Case Study

Writing a General Records Schedule for Electronic Records

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Abstract: The National Archives and Records Administration confronted the difficult question of how burgeoning electronic records should be scheduled and appraised when, in 1986-88, it revised the existing General Records Schedules as they pertained to the disposition of machine-readable records. The committee of custodial and appraisal archivists substantially revised GRS 20, the existing nontextual schedule for machine-readable records, and created new provisions in GRS 23, which, for the first time, addressed the issue of electronic records created on personal computers or in office automation systems. The authors discuss the fundamental archival questions raised in the revision process, describe how the issues were resolved, and evaluate the results.

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THE NATIONAL ARCHIVES AND Records Administration (NARA) faces the mammoth challenge of appraising and scheduling records created in the burgeoning computer environments in federal agencies. The issues involved in meeting this challenge came to a head between 1986 and 1988, during which time NARA undertook a revision of its General Records Schedules (GRSs). The GRS is the tool appraisal archivists and records managers employ to provide disposition authorization for categories of routine records common to several or all agencies of the federal government. The purpose of the GRS is to authorize the timely disposal of records that have no archival value (e.g., employee awards, vouchers for fees and mileage, mailroom logs, general requisition files, and motor vehicle maintenance files) and thus free appraisal archivists to concentrate their efforts on records more likely to be of enduring value.

Among the existing General Records Schedules at the beginning of the project was GRS 20, which was issued in 1982 to schedule machine-readable records. At the time, it was the only GRS that addressed machine-readable records. GRS 20 had been criticized on several grounds: it was too complicated to apply; it was totally mainframe-oriented and made no provision for disposal of personal-computer (PC) and office-automation (OA) applications; and it failed to distinguish adequately between permanent or potentially permanent records and routinely disposable housekeeping files. It was in this context that NARA undertook a revision of GRS 20 in May 1986. What began as a modest exercise with limited goals ended as a major overhaul with a confrontation of important questions about how electronic records should be scheduled and appraised. How these issues were resolved—through the revision of GRS 20 for electronic records created on mainframe computers and a new inclusion in GRS 23 of provision for electronic records in OA and PC environments—may be of interest to archivists and records managers both inside and outside the federal government.[1]

Issues and Problems

A model general records schedule item is broad enough to be useful in disposing of a large quantity of nonarchival records, yet specific enough to prevent the inadvertent destruction of potentially archival ones through misapplication. This is a difficult balance to maintain. The revision process brought into sharp contrast the viewpoints of NARA custodial archivists who feared the loss of potentially permanent records, and NARA appraisal archivists who felt overwhelmed by the vast number of automated information systems they had to review individually, despite the obvious lack of archival value. In devising a new general records schedule for electronic records, NARA addressed fundamental archival questions, many of which are not unique to electronic records. There were six basic issues:

1. What should be considered an electronic record?
2. Should there be a separate GRS for electronic records or should each GRS (such as GRS 4 for Property Disposal Records) include all relevant records regardless of medium?
3. Should the GRS for electronic records be limited to disposable (read "destructable") records? If so, how would NARA instruct records officers on the potential value of nontextual (especially electronic) records, given the bias of many records managers toward paper records?

[1]Copies of the 1988 revised versions of GRS 20 and 23 are available from the Records Administration Information Center, Agency Services Division (NIA), National Archives and Records Administration, Washington, DC 20408 (telephone number 202-724-1471).

4. Should the GRS for electronic records be limited to administrative ("housekeeping") records or include program files as well? What impact would the decision have on NARA's instructions for the disposal of processing records?
5. To what extent, if any, can existing dispositions for paper records be applied to electronic records that replace them, without undertaking a separate appraisal of the electronic records? Does such an approach simply perpetuate an archival bias for paper? Does it make a difference if the records in question are batch (statistical) files, relational databases, text files, or spreadsheets?
6. Does the machine make a difference? Should records maintained on mainframe computers be treated differently from those on PCs or in office automation systems?

The New General Records Schedules for Electronic Records

Debate over these issues lasted for nearly eighteen months, with participation by staff from several units within NARA, as well as input from representatives of other federal agencies. There was substantial disagreement on each issue and the solutions achieved were compromises, many of which were adopted because they were realistic given the constraints. The final form of the revised GRS was the work of a committee of seven, four representing the Office of the National Archives (the custodial archivists) and four representing the Office of Records Administration (appraisal). Consensus over what would be considered an electronic record (Issue 1) was achieved first. There had been some question, for example, as to whether word processing documents, used simply to produce the official record (paper) copy that was then filed, were themselves records. Some felt that they were disposable records, and others felt they were nonrecord in nature. The committee agreed to treat word processing documents as records and provide a disposition. NARA had worked for over a decade to convince records managers and others in the federal sector that electronic records are "records," and the committee felt it would be a tactical error to suggest that NARA was retreating from that position.

Next the committee decided to divide electronic records between two schedules (Issue 2). GRS 20 covers only those electronic records created in central computer facilities on mainframe equipment. GRS 23, Records Common to Most Offices Within Agencies, includes electronic records in office automation and PC environments (see Figure 1). Both GRS 20 and 23 cover only disposable records (Issue 3); the task of instructing records managers (and archivists) about potentially archival electronic records will be handled in a separate issuance. The revised schedules include disposal authorities for electronic files whose record status had been questioned, such as word processing files used to create hard copy for filing. Administrative "housekeeping" records (Issue 4) in electronic form are defined and given dispositions in terms of their paper equivalents. GRS 20 authorizes the disposal of most input, processing, extract, and summary files if the master file has been scheduled. Many computer facility administration files are included, but development and testing records were excluded.

The most controversial inclusion/exclusion issue was relational databases (Issue 5). The committee recognized that databases were an advancement over batch files and offered greater research potential. Rather than exclude databases from GRS disposition guidelines altogether, however, the committee chose to restrict the types of information covered by the GRS to the extent that the database format and the potential for linkage would not affect disposability. Under GRS 20, mainframe databases are disposable if all information in them has

Figure 1

NARA General Records Schedule 23

ITEM NO.	DESCRIPTION OF RECORDS	AUTHORIZED DISPOSITION
2.	Word Processing Files.	
	Documents such as letters, messages, memoranda, reports, handbooks, directives, and manuals recorded on electronic media such as hard disks or floppy diskettes:	
	a. When used to produce hard copy which is maintained in organized files.	Delete when no longer needed to create a hard copy.
	b. When maintained only in electronic form, and duplicate the information in and take the place of records that would otherwise be maintained in hard copy providing that the hard copy has been authorized for destruction by the GRS or a NARA-approved SF 115.	Delete after the expiration of the retention period authorized for the hard copy by the GRS or a NARA-approved SF 115.
3.	Administrative Databases.	
	Databases that support administrative or housekeeping functions, containing information derived from hard copy records authorized for destruction by the GRS or a NARA-approved SF 115, if the hard copy records are maintained in organized files.	Delete information in the database when no longer needed.
4.	Electronic Spreadsheets.	
	Spreadsheets that are recorded on electronic media such as hard disks or floppy diskettes:	
	a. When used to produce hard copy which is maintained in organized files.	Delete when no longer needed to update or produce hard copy.
	b. When maintained only in electronic form.	Delete after the expiration of the retention period authorized for the hard copy by the GRS or a NARA-approved SF 115. If the electronic version replaces hard copy records with differing retention periods, and agency software does not readily permit selective deletion, delete after the longest retention period has expired.

GRS 23, "Records Common to Most Offices Within Agencies," provides for the disposal of records of routine internal administrative and housekeeping activites. The June 1988 revision included, for the first time, coverage of certain types of records created in electronic form on stand-alone or networked micro- and mini-computers.

been deemed disposable in paper form by another GRS. GRS 23 permits the deletion of databases that support administrative or housekeeping functions and that contain information derived from documents previously authorized for disposal in that office.

An even thornier question was the application of dispositions approved for paper records to their electronic counterparts (also Issue 5). This was proposed as a solution to the confusion about what constituted an electronic housekeeping file eligible for disposable under the GRS. In the past, NARA had required agencies to seek new disposition authorization for any paper series of records after it was automated. The revised GRS permits the application of a disposition for paper records to the electronic form, but only in restricted circumstances. In the case of mainframe computer files (GRS 20), it can be done only when the automated series replaces records scheduled for disposal under an existing GRS authority.

Even some GRS items were excluded after the committee reviewed the entire GRS item by item. A total of seven GRS items, mainly dealing with personnel records, were excluded. In each case, the committee felt that there was a distinct possibility that the information might be more valuable in electronic form than it was in hard-copy due to the ability to manipulate it for statistical research. For this reason the committee concluded that such data files should be appraised individually, rather than approved for disposal under a GRS item. While not a perfect solution, the new GRS 20 provides criteria for determining what constitutes a housekeeping file that is disposable under the GRS.

While exploring the application of paper dispositions to electronic records, it became clear that all members of the committee were willing to permit broader disposal authority for PC and office automation files than they were for those in mainframes. The implicit assumption was that most federal agencies maintain their important data at central computer facilities, and that PCs were being used primarily to make the individual program units perform more efficiently. Put another way, most agencies feel that they need to control closely their corporate data, and thus they keep it under centralized control. Using that framework, the committee chose to separate the PC and OA applications from the mainframe ones and put them into GRS 23. GRS 23 permits the disposal of housekeeping files that replace or contain information drawn from records disposable under a GRS item or any disposal authority approved specifically for that agency. An analysis of known PC and OA-based systems indicates that the vast majority do one of the following: create reports and correspondence and serve as a reference file for a program unit, keep track of some phase of the unit's work, or consist of a downloaded portion of a mainframe file to permit easy access to the data that directly affects the work of the unit.

Both GRS 20 and GRS 23 distinguish between electronic records that are used simply to produce paper copy that is filed, and those that replace paper copy. If the electronic file becomes the record copy (still relatively rare in federal agencies, especially in PC environments) it must be maintained as long as its paper equivalent would have been. If it replaces more than one series of paper records, the longest retention is to be applied to the entire data file. Records that are used simply to create hard copy that is then filed are authorized for disposal when no longer needed. Agencies are directed to develop their own internal disposal procedures, weighing the convenience of the electronic record for current business against the economics of storing the data. The revised GRSs give agencies the flexibility to resolve such questions within the agency without further approval from NARA.

In adding the authority to dispose of data

files that contain (or track) information disposable under an agency-specific disposition authority, the committee implicitly agreed that some program files (as opposed to strictly housekeeping ones) would be included in the GRS. In GRS 20, input and processing files are disposable no matter what their contents, and extract and summary data are disposable if the master file was scheduled to permit disposal. The rationale for the latter decision was that, if the master file was archival (nondisposable), the extract or summary could be recreated from it; if the master file was not, no summary or extract would be archivally valuable either. (Files created to permit access by the public to restricted master files were specifically excluded from GRS disposition authorization.)

The disposal criteria provided the following results. The revised GRSs permit the disposal of electronic records under two broad categories. First, some categories of information are of such a mundane nature that even automation would not enhance their value sufficiently to make them archival. "Junk is junk" became the rallying cry of the appraisal archivists, and the committee finally agreed, albeit with a relatively narrow definition of what constituted "junk." Second, some electronic records are disposable under the revised GRSs based on their position in the life cycle of information. Word-processing files used to create hard copy and extracts are but two examples of files deemed disposable because they do not contain unique information in its final form.

Conclusion

Was the revision of GRS 20 and the addition of new GRS 23 provisions worth the effort, given the time it took and the limited nature of the results? Our feeling now is yes, for three reasons. Recent systematic reviews of administrative data files in several agencies indicate that many of the committee's working hypotheses about how computers are used are correct. This confirms that little potentially archival data will be lost if the revised GRSs are correctly applied. Those same studies also indicate that the revised GRS 23 will be useful in authorizing the disposal of PC-based records. Finally the revised GRS has received a favorable response from many archivists and records managers both inside and outside of the federal government. GRS 20 and 23 seem to fit their understanding of how the world works, and how to handle disposable records efficiently. Obviously more needs to be done, and will be. Yet, within the boundaries in which it was created, the current revision can serve as a useful tool to dispose of the "junk," and free the appraisal staff to seek out electronic records of enduring value.

The revised GRS is intentionally a very conservative document. The reliance on dispositions for paper records, the exclusion of test and development data previously authorized for disposal, and the very restricted definition of housekeeping records all reflect the committee's recognition that they had a limited grasp of the full extent of automation applications in the federal government. There were attitudes, preconceptions, and evaluations based on impressionistic data, but little hard information about automation in the federal sector.

The treatment of electronic records in the 1988 revision of the GRS can be seen as a transition phase between the mainframe orientation of the previous GRS, and a GRS that integrates the dispositions of paper and electronic records. This transition in the GRS parallels the transition in federal agencies which are moving, at varying rates, from separate paper and computer environments to integrated information management.

The next five years will be used to expand NARA's information base so that electronic records can truly be incorporated into the fabric of the GRS. A revision of

that magnitude takes more time and research than was available to the committee for this revision, but the hope is that in five years, for example, GRS 7 (Expenditure Accounting Records) can be rewritten so that it refers to specific types of electronic data rather than general accounting ledgers. As NARA reviews administrative records of federal agencies, it is constantly seeking examples of electronic files appropriate for inclusion in the next revision of the GRS. NARA-sponsored studies, such as the study of electronic records conducted by the National Academy of Public Administration, will also expand the Archives' knowledge base and provide insights into how computers are being used in the federal government.