“The Computer Ate My Homework, Your Honor”: What You Need to Know About the Electronic Discovery Amendments to the Federal Rules of Civil Procedure

By Greg Bass

[Editor’s Note: This periodic column aims to give practical help on litigation issues that advocates encounter in federal or state court. “Affirmatively Litigating” outlines the problems, offers some basic legal research results and analyses, and suggests possible approaches to resolving the issues. The columnist Greg Bass, litigation director, Greater Hartford Legal Aid (999 Asylum Avenue, 3d Floor, Hartford, CT 06105; 860.541.5018), welcomes reader feedback. Send your comments and questions, as well as suggestions, to gbass@ghla.org.]

The Question

In your federal court challenge to a housing authority’s disability discrimination practices, you need discovery of statistical data, e-mail, and word processing documents, all in multiple drafts and formats, and stored in various electronic media and locations, including an office network and laptops. The housing authority recently changed its computer network to a new operating system, and it recycles e-mail onto backup tapes, which are periodically overwritten. What is the best way to frame your discovery requests to ensure receiving all relevant data?

The Answer

Guidance on accessing and retrieving relevant data in a usable format before its destruction is contained in recent amendments to the Federal Rules of Civil Procedure governing the discovery of electronically stored information (ESI).

The Basics

Amendments to the Federal Rules of Civil Procedure incorporating information technology advances relevant to civil discovery became effective December 1, 2006. The rules and interpreting case law now expressly include ESI as a discrete category of discoverable information. They also address how “accessible” various ESI formats are, whether the costs of searching and retrieving “inaccessible” data may be shifted to the requesting party, and whether the responding party has a duty to preserve the electronically stored data. The rules require the parties to develop an ESI discovery plan that will be incorporated into a pretrial scheduling order, and they allow sanctions for the nonproduction or destruction of electronic data.

What Makes ESI Unique

Most new information is stored digitally. According to one study using 2002 data, 92 percent of all five exabytes of new information stored in all media was stored electronically on magnetic media.


2 See Fed. R. Civ. P. 16 (pretrial conferences), 26 (scope of discovery), 33 (interrogatories), 34 (requests for production), 37 (sanctions), 45 (subpoenas).
primarily hard disks. Only 0.01 percent was stored on paper. E-mail is an increasingly omnipresent means of communication. About 31 billion e-mail pieces were sent daily in 2002, and this was expected to double by 2006. E-mail “ranks second behind the telephone as the largest information flow,” and e-mail users constitute 35 percent of the total U.S. population.

The features that fundamentally distinguish digitally stored information from paper can be grouped into six basic types that have practical import for discovery:

1. “Volume and duplicability,” which leads to “vast information accumulations” and “large-scale user-created and automated replication without degradation of the data”;

2. “Persistence,” which ordinarily means that “deleting” a file “does not actually erase the data from the computer’s storage devices”; “[u]ntil the computer writes over the ‘deleted’ data … it may be recovered by searching the disk itself rather than the disk’s directory”;

3. “Dynamic, changeable content,” which is designed to change over time without human intervention and which allows modification of information by merely moving or accessing the data in ways that are hard to detect without computer forensic techniques;

4. “Metadata,” which “includes information about the document or file that is recorded by the computer to assist in storing and retrieving,” including items such as “file designation, create and edit dates, authorship, comments, and edit history” that may not be readily apparent on the screen view of the file;

5. “Environment—dependence and obsolescence,” which lead to information in a database being “incomprehensible when removed from the structure in which it was created” and periodic “migrations of data to different platforms within a few years” that make it difficult to access this “legacy” data from out-of-date systems; and

6. “Dispersion and searchability,” which hamper the ability to trace the origin, completeness, or accuracy of ESI that has been transmitted in multiple versions to numerous locations, including hard drives, laptops, network servers, or backup tapes. Conversely, “new efficiencies and economies” can result from quick and accurate automatic search capabilities of many forms of ESI and media.

Overview of the Electronic Discovery Amendments

This complexity of ESI occupied much of the multi-year rule making that produced the 2006 electronic discovery amendments. A Judicial Conference committee report noted that ESI discovery “raises markedly different issues from conventional discovery of paper records,” including its “exponentially greater volume,” its “dynamic” nature whereby “merely turning a computer on or off can change the information it stores,” and the operation of computers through “overwriting and deleting information, often without the operator’s specific direction or knowledge.”

Recognition of ESI as a Mandated Form of Disclosure: Rule 34. Federal discovery rules have not significantly addressed technological advances since 1970 when the Rule 34 description of “documents” subject to requests for production was amended to add “data compilations from which information can be obtained, translated, if necessary, by the respondent through detection devices into reason-
ably usable form.” The 2006 amendment to Rule 34 clarifies that parties may request the production of ESI “stored in any medium” and “translated, if necessary, by the respondent into reasonably usable form.” ESI is a distinct type of discoverable information on a par with hard-copy documents. A Rule 34 request that simply asks for production of “documents” should be interpreted to encompass ESI. Instead of a uniform definition, Rule 34 reflects an expansive, flexible approach that is applicable throughout the rules and meant to accommodate technological advances.

The amended Rule 34(b) allows the requesting party to specify the form of production of ESI. The rule also permits the responding party to object to the requested form. If the requesting party does not ask for information in a particular form, or absent agreement or court order to the contrary, the responding party must produce the ESI either “in a form or forms in which it is ordinarily maintained or in a form or forms that are reasonably usable.”

The producing party may not degrade or convert the ESI to a form that makes access more difficult or burdensome. An example might be the removal of searchability features. The party seeking production may request that the producing party “translate” data from its customarily maintained form into a reasonably usable one and provide “technical support, information on application software, or other reasonable assistance to enable the requesting party to use the information.” In all cases, the responding party must “state the form or forms it intends to use” in writing and in advance of the actual production of ESI.

Accessing ESI in an Appropriate Format. In Williams v. Sprint/United Management Company the defendant admitted “scrubbing” metadata from electronic Excel spreadsheets that it produced in discovery. The metadata would have disclosed file names, dates, printout dates, changes and modification dates, authors, and recipients. The court held that metadata are “an inherent part of an electronic document” and that electronic documents as “maintained in the ordinary course of business” should be produced “with their metadata intact.” The court subsequently addressed the defendant’s rolling production of paper versions of e-mail separated from their spreadsheet attachments. Finding that plaintiffs had agreed to the production of hard copies of the e-mail and had not shown that they needed an alternate version of the documents, the court denied plaintiffs’ request for the re-production of the e-mail pieces and their attachments in native electronic format.

Counsel should carefully specify the format in which they want ESI produced. Failure to specify the format may lead to production in formats such as hard...

---


102006 Amendments to Fed. R. Civ. P. 34(a), advisory committee’s note ("Rule 34(a) is amended to confirm that discovery of electronically stored information [ESI] stands on equal footing with discovery of paper documents.").


122006 Amendments to Fed. R. Civ. P. 34(a), advisory committee’s note. Rule 34(a) does so by allowing a responding party to answer an interrogatory by giving access to ESI. See E-Discovery Amendments and Committee Notes supra note 10, at 34.

132006 Amendments to Fed. R. Civ. P. 34(a), advisory committee’s note. ("The wide variety of computer systems currently in use, and the rapidity of technological change, counsel against a limiting or precise definition of electronically stored information. Rule 34(a)(1) is expansive and includes any type of information that is stored electronically.... In each of these rules, electronically stored information has the same broad meaning....") See E-Discovery Amendments and Committee Notes supra note 10, at 34–35.

14Fed. R. Civ. P. 34(b)(ii). The responding party need not produce the same ESI in multiple forms. Id. 34(b)(iii).


16Fed. R. Civ. P. 34(b). In addition to seeking production, inspection, or copying, parties may now specifically request that ESI be tested or sampled. Id. 34(a)(1); 2006 Amendments to Fed. R. Civ. P. 34(a), advisory committee’s note. See E-Discovery Amendments and Committee Notes supra note 10, at 36.


copies lacking retrievable metadata and making it difficult or impossible to retrieve or decipher the sought-after information in the documents.  

Reasonable Accessibility of ESI, Undue Burden, and Good Cause: Rule 26(b)(2)(B). The rules create a two-tier approach to ESI by separating ESI into two categories: (1) that which is “reasonably accessible” and (2) that which is “not reasonably accessible.” Rule 26(b)(2)(B) specifically addresses data identified as “not reasonably accessible”:

A party need not provide discovery of electronically stored information from sources that the party identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the party from whom discovery is sought must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

The amended rule does not define or describe specific ESI sources deemed reasonably accessible or not.

ESI that the producing party agrees can be reasonably accessed without substantial burden or cost comprises the first “tier” of data. This information should be routinely produced, subject to relevance and privilege considerations.

As noted above, the second “tier” of ESI, data “not reasonably accessible,” is subject to a showing of undue burden. If the producing party demonstrates that the cost of search, retrieval, or production of requested data that is “not reasonably accessible” creates an undue burden, the party is relieved from turning the data over. The responding party must identify by category or type the sources of potentially responsive data that it is declining to search or produce. This identification should be detailed enough to allow an evaluation of both the burdens and costs potentially associated with producing the data and the likelihood of actually finding responsive information in the described sources.

Even if the producing party demonstrates that the requested data are inaccessible, the court may still order discovery from the data source, provided that the requesting party shows “good cause.” A court bases its good-cause determination on whether the particular circumstances of the case justify the associated burdens and costs of production. Either side may present disputes over accessibility to the court through a motion to compel or through a motion for a protective order, as appropriate. The advisory committee’s note suggests a nonexclusive list of factors bearing on the good-cause assessment and including:

(1) the specificity of the discovery request;
(2) the quantity of information available from other and more easily accessed sources;
(3) the failure to produce relevant information that seems likely to have existed but is no longer available on more easily accessed sources;
(4) the likelihood of finding relevant, responsive information that cannot be obtained from other, more easily accessed sources;
(5) predictions as to the importance and usefulness of the

---

202006 Amendments to Fed. R. Civ. P. 26(b)(2), advisory committee’s note (“It is not possible to define in a rule the different types of technological features that may affect the burdens and costs of accessing electronically stored information.”). See E-Discovery Amendments and Committee Notes, supra note 10, at 13.
21§ 2008.2 (2d ed. 1994) (“It is assumed that the responding party will produce all other responsive” ESI).
The responding party retains the burden of defending its claim of inaccessibility; the requesting party bears the burden of demonstrating that its need for the discovery outweighs the burden and cost of accessing it. The good-cause assessment is further subject to the Rule 26(b)(2)(C) factors that allow the court to place limitations on the frequency or extent of discovery of ESI.

**Cost Shifting: Who Pays for the Production of “Inaccessible” ESI?** Courts often allocate the cost of ESI discovery in their accessibility and good-cause assessments. While the rule does not mandate cost shifting, the advisory committee’s note refers to cost shifting as a potential condition of producing inaccessible data.

A series of seminal decisions authored by Judge Shira A. Scheindlin of the Southern District of New York in the *Zubulake v. UBS Warburg LLC* litigation address several ESI discovery issues, including cost shifting in the context of a plaintiff in an employment discrimination action seeking production of corporate e-mail. In *Zubulake I* the court balanced the competing concerns of broad discovery and cost control to rule on disclosure of the defendant’s archived e-mail stored on backup tapes and optical disks. The court noted that “the presumption is that the responding party must bear the expense of complying with discovery requests.” This means that electronic discovery cost shifting should not be routine but should occur only when the responding party incurs an undue burden or expense. This assessment hinges upon whether the data are “kept in an accessible or inaccessible format (a distinction that corresponds closely to the expense of production).” For example, cost shifting is generally appropriate for the production of e-mail stored on backup tapes, which are typically considered inaccessible. Stating that cost shifting must be neutrally applied with close calls being resolved in favor of the presumption, the court specified a seven-factor test:

1. The extent to which the request is specifically tailored to discover relevant information; 2. The availability of such information from other sources; 3. The total cost of production, compared to the amount in controversy; 4. The total cost of production, compared to the resources available to each party; 5. The relative ability of each party to control costs and its incentive to do so; 6. The importance of the issues at stake in the litigation; and 7. The relative benefits to the parties of obtaining the information.

The central inquiry guiding these factors, which are not to be mechanically applied as a simple checklist, is “does the request impose an ‘undue burden or expense’ on the responding party? Put another way, ‘how important is the sought-after evidence in comparison to the cost of production?’ The first two “marginal utility” factors are thus the most important.

---

26See E-Discovery Amendments and Committee Notes, supra note 10, at 16.

27Id.


32Id. at 318.

33Id. at 320.

34Id. at 320, 322.

35Id. at 322–23; see id. at 320–21 (test is modification of eight-factor analysis announced in *Rowe Entertainment Incorporated v. William Morris Agency Incorporated*, 205 F.R.D. 421, 429 (S.D.N.Y. 2002)).

36Id. at 323 (citing *McPhee v. Ashcroft*, 202 F.R.D. 31, 34 (D.D.C. 2001) (“The more likely it is that the backup tape contains information that is relevant to a claim or defense, the fairer it is that the [responding party] search at its own expense.”).
Finding that the requested e-mail pieces were unavailable elsewhere but that the likelihood that relevant e-mail would be retrieved from an identified group of seventy-two backup tapes was still speculative, the court in *Zubulake III* applied the seven-part test to allocate 25 percent of the roughly $166,000 search and restoration costs to the plaintiff. The court ordered the defendant to bear the complete costs of reviewing and producing the ESI from these tapes—approximately $108,000—after its conversion to an accessible form.37

**Initial Disclosure of ESI: Rule 26(a)(1).** Electronic discovery usually begins with the Federal Rule of Civil Procedure 26(a)(1) mandatory disclosures of information. Generally a party must automatically make initial disclosures of information that it “may use to support its claims or defenses at the outset of the case and without waiting for a formal discovery request.”38 This mandate now includes ESI.39

**Preservation of ESI, Sanctions for Its Spoliation, and the “Safe Harbor”: Rule 37.** Rule 37 generally permits the court to impose sanctions for the failure to produce discovery or comply with discovery orders.40 Rule 37(f) now provides a “safe harbor” against discovery sanctions where the producing party has lost requested ESI through the routine, good-faith operation of its storage systems.41

In *Zubulake IV* the court addressed the duty to preserve ESI and sanctions for its spoliation. The preservation duty “involves two related inquiries: when does the duty to preserve attach, and what evidence must be preserved?”42 The preservation obligation “arises when the party has notice that the evidence is relevant to litigation or when a party should have known that the evidence may be relevant to future litigation.”43 The court summarized the second preservation inquiry: “Once a party reasonably anticipates litigation, it must suspend its routine document retention/destruction policy and put in place a ‘litigation hold’ to ensure the preservation of relevant documents” in existence at the time the duty to preserve attaches, both prepared by individuals and for them.44 As a rule backup tapes need not be preserved unless they are in fact accessible or unless otherwise unavailable documents of “key players” can be traced to them.45

*Zubulake IV* also addressed spoliation of ESI. Spoliation has been defined as “the destruction or significant alteration of evidence, or the failure to preserve property for another’s use as evidence in pending or reasonably foreseeable litigation.”46 The court “may impose sanctions under Fed. R. Civ. P. 37(b) when a party spoliates evidence in violation of a court order…. Even without a discovery order, a district court may impose sanctions for spoliation, exercising its inherent power to control litigation.”47 The court in *Zubulake IV* allowed a party to seek sanctions for spoliation upon showing of culpability, a duty to preserve, and relevance of the documents.48 Sanctions may include an instruction to the jury that it may infer that the destroyed evidence, if available, would have been unfavorable to the spoliating party.49

---


39 *Id.*


42 *Zubulake IV*, 220 F.R.D. at 216.


45 *Zubulake IV*, 220 F.R.D. at 218.

46 *Id.* at 216 (citing *West v. Goodyear Tire and Rubber Company*, 167 F.3d 776, 779 (2d Cir. 1999)).

47 *West*, 167 F.3d at 779 (citations omitted).

48 *Zubulake IV*, 220 F.R.D. at 220 (citing *Byrne v. Town of Cromwell*, 243 F.3d 93, 107–12 (2d Cir. 2001)).

49 *Id.* at 220.
In *Zubulake V* the court issued an adverse inference instruction as a sanction for the defendant’s destruction and untimely production of relevant e-mail pieces due to the defendant’s failure to preserve them through an adequate litigation hold.50 The court admonished counsel that implementation of a “litigation hold” was “only the beginning” of the obligations of a party and counsel to preserve ESI relevant to pending or reasonably anticipated litigation. Counsel must affirmatively oversee and monitor compliance with the litigation hold: “In short, it is not sufficient to notify all employees of a litigation hold and expect that the party will then retain and produce all relevant information.”51

The amended Rule 37(f) “safe harbor” now affords a responding party refuge against sanctions under the Federal Rules of Civil Procedure “absent exceptional circumstances” where a party “fail[s] to provide electronically stored information lost as a result of the routine, good faith operation of an electronic information system.”52 This amendment reflects concerns that “the ordinary operation of computer systems creates a risk that a party may lose potentially discoverable information without culpable conduct on its part,” which may include “the alteration and overwriting of information, often without the operator’s specific direction or awareness.” A good-faith showing may incorporate active “intervention to modify or suspend certain features of that routine operation to prevent the loss of information” (such intervention as implementing a “litigation hold”) when a party is under a duty to preserve ESI due to “pending or reasonably anticipated litigation.”53

**ESI Discovery Planning: Rules 26(f) and 16(b).** Federal Rule of Civil Procedure 26(f) requires counsel to meet and confer “as soon as practicable” after commencement of most actions to discuss case management and to develop a discovery plan.54 This now includes discussion of “any issues relating to disclosure or discovery of ESI, including the form or forms in which it should be produced.”55 The parties are encouraged to discuss and stipulate to, if possible, the location and nature of electronic data sources likely to contain relevant information, their accessibility, and proposed forms of production and preservation.56 After receiving the parties’ Rule 26(f) discovery plan, the court, pursuant to Rule 16(b), enters a scheduling order specifying case-specific limitations and deadlines, including provisions for discovery of ESI.57

**Practice Pointers**

1. Work with information technology staff or consultants as appropriate, regarding electronic data access and retrieval issues encountered in litigation.

2. Be prepared to discuss, as needed at the Rule 26 conference, a range of ESI issues, including identification of sources of relevant data currently located in storage systems that are being actively used and that the parties agree are accessible and those deemed potentially inaccessible; the opposing party’s information systems, their operational status, and persons knowledgeable in their use; possible cost shifting; methods to streamline the search, retrieval, and review of large volumes of data through sampling, testing, use of search terms, or similar methods; desired production formats (e.g., native or other searchable formats with metadata intact); concerns about the potential de-
struction of relevant data through the opposing party’s use of routine document retention policies; and any resulting “litigation hold” procedures needed to preserve the data.

3. Consider sending a “preservation letter” that notifies opposing counsel, either prelitigation or at the time of filing the complaint, to preserve all relevant ESI. Consider describing the specific types of data to be preserved (including active and backup files), explaining where the data reasonably might be, and requesting cancellation of data destruction protocols that could reasonably result in the deletion, modification, erasure, overwriting, or loss of ESI relevant to the litigation.

4. Tailor your discovery requests by considering in which type of format you need the ESI. For example, is it crucial to obtain e-mail and attachments in their native format with metadata intact and identified, such as prior edits, collective authors, and recipients? If so, not specifying this may leave you with production of hard copies that omit critical evidence.

---

14 See Cache La Poudre Feeds LLC, 2007 WL 684001, at *9 (“Given the dynamic nature of electronically stored information, prudent counsel would be wise to ensure that a demand letter sent to a putative party also addresses any contemporaneous preservation obligations.”).

Subscribe to Clearinghouse Review

Annual subscription price covers

☐ six issues (hard copy) of Clearinghouse Review and
☐ www.povertylaw.org access to current issues of Clearinghouse Review and all issues from 1990

Annual prices (effective January 1, 2006):

☐ $250—Nonprofit entities (including small foundations and law school clinics)
☐ $400—Individual private subscriber
☐ $500—Law school libraries, law firm libraries, other law libraries, and foundations (price covers a site license)

Subscription Order Form

Name ____________________________________________

Fill in applicable institution below

Nonprofit entity __________________________________

Library or foundation* __________________________________

Street address ________________________________________ Floor, suite, or unit __________

City ________________________________________ State ________ Zip __________

E-mail ____________________________________________

Telephone ______________________ Fax ______________________

*For Internet Provider–based access, give your IP address range __________________________________

Order

Number of subscriptions ordered ________
Total cost (see prices above) $ _______

Payment

☐ My payment is enclosed.
  Make your check payable to Sargent Shriver National Center on Poverty Law.

☐ Charge my credit card: Visa or Mastercard.
  Card No. ______________________ Expiration Date __________
  Signature ______________________________________________
  We will mail you a receipt.

☐ Bill me.

Please mail or fax this form to:
Sargent Shriver National Center on Poverty Law
50 E. Washington St. Suite 500
Chicago, IL 60602
Fax 312.263.3846