Digital Audio Files in Litigation:
Did You Think Your Oral Comments Couldn't Come Back to Haunt You?[1]

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I. Introduction

Eliot Spitzer, New York's attorney general at the time, is quoted as saying, "Never write when you can talk. Never talk when you can nod. And never ever put anything in an e-mail."[3] Maybe he would rethink that in light of new technologies and tell people not even to talk. With so many audio recordings made of business meetings, telephone calls to consumer help centers, and voicemails, and digital recorders becoming less expensive and able to hold more and more information, businesses are not only confronted with someone's offhand comments in litigation but all of these recordings can cause the enterprise incredible cost to review during litigation. Traditionally, law firms had to listen to audio recordings or have them transcribed. When they made fewer recordings, this did not present a significant expense. Now, however, audio could cause hundreds of

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[3] Business 2.0, December 2005 at p. 114.

hours of listening time or transcribing time, to cull the relevant material.

Not that many years ago, if someone wanted to keep an audio record of an event, the only option was reel to reel tapes. These bulky, easily destroyed items not only were difficult to use, but the recording machines were big, not very portable and relatively expensive. Next, smaller versions of reel to reel tape recorders, more or less portable, yet still subject to media degradation and difficulty of use. Storage of this media was even more difficult than paper files. The bulky tapes frequently were stored in boxes that didn't fit anywhere. Few people outside the government made records of events this way; fewer still used them for anything other than witness interviews. They had little litigation interest.

Next came cassettes. Much more portable, but as with all magnetic tape, destruction or degradation remained a problem. Once again, storage of the media presented issues. Less bulky, but still they took up physical space and didn't fit in anything. Micro cassettes came next. Small enough, but still magnetic tape, and perhaps small enough to fall between the cracks, literally.

More recently, the introduction of inexpensive digital recorders made recording easier, more portable, more permanent and spatially insignificant – the recordings could now be stored on computer media. Were this carefully planned[4] creation of digital

[4] "Carefully planned" because the person making the recording *plans* to record the conversation or this particular event at this particular time; then must *intentionally* transfer the recording from the portable recording device to more

recordings the extent of digital audio files, the use of that information in litigation would not be nearly the management issue it has become. Because the user would save the digital audio file to a specific location, in the event of litigation, only a limited number of such files are needed for review.

Audio has been important to litigation since the first crude method of making recordings, and rules have included recordings in the definition of discoverable information since the advent of civil discovery. The December 2006 revisions to the Federal Rules of Civil Procedure now clearly include "sound recordings" in the definition of "document" and as part of "electronically stored information."[5] This change, coupled with an awareness of the richness of digital audio as a source of information, has led many litigators to seek audio files.

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permanent media. This type of Digital recording is contrasted with the ones that are "casually created," that include voicemail. While the caller may leave a message, there certainly was no plan to do so. A business meeting or an interview with a witness that the recorder plans to record will probably become more of a business record and may be catalogued. While the unplanned type of audio file may be fleeting and quickly lost.

[5] Fed. R. Civ. Proc. 34(a) states: "Any party may serve on any other party a request (1) to produce . . . any designated . . . electronically stored information – including . . . sound recordings, . . . stored in any medium from which information can be obtained – translated, if necessary, by the respondent into reasonably usable form . . ." Prior to the December 2006 amendments, Fed. R. Civ. Proc. 34(a)(1) simply authorized requests for "designated documents (including . . .phonorecords, and other data compilations fromwhich information can be obtained. . .)." The earlier rule, while it was understood to include computer records, and by extension of "phonorecords," probably included Digital audio, needed the updating that the December 2006 amendments brought. Now there can be no question that Digital audio is included within the scope of Rule 34.

Technological advances have fed the growing volume of data. Technology did not stop with portable digital audio recorders.[6] Answering machines, once using cassette tapes, are now digital or have been replaced with digital voice mail. The digital voice mail is maintained digitally somewhere, if only fleetingly, yet perhaps long enough to be copied to a back up system. On the other hand, the voice mail, depending upon the system, may reside for a longer period of time. For instance, Yahoo! offers free voice mail through its Messenger system.[7] The voice mail resides on Yahoo!'s servers until the individual accesses it; and, then after for as long as Yahoo! decides to keep it.[8] But, the same can be said for the corporate voice mail system. Whoever sets the system may be the only one determining the parameters.

Voice over Internet Protocol ("VoIP"), a digital method of telephony, has blossomed over the past few years.[9] Because the voice is digital, it resides on computers for at least a short period of time. Consider also the number of consumer telephone lines that routinely announce, "This call may be monitored or recorded for quality purposes." Of course, recording it "for quality purposes," whatever that means, does not

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[6] This article does not address Digital video and audio recorders – presenting expanded difficulties. While the audio portions of the video recordings can be addressed using the technology described in this article, the video has no technological searching techniques to date. Someone must watch the video.

[7] See http://messenger.yahoo.com/feat_voice.php, last visited June 6, 2007.

[8] *Id.*

[9] *See, e.g.,* Vonage Holdings Corp., Form 10-Q, filed May 15, 2007 with U.S. Securities & Exchange Commission.

preclude the material's being used either by the quality conscious company or by its opponent in litigation. Moreover, businesses routinely have surveillance video and audio in their campuses.

The standard methods of reviewing audio to locate information are to listen to the audio or to have it transcribed and searched as text. In the past, "'the only alternative was to put headphones on contract attorneys and have them sit in a room and listen to the audio files.'"[10] This method is prohibitively time-consuming.[11] Then either the producing party produced the audio files or had a transcription service transcribe each portion, or both. The other option, having all audio transcribed so it could be searched as any other electronic text file, was equally as time consuming and expensive.

This article explores two methods of reviewing digital audio files without having contract attorneys sit in a room and listen or having transcriptionists create text files. From an enterprise standpoint, the article also addresses policy solutions to help minimize problems of searching audio files and proposes an escalating approach to digital audio in litigation so that the most burdensome and most expensive review is not necessary in all cases.

II. Two Technological Approaches to digital Audio

Technology has developed essentially three different approaches[12] to searching digital audio.[13] The

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[10] "Sound Searching" *Inside Counsel*, January 11, 2007.

[11] *See, e.g. Lindell v. Casperson*, 360 F. Supp. 2d 932, 947 (W.D. Wisc. 2005).

[12] Counsel must actually understand how to deal with Digital audio in the first place, however. In *Talevski v. Carter*, 2007 WL 1797634 (N.D. Ind. June 18,

first approach uses technology to replace court reporters or transcriptionists in converting audio files to text. The user then searches the text. With improvements in voice recognition software, this approach has become more effective and accurate. The second approach uses the simplest components of sounds, known as "phonemes," to search the actual sounds in a digital record with strings of those standard sounds and locate matches. In this way, the audio need not be transcribed, unless one wishes to do so after locating responsive records. The third approach is a combination of the other two, combining transcript so that the user can "see" the speech, with a third technological advance, conceptual analysis of phoneme strings so the computer can organize the material. The article describes two proprietary applications for the audio searching:, Nexidia a strict phoneme approach; and, DigIT[14] combining transcription with phonemes and conceptual grouping.

2007), the parties could not determine how to copy the contents of a Digital recording device. Originally counsel promised to have the audio copied in June 2006, but in August 2006, counsel "expressed difficulty in having the contents of the Digital recorder duplicated, and it was not until August 2006, without having copied or transcribed the contents of the device, that he responded to the discovery request by producing the recorder itself." *Id.* at *2. The author does not recommend simply turning over devices to the opposing party.

[13] The scope of this article is to explain the current state of technology and to propose litigation solution strategies and policies. Consequently, the author expresses no opinion as to which approach is "better" or creates more of an economy. While the software in one approach may be more or less expensive to use than in the other; the time reviewers must use may outweigh "cost" savings. This is an analysis for another article.

[14] In the interest of full disclosure, the author is employed by a company that is owned by the same parent company that owns DigIT.

A. Nexidia – the Phoneme Approach

Spoken language is composed of phonemes.[15] Nexidia operates on the phonemes in audio files without transcribing them. It searches through audio, matching sounds and creates an index of all phonemes in the material searched.[16] The user sets search terms and criteria, choosing to limit searches to extremely close matches, or loosening the search for near sound-alike matches, to cover unusual pronunciations, background noise, or regional dialect.[17] Based on probability of two sounds being alike, phonetic search results report as a list of likely "hit" locations.[18] Because it is probabilistically based, the user can determine how close the matches must be.

Nexidia breaks the content into short time segments, for the reviewer to hear and to determine

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[15] Nexidia defines a phoneme as "the smallest unit of human speech." Brad Harris and David Fishel, "White Paper: Voice Mail and Audio Recordings: Evolving E-Discovery Standards" 2006, at p. 4, n.4, available at http://www.nexidia.com/downloads/whitepapers.html (last visited 22 June 2007) (hereinafter "Harris & Fishel"). These authors maintain that English contains 42 phonemes. *Id.* at p.4 SoftSound, the Autonomy based technology used by DigIT, finds only 38 phonemes in English. "SoftSound- a unique combination of conceptual and phonetic technology," at http://www.autonomy.com/downloads/Technical%20Briefs/etalk/Autonomy%20etalk%20TB%202005-04-25.pdf (last visited 23 June 2007) (hereinafter "SoftSound White Paper.")

[16] David Fishel, "Defending the Accuracy of Phonetic Audio Search in Civil Discovery," 2007 at p. 9 available at http://www.nexidia.com/downloads/whitepapers.html (last visited 22 June 2007) (hereinafter "Fishel").

[17] *Id.* at 10.

[18] *Id.*

whether it meets the litigation needs.[19] Because searches are based solely on phonemes, it is not dependent upon a dictionary.[20] Nexidia admits that it is not as accurate as having a court reporter transcribe the material.[21] However, the attorney must balance time, cost and accuracy.

To demonstrate accuracy and to promote defensibility, Nexidia tests each audio set[22] by identifying a sample,[23] then a professional transcript is created.[24] "[T]he transcript is time-coded, and a large body of search terms (over a thousand) is randomly selected from the transcript . . . The time-coded location in the transcript of each search term is noted."[25] Identical searches are run on the sample using phonemes and using the transcript.[26] The reviewers compare the results and, presumably, find the phoneme approach defensible and can agree with the other parties to the litigation on protocols and balancing cost with accuracy.[27]

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[19] "Defensible Strategies for Discovering Sound Recordings," Webinar produced by Fios, Inc. and Nexidia, May 1, 2007 available from http://www.nexidia.com/news/event_schedule.html# (last visited 23 June 2007) (hereinafter "Nexidia Webinar").

[20] *Id.*

[21] *Id.* Especially for audio files that are not "broadcast quality," that is files that come from cellular phones or other sources.

[22] *Id. and see* Fishel at pp. 11 – 12.

[23] "A statistically significant set of audio is extracted from the full set. Care is taken to ensure that the recordings are representative of both the content and audio quality of the overall collection." Fishel at 11.

[24] *Id.*

[25] *Id.* at 12.

[26] *Id.*

[27] *Id.* Fishel maintains that "[a] party that disagrees with the approach would be required to produce empirical proof that its alternative methodology or

B. DigIT – the Combination Approach

DigIT Technologies, LLP[28] incorporates what may be called a more traditional approach to audio files with conceptual searching and a phonetic engine.[29] Many people are familiar with speech recognition software.[30] Such software, installed on the user's computer, requires the user to train it for that person's voice, and then that person may use it for dictating directly to text. After the text appears in a document, the user then "fixes" the mistakes. While the products claim to have increase accuracy, many people[31] do not find them satisfying.

DigIT, built upon SoftSound, an Autonomy product,[32] indeed creates a transcript using voice recognition technology. However, if this were the extent

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technology provides better results, taking into consideration the balancing factors of cost, time, and accuracy." *Id.*

[28] www.DigITtechnologies.com

[29] As stated above, *see Note 10*, DigIT uses the Autonomy product, SoftSound.

[30] One of the most widely used is Dragon Naturally Speaking, www.advancedspeech.com, one of the first speech recognition software applications. While these have become better than the original ones, many people do not find them very satisfying.

[31] For instance, consider Dragon's testimonials, http://www.advancedspeech.com/testimonials.htm, the first one, presumably created by using Dragon, uses the word "for," when it should use "four." The author has tried numerous speech recognition products and has never found one that did not take more time in making corrections, than had he simply typed the document himself to start with. Of course, this is not a scientific study, but based on this author's preferences and level of patience.

[32] Email of 23 June 2007 from Preston Fisher of DigIT to the Author, a copy of which is on file with the author, describing SoftSound and its use by DigIT (hereinafter "email of 23 June 2007).

of the solution, it would hardly be interesting.[33] DigIT's technology not only creates a transcript, and not only searches, indexes and identifies phonemes, but uses conceptual matching, to create matrices that make results easier to analyze.[34] It does this by analyzing the context of sound combinations as it "listens."[35] Only by considering context and concepts, can the most accurate results occur quickly. For instance, if a system simply searches for the phoneme string that constitute "cat," such words as "catalog," or "caterpillar" (both the common and proper noun) may show in the results.[36] Conversely, if someone searches for the string "c-a-t," in a text only searching database, it may match across words and return "anarchic attitude."[37] By combining phonetic with transcript with conceptual "understanding," the DigIT technology "can help actually *understand* what is said so it's not necessary to search all phoneme sequences."[38] The technology "doesn't do a word for word translation but instead transcribes every

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[33] Especially to this author who, no matter how many advances the speech recognition software developers claim, remains skeptical of its accuracy, and utility.

[34] SoftSound Whitepaper at 1.

[35] "For example, if during a radio *'phone in'* on the subject of the White House a caller says *'George'* the technology can predict that their [sic] following word is likely to be *'Bush'*. Further to this, SoftSound understands that the word *'Bush'* refers to a person and not a plant. However, if the caller used the same word when calling into a discussion on gardening . . . SoftSound understands that different topics are conceptually related and the caller's interests are most probably botanical and not political." *Id.*

[36] *Id.* at p. 2.

[37] *Id.*

[38] *Id.*

couple of words and uses the phoneme analysis of the surrounding words to 'guess' at the others."[39]

The developers claim it can "self-learn" as it operates on changing domains of sound.[40] Finally, the developers claim the "technological combination of the phonetic and conceptual retains all the power of the pure phonetic approach and provides significant gains in speed, accuracy, scalability and the unique ability to understand what is said."[41]

C. Accuracy of Nexidia and DigIT

The scope of this article does not include testing the assertions of Nexidia or DigIT. The technology is new and no reported cases mention either Nexidia nor the technology behind DigIT.[42] Furthermore, the information about both technologies come from the developers and marketers of the technologies themselves. How much is accurate? How much is "puff and blow?" The author makes no representation that either of these technologies does what the companies claim. Rather, the article *reports* what the technologies *claim*. Readers interested

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[39] email of 23 June 2007.

[40] SoftSound Whitepaper at 2, "such as the news where complex and previously unforeseen stories can suddenly and dramatically appear with little warning."

[41] *Id.*

[42] The author ran the search, "'Nexidia' or 'SoftSound' or 'etalk,'" in the Westlaw "Allcases" database on 23 June 2007, and produced "There are no documents that satisfy your request." "etalk" was chosen as a search term because it is a mark also used by Autonomy for the product. *See* SoftSound Whitepaper. As if to demonstrate the accuracy of the information in Note 32 above, and accompanying text, the author ran a search for "DigIT" and, even placing it in parentheses, received results including "Digit" (the noun meaning a single number) and "Digits."

in either technology should contact the companies and make their own decisions. Furthermore, the author has gathered no information on the cost of using either technology nor the savings that potentially can be realized by using either technology rather than having material transcribed or having contract attorneys listen to digital audio files. Finally, technology advances so rapidly that by the time this article is published, its information may be "dated." Counsel must make their own decisions after reviewing current technology and balancing time, cost, and accuracy.

III. Minimizing the Problem

When businesses and individuals made audio recordings on reel to reel tape or even on mini-cassettes, they had to find places to store the material. It took up physical space, just as paper documents placed in bankers' boxes took up space. Now, however, with most audio created digitally, businesses and individuals can mindlessly retain vast amounts of audio. However, given the need to review that material in the event of litigation and the associated costs, the questions arise: should audio files be retained simply because they can be; and, how can the audio chosen for retention be organized to minimize cost later?

The answer to the first question is as obvious as the answer to the same question applied to text files, electronic mail, design drawings and the like. Of course, all audio files that can be retained ought not be retained. Not all documents (using the Federal Rule of Civil

Procedure definition)[43] need be retained routinely unless litigation is underway or immanent. However, records must be retained for varying periods of time.[44] "A record is something tangible recorded on any medium (paper or electronic) that is evidence of business events or transactions that has legal or business value and that one intends to be memorialized."[45] To this definition could be added "or that the government or other governing body requires to be retained."[46]

Consequently, the voice mail from Aunt Ethyl issuing an invitation to Aunt Minnie's surprise birthday party is probably not a record of the hardware business at which the niece works as a secretary. Records retention and destruction policies that apply to text need to apply to audio as well. Because audio may be captured on back up media, and because it may be kept on separate servers, it is essential that risk managers and records staff address these issues.

"[T]here are two sets of needed rules-records policies and retention schedules used during regular business environments, and different ones that supercede [sic] and suspend the routine retention rules

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[43] Fed. R. Civ. Proc. 34(a) specifies "sound recordings" as a type of document or electronically stored information.

[44] The length of time for retention of a record depends upon its business utility, government laws and regulations governing a particular industry, etc.

[45] Randolph A. Kahn, "What is a Record," AIIM e-Doc Magazine, September 1, 2002, available at http://www.aiim.org/article-docrep.asp?ID=25000 (last visited 24 June 2007) (hereinafter "Kahn").

[46] *See, e.g.* Laurel Sanders, "Creating a Records Management Policy that is Right for Your Business: Using Automation to Eradicate Chaos and Facilitate Compliance," at p. 2 available at http://www.aiim.org/viewpdfa.asp?ID=32912 (last visited 24 June 2007) (hereinafter "Sanders").

in the context of threatened, imminent, or filed lawsuits, audits, or investigations."[47] As with text electronic documents, once litigation[48] is anticipated, any audio files that may be relevant, even if they would not have been "records," must be retained.[49]

What, then should be routinely retained? The question can only be answered "locally," that is with respect to a particular business or individual. Whatever the solution, just as with text and other electronic documents, identifying the solution and creating policies and rules is but the first step. The enterprise must educate individuals within as to the need for the rules and how to follow them.[50] Then, the policy must be explained and monitored.[51] Even automated systems must be explained and monitored, without employees' understanding, they can circumvent automated systems by creating their own "rogue" retention systems by, for instance, copying files to DVDs.

A retention policy is but the first step. Audio files, as other types of digital files, can be saved to particular, labeled folders so someone can locate them quickly when needed, or they can be indexed. Consider an

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[47] *Id.*

[48] "Litigation" here is understood broadly to include government audits and investigations as well as civil litigation.

[49] Kahn *and see In re Napster, Inc. Copyright Lit.*, 462 F. Supp. 2nd 1060, 1070 (N.D. Cal. 2006) *citing to "National Ass'n. of Radiation Survivors,* 115 F.R.D. [543] at 557-58 ("The obligation to retain discoverable materials is an affirmative one; it requires that the agency or corporate officers having notice of discovery obligations communicate those obligations to employees in possession of discoverable materials.")."

[50] Sanders at p. 1.

[51] *Id.* at 3.

enterprise with the following policy that is enforced and followed religiously by its employees:

1) Employees must designate an audio file as a "record" for it to be retained.
2) The employee designating an audio file as a "record" must place it into a subject matter folder and give the audio file a descriptive name.
3) Any audio file not classified as a record within 3 days of its creation will be deleted from the system.

In addition, the enterprise retains back up media for a minimal time.

In the event of litigation, other than the material that employees have sorted, the enterprise (after instituting a litigation hold)[52] will, at most, need to review three days' worth of unclassified audio files and, perhaps, any audio files residing on back up.[53] Then, as litigation progresses, review any newly created and relevant audio

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[52] An excellent and readable statement of the obligations in anticipation of litigation appears in *Disability Rights Council of Greater Wash. v. Washington Met. Transit Auth.*, 2007 WL 1585452 at *7 (D.D.C. June 1, 2007).

[53] It is likely that the majority of this information, to be reviewed, will be on the back up media because the back ups will contain the unclassified recordings as well as others. But, as with other material on back up media, the court may well find it is "not reasonably accessible" given a reasonable retention/classification policy and the difficulties of reviewing back up media in general. *See.* Fed. R. Civ. Proc. 26 & 34. Consequently, the "reasonably accessible" will be the three days worth of unclassified material plus the classified material.

files.[54] By limiting the retention of audio files in this way, the enterprise dramatically limits its need to review.

But, would courts hold such a retention system, a "good faith" system?[55] In other words, is it "reasonable?" As always, whether it is reasonable depends upon such factors as why the audio was made, how it was to be used, whether employees actually complied with the sorting and categorizing system. However, if a company creates extensive audio files for a customer support center – "this call may be recorded or monitored for quality and training purposes" – how often are the files reviewed by supervisors or trainers? If they really are created for that purpose,[56] and if supervisors or trainers review the audio randomly every day, then is it not reasonable to delete each day's files at the end of the daily review, after saving and classifying any that the enterprise needs to retain?[57]

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[54] It seems likely that relevant audio files would not be created after the fact. But, if so, they should be immediately classified so as to eliminate the need for extensive search and review.

[55] *See, e.g.* Fed. R. Civ. Proc. 37(f).

[56] Rather than the author's suspicion, just to annoy people.

[57] In one case, reviewed in more depth below, two companies had audio file retention systems that illustrate the problem. One defendant, Nomura Canada, used two DVDs. When one DVD was full, the system automatically started writing to the other; when it was full, the system returned to the first and overwrote the data on it. *E*Trade Securities v. Deutsche Bank*, 230 F.R.D. 582, 590 (D. Minn. 2005). Another defendant, Nomura Securities International, kept audio recordings for five days. *Id.* at 594, n.13. The court did not find either retention policy unreasonable. Nomura Canada was, however, sanctioned for not suspending this system once litigation was immanent.

While courts have answered some of these questions with respect to other types of electronic files, to date, very little jurisprudence and very little scholarship addresses these questions for audio files. Until that time, if an enterprise consciously creates a digital audio policy based upon a consideration of its uses of audio, implements it, monitors it, and enforces it, the enterprise should have no difficulty explaining it to a court and getting the court's approval.

IV. Existing Case Law

Back in the early days of electronic discovery, all reported cases could barely fill a two inch binder. Many of the cases now may be applicable to audio files, and a few cases mention audio files,[58] however, there are virtually no cases concerning the issues unique to audio.

A. One Case

One court, the United States District Court for the District of Minnesota, in *E*Trade Securities v. Deutsche Bank AG*,[59] had occasion to consider audio files during a motion for sanctions for discovery abuse. The plaintiff, E*Trade, claimed that defendants engaged in a fraudulent trading scheme by manipulating the

[58] Criminal cases have dealt with audio files for quite some time under questions of access to recorded conversations by defendants. However, these have not focused on the sorts of questions raised in civil litigation. One criminal case, *United States v. Sattar*, 2003 WL 22510435 (S.D.N.Y. November 5, 2003), is discussed below for the very limited purpose of contrasting the lawyering in that case with a civil case.

[59] 230 F.R.D. 582 (D. Minn. 2005). This case is the district judge's adoption of the magistrate judge's Findings and Recommendation. Consequently, though the opinion is of the district judge, the magistrate judge wrote the contents.

availability and price of certain securities.[60] Central to E*Trade's proof was multiple telephone conversations among employees of the defendants.[61] Two of the defendants, Nomura Canada and Nomura Securities International, Inc. routinely recorded telephone calls.[62] Because defendant Deutsche Bank produced telephone conversations referring to calls between one of its employees and employees for Nomura Canada concerning the securities forming the subject matter of the litigation, and Nomura Canada did not produce recordings of those calls, the court inferred "a high likelihood that relevant information would have been obtained" from the Nomura Canada recordings.[63]

> Nomura Canada recorded and preserved its traders' calls on recordable DVDs. . . . A two-DVD system was set up to record one full DVD then automatically switch to a second. When the second DVD would fill with recorded calls, the system would automatically switch back to the first DVD and record over the previously saved telephone calls. . . . the taping system was set up to assist in settling trade disputes. . . [and Nomura Canada] had in the past

[60] *Id.* at 585.
[61] *Id.*
[62] *Id.* at 590 (describing Nomura Canada's practice) and *Id.* at 594, n. 13 (describing Nomura Securities Int'l's practice).
[63] *Id.* at 590.

> used the recording system in its favor, to resolve a dispute with a broker.[64]

The court had no problem with the automated system, nor the fact that audio was not maintained for any specified period of time. The court though found Nomura Canada guilty of spoliation for failing to suspend the automated system as of December 2001 or January 2002 when the litigation was anticipated.[65] The Court found that the loss of "the recorded telephone conversations has materially prejudiced the plaintiffs in their case."[66]

"The substantial and complete nature of the destruction of the evidence contained in the recorded telephone conversations . . . destroyed by Nomura Canada, justifies a finding of prejudice."[67] The court does not consider the cost of compliance with a litigation hold in this case. However, if it had, the court would have determined that the cost compared to the loss to the plaintiffs of this data would also have justified sanctions. DVDs are cheap. Since the relevant telephone calls occurred prior to the "trigger date" of December 2001 or January 2002,[68] all Nomura Canada needed to do to avoid

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[64] *Id.*

[65] *Id.* The Court follows the same analysis in determining spoliation liability and remedies as in other electronic discovery cases. First, it identifies the "trigger date" for preservation of evidence, *id.* at 588-9, then it determines whether relevant information likely existed in the universe of the audio files, *id.* at 590. Next it analyzes potential prejudice to E*Trade, *id.* at 592, and finally, determines what sanctions are appropriate, *id.* at 592-3.

[66] *Id.* at 592.

[67] *Id.* (citation omitted).

[68] It is very unlikely that relevant telephone calls would occur after the time the scheme collapsed, in September 2001, *see Stephenson v. Deutsche Bank AG*,

sanctions, was to retire the two DVDs in use at the time. To be absolutely and completely safe, Nomura Canada had to buy a box of DVDs and rather than overwriting DVDs as one became full, merely retire that DVD and insert another.

The cost to Nomura Canada to search two DVDs for responsive telephone calls and to buy some more DVDs would have been minimal compared to the cost of the sanctions – an adverse inference.[69] In addition, the court ordered Nomura Canada to produce phone records.[70] Plaintiffs, then, could point to calls between implicated employees and argue the adverse inference to the jury.

Some of the conversations, during August 30, 2001 to February 22, 2002, however, were retained. Nomura Canada claimed they were inaudible due to system problems.[71] E*Trade presented evidence that approximately half of the recordings *were*, in fact, audible.[72] The Court ordered Namura Canada to produce a copy of *all calls* that it maintained during that period of time.[73] Due to the need to review for privilege, counsel then would need to review all the calls during that period of time.

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282 F. Supp. 2d 1032, 1050-1 (D. Minn. 2003) (giving the full factual background of the case).

[69] *E*Trade*, 230 F.R.D. at 593. The adverse inference is an instruction that "the jury may infer that the information that Nomura Canada . . . failed to preserve would have been advantageous to plaintiffs and disadvantageous to" Nomura Canada. *Id.*

[70] *Id.* at 596.

[71] *Id.* at 594.

[72] *Id.*

[73] *Id.* with the provision that any privileged calls could be removed and a privilege log produced for those calls.

One of the other defendants, Nomura Securities International, Inc., (NSI) also recorded calls but had a different system from Nomura Canada.[74] NSI recorded telephone calls of its traders and retained the recordings for five days.[75] E*Trade maintained that NSI should have retained the last five days' worth of calls made prior to September 1, 2001. Unfortunately, the taping system resided at the World Trade Center and was destroyed on September 11, 2001.[76] Consequently, the Court held that it could not expect NSI to preserve evidence it no longer had.

The most interesting part of *E*Trade v. Deutsche Bank AG*, is that neither the court nor the plaintiffs faulted either Nomura Canada nor NSI for their respective audio file retention and destruction policies and practices prior to the "trigger date." Consequently, at least implicitly relying upon this opinion, enterprises that create digital audio files given business purpose and justification may,create retention policies for audio files that are relatively short.[77]

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[74] *Id.* at 594, n. 13.
[75] *Id.*
[76] *Id.*
[77] Depending upon the media used and the volume of audio recorded, two DVDs may be more or less than five days' calls. Regular DVDs may contain up to 120 minutes, *see* http://www.memorex.com/html/products_subcategory.php?section=1&SID=6&opento=3 (last visited 26 June 2007) while newer double layer DVDs, 240 minutes, *see* http://www.memorex.com/html/products_detail.php?section=1&SID=35&PID=968&FID=189&opento=100034 (last visited 26 June 2007).

B. Justifying Audio Policies to Courts

Two cases illustrate the need to justify audio policies to courts. These cases teach that, first, counsel must understand what the client has done and, second, counsel must educate the court. In the first case, a criminal matter, *United States v. Sattar*,[78] the government attorneys explained the process to the Court and prevailed. In the other case, a civil case, *Del Campo v. Kennedy*,[79] even a reasonable retention policy when coupled with a bad explanation, led to the defendants' having to retain voluminous material and review it.

In *Sattar*, during the period under which it was routinely recording certain calls of the original defendants, the Federal Bureau of Investigation changed from one recording system to another.[80] The government added a new defendant based upon the contents of some of those calls.[81] That defendant claimed that "the FBI deliberately dismantled the recording system that would permit access to the audio files in their original format, even though it was aware of the possibility of a criminal prosecution against" the additional defendant.[82]

The defendant failed to show that the new file format, in which the audio files would be played, would change the files in any relevant way. The government, on the other hand, responded to the charges credibly.[83] It provided a declaration that "the upgrade was done in the

[78] 2003 WL 22510435 (S.D.N.Y. November 5, 2003).
[79] 2006 WL 2586633 (N.D. Cal. September 8, 2006).
[80] *Sattar* at *3.
[81] *Id.*
[82] *Id.*
[83] *Id.* at *4.

ordinary course of the FBI's business, and that no one involved in the FBI's computer upgrade had any personal knowledge of the investigation. . . ."[84]

Perhaps, equally as important, the same declaration convinced the Court that "there is no reason to believe that the file format in which the older system's recordings must now be played fails to maintain the files' original fidelity, or that it compresses or destroys any data."[85] Finally, the defendant made no showing that any materials helpful to her were omitted from the voluminous production she received.[86]

Contrast the civil case of *Del Campo v. Kennedy*.[87] In this consumer case, plaintiff learned that defendant routinely recorded telephone calls.[88] It maintained the audio on digital disks for two weeks then routinely destroyed the audio.[89] Plaintiff asked the court to order defendant to suspend its destruction policy. [90] The defendant claimed plaintiff had no evidence that it intended to continue the destruction of audio files.[91] Unfortunately for defendant, plaintiff had a copy of one of defendant's employee's emails seeming to indicate the litigation hold would not occur and audio files would

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[84] *Id.*
[85] *Id.*
[86] *Id.*
[87] 2006 WL 2586633 (N.D. Cal. September 8, 2006).
[88] *Id.* at *1.
[89] *Id.*
[90] *Id.*
[91] Even though the Court calls these digital disks "tapes" throughout, the defendant's practice was to save to disk.

continue to be destroyed.[92] Consequently, if someone instituted a litigation hold, either that person did not explain to the employees that it applied to all material or no one monitored compliance.

But even worse, defendants trotted out the tired objection that maintaining the disks would be a burden, expecting the court to accede.[93] The court, however, found, the defendant "does not, however, provide any details of the alleged burden. Accordingly, there is no evidence of any burden, undue or otherwise, that would cause the court to allow [the defendant] to destroy potentially relevant documents[sic]"[94] It is unlikely that defendant could produce any evidence of burden involved in maintaining disks. The cost of disks and the storage space are small enough to make retention unlikely to be burdensome. Now, reviewing all the material may well be very burdensome and the court may no longer be willing to entertain another similar objection.

What could defendant have done to limit its burdens? First, presumably once litigation began, defendant no longer had any contact with plaintiff to try to collect on bad checks. Consequently, no recordings of telephone calls after the beginning of litigation are relevant. Therefore, if it had been following its policy, it would have two weeks' worth of material. If it did not cease collection efforts, it could record in a separate

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[92] *Id.*
[93] *Id.*
[94] *Id.* (footnote omitted).

location all calls with this plaintiff. Once again, having very little material to review.

V. A Preferred Approach in Litigation

Assuming an enterprise has a reasonable retention policy for digital audio that it can justify based upon identified needs and defensible practices, how should it approach digital audio files in litigation?

A. First Principles

Counsel sometimes forget the basic principles of litigation when confronted with digital information. Even before thinking about the topics specific to electronic information, fundamental litigation decisions demand attention. In *Semsroth v. City of Wichita*,[95] the court reviews those foundations that apply to all litigation. First, the party must determine the likelihood of finding relevant information.[96] Part of this determination is the value of that information to the current litigation.[97] In the realm of digital audio, these questions are particularly important. In the *E*Trade* case, the actual telephone conversations that detailed the scheme would have great value. For the jury, the value of the actual voices is significantly greater than the value of a transcript or the text of an email. In another case, for instance the *Sattar* criminal case, how much value is there to the defendant of playing numerous audio clips of languages the jury cannot understand.[98]

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[95] 2006 WL 3913444 (D. Kans. November 15, 2006).
[96] *Id.* at *8.
[97] *Id.*
[98] *Sattar*, at *2 (describing the claim of defendant that the languages on the audio were not ones she could understand).

The second step, given a decision of likelihood of finding valuable information is a consideration of the cost as compared to the amount in controversy and the party's resources.[99] While many times, these questions arise later in determinations of cost shifting, however, they are relevant at the outset as well in determining what resources to devote to finding audio. If the amount in controversy is not significant enough to justify extensive digital audio discovery, the parties may wish to approach the initial discovery planning conference differently.[100] After addressing these, "first principles," counsel turn to considerations unique to digital audio files as a subset of digital information in general.

B. Reasonably Accessible

The next question is whether the audio files are reasonably accessible.[101] Simply using boilerplate or automatically classifying certain types of files as "not reasonably accessible," will not carry the day.[102] Furthermore, maintaining information in a format that makes it not reasonably accessible while not maintaining it in reasonably accessible storage does not provide respite for the enterprise. In *Disability Rights Council of Greater Wash. v. Washington Met. Trans. Auth.*,[103] the court, in considering text files, had no sympathy for an enterprise that had failed to keep discoverable material

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[99] *Semsroth* at *8.

[100] *See* Fed. R. Civ. Proc. 26(f).

[101] Fed. R. Civ. Proc. 26(b)(2) allows a party not to "provide discovery of electronically stored information from sources that the party identifies as not reasonably accessible because of undue burden or cost."

[102] *See, e.g. Del Campo* cited above.

[103] 2007 WL 1585452 (D.D.C. June 1, 2007).

in an easily accessible format, ordering the enterprise to review back up media.[104]

> I am anything but certain that I should permit a party who has failed to preserve accessible information without cause to then complain about the inaccessibility of the only electronically stored information that remains. It reminds me too much of Leo Kosten's definition of chutzpah: "that quality enshrined in a man who, having killed his mother and his father, throws himself on the mercy of the court because he is an orphan."[105]

Courts have become more and more reluctant to allow enterprises to create systems and then to hide behind those systems.

"The Federal Rules do not permit [the defendant] to hide behind its peculiar computer system as an excuse for not producing" information.[106] With respect to audio files that can be so much more costly and time consuming to manage and to review, courts should be even less solicitous of enterprises that do not have systems in place to manage the data. The first question the court should ask the parties with claims of not reasonably accessible

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[104] *Id.* at *8.
[105] *Id.* (citation omitted).
[106] *Static Control Components, Inc. v. Lexmark Int'l, Inc.*, 2006 WL 897218, *4 (E.D. Ky. April 5, 2006) citing to the seminal paper case, *Kozlowski v. Sears, Roebuck & Co.*, 73 F.R.D. 73 (D. Mass. 1976).

audio files is, *"What have you done to manage your audio files so that the relevant files would be accessible when you need them?"* The court then asks the follow-up question: *"What business purpose is served by the method in which you keep your audio files?"*

Many courts will find themselves hard pressed to order cost shifting or to allow the enterprise to avoid production of the material even if it is not reasonably accessible. "The fact that a corporation has an unwieldy record keeping system which requires it to incur heavy expenditures of time and effort to produce requested documents is an insufficient reason to prevent disclosure of otherwise discoverable information."[107] More and more courts are distilling the dispute to such an analysis. Therefore, the seminal step for litigation is finding reasonable answers to the questions of business purpose and method of managing audio prior to the litigation.

C. Mandatory Initial Disclosures

Federal Rule of Civil Procedure 26(a)(1)(B) requires each party to disclose "a description by category and location of, all documents, *electronically stored information*, and tangible things that are in the possession, custody, or control of the party *and that the disclosing party may use to support its claims or defenses, unless solely for impeachment.*"[108] There are three important points for counsel with respect to these mandatory disclosures and audio files: what the rule does

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[107] *Wagner v. Dryvit Systems, Inc.*, 208 F.R.D. 606, 611 (D. Neb. 2001) (citations omitted).

[108] *Fed. R. Civ. Proc. 26(a)(1)(B).*

not require; what the rule *does* require; and, what happens if counsel violates the rule.

First, the rule specifically excludes information that the party does not intend to use. The 2000 amendment to the rule changed it from requiring disclosure of material "relevant to the disputed facts alleged with particularity."[109] Under the rule as it existed prior to 2000 amendment, parties had to disclose material adverse to their interests. At this time, however, parties need only disclose the location of material they intend to use. With audio files, it is probably the best practice simply to identify types of material and its location rather than trying to produce at the time of the initial disclosures since disclosure would require counsel to perform a review for privilege and confidential information in an extremely short period of time..

The disclosure itself, however, must be with enough specificity to allow opposing counsel to make a reasonable request for it. The court in *Sender v. Mann*[110] noted the lack of guidance in the rule itself concerning specificity.[111] Reviewing committee notes and other courts' opinions, it found a "common sense" approach.[112] The disclosures should not be treated as a formality, but rather detailed enough to identify material for opposing counsel.[113] Of particular note when thinking about audio files, is the *Sender* court's analysis of the duty of counsel

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[109] *See Committee note on Amendments in 2000 to Rule 26.*
[110] 225 F.R.D. 645, 650 (D. Colo. 2004).
[111] *Id.*
[112] *Id.*
[113] *Id.*

to investigate prior to making the disclosures.[114] With audio files, this requires counsel to locate audio files it intends to use before making initial disclosures and then, to disclose detailed information about those files.

The third consideration in mandatory disclosures is the result for violating the rule.[115] The court may prevent the party that does not make an adequate disclosure from using the material at trial unless the failure was substantially justified or harmless.[116] The court in *Sender* reviews the four factors set forth by the Tenth Circuit to determine whether a failure was substantially justified or harmless.[117] Those factors include: surprise and prejudice to the opposing party; ability to cure prejudice; potential disruption of the trial; and, bad faith or willfulness.[118] The court reviews all of these factors in its broad discretion.[119]

When counsel find that their client maintains audio files that may have a use in supporting that client's claims

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[114] *Id.* at 651. Citing to *In re Independent Service Org. Antitrust Lit.*, 168 F.R.D. 651, 653 (D. Kans. 1996) that a party may not stick its head in the sand, refuse to look for answers and then say it does not have detailed information for initial disclosures.

[115] Noting the difficulty of identifying all electronically stored information early in the litigation, the Advisory Committee on Federal Rules of Civil Procedure (hereinafter "Rules Committee") reminded courts and attorneys that the rule allows supplementation. Report of Civil Rules Advisory Committee, May 27, 2005 (revised July 25, 2005) at p. 15 (available at http://www.uscourts.gov/rules/supct1105/Excerpt_CV_Report.pdf last visited 30 June 2007) (hereinafter "Rules Committee Report").

[116] *Fed. R. Civ. Proc. 37(c)(1).*

[117] *Sender*, 225 F.R.D. at 656, *citing to Woodworker's Supply, Inc. v. Principal Mutual Life Ins. Co.*, 170 F.3d 985, 993 (10th Cir. 1999).

[118] *Id.*

[119] *Id.* at 655.

or defenses, counsel must investigate before exchanging mandatory initial disclosures. Digital audio files that are relevant but do not support the client's claims or defenses, may not be destroyed even though they need not be disclosed. Knowing of their relevance to pending litigation, destruction would constitute spoliation.[120]

D. Discovery Practice

The Advisory Committee on Federal Rules of Civil Procedure did not emphasize the need for counsel to meet and confer early and in detail to increase counsels' billable hours. Rather the Rules Committee noted: "The dynamic nature of electronically stored information, and the fact that routine operation of computer systems changes and deletes information, make it important to address preservation issues early in cases involving discovery of such information."[121] Additionally, the Rules Committee wants parties to discuss digital information to attempt to avoid problems that may cause "costly and time-consuming searches and production."[122]

The early discussion of electronically stored information is as important, if not more important, with digital audio files. The December 2006 the Supreme Court revised the rule "to state that the parties should discuss 'any issues relating to . . . electronically stored information, including the form or forms in which it should be produced.'"[123] Given the options of producing audio files as native audio files that may require

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[120] *See* Sanders op. cit.
[121] Rules Committee Report at 16.
[122] *Id.*
[123] *Id.*

specialized software to review, audio files converted to popular software formats, or transcriptions (either in electronic or paper versions), each with its own value, if the parties do not agree, the producing party may produce "the information in a form or forms in which it is ordinarily maintained or in a form or forms that are reasonably usable."[124] The producing party can justify any of the formats described as either the way ordinarily maintained – native files – or "reasonably usable" – any of the other formats.

From the point of view of the producing party, it may be able to avoid costly conversion of digital audio files by working with the requesting party. Also, by working together, counsel may be able to narrow the files that must be produced, limiting the searching costs. When actually requesting audio, the parties should work together to determine the best method.[125] The requests need to be specific for two reasons. First, by making specific requests, the requesting party can avoid the "vague" or "unduly burdensome" objection. But, second, and more importantly, the requesting party can avoid receiving what it requested. If the requesting party receives massive numbers of digital audio files, it will need to review them, driving the costs of discovery higher.

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[124] Fed. R. Civ. Proc. 34(b)(ii).

[125] Frequently, the best results will inhere if the parties have their experts work together prior to one party's beginning to collect information and process it. By having the experts communicate, the parties can have those persons who will work with the information design an efficient system, obviating the need to argue about format or redesign systems.

Federal Rule of Civil Procedure 34, as amended in December 2006, contains a specification for requesting electronic information that applies to digital audio files.[126] The request for information may specify the form or forms of production.[127] If the producing party agrees, the material is produced. If the producing party does not agree, it must state the form it intends to use.[128] If the parties cannot agree, the court will decide.[129] In the event that requesting party specifies no form, the responding party may produce as it chooses in "reasonably usable" format or as maintained in the ordinary course of business.[130]

Two additional points bear attention. First, the so-called "one bite rule,"[131] allows the producing party to object to subsequent production of the same material in a different format. "[A] party need not produce the same electronically stored information in more than one form."[132] Therefore, if producing party legitimately produces digital audio in native format and requesting party cannot use it that way, requesting party may need to pay the cost of a second production.[133]

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[126] *See* Fed. R. Civ. Proc. 34 (a) specifying the applicability of that rule to "electronically stored information" including "sound recordings."
[127] Fed. R. Civ. Proc. 34(b).
[128] *Id.*
[129] *Id.* referring the parties to Fed. R. Civ. Proc. 37 for enforcement.
[130] Fed. R. Civ. Proc. 34(b)(ii); however, as noted above, this probably is unsatisfactory from both the requesting and producing parties' points of view.
[131] *See*, Alan F. Blakley, "Unanswered Questions in the 2006 Federal Rules Changes," *The Federal Lawyer*, November/December 2006.
[132] Fed. R. Civ. Proc. 34(b)(iii).
[133] *See* discussion of cost shifting below in subsection E.

Second, a question that has been ignored by many is the impact of requesting information from third parties. Congress amended Federal Rule of Civil Procedure 45 concerning sub poenas at the same time it revised the other rules to address issues in electronically stored information.[134] Many audio files relevant to a particular law suit may be stored on a third party's server.[135] The third party will not want to expend the time or money to search its audio material for others. Therefore, both parties should work together to design a method with the least impact on the third party.[136]

E. Cost Shifting

While the federal rules do not require cost shifting when parties seek material under sub poena from a non-party, many state courts do.[137] Federal courts have been unanimous in giving significant weight to the non-party status of the recipient to a subpoena. "'Non-party status'

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[134] *See* Alan F. Blakley, "Sharpen Your Discovery from Nonparties," *Trial Magazine*, April 2007 (hereinafter "Blakley Rule 45").

[135] Such systems as Voice over Internet Protocol telephony are beyond the scope of this article. However, such telephony has become widespread in both the business and personal arenas and telephone calls made in such a way are, at least briefly, record. For an introduction to issues surrounding VoIP, *see* D.B Garrie, M.J. Armstrong, D. Harris, "Is Your Conversation Protected?" Seattle L. Rev., (2005) 27, 97 – 113.

[136] *See esp. Tessera, Inc. v. Micron Technology, Inc.*, 2006 WL 733498 (N.D. Cal. March 22, 2006) (holding that the special burdens on nonparties militate toward especial efforts of the parties to work together to gather the information).

[137] For instance, in New York "the reasonable production expenses of a non-party witness *shall be defrayed* by the party seeking discovery." N.Y.C.P.L.R. § 3122d (emphasis added). Similarly in Texas, "a party requiring production of documents by a non-party *must reimburse* the non-party's reasonable cost of production." Tex. R. Civ. Proc. 205.3f (emphasis added).

is a significant factor to be considered in determining whether the burden imposed by a subpoena is undue."[138] Because finding such information may be disruptive to business, simply offering to pay the financial costs of retrieving electronic information may not be enough, "expense is but a part of the burden."[139]

For cost shifting among parties, the Rules Committee set forth seven non- exclusive factors:

> (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 further information;
> (6) the importance of the issues at stake in the litigation; and
> (7) the parties' resources.[140]

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[138] *United States v. Amerigroup Illinois, Inc.* 2005 WL 3111972 at*4 (N.D. Ill. October 21, 2005).
[139] *Id.*
[140] Rules Committee Report at 41.

In *Semsroth v. City of Wichita*,[141] the Court adds another consideration particularly appropriate for digital audio files. It finds a direct correlation between accessibility of data and undue burden that it considers prior to moving to the seven factors.[142] The volume of audio information and the difficulty and cost of reviewing it[143] may militate towards cost shifting in most disputes concerning audio files. In any event, counsel must prepare to address the factors listed in the notes of the Rules Committee.[144]

VI. Conclusion – Best Practices

Creation of digital audio, having become ubiquitous in the business world, demands careful attention long before the enterprise anticipates litigation. With virtually no case law devoted to the problems of review peculiar to digital audio, this article, in looking to other digital cases, proposes the following best practices.

- Enterprises that collect digital audio should have a retention policy that mirrors the actual reason that the enterprise collects digital audio.

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[141] 239 F.R.D. 630, 637 (D. Kans. 2006).

[142] *Id.* Even though the case was decided prior to the effective date of the 2006 rules revisions, the Court uses the seven factors adopting them, as it were, through "common law."

[143] *See* "Sound Searching" *Inside Counsel*, January 11, 2007.

[144] Rules Committee Report at 41. So much has been written on cost shifting that this article need not repeat the analysis. For a synopsis, *see*, David K. Isom, "Electronic Discovery Primer for Judges," 2005 Fed. Cts. L. Rev. 1 at K (2005) available at http://www.fclr.org/2005fedctslrev1.htm (last visited 30 June 2005).

- The retention policy should include retention of digital audio for as short a time as it can defend based upon business needs.
- The retention policy should include a method for important digital audio records to be sorted, labeled and retained indefinitely.
- The enterprise “litigation hold” plan should contain a special provision for digital audio, especially if the enterprise’ retention policy is brief.
- At the inception of litigation during the Rule 26(f) conference, the parties should specifically address audio files including
    - likelihood of finding relevant information on audio files;
    - the location and format of audio;
    - cost and method of review to ensure finding all discoverable information;
    - method of production.
- If third parties are likely to have discoverable digital audio files, the parties to the litigation should work together to minimize that third parties costs, including not only monetary cost but lost productivity.
- Counsel should research all methods of reviewing digital audio (not relying upon a single previously used method such as transcription) to choose a method that best suits the needs of the case, based on volume of information and complexity of the litigation.

- If the court must become involved to resolve disputes, it should
    - inquire into the purpose of the retention system and adherence to it;
    - not allow the custodian of digital audio to use a poorly created and maintained system that makes digital audio more difficult to access to argue for undue burden and to shift costs;
    - inquire into the processes counsel have considered;
    - carefully apply the factors outlined in the Committee Notes to the 2006 federal rules revisions.

As enterprises and individuals create more and more non-text digital media, including all forms of audio and video, the likelihood of finding important information on that media increases but also the costliness of locating that information increases. A carefully planned retention plan that includes special consideration of digital audio, can eliminate a great deal of cost by presorting the important records, maintaining only what is necessary for business purposes and only for the amount of time needed for business purposes.

In the event of litigation, if the enterprise has planned properly, the amount of digital audio to review will present less of a problem. Counsel must, however, be vigilant in working together and in reviewing emerging technology rather than simply relying upon a known method such as transcription. Enterprises can use

digital audio to their advantage, as one of the defendants in *E*Trade Securities*[145] had done, but, without planning for digital audio it can present a nightmare of cost and burden.

[145] *See* footnote 63 above and accompanying text.