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Lawrence Berkeley Laboratory

UNIVERSITY OF CALIFORNIA, BERKELEY

Information and Computing Sciences Division

Final Report of the Department of Energy ADPE/DS Review Panel

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July 1988

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Final Report

of the Department of Energy

ADPE/DS Review Panel

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Summary

As mandated by Congress, the General Services Administration maintains an inventory of computer equipment belonging to the Federal Government. It is referred to as ADPE/DS. All agencies are required to contribute information to ADPE/DS.

In 1987, GSA began a review of ADPE/DS to find ways to make the reporting more accurate and therefore more useful. In the fall of 1987, DOE organized the ADPE/DS Review Panel to provide input to the GSA review process. The Panel traced the chain of authority to evaluate the extent to which the implementation of ADPE/DS matched the intent. Numerous issues regarding both GSA and DOE requirements and procedures for information gathering were discussed.

The Panel is concerned that the burden of ADPE/DS is disproportionate to its usefulness. Of even greater concern, however, is the apparent absence of a clear understanding by GSA of the need for specific data. Planners of data systems, such as with GSA's ADPE/DS, often try to increase accuracy by collecting much detail. But in a practical sense, collecting more data, and in greater detail, does not necessarily increase accuracy and usefulness of the resulting reports. The Panel suspects that ADPE/DS collects far more data than required to obtain the information and knowledge apparently sought. GSA has left the Panel with the strong impression that effort expended by reporting sites is largely wasted because the quality of the data is so inconsistent that the reports produced by GSA are substantially unreliable.

Participating GSA staff agreed that GSA should determine what data is truly vital to its mission. Though participating GSA staff agreed that this is the reasonable next step, it appears that this process is stalled. Therefore, lacking any justification from GSA for the need for specific data, the Panel has formulated recommendations to DOE based on the belief that the spirit of the Public Law can be met by collection of a simple CPU listing from each site.

The Panel also examined the internal DOE information-transmission procedures and determined that some are the cause of wasted effort. Recommendations to alleviate these problems are oriented to relieving ADPE/DS sites of the burden of maintaining accounts on the Germantown computing system. Electronic networking and even paper-based reports from the sites are recommended as superior.

The Panel also recommends that any specifications for a future version of ADPE/DS which GSA might distribute be submitted to the Panel for review.

ADPE REVIEW PANEL FINAL REPORT

1. Introduction: Background and Chronology.

Early in 1984, DOE announced its replacement of the old ADP inventory reporting system. The new DOE system, Automatic Data Processing Equipment/Data System (ADPE/DS), mirrored the new GSA system of the same name and was intended to assure that data provided to GSA by DOE was formatted correctly and met other requirements.

In June, 1984, DOE held the first ADPE/DS training session in Boulder, Colorado for DOE contractors and field office personnel who would be involved with the system. During this session and subsequent training sessions, issues were raised by attendees concerning various bothersome aspects of both the DOE ADPE/DS and its *raison d' être*, the GSA ADPE/DS.

During 1987, Mr. Terry McNair, Director of the Federal Equipment Data Center, began to study whether the GSA ADPE/DS system could be streamlined as a way of making the data more accurate and therefore more useful. In the autumn of 1987, Mr. Robert Greeves, Director of the DOE Office of ADP Management (OADPM), formed the ADPE/DS Review Panel as a means of soliciting comment to contribute to the streamlining project at GSA, and to improve the DOE implementation as well.

The Panel first met at Lawrence Berkeley Laboratory on 21-22 September 1987. Following the September meeting, printed copies of the issues raised in Berkeley were distributed to interested parties for comment. The comments were reflected in a revised set of Issue Sheets which were distributed and discussed at the second Panel meeting, held at DOE Germantown on 04 November 1987.

The following day, the Panel members participated in a GSA-sponsored discussion of ADPE/DS in Washington. Representatives from Agriculture, NASA, the IRS, Defense, and others attended as well as the relatively sizeable DOE contingent. GSA indicated that it intends to abandon the requirement for reporting groupings of components into "systems". This decision will reduce the reporting burden considerably.

GSA also agreed to develop a plan to discover what essential information needs of GSA and OMB are expected to be satisfied by ADPE/DS, and to formulate a new ADPE/DS based upon that research and suggestions from reporting agencies. The Panel submitted a short list of questions to GSA (Section 4) as a first step in this discovery process.

At this writing, none of the promised information has been received from GSA describing what data is genuinely vital to its mission. Further, planned improvements, including the discontinuance of "system records", are in jeopardy for lack of activity at GSA.

2. Charge to the Panel.

The Panel was charged with several tasks. The first was to determine its own charge. The following was agreed upon at the first meeting in Berkeley on 21-22 September 1987:

The Panel shall identify and discuss issues relating to ADPE/DS and, where appropriate, investigate alternative procedures and make recommendations.

The Panel shall address issues in any of the following categories:

1. GSA reporting requirements and procedures, generally.
2. DOE interpretation of GSA reporting requirements.
3. GSA - DOE reporting interface.
4. DOE reporting requirements and procedures as applied to DOE contractors.
5. Future plans and specifications for GSA ADPE reporting procedures.

The Panel shall scrutinize cost effectiveness, the benefits, and burden of present procedures for ADPE/DS reporting.

The Panel shall meet as needed with DOE and GSA staff to accomplish its charge.

The final report of the Panel shall be approved and submitted to the Office of ADP Management, if feasible, no later than November 21, 1987.

3. General Issues.

Many issues were raised with respect to tracking and grouping components into "systems". Grouping components into systems is often arbitrary in light of modern ADPE's decentralized architecture. Further, the artificial "system" grouping reported in ADPE/DS causes the reported values of such ADPE to be misleading.

The impracticality of reporting embedded ADPE was discussed.

GSA representatives agreed that abandoning both requirements for reporting system configurations and embedded ADPE is reasonable.

Given the amount of technical detail required at present, general inventory personnel are often not sufficiently knowledgeable to perform ADPE/DS inventory tasks. They must obtain substantial assistance from system managers and staff scientists at some sites. GSA agreed that reducing the reporting complexity to enable general inventory staff to conduct the ADPE/DS inventory is a reasonable objective.

When a lease-to-ownership item is paid off, the cognizant persons are often associated with accounting departments on site. At some sites, the inventory and scientific staff are not in a position to detect such accounting transactions and thus are not able to report them to ADPE/DS.

4. GSA Issues.

The following questions placed by the Panel were left open and responses are still awaited:

1. Who uses the document Automatic Data Processing Equipment in the U.S. Government (Summary)? Why do they use it? Are they getting the information that they believe they need?

2. What is the purpose of the table Distribution of Dollar Value and Count for Selected ADPE Categories by Manufacturer for categories *other than* CPUs? What vital responsibility could not be met if components such as tape drives and disks were not included in this table? Could listing only the CPU's enable the user to derive the knowledge sought?

3. The "Other" category on the chart KHER14AA, Distribution of Selected ADPE by Category, seems so large relative to other values that the chart itself seems not to be meaningful. What real use is made of this chart?

4. Is the purpose of the table KHER4501, CPU Average Age by Size Category, to indicate obsolescence? If so, is not the date of "opus 1" of the CPU more pertinent than the acquisition date reported by sites? Are users of this table aware that the data from sites used to generate this table is misleading?

5. In the table Distribution of Manufacturer Dollar Value by Reporting Agency, does "value" mean "market value", "acquisition cost", or "price most recently paid"? What information is really desired? Are users of the document aware that the data from field sites is being reported so inconsistently that the end result is virtually meaningless?

5. DOE Issues.

1. GSA and DOE participants agreed that "embedded ADPE" should be stricken from the reporting requirements (See Issue Sheet 9F).

2. Reporting data is burdensome enough without having to compare it to the previous report. OADPM participants acknowledged that a single *optional* "card image" at the beginning of the ADPE report indicating that the subsequent data is *a replacement for*, rather than a modification of the previous data submitted, will be helpful to a number of sites. DOE agreed to instruct Calculon to implement this recommendation. However, no announcement has yet been made by OADPM (See Issue Sheet 10).

3. Presently, DOE requires quarterly ADPE/DS reports. However, GSA presently requires only semi-annual reports. This discrepancy appears to stem from OADPM enthusiasm for ADPE/DS and because logon account passwords on the Germantown Amdahl expire every 90 days. New GSA requirements may call for "perpetual" reports, where perpetual is redefined to mean "soon as reasonably convenient but at least once per year". DOE participants agreed to change the DOE reporting requirement to be consistent with GSA (See Issue Sheet 11).

4. DOE telecommunications staff appeared very receptive to facilitating transmission of data, such as ADPE reports, electronically over a network to eliminate the problems inherent in maintaining a logon account on the Germantown Amdahl system. The Review Panel encouraged DOE to study whether to become a BITNET node. No response to a formal request made in January has been received at this time (See Issue Sheet 12).

5. DOE ADPE training sessions have not included discussion of ADPE concepts, but merely procedural steps of logging on, sending files, entering data, and generating reports. It is questionable whether training courses are necessary at all if the ADPE/DS User Manual can be rewritten to describe the pertinent policy and procedures and an alternative to logging on interactively to the Germantown computer center is provided (See Issue Sheets 17 and 18).

6. Issues were raised concerning many problems inherent in logging onto the Germantown computing facility to submit ADPE reports. They revolve around a fundamental problem, namely that persons who use the system infrequently are nevertheless required to obtain and maintain a working knowledge and relationship with that computing facility. Specific manifestations of this issue are (See Issue Sheets 13, 14 A-D, 16):

   Difficult to use. The online mechanism for collection of ADPE/DS data within DOE is user-hostile and costly relative to the low frequency of usage by non-Germantown users. The DOE computer center invalidates passwords and archives (i.e., makes unavailable to the user) command files after the logon account incurs a period of inactivity. The computer center is not configured to support occasional users such as those who are responsible for ADPE/DS reports. DOE ADPE/DS representatives, even those at sites with little reportable ADPE, must retain a working knowledge of this "foreign" computer center and logon quarterly to avoid the even-greater inconvenience of reestablishing the account.

   Poor security policy. In general, requiring persons to become members of a computer center user community which they will use infrequently is poor policy from a security standpoint. Accounts that are not used regularly are one of the main sources of security breaches by unauthorized "hackers" because detection is less likely.

   Costly. The off-site user components of ADPE/DS appear to be costly relative to the infrequent usage by non-Germantown users. The Panel attempted to estimate the cost of supporting ADPE/DS for non-Germantown users (designing and programming user interfaces, documenting, consulting, and training), and the cost of simply submitting the reports to OADPM on paper from a local recordkeeping system, automated or manual, then employing temporary data entry clerks at Germantown to enter the data. Unfortunately, these cost figures are apparently unavailable.

The Panel discussed alternative vehicles to online ADPE/DS for collecting the data:

Networks. DOE participation in a network such as BITNET can reduce the problems associated with these issues. BITNET provides only for file-transfer, not logging on. Thus, it provides very low security risk, especially relative to the present system which allows outside access to anyone with the Amdahl's telephone number.

Plain paper mailed separately. Until Germantown can become connected to an appropriate network, and for those reporting sites that are not likely to have network access, it appears probable that training a few data entry clerks at Germantown might be much less costly, require less training and support, cause fewer errors and enable errors to be corrected more quickly, and be more secure, than continuing to support ADPE/DS for non-Germantown users who prefer not to maintain a user relationship with that computing facility.

ITR LRP. A well-known OADPM data collection mechanism is the annual Information Technology Resources Long Range Plan (ITR LRP). The ITR LRP process presently consists of at least two distinct subprocesses: data collection and subsequent manipulation of portions of the data collected. The Panel discussed the feasibility of OADPM employing the data collection part of the ITR LRP process as an alternative to the online ADPE/DS user system. However, invited comments from several quarters expressed opposition to this concept on the grounds that it would lead to an increased burden for those involved with the LRP or tempt LRP reporting requirements to expand. Consequently, the Panel is unable make a unanimous recommendation on this proposal.

6. Foundations for Recommendations.

As a result of investigation and deliberation, the Panel has acknowledged several principles and ascertained many facts. The pertinent principles and findings are:

1. That oversight functions, such as the ADPE inventory, are legitimate and necessary activities of responsible government.

2. That the Public Law from which ADPE/DS stems (in 40 USC 486) is a straightforward requirement for an ADPE inventory, and that the intent was to have a useful inventory, not a Byzantine data management system fed by a cast of thousands.

3. That it is the GSA regulation (41 CFR 201-26) which *implements* the law, not the law itself, that calls for elaborate detail to be reported.

4. That DOE has compelling interest in demonstrating that the Department is a responsible manager of ADPE resources so that it will continue to be granted authority to procure such resources.

5. That the essential issue regarding the ADPE/DS, both with respect to DOE and to GSA, revolves around the burden of the program *relative to* its usefulness.

6. That senior GSA management cannot provide justification for much of the data collected and maintained under the auspices of ADPE/DS.

7. That the more data collected, the less information obtained, because the magnitude of the data collection and reporting process becomes overwhelming. The Panel believes that ADPE/DS collects far more data than required to obtain the knowledge apparently sought, and that the voluminous detail, in fact, *prevents* the data from being useful.

8. That DOE's Information Technology Resources Long Range Plan (ITR LRP) process accomplishes its goal of responsible strategic ADP planning; that the role of the GSA ADPE/DS appears to add little value to the management of DOE information resources; and hence, that DOE's primary involvement with ADPE/DS is not as a direct beneficiary, but only as a provider of data; and finally, that this might be true of all agencies.

9. That sites which have pursued a *distributed* rather than a *centralized* computing strategy are penalized with a disproportionate reporting burden because they must report more items than a site with a centralized computing facility of equal dollar value.

10. That all national laboratories and major universities are active participants in electronic networks; that the ability of DOE contractors to submit data, including ADPE reports, to DOE Headquarters is inhibited by Headquarter's non-membership in an appropriate electronic network; that DOE's isolation in this regard is archaic and costly and stems from continued use of DIALCOM and conventional office procedures; and that the difficulties in submitting data to DOE ADPE/DS, especially relative to logging on, maintaining passwords, archiving files, etc. are easily solved by Germantown becoming a member of an appropriate electronic network such as BITNET.

11. That *obsolescence*, with respect to computing, refers to the degree to which a system is inferior to the state of the art; that it usually coincides, though not always, with the *age* of a system; therefore that obsolescence can generally be derived from the age of opus 1 of the make and model; and thus, that acquisition date of the machine need not be reported for each system at each site if GSA maintains the date of opus 1 of each pertinent make and model.

12. That GSA needs to know, for planning, how much ADPE is planned to be replaced or eliminated during the next few years by each of the agencies; that this information can be derived from each site's ITR Long Range Plan for *major* ADPE, and need not be reported separately for each system at each site.

13. That GSA use of similar data collected by private survey research firms can be more cost-effective than requiring government agencies to perform the data collection process themselves; and that such use appropriately places the expense of the data collection process upon GSA.

14. That, given the architecture of modern computing equipment, the grouping of components into "systems" is artificial, costly to accomplish, and contributes to misleading and inaccurate reports.

7. Recommendations.

The Panel initially assumed that issues of concern about ADPE/DS would be raised with DOE and GSA staff and then, either their rationale would be accepted or proposals for changes would be made. However, both the Panel and participating GSA staff discovered that the rationale for collecting certain ADPE/DS data, as presented in Section 4 above, was unknown even by GSA. Repeated attempts by GSA staff to obtain responses to those questions from senior GSA management on behalf of the Panel have met with no success. The discovery process appears to be stalled. Hence, the Panel has agreed that it has no other course than to proceed by making the following recommendations:

1. That only simple table-like listings (including only make, model, and quantity) of CPU's with a vendor list price (or GSA schedule price) of $50,000 or more be collected from each site. From these listings, other desired information can be derived as described below. This will accomplish GSA's goal of collecting more accurate and therefore more useful information.

2. That GSA designate a private survey research firm that is authorized to make telephone inquiries to government ADPE installations to collect information about ADPE beyond the CPU listing described above; and that GSA supplement the CPU listings with the information from these firms. Such firms collect and maintain data describing government ADPE. (This effort is already underway at GSA.)

3. That GSA or designated a private survey firm maintain a profile of each CPU type based on survey information; that these profiles be applied to the CPU listings submitted by sites to derive desired information about the inventory; and that these profiles include the date of opus 1 of each make and model CPU in order to determine the obsolescence of ADPE, rather than requiring each site to provide obsolescence information for each piece of ADPE.

4. That OADPM support the present trend in GSA to discontinue the use of "system records".

5. That GSA, DOE, and the Review Panel explore means to relieve the disproportionate reporting burden for sites that have adopted a distributed rather than a centralized computing strategy.

6. That DOE Germantown become a BITNET node.

7. That the Panel should reconvene upon receipt of any GSA response to the inquiries in Section 4 to review them in the light of GSA's plans to redesign ADPE/DS.

Although ADPE/DS might, at one time, have given teeth to the justification process for procuring computing resources by the government, it appears probable that the nerve in the tooth has died, leaving a massive hard-to-penetrate structure, a historical artifact. To GSA's credit, they have undertaken, on their own initiative, the task of streamlining ADPE/DS. Since the project is based upon their initiative, the Panel believes that recommendations to accomplish that streamlining will be accepted positively rather than rejected out-of-hand.

8. Interim Measures.

The Review Panel encourages the Office of ADP Management to dedicate its primary effort regarding ADPE/DS toward the recommendations in Section 7. Without deemphasizing those items, the Panel proposes measures that can be implemented in the near-term internally within OADPM:

1. (Issue Sheet 10) Implement the REPLACEMENT-FLAG as an option. Such a flag or card image at the beginning of an ADPE/DS report would indicate that the subsequent data is a *replacement for*, rather than an update to, the previous inventory for that site. Presently, to accomplish a replacement inventory, each system record must be individually deleted, which requires the site to retain old information about systems previously reported. This is impractical for sites that maintain their own ADPE inventory management system because they must keep track not only of their present inventory, but of a previous "snapshot" of the inventory.

2. (Issue Sheets 17 and 18) Enhance ADPE/DS training sessions and consulting support to include coverage for questions concerning policy and reporting requirements. Presently, training and consulting is limited to technical issues. Explanation of substantive policy as well as technical issues is essential, especially for those who are new to ADPE/DS. An OADPM staff member should present background and a policy briefing at every training session.

3. (Issue Sheet 9F) Rescind the requirement for inclusion of "embedded ADPE".

4. (Issue Sheets 14A-D) Consider alternative data collection mechanisms that are more appropriate for the infrequent nature of inventory reporting than the online DOE ADPE/DS. Germantown connection to an appropriate electronic network such as BITNET will remedy these problems for a number of sites.

ADPE REVIEW PANEL FINAL REPORT

APPENDIX A

Roster of Participants

Roster of Participants

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ADPE REVIEW PANEL FINAL REPORT

APPENDIX B

Issue Sheets

ADPE/DS Issue Sheet

Issue No.: 1

Subject: Reporting Anomalies

Submitted by: Archie Ruatto

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☒ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

Some ADPE reports obtained from GSA do not accurately reflect information submitted to GSA. Some data is omitted.

Disposition Summary:

Discrepancy in figures: GSA and DOE have different definitions for class of machine, causing figures to disagree. GSA also performs some editing of raw data submitted by agencies. This discussion led to the topic of obsolesence.

Appearance of obsolesence: GSA acknowledges the distinction between the age of specific equipment and the age of the technology (i.e., the "opus 1" of a machine model), and will consider reporting each as appropriate.

GSA will consider including ACQUISITION DATE in the the component record for CPU's.

Recommendations:

1. Do not collect any "date" data for CPUs, but rather, GSA should maintain a table of "opus 1" dates for each make and model of CPU.

ADPE/DS Issue Sheet

Issue No.: 2

Subject: Level of detail required

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☒ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

The GSA policy and procedure requirement for ADPE/DS comes from 41 CFR 201-26.204. Paragraph (a) sets forth general objectives. Paragraph (b) actually defines database elements, structure, and attributes. The striking aspect of the procedure paragraph is the extremely high "level of resolution" of data being collected.

What is the benefit to GSA of collecting such detailed data? Does all of this *data* have *information* value as well? How did GSA decide what data to collect?

For example, what additional benefit does GSA gain in recording model numbers of components rather than merely to record a single sum of occurrences of a component type for a particular manufacturer?

For example, what is the benefit to GSA of recording that a site has:

2 STC Model 101 tape drives,
2 STC Model 102 tape drives, and
2 STC Model 102A tape drives,

as opposed to recording that it has:

6 STC tape drives (component class 05)?

What function would GSA be unable to perform satisfactorily if model designations for components were not collected?

Issue No.: 2 (continued)

Subject: Level of detail required

Disposition Summary:

GSA agrees that type and model designation might not be necessary. However, if price data is to be omitted, then model and type might be needed. GSA tentatively plans to merge the model and type fields into a single field.

To be determined: whether both price, make/model data can be eliminated for non-CPU components.

ADPE/DS Issue Sheet

Issue No.: 3

Subject: Level of Detail: manufacturer and model codes

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☒ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

Presently, a reporting site is prevented from reporting a component that is obtained from a manufacturer that is not in the GSA table. The usual procedure is to call some person designated in the agency, who in turn must call someone at GSA to assign a code and inform the originating agency. The agency contact must then inform the site. This process is further complicated when the address or other identifying information of the manufacturer is unknown to the site (the equipment might have been obtained from a retailer or reseller). It is further complicated when designated contact persons are unavailable.

This problem is even more severe for models of components. Manufacturers constantly add new model designations.

Presently, the burden of notification of new models and manufacturers is on the reporting site. Why must this notification burden be on the reporting site? What is the feasibility of GSA assuming this burden by automating the recognition of new manufacturers and models and the assignment of codes, without rejecting reports from the field?

Issue No.: 3 (continued)

Subject: Level of Detail: manufacturer and model codes

Disposition Summary:

GSA proposes that manufacturer codes for non-CPUs will be optional. A small number of codes will be defined for major manufacturers. Records will not be rejected if the MFG code is not in the table, but the value will, instead be regarded as a "miscellaneous manufacturer".

To be determined: Whether relaxing use manufacturer codes will affect the possibility of eliminating price reporting.

Unresolved: Who should bear the burden of codification? If it should be the agency requiring the information, how could GSA perform the codification if agency reports contained variable-length free text values for manufacturer rather than a code?

ADPE/DS Issue Sheet

Issue No.: 4

Subject: Component Prices

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☒ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☒ Other What information does GSA/OMB really need?

Description of the Issue:

Manufacturers are constantly changing their prices. Presently, all components of a particular make, model, and class are reported using the most recent price paid for one unit of that particular item. Thus, the intent of ADPE/DS is apparently to reflect *value* rather than *amount paid*.

Given this, it is questionable whether component prices reported by sites are meaningful at all. A component may have been obtained at artificially low "cost" from another system at the same site or even from the salvage list.

More often, a component might not have been priced individually, but bought as part of a discounted package. One could allocate the package cost among the components, but that skews the price information of other components of the same model and make. What then is the real information value to GSA?

Further, no provision is made for assigning prices to individual components where a vendor simply "throws in another widget" with a big order. This means not only expending effort to recalculate the system value, but that the system might become unreportable! For example, a $55,000 system has 3 disks valued at $5,000 apiece. A fourth disk of the same make and model is bought for $1000, reducing the system value to $44,000. The system is now unreportable, but has *more* ADPE!

Since component makes and models are maintained in a GSA table, what is the feasibility of including in that table, a standard GSA purchase price for each item, rather than using the widely varying values reported from sites? If 1,000 sites have a WIDGET disk drive, what is the value to GSA of having 1000 different prices? It seems reasonable to print a list of components for each manufacturer and ask them to annotate the list with their current prices. This could be done once a year.

Issue No.: 4 (continued)

Subject: Component Prices

Disposition Summary:

GSA agreed that values would be more uniform and therefore more meaningful if assigned once by GSA rather individually by component record. However, if component model and type are eliminated, then some dollar amount might be required for each component record.

Is the fact that $7,000 was paid for a Widget 9000 in 1982 meaningful *today*? If the data for price *ages*, then this is a second reason why reported price values become meaningless, the first being that each site may report a different price value for the same item.

To be determined: Does GSA and OMB need:

The *value* of the inventory? or
The *price paid* for the inventory? or
Merely that the inventory exists, with value/cost assigned by using GSA-supplied values from a GSA-maintained table?

GSA will investigate and respond.

ADPE/DS Issue Sheet

Issue No.: 5

Subject: Reporting ownership status changes

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☒ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☒ Other GSA to determine what information GSA/OMB really needs.

Description of the Issue:

ADPE/DS appears to require us to track when every component that is leased with option to purchase changes its status from leased to owned, i.e., when it's paid off.

This is not a requirement that can be met (especially on the component level) by property management personnel or system managers. This is accounting information residing with division administrators and the accounting department.

Is this kind of information required in other property management or inventory reporting requirements in the government? Are inventory people required to be aware of such status changes with respect to automobiles or furniture or any other government property?

Disposition Summary:

GSA agreed that lease obligations are reported by agencies via other reports. Further, obligations (i.e., leases) reported in ADPE are inaccurate because not all inventory is reportable. Therefore, GSA will consider:

> Deleting the LTO category, with LTO items to be reported as "owned";
>
> The interpretation of the ownership field can be changed from "present ownership status" to "original ownership status".

To be determined: What information does OMB really need? What is the information used for? Should that information come from the ADPE inventory, or should it come from other reports already submitted *routinely* by the agencies. GSA will investigate and respond.

ADPE/DS Issue Sheet

Issue No.: 6

Subject: Syntax,typography, and codification burden on reporting agency

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☒ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☒ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

The procedure detailed in this regulation appears to be a significant departure from other reporting requirements in the government in that it goes beyond *what* is reported, but dictates *how* (i.e., the format in which) it is to be reported (i.e., in machine-readable form), and further, places severe syntatic, typographic, and codification constraints on how the information is reported.

Given that the burden of converting *information* into *internally formatted data* is usually that of the party requesting the information, not the party providing it, what is the basis for requiring each reporting agency to do this conversion for GSA?

Has GSA considered the cost of placing this burden of conversion of information into GSA internal format on the various government agencies? On what grounds does GSA believe that is to more cost-effective to force each agency to develop elaborate systems to comply with strict syntactic rules rather than simply retain a small staff to perform data entry within GSA?

Issue No.: 6 (continued)

Subject: Syntax,typography, and codification burden on reporting agency

Disposition Summary:

No fundamental justification for assigning the syntactic and codification burden on the reporting agency was given. The use of variable length rather than fixed length fields was discussed. From a practical standpoint, it was proposed by GSA that the burden be shared, however details cannot be finalized until new record structure and data element specifications are determined.

GSA indicated that it will attempt to provide greater automatic editing capability on data prior to storage to reduce the number of records rejected for syntactic violations. It was discovered that DOE actually adds some syntactic constraints rather than relaxing them.

GSA will investigate:

1. Relaxing syntactic and typographical burden
2. Relaxing the codification burden
3. The feasibility of using variable length rather than fixed-length fields as a means to avoid the burden of column-dependent formatting of data.

ADPE/DS Issue Sheet

Issue No.: 7

Subject: Antiquated component class codes

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☒ More information or investigation of feasibility needed
- ☒ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

The component classes defined do not reflect modern computing equipment, especially from a vendor such Digital Equipment. Some of the components, such as controllers, are in the form of a board that fits in a slot in the CPU cabinet. They are not separate devices. On the other hand, there are various components that must presently be put in the "other" catagory, such as network devices (ethernet devices) and clustering devices (e.g., computer interconnects). Of course, it's always possible to force data into a category, but the value of codification diminishes as the distinctions and definitions are blurred.

As well, magnetic core and magnetic drum units are obsolete. Punched card machines are specifically excluded from the inventory by regulation.

Disposition Summary:

Component classes will be reduced to CPU (01), tape (02), disk(05), other storage (08), printer (28), and perhaps communications devices and microcomputers.

Bureau of Standards categories will be consulted.

To be determined: Whether it is necessary to report equipment that does not fall into one of the reportable categories, or whether to eliminate the "other" categories. Eliminating "other" will facilitate streamlined reporting and will make agency reports more closely coincide with the reporting requirements.

A threshold for components (Issue 15) will also facilitate streamlined reporting.

Recommendation

Report only CPU's and eliminate reporting of all other components.

ADPE/DS Issue Sheet

Issue No.: 8

Subject: Reporting frequency

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☒ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☒ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

What is the basis for requiring ADPE reports quarterly rather than annually? What function would GSA be unable to fulfill if reports were submitted annually rather than quarterly?

Disposition Summary:

Periodic reporting will be changed to perpetual (immediate) reporting of individual transactions. Unfortunately, periodic inventories might still be required. *Tracking* ADPE requires separate significant effort from *reporting* it.

Consideration for sites: What internal tracking effort at the site must occur (e.g., annual inventory or link to purchasing/receival & salvage transactions) to assure accuracy?

Recommendation:

Immediate reporting of individual transactions("perpetual" reporting) rather than periodic inventory should be implemented, if it will, in fact, reduce workload. If immediate reporting causes undue tracking, then it should be reconsidered.

ADPE/DS Issue Sheet

Issue No.: 9A

Subject: Reporting *system* configurations; fundamental issue

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☒ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☒ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☒ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

In concept, the ADPE/DS system requires reporting substantially more than property inventory. In addition to reporting actual pieces of equipment (components), sites are also required to report how these components are grouped into abstract conceptual entities called *systems*.

There are several problems in reporting this "non-property" information, as described in the following issue sheets.

What added benefit does GSA gain from having system groupings reported, beyond mere lists of components? What function could GSA not perform if only component data was furnished?

Disposition Summary:

GSA generally agreed that the requirements for "system records" and for "system designation" on component records can be eliminated. System records might be changed, in concept to "CPU records" and component records to "peripheral records" which would facilitate collecting different information for CPU's than for peripherals. But peripherals would not need any link to CPU records. Each site may still retain system configuration information locally for their own purposes, but it need not be reported to GSA, and therefore need not be tracked if not used by the site for its own purposes.

A "local identifier" field in place of the system identifier field on component records was proposed. That "optional fields" are not considered optional by users was discussed.

Issue No.: 9A (continued)

Subject: Reporting *system* configurations; fundamental issue

Recommendation:

The requirements for "system records" and for "system designation" on component records should be eliminated. System records might be changed, in concept to "CPU records" and component records to "peripheral records" which would facilitate collecting different information for CPU's than for peripherals.

ADPE/DS Issue Sheet

Issue No.: 9B

Subject: Reporting *system* configurations (components moving)

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☒ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☒ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

Presently, if a component, such as a disk drive, is moved from one system to another, we are required to expend effort in reporting changes to both systems. In such an instance, the amount of ADPE owned by the government has not changed. Given that, what benefit does GSA gain from knowing that a component has moved from one system to another?

Disposition Summary:

GSA tentatively agrees that the concept of reporting system configurations can be deleted. If ADPE migrated from one ADPE unit to another, the transactions would still appear as a "delete" and an "add".

Recommendation:

See Issue 9A.

ADPE/DS Issue Sheet

Issue No.: 9C

Subject: Reporting *system* configurations. Tracking

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☒ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☒ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

Beyond the burden of maintaining and reporting how components are configured into systems is that tracking for *all* systems must be performed, not just those above the $50K threshold, so that the site can detect when a system crosses the threshold in either direction. This tracking is expensive because we must continually recalculate the "system value". *Tracking is a burden, not just reporting.*

But further, it means that effort might be required to report a system or de-report a system that crosses the threshhold merely if a component is moved down the hall from one system to another, changing the values to both systems. Similarly, if some technician runs a wire between two $30,000 systems making them into one system, it becomes "reportable". If the wire is unplugged, it becomes "unreportable"

In both these cases, effort must be expended to track and report a change when, in fact, *the actual value of ADPE owned by the government has not changed.* What is the benefit to GSA in our expending reporting and tracking effort when the government has not gained or lost any physical inventory?

Issue No.: 9C (continued)

Subject: Reporting *system* configurations, Tracking

Disposition Summary:

GSA tentatively agrees that the requirement for reporting system configurations can be deleted. Therefore, the concept of system value threshold is moot.

The possibility of deleting the requirement for reporting ADPE unit number was discussed.

Some changes in presesent local agency ADPE systems will be required to implement deletion of system identifiers and possibly ADPE unit number. This effort is considered to be cost-effective as the benefit of *not* tracking system configurations exceeds the cost of modifying local reporting systems.

For further discussion: Whether ADP unit number need be reported with each record. Because it is the same for each record in an ADP unit, it need not be stored in local databases, unless, as in the case of DOD, one database is used to administer multiple ADP units. For most sites, it is merely a text string, and is not a burden to include in the report.

Recommendation:

See Issue 9A.

ADPE/DS Issue Sheet

Issue No.: 9D

Subject: Reporting *system* configurations. CPU required

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☒ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☒ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

Presently, the ADPE system rejects a system record for which there is no CPU (component class 01). However, there are cases where the CPU is not DOE-owned, but there is more than $50,000 in DOE-owned peripherals attached to the system.

It would be helpful if the requirement for a CPU to be included in a system were dropped.

Disposition Summary:

GSA tentatively agreed that the requirement for reporting system configurations can be deleted.

GSA agreed that if system records should be retained, the requirement for a CPU as part of a system should be dropped.

Recommendation:

See Issue 9A.

ADPE/DS Issue Sheet

Issue No.: 9E

Subject: Reporting *system* configurations. effort

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☒ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☒ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

Beyond the burden of *what* must be maintained and reported (information on how components are configured into systems) is the burden of *who* must perform it. This "system configuring" cannot be done by property management staff. An inventory taker cannot walk into a machine room that contains several systems, and identify with which of those systems a particular box, such as a disk drive, is associated. Only the system manager is knowledgeable enough to specify which components are part of which systems.

What benefit does GSA gain in requiring an inventory that cannot be performed routinely by inventory personnel, but must be done by (expensive) specialized personnel, in this case, system managers?

Disposition Summary:

GSA tentatively agrees that the requirement for reporting system configurations can be deleted.

Recommendation:

See Issue 9A.

ADPE/DS Issue Sheet

Issue No.: 9F

Subject: Reporting *system* configurations, embedded ADPE

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☒ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

DOE ORDER 1360.6 (ADPE/DS) requires reporting of embedded ADPE (e.g. a spectrometer that has a computer inside it) that is excluded in 1360.1 and 1360.1A, as is reasonable. Thus, we have no way of detecting purchase of such embedded ADPE. Then there is the problem of determining a cost to the ADPE portion of the instrument even though it was purchased as a package with a single price.

This difficulty stems from requiring system configurations in addition to component data. If the ADPE/DS did not require system configuration information, the inventory could be conducted by property management personnel, who would be more likely to detect such a processor once the entire instrument is on site.

Disposition Summary:

GSA agreed that a change in the regulations should be made to exclude embedded ADPE.

Recommendation:

Delete requirement to report embedded ADPE.

ADPE/DS Issue Sheet

Issue No.: 10

Subject: Reporting snapshots

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☒ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

For sites with their inventory already in machine readable form, it is much easier to delete all of the component records for a system and add the new component records (i.e., a "snapshot"), than to compare each component in the new report with the previous report (i.e., what is presently on the Omega/ADPE file) to determine if it has changed. Presently, we accomplish this by deleting system records, which automatically delete component records. We then submit the new system and component records, i.e., the new snapshot.

But this still requires that we generate (and therefore retain the data to generate) a series of "delete system" transactions so that we can start with a clean slate before submitting the new snapshot. It would be helpful to have defined a single command that, in effect says, "delete the presently reported inventory for site X". For example,

9895J1701

where the "9" in the first column means "Delete all system and component records for the ADPE unit specified", in this case, unit 1701.

Such a command would be useful even if the concept of reporting system configurations is discontinued.

DOE has refused to provide this easier form of snapshot reporting because there would be a few moments when no data is in the database for our site. But there is no substantive difference between the effect of such a command and the present procedure of deleting all the system records. The DOE objection seems to be excessively cautious.

Support for this concept in the GSA system also might be useful as it would make reporting for agencies such as DOE less computation-intensive.

Issue No.: 10 (continued)

Subject: Reporting snapshots

Disposition Summary:

Ruatto will investigate whether there is a technical reason for prohibiting implementation of this feature in the DOE system.

A GSA response to this issue will be provided by McNair/Rodgers.

ADPE/DS Issue Sheet

Issue No.: 11

Subject: Reporting frequency

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☐ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☒ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

DOE has information about the present ADPE inventory for each unit or site. Further DOE is aware of, indeed approves or receives implementation plans for, all major ADPE acquisitions.

Given that DOE is aware of each contractor's ADPE inventory, why cannot DOE perform quarterly reporting on behalf of the contractor, with the contractor performing an annual audit?

If a contractor has no substantive acquisitions or departures of ADPE in a quarter, why must DOE be explicitly told that there are no changes?

Disposition Summary:

DOE did not have sufficient time to respond to this issue; however, note the GSA response to issue 8.

Recommendation:

Eliminate quarterly reporting, implement immediate ("perpetual") reporting.

ADPE/DS Issue Sheet

Issue No.: 12

Subject: Submitting report files electronically

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☐ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☒ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

DOE Order 1360.6 indicates that the following media are supported:
Data entered interactively to the DOE computer
Magnetic tape
Paper reports
Not punched cards.

Why does the DOE Order fail to provide for support for submitting existing machine-readable files electronically?

The ADPE/DS System Referenence Manual, Appendix K provides, in elaborate detail, the procedure to upload a file from a PC. A logon account is required. Unfortunately, an error checking telecommunications facility, such as XMODEM, is not supported by the DOE host computer. Errors in transmission require one to logon and manually edit the file. Is there rationale for not supporting a standard error-checking communications facility?

An even better way to send files electronically does not require one to logon to a host, but merely to send the file over a standard network such as ARPANET, NSFNET, or BITNET. Is the DOE headquarters computer on such a standard network? If not, is there some rationale in favor of isolating the DOE facility electronically?

The ability to send ADPE reports to DOE over a network, where logging on to the host is not required, would greatly facilitate reporting. It would also enhance the communications between DOE entities, in general.

Issue No.: 12 (continued)

Subject: Submitting report files electronically

Disposition Summary:

Discussion of aspects of this issue transpired spontaneously without formal presentation of this issue. Therefore, written response is solicited from all interested parties.

Through discussion, DOE OADPM began the process of developing an appreciation for what electronic data transmission networks are, what networks exist, which are used extensively by DOE contractors and for what purposes, the advantages of participating in them, what gateways are, and their use. Some basic descriptions of these concepts were presented. The advantages of electronic data transmission networks relative to the use of telephones, telefaxing, snail mail, magnetic tapes, and use of clerical assistance were discussed. The OPMODEL system was briefly described.

Present DOE use of alternate electronic facilities, such as DOE HQ staff's use of an LBL computer (because it is connected to ARPANET) and DIALCOM, were presented as examples of DOE HQ need for direct access to modern networking facilities. It was noted that DOE may be spending a substantial amount for DIALCOM service while as many as half of the 2000 accounts are inactive.

The specter of internal political resistance to such technology for use by the headquarters computing center was raised by OADPM.

OADPM will attempt to identify the appropriate persons at DOE HQ with whom this issue should be raised.

OADPM can informally investigate whether an ARPANET/OPMODEL gateway (perhaps at LLNL) is feasible, whether DOE HQ and operations offices should become nodes on a network (such as ARPANET) directly, or whether there are better alternatives. OADPM will attempt to determine whether there is an existing body of planning or decisions that are contrary DOE joining a standard network.

The discrepancy between DOE Order 1360.6 and the ADPE/DS Reference Manual was not addressed. A DOE response is solicited. DOE is encouraged to include transmission of files electronically as one of the acceptable "media" for ADPE reports in the DOE Order.

ADPE/DS Issue Sheet

Issue No.: 13

Subject: Reporting Systems, Reporting Redundancy

Submitted by: Allan Konrad, Suzanne Sharp

Date: 17 September 1987

Category:

- ☐ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☐ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☒ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

DOE conducts an extremely thorough annual planning process, the ITR LRP. Part of that process requires each DOE contractor to enumerate annually its major ADPE resources (Part 3, Section B).

In addition to this inventory in the LRP, implementation plans are submitted to regional DOE offices to obtain new ADPE and clearance documents are issued by the DOE office indicating that the ADPE will actually be ordered.

The combination of the inventory reported in the LRP with the implementation plans/clearance documents seems to coincide with the ADPE reported in ADPE/DS. That is, the information in the hands of DOE from LRPs/clearance documents seems to be sufficient to meet the *intent* of the congressional requirement.

Presently, DOE has mechanically "passed through" GSA reporting requirements to DOE contractors. What is the feasibility of modifying the ITR LRP information gathering process, if needed, to enable DOE to use this data to meet the requirements of GSA? That is, can DOE perform a value-added service to contractors by integrating data it receives for LRPs into its ADPE reporting mechanism?

Consideration should be given to studying DOE contractor reporting requirements to determine the amount of redundant reporting. For example, DOE Order 1360.1C requires tracking of sensitive ADPE equipment. As a result of this requirement, much of the same information is reported as in the ITR LRP, as well as the ADPE inventory. Could a single report be made by contractors from which DOE could extract the information it needs to meet each of its reporting requirements?

Issue No.: 13 (continued)

Subject: Reporting Systems, Reporting Redundancy

Disposition Summary:

This issue has been renamed. If GSA eliminates the reporting requirement for system configurations, this issue might be moot with respect to ADPE. However, apart from ADPE/DS, the issue of redundant reporting should be considered further.

ADPE/DS Issue Sheet

Issue No.: 14A

Subject: Logon account "required", generally

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☐ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

DOE has implicitly "required" of contractors two burdens *that are not part of, but beyond* the mere reporting requirement in DOE Order 1360.6.:

1. Obtaining and maintaining a login account on the DOE computer.
2. That of actually *processing* the data once it is submitted to DOE.

This second burden is extremely inconsistent with general reporting practices. It is akin to requiring one who writes a personal check to travel to the bank to perform the check clearing process.

What is the justification for administering ADPE/DS such that contractors must meet requirements that are not specified in the DOE Order?

What is the justification for DOE "requiring" contractors to perform processing of ADPE data on behalf of DOE?

If contractors did not maintain logon accounts and process their data sets, but merely met the requirements in DOE Order 1360.6 (by submitting printed reports), could DOE still fulfill its reporting obligation to GSA?

Recommendation

A recommendation has been made to DOE to become a BITNET member. No response has been received.

Issue No.: 14B (continued)

Subject: Logon account "required", Costs

What were and are the costs to DOE of fulfilling the ADPE requirement by requiring ADPE units to retain logons?

	Cost in $
1. Design and implementation of the online system (Calculon)	_____
2. Maintenance of the online system	_____
3. Training and documentation.	_____
(How many have been trained?) _____	
4. FTE in the field:	
gathering information	_____
Entering and reporting information to DOE	_____
5. Total life cycle cost (1984-1988)	_____

If DOE received ADPE information from contractors on paper and simply keypunched it with their own staff, how much would it have cost? _____

ADPE/DS Issue Sheet

Issue No.: 14C

Subject: Logon account "required", Security

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☐ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

DOE has implicitly "required" of contractors two burdens *that are not part of, but beyond* the mere reporting requirement in DOE Order 1360.6.:

1. Obtaining and maintaining a login account on the DOE computer.
2. That of actually *processing* the data once it is submitted to DOE.

These implicit "requirements" have several ramifications:

- Having to maintian a logon account means having to log on every 90 days to renew a password. That means someone must remember to log on even where there is no ADPE to report.
- Having to maintain a logon account means becomming subject to security rules and constraints. In fact, having unused active accounts is a poor practice because hackers tend to seek and penetrate unused logon accounts. The real owner is unaware of this if he does not regularly use the account. Hence requiring people to maintain logon accounts that they do not regularly use should be discouraged rather than required.

Recommendation

A recommendation has been made to DOE to become a BITNET member. No response has been received.

ADPE/DS Issue Sheet

Issue No.: 14D

Subject: Logon account "required", Time-consuming non-germane tasks

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☐ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

DOE has implicitly "required" of contractors two burdens *that are not part of, but beyond* the mere reporting requirement in DOE Order 1360.6.:

1. Obtaining and maintaining a login account on the DOE computer.
2. That of actually *processing* the data once it is submitted to DOE.

These implicit "requirements" have several ramifications:

- With respect to training, for the ITR Long Range Plan, a one-day workshop is held annually to discuss changes and answer questions. But in general, reports required of contractors by DOE do not require elaborate formal training. The notable exception is ADPE/DS reporting, for which very detailed training is required.
- Having to maintian a logon account means having to log on every 90 days to avoid losing files (they get "archived" by the DOE computer center). That means someone must remember to log on even where there is no ADPE changes to report.

All of these are caused by DOE's mechanically "passing through" to contractors the burden of submitting data in internal GSA format rather than performing that conversion internally in DOE.

The ADPE system documentation and computer center documentation are both more lengthy than the data that we report. Both take more time to maintain and read than it takes to manually enter our data in a file and send it. In other words, the overhead is larger than the task itself.

Issue No.: 14D (continued)

Subject: Logon account "required", Time-consuming non-germane tasks

There is no apparent value to contractor's in maintaining a working knowledge of the DOE computing facility merely to submit an inventory report. There are no other applications that are of use or even accessible to us on the DOE computer.

Recommendation

A recommendation has been made to DOE to become a BITNET member. No response has been received.

ADPE/DS Issue Sheet

Issue No.: 15

Subject: Level of detail required

Submitted by: Allan Konrad

Date: 17 September 1987

Category:

- ☒ GSA requirements and procedures
- ☐ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

GSA has tentatively agreed to discontinue requiring "system records". Two alternatives are:

Require "component records" only

Require "CPU records" and "periperal records"

In either case, two questions arise:

1. What should the component threshold be? It is not sufficiently useful to report components below a reasonable value.
2. Should the same threshold be applied to each category?

Proposal 1:

If there are only component records, then there should be a single component threshold value, e.g., $10,000.

If there are CPU records and peripheral records, then separate thresholds for both might be defined, e.g., $20,000 for CPUs and $10,000 for peripherals.

Proposal 2:

Components below $30K should be required to be reported when purchased, but not maintained actively in the ADPE inventory. That is, require *original reporting* of low-cost periperals, but eliminate *tracking* of them. Do not require reporting when such low-cost peripherals are salvaged, excessed, gotten rid of, etc.

Issue No.: 15 (continued)

Subject: Level of detail required

Disposition Summary:

Proposal 1: GSA indicated the potential need to have separate thresholds for each peripheral category. The view was expressed that maintaining such separate thresholds was unnecessarily complex.

Proposal 2 has not been discussed.

GSA agrees that type and model designation might not be necessary. However, if price data is to be omitted, then model and type might be needed. GSA tentatively plans to merge the model and type fields into a single field.

To be determined: whether both price, make/model data can be eliminated for non-CPU components.

Recommendation

Report only CPU's and eliminate reporting of all other components.

ADPE/DS Issue Sheet

Issue No.: 16

Subject: Online updating is cumbersome

Submitted by: Ed Orner, Albuquerque (via S. Sharp)

Date: 30 September 1987

Category:

- ☐ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

For those sites that enter their inventory records manually using the online ADPE/DS system, procedures to change records are cumbersome, complicated and require delays caused by the overnight processing requirement.

Disposition Summary:

This is a new issue. The overnight processing delay might now be eliminated. Specific information on the nature of the cumbersomeness is needed; however, GSA's revisions to their system might provide the opportunity to make the DOE system easier to use for those who want to use it.

Whether the burden of entering data online on the DOE computer should be placed upon reporting units *at all* is an open issue as well.

ADPE/DS Issue Sheet

Issue No.: 17

Subject: Online training mis-oriented

Submitted by: Ed Orner, Albuquerque (via S. Sharp)

Date: 30 September 1987

Category:

- ☐ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

For those sites that enter their inventory records manually using the online ADPE/DS system, procedures to change records are cumbersome, complicated and require delays caused by the overnight processing requirement.

Because interactive ease-of-use is less than desirable, training sessions are oriented to procedure (e.g., key strokes, syntax, column specifications), rather than substantive ADPE issues, such as whether a system is reportable, whether to report similar items as the same or different records, etc.

Disposition Summary:

This is a new issue. Simplification of the GSA requirements will increase the ease-of-use for those who report data interactively as well as with other means.

The session should include entering data for a real site as an example.

Under new GSA specifications, the need for a training session *at all* should be considered. A clear concise set of written instructions might suffice if the burden of interacting with the DOE computer center is eliminated and if the concept of system configurations is eliminated.

ADPE/DS Issue Sheet

Issue No.: 18

Subject: Consulting

Submitted by: Ed Orner, Albuquerque (via S. Sharp)

Date: 30 September 1987

Category:

- ☐ GSA requirements and procedures
- ☒ DOE requirements and procedures
- ☐ Cost/Benefit, generally

Disposition:

- ☒ More discussion needed
- ☐ More information or investigation of feasibility needed
- ☐ Other ADPE contacts should be consulted
- ☐ No more information needed, formulate recommendation
- ☐ No more information needed, table pending system changes
- ☐ Recommendation formulated, include recommendation in final report
- ☐ Dismiss the issue
- ☐ Other _____

Description of the Issue:

For those sites that do not maintain their inventory records in machine readable form, the online ADPE/DE is used for data entry.

Consulting staff did not have grasp of the ADPE requirements, only procedures. For example, when asked what is the source for a SYSTEM ID value, the consultant did not know.

Disposition Summary:

This is a new issue. Simplification of the GSA requirements will increase the ease-of-use for those who report data interactively as well as with other means.

The documentation should be modified to explain the source for SYSTEM ID values if the concept of system ID's is retained.

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