas where misdirected phone calls originate (e.g., DOE operators; other EE offices; industry networks). Additionally, this distribution list should also be provided to all BSD support organizations and should include relevant support organizational contacts for internal use only.*

- *Develop and distribute a listing of other relevant government agencies, and specific points of contact within these agencies which handle technical areas similar or akin to those under BSD (and possibly other divisions within OTT), should be developed and distributed to BSD technical staff and especially to BSD support staff and organizations. This will help BSD staff in forwarding certain information requests to the appropriate individuals in other government agencies as well as potentially alleviating a portion of the problems relating to misdirected phone calls.*
- *BSD should provide guidance to external DOE organizations, specifically to support and national laboratory contractors, in order to establish a hierarchical system for responding to information requests. This will lead to more efficient utilization of limited resources while simultaneously improving the timeliness of responses.*
- *Encourage OTT/DAS to develop the "OTT Standard" that is to be used when responding to information requests. Without a set of guidelines, there is nothing from which actual performance can be measured. The standard should emphasize a general philosophy while providing concrete examples and means by which performance will be measured.*
- *Develop BSD guidelines on areas such as funding criteria for unsolicited projects. Likewise, tracking of information request repeat phone calls may result in identification of other areas where written guidance is needed.*
- *Develop a new employee briefing package. This package would include many of the recommendations described in this report, guidelines that new employees are expected to follow when handling information requests, and checklists for quality control. Additionally, these briefing packages should be sent to BSD support organizations for their internal use.*
- *Encourage the continued use of data collection forms, notebooks and checklists developed for this information management assessment. This will serve as a tracking system for information requests (as previously recommended).*

**FINDING 3: THE DEVELOPMENT AND IMPLEMENTATION OF FILE MANAGEMENT PROCEDURES AND STANDARDIZED RESPONSES FOR FREQUENTLY RECEIVED INFORMATION REQUESTS WOULD ASSIST BSD IN PLANNING FOR, OR ANTICIPATING REQUESTS.**

- Factsheets and reports have been developed by BSD staff for previous information requests. However, the location of these materials is not centralized and therefore, BSD staff often cannot find the pre-existing files and have to redevelop similar documents. Likewise, factsheets and quick response information developed by national laboratories and support contractors are not widely shared/known between these BSD support organizations. It is important to note that, although standardized responses can be developed for frequently asked questions, there will still be the need to tailor the standardized response to meet specific information requests.

*Note: The frequency/volume analysis of information requests showed that approximately 23 percent of requests are referred outside BSD, primarily to national laboratories.*

- BSD support organizations also maintain database systems that are available to BSD staff. However, the current location of off-site information (and lack of on-line access) may tend to impede the timeliness of the request and/or BSD's accessibility (e.g., due to lack of knowledge about existence of off-site informational databases, especially new employees). Developing a system to collect and locate within BSD's Office all available data/materials for responding to information requests would reduce some of the referrals to national laboratories and/or information hotlines. This would reduce the number of individuals handling a request and could increase BSD's ability to meet deadlines.

**RECOMMENDATIONS:**

- *A binder/notebook containing standardized responses could be maintained by the BSD secretary. This could assist in providing coverage when individuals are away on travel thereby providing a mechanism to curtail referrals, while creating a resource tool so that staff are cognizant of events in other program areas. In circumstances where customizing the response is necessary, standardization and centralization help to provide files containing fundamental information that is fairly generic to a wide array of requests.*
- *Send 2 copies of each response - 1 copy for centralized binder system that includes weekly and monthly reports; the other copy goes to the technical person responsible for the area of concern.*

- *Additional copies of each response should be sent to BSD support organizations so that these organizations can start handling some of the more standardized information requests.*
- *Facilitate greater sharing of information between national laboratories and support contractors to increase system efficiency, quality, and reduce duplication and response time. Develop and disseminate to BSD staff and support contractors a list of readily available information. This could be included as an activity and in quarterly discussions.*
- *The development and implementation of file management procedures and manual would assist BSD staff and BSD support organizations in planning for, anticipating, and responding to the same information requests. These procedures would ensure that all staff members have access to the same information and would reduce the number of duplicative responses and/or individuals involved in addressing a given request.*
- *A detailed evaluation needs to be performed to determine what pre-existing standardized responses should be included in the centralized file management system.*
- *Once file management procedures are established, maintenance and upkeep of the system's information needs must be clearly established for each BSD staff member to ensure its efficient operation.*

**FINDING 4: LONG-TERM PLANNING WOULD ENHANCE BSD'S ABILITY TO RESPOND TO INFORMATION REQUESTS.**

- A planning/control system is lacking that anticipates information requests that may originate from OTT or from other Offices within EE.
- A detailed analysis needs to be performed to determine what information would be most useful to BSD staff. Periodic reviews should be conducted to identify any additional items of information that would be useful in responding to multifaceted information requests.
- Similar types of information requests occur every year (e.g., seasonal such as budget requests) which should provide the basis for advanced planning.

**RECOMMENDATIONS:**

- *Increase planning/coordination between other EE Offices, the Offices directly supporting EE's Assistant Secretary (e.g., OPA, OMR), OTT/DAS, BSD, and the national laboratories.*

- *BSD needs to work with OTT to determine those requests that normally require a quick turn-around and to obtain a better understanding of upcoming information request requirements.*
  
- *Develop, within BSD, a system that keeps track of when events associated with information requests will occur (e.g., hearing exercises; first draft of budgets; major meetings). One possible way to address these events, is to include them in a "BSD Calendar of Events." Exhibit 11 represents a proposed Calendar of Events matrix and Exhibit 12 presents a standard DOE budget time schedule.*
  
- *Start a catalogue which tracks the date which internal memos/requests (controlled correspondence) are received and the response due date to try and identify where impedance(s) in information flow occurs. Encourage DAS level to do the same so that information flow is more efficient and the customer will receive a higher quality response. This tracking system should be extended to include the number of misdirected phone calls so that this problem can be identified and alleviated. Likewise, a better understanding of information request subject areas should assist in developing and anticipating information requests.*
  
- *Set-up an informal information request tracking system similar to that described above. Establish procedures for responding to requests as well as quality control guidelines to ensure highest quality possible.*
  
- *Ensure information management topics receive the appropriate level of attention as part of the program management (Goal 2) and the analytical needs (Goal 3) portions of the BSD Strategic Plan. Discuss and develop standardized responses for upcoming and corresponding information request/needs which would then be located on centralized systems.*

**FINDING 5: LACK OF CUSTOMER SATISFACTION ASSESSMENT METHODOLOGIES**

- Current tools and methods for evaluating and measuring customer satisfaction resulting from information request responses are severely lacking. Likewise, there are no mechanisms for avoiding recurring customer dissatisfaction.
  
- Most BSD staff members are not evaluated on customer satisfaction. Since reward systems such as salary raises are not generally tied to customer satisfaction evaluations, this area may not receive the necessary attention. Additionally, if customers are not satisfied with the assistance received, there are no pre-existing internal BSD mechanisms that can be utilized to guarantee that similar problems do not occur in the future.

EXHIBIT 11  
CALENDAR OF EVENTS

Activity	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct (Fiscal Year)
<b>1. Budget Cycle</b>												
<ul style="list-style-type: none"> <li>● Spring Planning Projection</li> <li>● Budget Formulation/ Internal Review</li> <li>● DOE Internal Review</li> <li>● DOE Passback/Formulation of OMB Budget</li> <li>● Preparation/Transmittal of 1st Line OMB Budget Backup</li> <li>● OMB Hearings/Q&amp;A</li> <li>● Past OMB Review/Appeal</li> <li>● Input-Congressional Budget/Backup</li> <li>● Defense of Budget Before Congress</li> </ul>	—	—		—	—	—	—		—	—	—	—
<b>2. Multi Year Plan Development / Finalization</b>			—	—	—	—						
<b>3. Annual Operating Plan Development /Finalization</b>						—	—	—	—			
<b>4. President's Budget Guidance to Labs</b>				—								

EXHIBIT 12  
SAMPLE DOE BUDGET TIME SCHEDULE

MONTH	BUDGET YEAR + 1 (198Y + 1)	BUDGET YEAR (198Y)	CURRENT YEAR (19CY)
January	Begin the Budget Year preparation in 198Y+1 with program guidance from Headquarters in January.	① Transmits Budget Request to Congress including updated authorization bill.	
February	Controller issues Budget Call and guidance (e.g., budget structure, environmental, lab, escalation rates, etc.) to field.	Transmits to field amounts in President's Budget. Authorization hearings.	
March		Authorization hearings. Appropriation Committee hearings.	
April		Appropriation Committee hearings. Congress Budget Committee submits Report. 1st Concurrent Resolution by Congress.	
May	Field office submits Budget Estimates to Headquarters May 15. Authorization legislation for Budget Year + 1 due to Congress.	Authorization legislation due from Committee.	
June	AS's and program divisions review field budget submissions. Controller issues Call for Internal Review Budget.	Authorization Bill passed by Congress and signed by President.	
July	Budget Estimates due from divisions July 15.		
August	OC prepares Program Budget Issue Documents (PBIDs) for BRC Review. BRC Review.		
September	Administrator's Review and Approval. Current Services Budget due to OMB. Preparation and submission of approved Budget Request to OMB.	Offices submit financial plan request to Controller. Congress completes action on Bills; signed by President. Appropriation Request submitted to OMB.	
		On October 1, the 198Y+1 Budget becomes the 198Y Budget.	On October 1, the 198Y Budget becomes the 19CY Budget.
October		OMB hearings of Budget.	Initial financial plans and allotments issued to field. Appropriation of funds by OMB.
November		President submits Current Services Budget to Congress. OMB review and approval.	Post appropriation financial plans and allotments issued to field. End Budget Formulation.
December		President's final concurrence. Preparation of Budget to Congress.	Begin Budget Execution phase.

**RECOMMENDATIONS:**

- *Develop and implement criteria, survey questionnaires, and customer satisfaction assessment capabilities (metrics) which will be used to measure customer satisfaction as it relates to information request responses. The criteria should be flexible enough to accommodate for the varying levels of responsibility among BSD staff members (which is especially true for technical versus support staff). Surveys can be conducted via questionnaire and on a specified time schedule such as quarterly, semi-annually, or annually. Using the tracking system for both informal and formal information requests (listed in previous recommendation), BSD has a detailed listing of phone numbers, names, and addresses of requesting sources. Therefore, survey questionnaires could be easily developed, implemented, and distributed to either a sampling or all requesting sources.*
  
- *Develop and maintain a list that will provide a mechanism for avoiding potential repeat customer satisfaction problems. An example is where one BSD staff member may not have known that BSD does not have a freedom of information officer (FOIA). The requesting source was forwarded to another BSD staff member who informed the person that, in fact, BSD does not have a FOIA officer which resulted in some level of customer dissatisfaction. While this situation can not be avoided the first time an unusual inquiry is received, there needs to be a system to reduce the chances of it happening again.*
  
- *Based on the customer satisfaction assessment criteria and actual evaluations, BSD staff performance reviews could include an evaluation of their performance in this area. Each individual would be evaluated based on pre-determined criteria relevant to their respective position. This flexibility in criteria should allow for fair and equitable evaluations based on varying levels of responsibility for all staff members.*

Overall, it was found that the BSD Office performs adequately, given current operating constraints. Due to some of these current operating restrictions, time has not been available to institute more comprehensive planning, organizing, controlling, and implementing mechanisms for responding to information requests. While there are some mechanisms that can improve the current process, the full effectiveness of these mechanisms to reduce "fire-drills" is constrained by outside factors that require the cooperation of other Offices within DOE, especially EE. However, there are several areas of improvement that can be incorporated into BSD's information management and response network. As a result of implementing the previously mentioned recommendations, the BSD program should realize an increase in quality and ability to meet information requests through anticipation and standardization. Likewise, a more efficient system should reduce technical staff's time requirements for handling information requests (especially if a combination of a reduction in misdirected information requests and increased support staff handling capability are realized), thereby allowing time for new

information coordination/dissemination efforts of importance to the program by technical staff members. Consequently, these recommendations build upon BSD's strengths while reducing their current weaknesses, thereby alleviating many of the current problems.

**NEXT STEPS:**

The next steps toward enhancing the current information management practices of the BSD program would be to assess the recommendations and choose the ones that appear to provide the greatest improvements. Subsequently, BSD would have to develop implementation plans and allocate resources to ensure proper administration. Similarly, the chosen recommendations and implementation plans should be incorporated into the national laboratory annual operating plans so that supporting organizations are operating under the same guidelines as BSD.

**APPENDIX A**

**CONSOLIDATED INFORMATION FROM  
ALL BSD DATA COLLECTION FORMS**

Record #	Requesting Source	Subject of Request	BSD Staff Receiving Request	Geographic Sector (Domestic)	Request Medium	Date Request Made	Request Handling				Action Taken
							Biofuels Systems Division	Other DOE	National Laboratory	Information Hotline	
1	DOE/EE/OTT/DAS Moorer	Fuel cycle evaluations of biomass ethanol and reformulated gasoline	J. Ferrell	Yes	E-Mail	6-Apr-94	.				Referred for action - BSD Staff (Reed)
2	DOE/EE/OTT/OAF Hudson	Request for training (V. Reed) to attend Program Management Overview May 2-6, 1994	J. Ferrell	Yes	Letter	18-Apr-94	.				Other - Approved Request
3	ORNL Janet Cushman	Letter of support for promotion for Leny Tusken	J. Ferrell	Yes	E-Mail/Phone	18-Apr-94	.				Other - Will provide letter
4	Union Concerned Scientists Eric Denzler	Review of repowering Midwest Report by Union of Concerned Scientists	J. Ferrell	Yes	Letter/Phone	18-Apr-94	.				Referred for action - ORNL Lynn Wright
5	Idaho Operations Office (DOE) Bill Thielbahr	Continuous Quality Improvement: Recommendations to improve OTT's Organizational Effectiveness	J. Ferrell	Yes	Meeting	18-Apr-94	.				Referred for action - BSD Staff (Costello)
6	DOE/EE/OTT/BSD Costello	Continuous Quality Improvement: Recommendations to improve OTT's Organizational Effectiveness	J. Ferrell	Yes	Individual	18-Apr-94	.				Other - Copy for staff/ Discuss at next office meeting
7	Long, Aldredge & Norman Jack Watson, Jr.	CESC/DOE meeting 4/28/94 in Birmingham, AL	J. Ferrell	Yes	Letter	18-Apr-94	.				Referred for action - BSD Staff (Sprague and Overton)
8	ORNL Mark Downing	RE: American Corn Growers proposed SOW	J. Ferrell	Yes	Phone	18-Apr-94	.				Returned phone call - modified proposal
9	Sucron Jon Freeman	Controlled Correspondence	J. Ferrell	Yes	Letter	18-Apr-94	.				Referred for action - BSD Staff (Santos-Leon)
10	DOE/EE/OTT/DAS Moorer	Amoco CRADA - provisions -- Amoco departs then no intellectual properties from CRADA allowed to go.	J. Ferrell	Yes	Phone	19-Apr-94	.				Received information - no action required
11	NREL Helena Chun	Request: "Heads Up" Bob Meglan (Modeler) foreign trip to New Zealand	J. Ferrell	Yes	Phone	19-Apr-94	.				Other - Discuss with R. Moorer

Record #	Requesting Source	Subject of Request	BSD Staff Receiving Request	Geographic Sector (Domestic)	Request Medium	Date Request Made	Request Handling				Action Taken
							Biofuels Systems Division	Other DOE	National Laboratory	Information Hotline	
12	NREL Ralph Overend	Roundtable RE: Marika Tatsutani (NRDC), differences with R. Overend on Climate Change wording	J. Ferrell	Yes	Phone			.		Referred for action - Ralph Overend	
13	CESC Kyle Michel	Logistics: Night in Birmingham Response of letter/support	J. Ferrell	Yes	Phone	20-Apr-94	.			Referred for action - BSD Staff (Overton)	
14	DOE/EI Howard Walton	Wood Energy Data Conference	J. Ferrell	Yes	Letter			.		Referred for action - ORNL/NREL	
15	DEO/EE/OTT/DAS Nancy Meyers	GS-11 Position, personnel called/notice canceled	J. Ferrell	Yes	Phone	17-Apr-94	.			Received information - no action required	
16	DOE/EE/AS - Golden Office Jerry Allsup	Field work proposal EFWBF42, Biofuels - comment	J. Ferrell	Yes	Letter	18-Apr-94	.			Received information - no action required	
17	NREL Ralph Overend	Advise regarding distribution of RT document to Hill/Staff	J. Ferrell	Yes	Phone	20-Apr-94	.			Referred for action - BSD Staff (Overton)	
18	DOE/EE/OTFA Mike Vorhees	Theresa Thomas Iowa Workshop (28th Workshop) - Switchgrass pubs needed	J. Ferrell	Yes	Phone	22-Apr-94		.		Referred for action - ORNL/NREL call Theresa	
19	DOE/EE/AS/OMR Barbara Coalgate	TQM projects in OTT. V. Reed is compiling table, part of EE Ad Hoc Committee on Quality	J. Ferrell	Yes	E-Mail	22-Apr-94	.			Referred for action - BSD Staff (Reed)	
20	DOE/EE/OTT/DAS Ann Hegnauer	Ag related program, Biodiesel expert - Argonne Meeting	J. Ferrell	Yes	E-Mail/Phone	22-Apr-94	.			Set-up/attend meeting	
21	DOE/EE/OTT/DAS Ann Hegnauer	Ag related program, Biodiesel expert - Argonne Meeting	J. Ferrell	Yes	E-Mail/Phone	22-Apr-94	.			Other - Developing talking points for C. Ervins	
22	Consortium for Plant Biotechnology Research Dorin Schimacher	Various topics funding for FY95-96 and meetings with Biomass power, Alternative feedstocks, and Bob Rabson OER	J. Ferrell	Yes	Phone	25-Apr-94	.			Received information - no action required	
23	NLH Ag University of Norway Dr. Jack Boe	Biodiesel: Plants producing 500,000 - 1,000,000 L/year. Response attached.	J. Ferrell	No	Fax	25-Apr-94	.			Referred for action - BSD Staff (Overton)	

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Record #	Requesting Source	Subject of Request	BSD Staff Receiving Request	Geographic Sector (Domestic)	Request Medium	Date Request Made	Request Handling				Action Taken
							Biofuels Systems Division	Other DOE	National Laboratory	Information Hotline	
24	DOE/EE/OTT/DAS Moorer	USDA Research meeting in PA June 1-2. USDA would like a presentation in Biofuels	J. Ferrell	Yes	E-Mail/Phone	2-May-94	.				Set-up/attend meeting
25	Consortium for Plant Biotechnology Research Jane Smith	Wanted to know DOE representative at Energy from Biomass Project Selection meeting	J. Ferrell	Yes	Phone		.				Referred for action - BSD Staff (Reed)
26	EPRI Jane Turnbull	American Farm Publication: Discussed paying for publication @ EPRI; she finally did	J. Ferrell	Yes	Phone	2-May-94	.				Status on proposal, letter, etc
27	Inside EPA Report Don Bilson	North Carolina - Biomass to Methanol Project	J. Ferrell	Yes	Phone	3-May-94	.				Returned phone call - provide information
28	ORNL Chuck Scott	Chuck Scott proposal for additional funding	J. Ferrell	Yes	Phone	4-May-94	.				Referred for action - BSD Staff (Sprague)
29	USDA/ARS Lamar Harris	Philadelphia meeting/June 1-2/Overview Biofuels, USDA meeting, Workshop	J. Ferrell	Yes	Phone	4-May-94	.				Set-up/attend meeting
30	Consultant Steve McCrae	Marine Applications of Biofuels	J. Ferrell	Yes	Phone	3-May-94	.				Referred for action - BSD Staff (Sprague)
31	DOE/EE/OIT Linda Schilling	Standards work with NIST/NREL Deputy Secretary's Office wants to find out about and support effort	J. Ferrell	Yes	Phone		.				Other - informal discussion providing information
32	USDA/ARS Steve Fearheller	Biofuels Conference	J. Ferrell	Yes	Fax	5-May-94	.				Set-up/attend meeting
33	IEA Operating Agent Louis Zsuffa	Recommendations for Activity Leaders	J. Ferrell	No	Fax	10-May-94	.				Other - fax back recommendations
34	Wichita Eagle Newspaper Tom Webb	Switchgrass in Kansas	J. Ferrell	Yes	Phone	10-May-94	.				Returned phone call, unable to contact - left message
35	USDA/SCS Theiyle Robertson	Discussed USDA/SCS "initiatives" for FY96	J. Ferrell	Yes	Phone	11-May-94	.				Returned phone call, unable to contact

Record #	Requesting Source	Subject of Request	BSD Staff Receiving Request	Geographic Sector (Domestic)	Request Medium	Date Request Made	Request Handling				Action Taken
							Biofuels Systems Division	Other DOE	National Laboratory	Information Hotline	
36	DOE/EE/OTT/BSO Overton	Need Info RE: Wind Power Biomass	J. Ferrell	Yes	Individual		.			Referred for action - EE Offices [M. Reed (Biopower)]	
37	DOE/EE/OTT/BSO Overton	Landfill gases for alternative fuel vehicles	J. Ferrell	Yes	Phone			.		Referred for action - NREL Barbara Goodman	
38	International Paris Tribune Noni Brown/Laura Colby	Biofuels - articles	J. Ferrell	No	Phone	12-May-94	.			Other - Sending copy of article to appear next week	
39	Private citizen Herold Albemarle	Garbage-to-ethanol	S. Sprague	Yes	Letter	15-Apr-94	.			Other - letter response directly	
40	Private citizen Herold Albemarle	Garbage-to-ethanol	S. Sprague	Yes	Letter	15-Apr-94			.	Referred for action - Outside DOE [NAFH (Hotline)/NATAS]	
41	DOE/EE/OTFA Mike Vorhees	Information/Contacts on switchgrass for Iowa Workshop	S. Sprague	Yes	Phone	22-Apr-94	.			Received information - no action required (L. Wright ORNL will attend workshop)	
42	Private citizen Ken and Pat Tergerson	Benefits of ethanol vs. petroleum (controlled correspondence to Sec. O'Leary)	S. Sprague	Yes	Letter	3-May-94	.			Provided BSD documents; letter response	
43	DOE/OEB Bob Rabson	Contact for pulp/paper in EE	S. Sprague	Yes	Phone	9-May-94	.			Returned phone call - provided information	
44	NREL Dianne Koepping	Status of proprietary-limited data rights determination for Costello's 's' of Stone & Webster	S. Sprague	Yes	Phone	9-May-94	.			Other - completed satisfactorily Status proposal, letter, etc.	
45	Holland & Hart Mary Alford	May 5 EPA Clean Air Report mentions DOE Mar94 analysis RFG/Alternative Fuels	S. Sprague	Yes	Phone	9-May-94		.		Referred for action - Other DOE (McNutt/Policy)	
46	Consultant Steve McCrae	Marine Applications of Biofuels	S. Sprague	Yes	Meeting	9-May-94			.	Referred for action - Outside DOE (NSDTB)	

Record #	Requesting Source	Subject of Request	BSD Staff Receiving Request	Geographic Sector (Domestic)	Request Medium	Date Request Made	Request Handling				Action Taken
							Biofuels Systems Division	Other DOE	National Laboratory	Information Hotline	
47	Engine Fuels Emissions Lithnian Chan	Writing paper, wanted information/papers on all aspects of biodiesel, utilization - emissions	S. Sprague	Yes	Individual	17-May-94					Referred for action - Outside DOE [NAFH (Hotline)NATAS]
48	Engine Fuels Emissions Lithnian Chan	Writing paper, wanted information/papers on all aspects of biodiesel, utilization - emissions	S. Sprague	Yes	Individual	17-May-94	.				Received information - no action required
49	CM Brice & Associates, Ltd. Christopher Brice	Ethanol plants - construction loans, grants	S. Sprague	Yes	Phone	20-May-94	.				Received information no action required
50	American Plywood Assoc. Mark Halverson	Options for Association to recycle wood wastes from job sites, also manufacturing sites to reduce landfilling, etc.	S. Sprague	Yes	Phone	25-May-94			.		Referred for action - National Lab (NREL)
51	Private citizen Herman Wefelmeyer	Wood waste-to-ethanol; use of vacuum removal of ethanol as formed, confirm thru pilot runs	S. Sprague	Yes	Letter	20-May-94			.		Referred for action - National Lab (ORNL)
52	Private citizen Herman Wefelmeyer	Wood waste-to-ethanol; use of vacuum removal of ethanol as formed, confirm thru pilot runs	S. Sprague	Yes	Phone	20-May-94	.				Other - Discussed by telephone Provided information
53	USDA Gene Short	Role of ethanol in RFG Report	S. Sprague	Yes	Phone	27-May-94		.			Referred for action - Other DOE (McNutt/Policy)
54	Private citizen Herschel Vineyard	Turpentine; turpentine-to-ethanol; Naval stores; pulp and paper industry	S. Sprague	Yes	Phone	27-May-94		.			Referred for action - Other DOE (OIT, Stan Sobczynski)
55	DOE/EE/OTT/BSDFerrell	CESC/DOE meeting 4/28/94 in Birmingham, AL	S. Sprague	Yes	Individual	18-Apr-94	.				Set-up/attend meeting
56	DOE/EE/OTT/BSDFerrell	Chuck Scott proposal for additional funding	S. Sprague	Yes	Individual	3-May-94	.				Other - increased funding
57	DOE/EE/OTT/BSDFerrell	Marine Applications of Biofuels	S. Sprague	Yes	Individual	3-May-94	.				Returned phone call - provided information

Record #	Requesting Source	Subject of Request	BSD Staff Receiving Request	Geographic Sector (Domestic)	Request Medium	Date Request Made	Request Handling				Action Taken
							Biofuels Systems Division	Other DOE	National Laboratory	Information Hotline	
58	DOE/EE/OTT/BSD Ferrell	Wood residue and wood waste figures volume	S. Sprague	Yes	Individual	27-May-94	.	.			Referred for action - EE Offices (M. Voorhees for regional contacts and status EIA study)
59	Private citizen Helen Alpert	MSW-to-ethanol; pluses/minuses	S. Sprague	Yes	Letter	3-Jun-94	.				Provided BSD documents/ information Other - Information and paper from R. Tshiteya
60	DOE Stan Lofton	LAN Access on computer	V. Reed	Yes	Phone	19-Apr-94	.				Received information - no action required
61	DOE/EE/OTT/OAF John Russell	Letter requesting ethanol information, answered with promotional material and hotline number	V. Reed	Yes	Letter	9-May-94	.			.	Provided BSD documents/ information
62	Wooster Country Club Chris Buckley	Biofuels information: Is there an industry? What are the opportunities? What does your program do?	V. Reed	Yes	Phone	10-May-94	.				Provided BSD documents/ information
63	DOE/EI Dan Nikoden	Fielding inquiry from Washington Post	V. Reed	Yes	Phone	12-May-94	.				Other - called woman in question at Washington Post Provided information
64	Washington Post Margaret Webb	Regarding article on ethanol as gasoline alternative; requesting information/graphics	V. Reed	Yes	Phone	12-May-94	.				Provided BSD documents/ information
65	DOE/EE/OBT John Stone	Washington Post article	V. Reed	Yes	Phone	13-May-94		.			Referred for action - Other DOE (McNut/Policy)
66	DOE/EE/OTT/BSD Ray Costello	Information on CAAA mandate for use of renewables (ethanol and ETBE displacement)	V. Reed	Yes	Meeting	13-May-94	.				Received information - no action required
67	USDOT Don Igo	Argonne National Lab/DOE report on RFG	V. Reed	Yes	Phone	13-May-94		.			Referred for action - Other DOE (McNut/Policy)

Record #	Requesting Source	Subject of Request	BSD Staff Receiving Request	Geographic Sector (Domestic)	Request Medium	Date Request Made	Request Handling				Action Taken
							Biofuels Systems Division	Other DOE	National Laboratory	Information Hotline	
68	DOE/EE/OTT/BSDFerrell	Fuel cycle evaluations of biomass ethanol and reformulated gasoline	V. Reed	Yes	Individual	6-Apr-94	.				Provided BSD documents/information; made presentation at Conference
69	DOE/EE/OTT/BSDFerrell	Wanted to know DOE representative at Energy from Biomass Project Selection meeting	V. Reed	Yes	Individual		.				Set-up/attend meeting
70	National Laboratory Stephanie Woodward	RFP for technology reinvestment program - any info available	V. Reed	Yes	Phone	24-May-94			.		Referred for action - National Lab (C. Wyman)
71	DOE/EE/AS David Kovner	Battelle Columbus Contract	G. Santos-Leon	Yes	Phone	18-Apr-94	.				Status proposal, letter, etc.
72	Western Ray Hahn	Statement of work for Program Management Plan	G. Santos-Leon	Yes	Phone	18-Apr-94	.				Status proposal, letter, etc.
73	NREL Dan Tyndall	Status of Interchem & Battelle Contract	G. Santos-Leon	Yes	Phone	18-Apr-94	.				Status proposal, letter, etc.
74	ORNL Truman Anderson	Strategic Plan	G. Santos-Leon	Yes	Phone	18-Apr-94	.				Set-up/attend meeting
75	DOE/GTN John Shen	Coal Gasification - Syngas conversion	G. Santos-Leon	Yes	Phone	25-Apr-94	.				Set-up/attend meeting
76	NREL Paul Bergeron	Strategic Plan	G. Santos-Leon	Yes	Phone	2-May-94	.				Other - provide clarification of objectives by phone Provide information
77	Simpson Timber Co. James A. Rydelius	Conference held in Mobile, AL, RE: Needs for Mechanization to Establish, Grow, and Harvest (SRIC) Wood Crops	B. Overton	Yes	Letter	6-Apr-94	.				Referred for action - BSD Staff (Ferrell)
78	Simpson Timber Co. James A. Rydelius	Conference held in Mobile, AL, RE: Needs for Mechanization to Establish, Grow, and Harvest (SRIC) Wood Crops	B. Overton	Yes	Letter	6-Apr-94	.				Received information - no action required

Record #	Requesting Source	Subject of Request	BSD Staff Receiving Request	Geographic Sector (Domestic)	Request Medium	Date Request Made	Request Handling				Action Taken
							Biofuels Systems Division	Other DOE	National Laboratory	Information Hotline	
79	James River Corp. Charles E. Kaiser	Conference held in Mobile, AL, RE: Needs for Mechanization to Establish, Grow, and Harvest (SRIC) Wood Crops	B. Overton	Yes	Letter	8-Apr-94	.				Referred for action - BSD Staff (Ferrell)
80	James River Corp. Charles E. Kaiser	Conference held in Mobile, AL, RE: Needs for Mechanization to Establish, Grow, and Harvest (SRIC) Wood Crops	B. Overton	Yes	Letter	8-Apr-94	.				Received information - no action required
81	Business Brandy Morris	Need Information RE: Wind Power Biomass	B. Overton	Yes	Letter	8-Apr-94	.				Referred for action - BSD Staff (Ferrell)
82	International Institute Conservation Daniel Silver	Information on biomass power division	B. Overton	Yes	Phone	25-Apr-94		.			Referred for action - Other DOE [EE offices (M.Reed, Biopower)]
83	Wooster Country Club Chris Buckley	Biogas	B. Overton	Yes	Phone	10-May-94	.				Referred for action - BSD Staff (Reed)
84	Walzyn Den Free	Landfill gases for alternative fuel vehicles	B. Overton	Yes	Phone	10-May-94	.				Referred for action - BSD Staff (Ferrell)
85	Engine Fuel Emissions Lithnian Chan	Biodiesel information	B. Overton	Yes	Phone	17-May-94	.				Referred for action BSD Staff (Sprague)
86	ORNL Susan Packett	Biodiesel from soybeans	B. Overton	Yes	Phone	18-May-94			.		Referred for action - National Lab (NREL, J. Shehan)
87	American Wood Fibers Steven Faehner	Wood residue and wood waste figures volume	B. Overton	Yes	Phone	27-May-94	.				Referred for action - BSD Staff (Sprague)
88	ILSR Mr. Irishad	Publication on ethanol Barry McNutt/IOT RE: Reformulated Gasoline	B. Overton	Yes	Phone	27-May-94		.			Referred for action - Other DOE (McNutt/Policy)
89	Valley Voice Newspaper John Lindt	Ethanol-vs-Methanol	B. Overton	Yes	Phone	27-May-94	.				Referred for action - BSD Staff (Ferrell/Sprague)
90	DOE/EE/OTT/BS Ferrell	CESC/DOE meeting 4/28/94 in Birmingham, AL	B. Overton	Yes	Individual	18-Apr-94	.				Set-up/attend meeting

Record #	Requesting Source	Subject of Request	BSD Staff Receiving Request	Geographic Sector (Domestic)	Request Medium	Date Request Made	Request Handling				Action Taken
							Biofuels Systems Division	Other DOE	National Laboratory	Information Hotline	
91	DOE/EE/OTT/BSDFerrell	Logistics: Night in Birmingham Response of letter/support	B. Overton	Yes	Individual	20-Apr-94	.				Set-up/attend meeting
92	DOE/EE/OTT/BSDFerrell	Advice regarding distribution of RT document to Hill/Staff	B. Overton	Yes	Individual	22-Apr-94	.				Returned phone call – made copies of document for briefing
93	DOE/EE/OTT/BSDFerrell	Biodiesel: Plants producing 500,000 - 1,000,000 L/year. Response attached	B. Overton	Yes	Individual	25-Apr-94	.				Provided BSD documents/information; faxed response indicating no existing US plants that size
94	DOE/EE/OTT/BSDFerrell	CESC trip to Birmingham, AL. Trip scheduling for Sarah, David Boren and John Ferrell	B. Overton	Yes	Individual	20-Apr-94	.				Set-up/attend meeting

**APPENDIX B**

**REPRESENTATIVE COMPOSITE OF TAXONOMY**

1	John Ferrell	E-Mail	DOE/EE/OTT/DAS	Ethanol	Referred for action - BSD Staff (Reed)	Domestic
2	John Ferrell	Letter	DOE/EE/OTT/OAF	Program Management Issues	Other - Approved Request	Domestic
3	John Ferrell	E-Mail/Phone	National Laboratory (ORNL)	Other	Other - will provide requested letter	Domestic
4	John Ferrell	Letter/Phone	Trade Association	General Program Information Requests	Referred for action - National Lab (Lynn Wright)	Domestic
5	John Ferrell	Meeting	Other DOE - Field Office	Program Management Issues	Referred for action - BSD Staff (Costello)	Domestic
6	John Ferrell	Individual	DOE/EE/OTT/BSO	Program Management Issues	Other - Copy for staff/discuss at next office meeting	Domestic
7	John Ferrell	Letter	Trade Association	Conferences/Workshops	Referred for action - BSD Staff (Sprague and Overton)	Domestic
8	John Ferrell	Phone	National Laboratory (ORNL)	Proposals	Status on proposal, letter, etc.	Domestic
9	John Ferrell	Letter	Industry	General Program Information Requests	Referred for action - BSD Staff (Gearson)	Domestic
10	John Ferrell	Phone	DOE/EE/OTT/DAS	Ethanol	Received information - no action req'd	Domestic
11	John Ferrell	Phone	National Laboratory (NREL)	Conferences/Workshops	Referred for action - EE Offices (Moorer)	Domestic
12	John Ferrell	Phone	National Laboratory (NREL)	Conferences/Workshops	Referred for action - National Lab (R. Overend)	Domestic
13	John Ferrell	Phone	Industry	Conferences/Workshops	Referred for action - BSD Staff (Overton)	Domestic
14	John Ferrell	Letter	Other DOE - EI	Conferences/Workshops	Referred for action - National Lab (ORNL/NREL)	Domestic
15	John Ferrell	Phone	DOE/EE/OTT/DAS	Other	Received information - no action req'd	Domestic
16	John Ferrell	Letter	DOE/EE/AS - Golden Field Office	Proposals	Received information - no action req'd	Domestic
17	John Ferrell	Phone	National Laboratory (NREL)	General Program Information Requests	Referred for action - BSD Staff (Overton (make copies of recomment & distr))	Domestic
18	John Ferrell	Phone	DOE/EE/OTFA	Conferences/Workshops	Referred for action - National Lab (ORNL/NREL call Theresa)	Domestic
19	John Ferrell	E-Mail	DOE/EE/AS/OMR	Program Management Issues	Referred for action - BSD Staff (Reed)	Domestic
20	John Ferrell	E-Mail/Phone	DOE/EE/OTT/DAS	Conferences/Workshops	Set-up/attend meeting	Domestic
21	John Ferrell	E-Mail/Phone	DOE/EE/OTT/DAS	Conferences/Workshops	Other - Developing talking points for C. Ervins	Domestic
22	John Ferrell	Phone	Trade Association	Program Management Issues	Received information - no action req'd	Domestic
23	John Ferrell	Fax	Other	Biodiesel	Referred for action - BSD Staff (Overton)	International
24	John Ferrell	E-Mail/Phone	DOE/EE/OTT/DAS	Conferences/Workshops	Set-up/attend meeting	Domestic
25	John Ferrell	Phone	Trade Association	Conferences/Workshops	Referred for action - BSD Staff (Reed)	Domestic
26	John Ferrell	Phone	Trade Association	Proposals	Status on proposal, letter, etc.	Domestic
27	John Ferrell	Phone	Other	Methanol	Provided BSD documents/information	Domestic
28	John Ferrell	Phone	National Laboratory (ORNL)	Proposals	Referred for action - BSD Staff (Sprague)	Domestic
29	John Ferrell	Phone	Other Govt Agencies - USDA	Conferences/Workshops	Set-up/attend meeting	Domestic
30	John Ferrell	Phone	Consultant	Biodiesel	Referred for action - BSD Staff (Sprague)	Domestic
31	John Ferrell	Phone	DOE/EE/OIT	General Program Information Requests	Provided BSD documents/information	Domestic
32	John Ferrell	Fax	Other Govt Agencies - USDA	Conferences/Workshops	Set-up/attend meeting	Domestic
33	John Ferrell	Fax	Other	Other	Other - Fax back IEA recommendations	International
34	John Ferrell	Phone	Other	Feedstock	Returned phone call, unable to contact -- left message	Domestic
35	John Ferrell	Phone	Other Govt Agencies - USDA	Other	Returned phone call, unable to contact	Domestic
36	John Ferrell	Individual	DOE/EE/OTT/BSO	General Program Information Requests	Referred for action - EE Offices (M. Reed (Biopower))	Domestic
37	John Ferrell	Phone	DOE/EE/OTT/BSO	Methanol	Referred for action - National Lab (Barbara Goodman (NREL))	Domestic
38	John Ferrell	Phone	Other	General Program Information Requests	Received information - no action req'd	International
39	Sarah Sprague	Letter	Other	Ethanol	Provided BSD documents/information	Domestic
40	Sarah Sprague	Letter	Other	Ethanol	Referred for action - Outside DOE (NAFH (Hotline)/NATAS)	Domestic
41	Sarah Sprague	Phone	DOE/EE/OTFA	Conferences/Workshops	Received information - no action req'd (L. Wright ORNL will attend wrkshp)	Domestic
42	Sarah Sprague	Letter	Other	Ethanol	Provided BSD documents/information ; letter response	Domestic
43	Sarah Sprague	Phone	Other DOE - OEB	General Program Information Requests	Provided BSD documents/information	Domestic
44	Sarah Sprague	Phone	National Laboratory (NREL)	Other	Status on proposal, letter, etc.	Domestic
45	Sarah Sprague	Phone	Trade Association	General Program Information Requests	Referred for action - Other DOE (McNutt/Policy)	Domestic
46	Sarah Sprague	Meeting	Consultant	Biodiesel	Referred for action - Outside DOE (NSDTB, Hotline)	Domestic
47	Sarah Sprague	Individual	Industry	Biodiesel	Referred for action - Outside DOE (NAFH (Hotline)/NATAS)	Domestic
48	Sarah Sprague	Individual	Industry	Biodiesel	Received information - no action req'd	Domestic
49	Sarah Sprague	Phone	Industry	Ethanol	Received information - no action req'd	Domestic
50	Sarah Sprague	Phone	Trade Association	General Program Information Requests	Referred for action - National Lab (NREL)	Domestic
51	Sarah Sprague	Letter	Other	Ethanol	Referred for action - National Lab (ORNL)	Domestic
52	Sarah Sprague	Phone	Other	Ethanol	Provided BSD documents/information	Domestic
53	Sarah Sprague	Phone	Other Govt Agencies - USDA	Ethanol	Referred for action - Other DOE (McNutt/Policy)	Domestic
54	Sarah Sprague	Phone	Other	Ethanol	Referred for action - EE Offices (OIT)	Domestic
55	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Conferences/Workshops	Set-up/attend meeting	Domestic
56	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Proposals	Other - increased funding	Domestic
57	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Biodiesel	Provided BSD documents/information	Domestic
58	Sarah Sprague	Individual	DOE/EE/OTT/BSO	Feedstock	Referred for action - EE Offices (M. Voorhies - regnl contacts & status EIA study)	Domestic
59	Sarah Sprague	Letter	Other	Ethanol	Provided BSD documents/information Other - Info and papers from R. Tshiteya	Domestic

60	Valerie Reed	Phone	Other DOE	Other	Received information - no action req'd	Domestic
61	Valerie Reed	Letter	DOE/EE/OTT/OAF	Ethanol and General Program Information Requests	Provided BSD documents/information	Domestic
62	Valerie Reed	Phone	Other	General Program Information Requests	Provided BSD documents/information	Domestic
63	Valerie Reed	Phone	Other DOE - Et	General Program Information Requests	Other - called woman in question at Washington Post	Domestic
64	Valerie Reed	Phone	Other	Ethanol	Provided BSD documents/information	Domestic
65	Valerie Reed	Phone	DOE/EE/OBT	General Program Information Requests	Referred for action - Other DOE (McNutt/Policy)	Domestic
66	Valerie Reed	Meeting	DOE/EE/OTT/BSD	General Program Information Requests and Ethanol	Received information - no action req'd	Domestic
67	Valerie Reed	Phone	Other Govt Agencies - DOT	General Program Information Requests	Referred for action - Other DOE (McNutt/Policy)	Domestic
68	Valerie Reed	Individual	DOE/EE/OTT/BSD	Ethanol	Provided BSD documents/information	Domestic
69	Valerie Reed	Individual	DOE/EE/OTT/BSD	Conferences/Workshops	Set-up/attend meeting	Domestic
70	Valerie Reed	Phone	National Laboratory (NREL)	General Program Information Requests	Referred for action - National Lab [C. Wyman (NREL)]	Domestic
71	Gerson Santos-Leon	Phone	DOE/EE/AS	General Program Information Requests	Status on proposal, letter, etc.	Domestic
72	Gerson Santos-Leon	Phone	Consultant	Program Management Issues	Status on proposal, letter, etc.	Domestic
73	Gerson Santos-Leon	Phone	National Laboratory (NREL)	General Program Information Requests	Status on proposal, letter, etc.	Domestic
74	Gerson Santos-Leon	Phone	National Laboratory (ORNL)	Program Management Issues	Set-up/attend meeting	Domestic
75	Gerson Santos-Leon	Phone	Other DOE - GTN	Methanol	Set-up/attend meeting	Domestic
76	Gerson Santos-Leon	Phone	National Laboratory (NREL)	Program Management Issues	Provided BSD documents/information	Domestic
77	Bonny Overton	Letter	Industry	Conferences/Workshops	Referred for action - BSD Staff (Ferrell)	Domestic
78	Bonny Overton	Letter	Industry	Conferences/Workshops	Received information - no action req'd	Domestic
79	Bonny Overton	Letter	Industry	Conferences/Workshops	Referred for action - BSD Staff (Ferrell)	Domestic
80	Bonny Overton	Letter	Industry	Conferences/Workshops	Received information - no action req'd; follow-up will be prep	Domestic
81	Bonny Overton	Letter	Industry	General Program Information Requests	Referred for action - BSD Staff (Ferrell)	Domestic
82	Bonny Overton	Phone	Trade Association	General Program Information Requests	Referred for action - EE Offices [M. Reed (Biopower)]	Domestic
83	Bonny Overton	Phone	Other	Methanol	Referred for action - BSD Staff (Reed)	Domestic
84	Bonny Overton	Phone	Industry	Methanol	Referred for action - BSD Staff (Ferrell)	Domestic
85	Bonny Overton	Phone	Industry	Biodiesel	Referred for action - BSD Staff (Sprague)	Domestic
86	Bonny Overton	Phone	National Laboratory (ORNL)	Biodiesel	Referred for action - National Lab [J. Shehan (NREL)]	Domestic
87	Bonny Overton	Phone	Industry	Feedstock	Referred for action - BSD Staff (Sprague)	Domestic
88	Bonny Overton	Phone	Trade Association	Ethanol	Referred for action - Other DOE (McNutt/Policy)	Domestic
89	Bonny Overton	Phone	Other	Ethanol/Methanol	Referred for action - BSD Staff (Ferrell or Sprague)	Domestic
90	Bonny Overton	Individual	DOE/EE/OTT/BSD	Conferences/Workshops	Set-up/attend meeting	Domestic
91	Bonny Overton	Individual	DOE/EE/OTT/BSD	Conferences/Workshops	Set-up/attend meeting	Domestic
92	Bonny Overton	Individual	DOE/EE/OTT/BSD	General Program Information Requests	Other - made copies of document for briefing	Domestic
93	Bonny Overton	Individual	DOE/EE/OTT/BSD	Biodiesel	Provided BSD documents/information (faxed response - no US plants that size)	Domestic
94	Bonny Overton	Individual	DOE/EE/OTT/BSD	Conferences/Workshops	Set-up/attend meeting	Domestic

**APPENDIX C**

**FREQUENCY/VOLUME ANALYSIS: SUMMARY AND ASSESSMENT  
OF INFORMATION REQUESTS RECEIVED BY  
SELECTED BSD STAFF MEMBERS**

**Frequency/Volume Analysis: Summary and Assessment of  
Information Requests Received by  
Selected BSD Staff Members**

Below are three individual assessments for BSD's John Ferrell, Sarah Sprague, and Bonny Overton.<sup>1</sup>

**John Ferrell**

Exhibit C.1 reveals that John Ferrell interacted mostly with DOE/EE/OTT and to a lesser degree, National Laboratories and Trade Associations. This interaction occurred primarily through the telephone medium. The largest proportion of information requests received by John Ferrell were related to Conferences/Workshops. Information requests handled by John Ferrell most frequently required referrals for action to other BSD staff members and/or National Laboratories.

John Ferrell suggested that the data collected fairly characterized the areas that are of primary concern to him. He estimated that he was able to record approximately 70-75% of all the request mediums (e.g., e-mail, letter, fax, individual, meeting, phone). Lastly, he felt that the data collection period was typical of the volume of information requests received by BSD and said that his area of responsibility includes feedstock, ethanol, political, and congressional related issues.

**Sarah Sprague**

In contrast, as shown in Exhibit C.2, Sarah Sprague mainly dealt with requests from sources outside DOE; specifically, sources classified in the Other category. However, a significant portion of the requests handled by Sarah Sprague was submitted by DOE/EE/OTT and Industry. The primary request medium was the telephone although, letters and individual submissions were also notable. The most frequent subject area was Ethanol with the General Program Information and Biodiesel topics receiving a fair amount of attention as well. Most of the actions resulted in referrals for action, mainly to sources outside DOE, and to a lesser extent, providing BSD related documents/information.

Sarah Sprague commented that, although she was unsure of whether she covered all request medium categories, she felt that she captured approximately 50% of all requests. Sarah Sprague also stated that the data collection, from her perspective, was "pretty light" as compared to the normal volume of information requests handled by BSD. However, she did not indicate whether those requests handled during the six-week period characterized the normal subject areas of information requests. Sarah Sprague listed ethanol, microalgae, and general questions as her areas of responsibility.

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<sup>1</sup> Individual assessments for other members of the BSD staff where not conducted due to a lack of significant data observations.

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**Bonny Overton**

A large share of Bonny Overton's time focused on dealing with Industry and DOE/EE/OTT (BSD referrals, specifically) requests through contact primarily by phone and secondarily by individuals and letters (Exhibit C.3). Most of the information requests dealt with Conferences/Workshops, General Program Information, and Biodiesel. Most of these information requests required Bonny to refer to other BSD staff for action and to set-up/attend meetings.<sup>2</sup>

Bonny Overton said that she primarily covered phone calls and not action items and thus, her data collection was biased toward the telephone medium. However, Exhibit C.3 shows a more dispersed mix of request mediums than she might have anticipated. She also indicated that she was able to capture approximately 80% of the requests received through the telephone medium although, the quantity of phone calls was not representative of normal volumes. Bonny Overton believes that information requests are seasonal with the largest volumes occurring during the October through January period. Finally, Bonny Overton said that her primary responsibilities are accommodating publication requests.

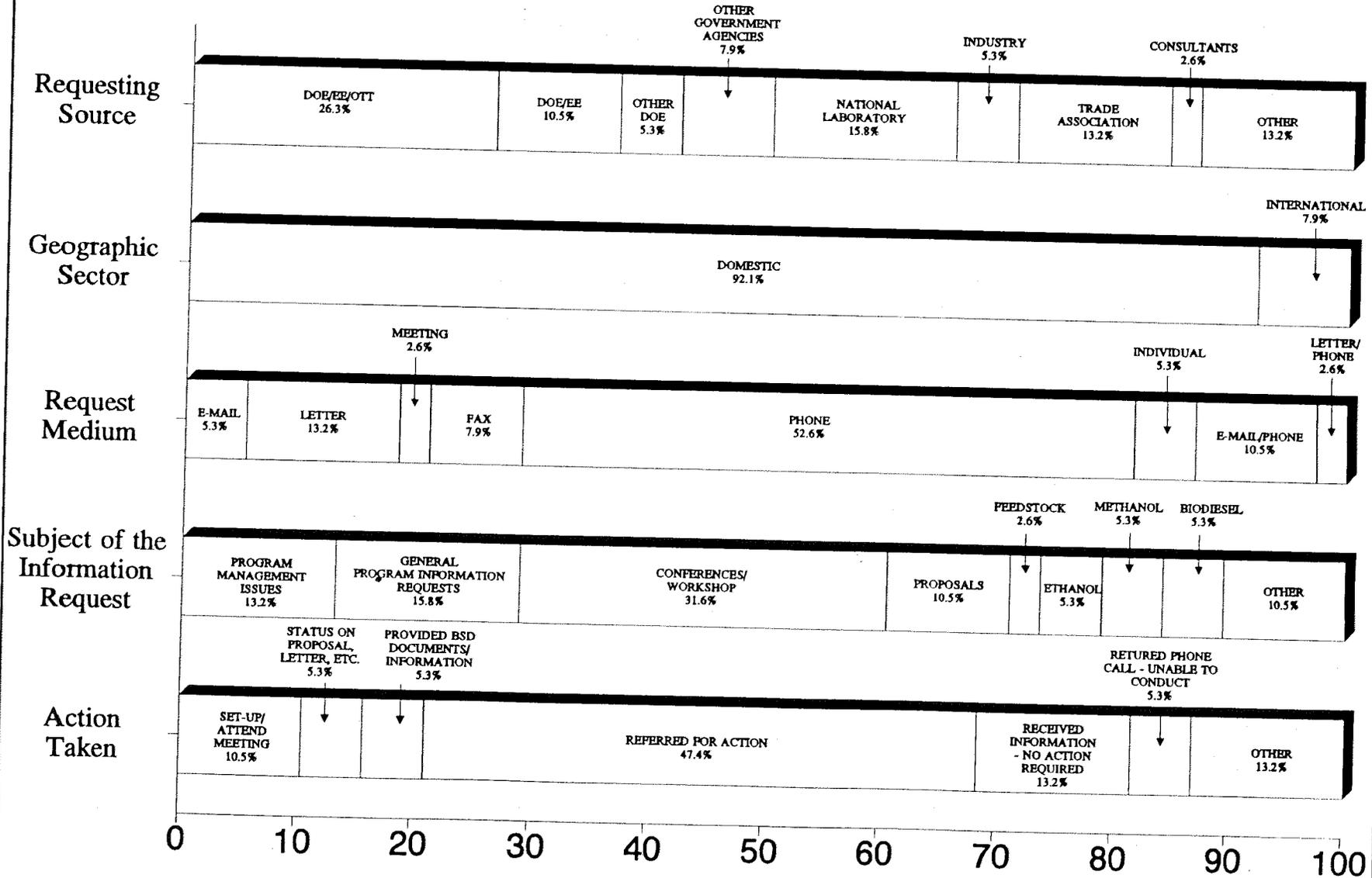
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<sup>2</sup> This is expected since Bonny's role as Division secretary generally requires referring information requests to the appropriate technical staff members and handling travel arrangements associated with Conferences/Workshops.

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**EXHIBIT C.1**  
**SUMMARY OF FREQUENCY/VOLUME ANALYSIS OF**  
**INFORMATION REQUESTS RECEIVED BY JOHN FERRELL**

**DYNACORP • MERIDIAN**

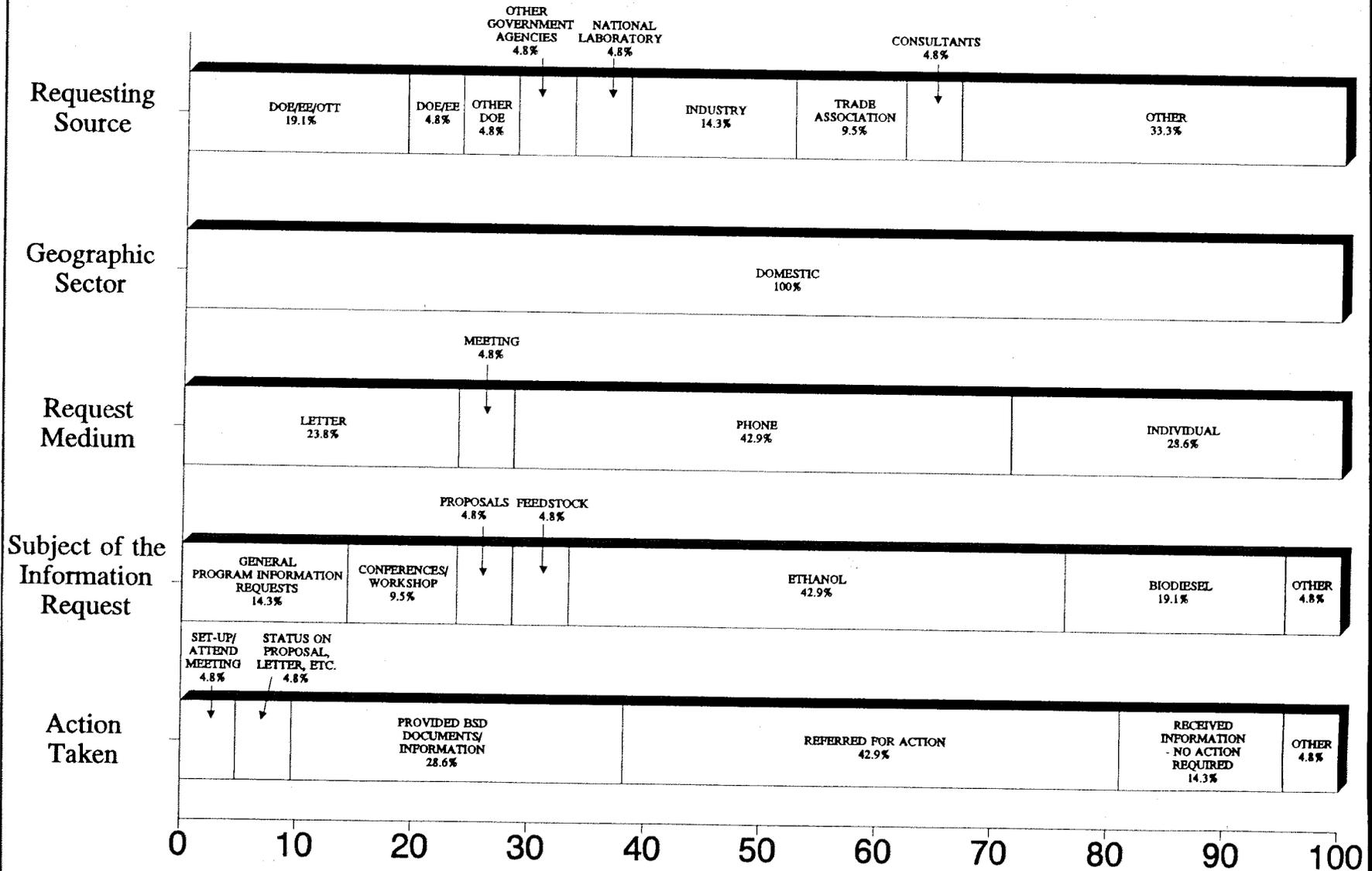


**Breakdown of BSD Information Request Activities (Percent)**

NOTE: Totals may not equal 100% due to rounding.

# SUMMARY OF FREQUENCY/VOLUME ANALYSIS OF INFORMATION REQUESTS RECEIVED BY SARAH SPRAGUE

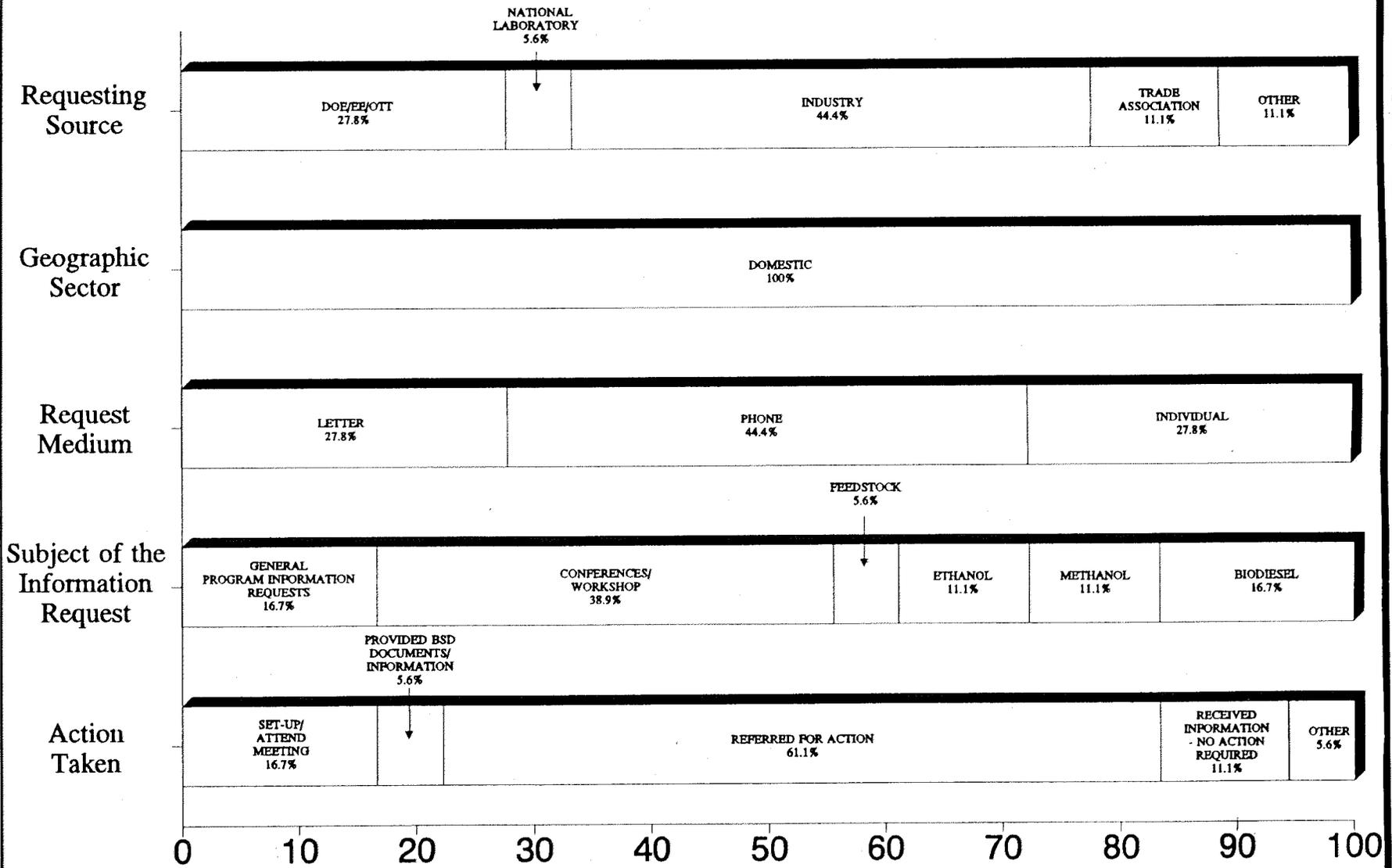
C-4



Breakdown of BSD Information  
Request Activities (Percent)

NOTE: Totals may not equal 100% due to rounding.

# SUMMARY OF FREQUENCY/VOLUME ANALYSIS OF INFORMATION REQUESTS RECEIVED BY BONNY OVERTON



Breakdown of BSD Information  
Request Activities (Percent)

NOTE: Totals may not equal 100% due to rounding.