January 6, 2022

Ms. Vanessa Countryman  
Secretary, Office of the Secretary  
US Securities and Exchange Commission  
100 F Street NE  
Washington, DC 20549


Ms. Countryman,

On December 1, 2021, the US Securities and Exchange Commission (SEC or Commission) published amendments (Proposal) to its recordkeeping rules promulgated under the Securities Exchange Act of 1934. The Proposal seeks to update Rules 17a-4 and 18a-6 so that they reflect the current collective Commission guidance, clarify the requirements applicable to electronic recordkeeping and to explicitly define the “prompt” standard as it relates to records production. NRS, a ComplySci Company (NRS) appreciates the opportunity to comment on this important proposal and commends the SEC for taking steps to modernize these onerous and complicated rules while also eliminating the anachronistic components that no longer serve to provide any tangible investor protections.

In general, NRS supports the proposal, subject to the comments below.

**Background on NRS and NRS Clients**

NRS serves more than 3,000 broker-dealers, investment advisers, and investment companies ranging from small institutions to the largest global investment management complexes, private fund managers as well as other financial firms.
Since 1983, NRS has provided its clients with exceptional compliance consulting services, compliance technology solutions, educational conferences and seminars. In addition, NRS created and sponsors, in conjunction with the Investment Adviser Association, the NRS Investment Adviser Certified Compliance Professional (IACCP®) certification program – now with more than 1,000 designees.

In 2021, NRS became a part of Compliance Science, Inc., where we believe advanced compliance technology empowers compliance professionals to transform their business. More than 7,000 customers, including some of the world’s largest financial institutions, rely on the ComplySci family of companies’ scalable and sophisticated platforms to stay ahead of risk and unlock the strategic potential of their compliance data. Our growing family of companies includes Compliance Science (ComplySci), NRS, illumis, and RIA in a Box. Together, we offer a full suite of governance, risk, and compliance (GRC) consulting, technology, managed services, analytics, and outsourcing solutions for the financial services industry. Our regulatory technology solutions help compliance organizations identify, monitor, manage, and report on risk and conflicts of interest, including personal trading, gifts and entertainment, political contributions, outside business affiliations, and other code of ethics violations.

Given NRS’ experience and customer base, our comments are focused on the proposed amendments to Rule 17a-4 and the impacts to broker-dealers even though we believe most will be similarly applicable to Rule 18a-6 and SBS Entities.

NRS has two general introductory comments on the proposed amendments and has responded to each Commission question below.

General comments regarding the Proposal:

A. One or more systems. The current rule and the proposed amendment are both written as though broker-dealers make use of only one method or system to preserve the required records. Nothing could be further from the truth. Some broker-dealers have invested in a monolithic recordkeeping system that collects and organizes records from a variety of systems and processes, but most broker-dealers retain required records on each of those various systems ensuring that each one meets the requirements of Rule 17a-4(f). Some of these systems are provided by vendors, like NRS, whose systems each maintain one or more required records. Addition of a much more attractive audit-trail based alternative to WORM requirements consistent with the Proposal will likely exacerbate the situation and result in fewer Brobdingnagian recordkeeping systems. Where appropriate below, NRS has made specific comments when there was a clear conflict between the unitary language in the
proposed amendments and the reality of multiple systems.

B. NRS applauds the Commission’s efforts to modernize and simplify the recordkeeping rules while also retaining appropriate safeguards to support their important investor protection mission. NRS suggests that the Commission could go further and eliminate the distinctions between paper, WORM, micrographic and/or electronic. NRS mostly agrees with the Petition’s principals-based concept and suggest that the Commission could amend the rules to require that firms keep accurate and valid records, and be prepared to produce them promptly without any discussion of which method or medium is used to store the records.

Responses to the specific questions in the Proposal:

1. Is the proposal to replace the term “electronic storage media” in Rule 17a-4(f) and the term “electronic storage media” in Rule 18a-6(e) with the term “electronic recordkeeping system” appropriate? If so, explain why. If not, explain why not. Is there a more appropriate term? If so, identify it and explain why it would be more appropriate.

In NRS’ experience, it is common that the term “media” is a point of confusion in the industry. Even though the Commission has stated its definition of the term in the Interpretation, that definition is inconsistent with the generally accepted usage of the term. “Electronic recordkeeping system” is an appropriate term, as part of the proposed rule amendments. However, as previously commented, NRS believes that the Commission can further simplify the rules to cover all forms of recordkeeping and therefore, eliminate the “electronic” modifier.

2. Is the definition of “electronic recordkeeping system” in Rules 17a-4(f) and 18a-6(e), as proposed to be amended, appropriate? If so, explain why. If not, explain why not. Is there a more accurate definition? If so, provide it and explain why it would be more accurate.

The proposed definition of “electronic recordkeeping system” is appropriate, although NRS prefers the word “stores” as opposed to “preserves,” which is subsequently used to define a requirement of the electronic recordkeeping system in 17a-4(f)(2)(i)(A). Either way, the definition is appropriately generic to survive foreseeable technological changes and will provide broker-dealers the flexibility to employ solutions that are innovative, efficient and/or cost-effective while still meeting the requirements of Rule 17a-4(f).

3. Is there a reason to retain the notification (including the 90-day notification) and representation requirements with respect to employing an electronic recordkeeping system in Rule 17a-4(f)? If so,
explain why. If not, explain why not. If the requirements should be retained, should analogous requirements be added to Rule 18a-6(e)? If so, explain why. If not, explain why not.

At the time of the original rulemaking in 1997, the new and unproven capabilities of electronic storage media may have been good reason to give the Commission and DEAs an opportunity to intervene prior to implementation by broker-dealers, however, the ubiquity of the use of electronic storage systems in today’s environment obviates the need for this notification requirement.

4. **Is the proposal to limit the requirements for electronic recordkeeping systems (including the audit-trail and WORM requirements) in paragraph (e)(2) of Rule 18a-6 to nonbank SBS Entities appropriate?** If so, explain why. If not, explain why not. Would these requirements conflict with requirements and guidance of the U.S. prudential regulators governing the use of electronic recordkeeping systems by bank SBS Entities? If so, please identify the requirements and guidance of the prudential regulators that would conflict with the proposed requirements of paragraph (e)(2) of Rule 18a-6 and explain how they would conflict with those proposed requirements. Would it be appropriate to apply certain of the requirements of paragraph (e)(2) of Rule 18a-6 to bank SBS Entities? For example, would it be appropriate to apply the requirements other than the audit-trail and WORM requirements? If so, explain why. If not, explain why not.

No comment.

5. **Would the proposed rule text setting forth the audit-trail requirement achieve the Commission’s objective of imposing an obligation that the electronic recordkeeping system be configured to permit the re-creation of an original record if it is altered, over-written, or erased?** If so, explain why. If not, explain why not and suggest alternative rule text that would achieve this objective.

The proposed rule text does, in NRS’ opinion, achieve the Commission’s objective with only one caveat. The text requires that the audit trail include the “individuals” creating, modifying or deleting a record. NRS finds this language to be problematic because a) systems don’t always record names but always record a unique identifier that can be used to find the name, and b) in many instances an automated system or process rather than a natural person will be the actor. Therefore, NRS recommends the following text for the proposed 17a-4(f)(2)(i)(A)(3):

“(3) Information sufficient to uniquely identify the person, system or process creating, modifying, or deleting a record; and”

6. **Would the proposed rule text requiring that the electronic recordkeeping system verify automatically the quality and accuracy of the electronic storage system storage and retention process achieve the
Commission’s objective that the electronic recordkeeping system be configured to ensure that when an original record is added to the electronic recordkeeping system it is completely and accurately captured in the system? If so, explain why. If not, explain why not and suggest alternative rule text that would achieve this objective.

NRS believes that it is appropriate to require an electronic recordkeeping system to automatically verify the quality and accuracy of the records being made, however, NRS disagrees that this is readily available as a configuration option in most or all systems that will be employed as an electronic recordkeeping system. The current rules include an analogous requirement for WORM-based systems and the verification, in most systems, likely happens at the time the record is moved from an operational system to the electronic storage media. Under the proposed rules, broker-dealers may eliminate the WORM-based systems and begin to rely on the operational systems as the electronic recordkeeping system, eliminating the need for a separate process to move the records from one system to another. While it is true that nearly every software system will, directly through its own coding or indirectly through the host operating system, identify failed writes, not all will have a configurable feature that explicitly tests the recorded data for accuracy. Some systems might keep an error log and continue processing. Therefore, it is NRS’ opinion that broker-dealers will need to ensure that the operational systems have the proposed functionality, and many will require programming changes by the broker-dealers or their vendors.

7. Is the proposed rule text requiring that the electronic recordkeeping system serialize the original and duplicate units of the storage media, and time-date for the required period of retention the information placed on such electronic storage media, if applicable, appropriate? If so, explain why. If not, explain why not. Does this requirement as it exists today only apply to electronic recordkeeping systems that use optical disk technology? If so, explain why. If not, identify other electronic recordkeeping systems for which serializing original and duplicate units of the storage media, and time-dating for the required period of retention the information placed on the electronic storage media is appropriate and done under current practices.

NRS agrees that the proposed addition of the “if applicable” modifier is beneficial and removes the ambiguity of its application to systems without multiple units of storage media. That said, NRS also believes that specificity of the “serialize and time-date” requirements of the existing and proposed rules are unnecessary and duplicative of the requirements to produce the records and retain them for the proper duration. Broker-dealers should have the latitude to choose any suitable methods to accomplish these goals – subject, of course, to appropriate internal control testing and examination by their DEA.
8. **Is the proposed rule text requiring that the electronic recordkeeping system have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in both a human readable format and a reasonably usable electronic format appropriate? If so, explain why. If not, explain why not and suggest alternative rule text. What types of electronic record formats should be considered reasonably usable? Do broker-dealers and SBS Entities use unique (i.e., proprietary) electronic formats? If so, can those electronic formats be converted into electronic formats that are reasonably usable?**

There are two standards to consider – human readable format and reasonably usable electronic format. NRS recommends that the Commission add more clarity to the definition of human readable. Is a list of transactions four pages wide and hundreds of pages long in 6-point font human readable? It can be read by a human, but may not be very usable.

With regards to the reasonably usable electronic format, NRS wholeheartedly agrees with the Commission’s goal of making this standard flexible and future-proof and feels that the Commission’s Proposal achieves this goal. The Commission should consider including a minimal list of acceptable formats. A potential definition might be:

"**Reasonably Usable Electronic Formats include, but are not limited to, Adobe Acrobat (.pdf), Microsoft Word (.docx), Microsoft Excel (.xlsx) and text files (.txt, .csv).**"

In NRS’ experience, nearly all electronic recordkeeping systems will naturally provide either human readable or reasonably usable electronic formats. A trading system will almost certainly readily provide an electronic format. A contracts system will default to a human readable format.

Combining the two into a requirement that all electronic recordkeeping systems have the capacity to produce either, at the whim of any examiner, adds a significant burden and will require system programming and updates by broker-dealers or their vendors.

Under the current system, broker-dealers and their examiners are adept at arranging delivery of records in either human readable or reasonably usable electronic formats acceptable to both parties. Requiring broker-dealers to ensure that all electronic recordkeeping systems can output both formats, regardless of the need for such, adds unnecessary cost and complexity to the implementation of such systems. NRS recommends that the proposed amendment be changed to reflect that electronic recordkeeping systems be required to have the capacity to produce either human readable or reasonably usable electronic formats, but not both.
9. Is the proposed rule text requiring that the electronic recordkeeping system have the capacity to readily download and transfer the information needed to locate the electronic record sufficiently clear? If so, explain why. If not, explain why not. For example, what type of information is necessary to locate a specific record maintained and preserved on an electronic recordkeeping system? Are indexes used? If so, how? Are data fields used? If so, how? Should the rule be more specific in identifying the type of information necessary to locate a specific record maintained and preserved on an electronic recordkeeping system? If so, explain how and suggest alternative rule text.

NRS finds this proposed amendment to be clear and appropriate and will allow broker-dealers the flexibility to efficiently deliver the required information.

10. Is the proposed rule text requiring the broker-dealer or SBS Entity to at all times have available, for examination by the regulators, facilities for immediate production of records preserved by means of the electronic recordkeeping system and for producing copies of those records appropriate? If so, explain why. If not, explain why not and suggest alternative rule text. What type of facilities would be needed to meet this requirement?

NRS finds that this proposed rule is unclear, impractical, and inconsistent with general examination practices. Is the Commission asking that broker-dealers have one or more computer workstations set aside for use by examiners and able to access all electronic recordkeeping systems? The requirement for the broker-dealer to promptly deliver requested records should be adequate to ensure that the DEA receives the required information and afford the broker-dealer with an opportunity to perform a privilege review before production.

11. Is the proposed rule text requiring the broker-dealer or SBS Entity to be ready at all times to provide immediately any record or information needed to locate records stored by means of the electronic recordkeeping system that the regulators may request appropriate? If so, explain why. If not, explain why not and suggest alternative rule text.

See NRS’ response to question 10.

12. Is the proposed rule text requiring the broker-dealer or SBS Entity to maintain a backup electronic recordkeeping system appropriate and necessary? If so, explain why. If not, explain why not. For example, do broker-dealers maintain a backup electronic recordkeeping system with respect to the electronic records they preserve for business purposes? Are their other measures that broker-dealers take with respect to preserving their business-purpose electronic records that are designed to
maintain access to the records if the electronic recordkeeping systems fails? If so, please identify and describe them and suggest how they could be incorporated into a final rule.

NRS finds this requirement to be appropriate and consistent with industry best practices, although, if the goal is to ensure that the records are available following a disaster, then the proposed rule is inadequate and, potentially, unnecessary given business continuity and disaster recovery rules. This rule does not, for example, discuss geographic or topological disparity between the two copies. NRS recommends, for clarity sake, that the Commission reference this as a minimum requirement and that the electronic recordkeeping system be part of the broker-dealer business continuity and disaster recovery plans.

13. Is the proposed rule text requiring the broker-dealer or SBS Entity to organize and maintain information necessary to locate records maintained by the electronic recordkeeping system appropriate? If so, explain why. If not, explain why not and suggest alternative rule text.

NRS finds this proposal to be clear and appropriate and will provide broker-dealers the flexibility to implement any method of cataloguing their records.

14. Is the proposed rule text requiring a broker-dealer or SBS Entity using an electronic recordkeeping system to have in place an auditable system of controls that records, among other things: the names of persons inputting, altering, or deleting a record; and the date and time such persons input, altered, or deleted the record appropriate? For example, is this the type of information that could be used to examine whether the system is operating in conformance with the requirements of the proposed rule (e.g., if the electronic recordkeeping system is adhering to the audit-trail requirement, that it is preserving records in a manner that allows the original record to be re-created if overwritten, erased, or otherwise altered)? If so, explain why. If not, explain why not and suggest alternative rule text. For example, is there other information that would be necessary to achieve the objective of the requirement? If so, please identify it. Should the Commission add a requirement for a periodic audit to confirm that the auditable system of controls is working as appropriate? If so, should the required audit be internal or external?

NRS has several concerns with the language of the proposed rule. First, NRS believes that the Commission endeavors to ensure that an electronic recordkeeping system have what is commonly referred to as an “audit trail,” and recommend that the Commission adopt that terminology rather than an “auditable system of controls.” The purpose of an audit trail is to track the history of a record from creation, through any changes and ultimately to deletion.
Second, the proposed rule requires that the audit trail include the “names of individuals” inputting, altering or deleting a record. NRS finds this language to be problematic because a) systems don’t always record names but always record a unique identifier that can be used to find the name, and b) in many instances an automated system or process rather than a natural person will be the actor. Therefore, NRS recommends the following text for the proposed 17a-4(f)(3)(v)(2):

“(2) Information sufficient to uniquely identify the person, system or process inputting, altering, or deleting a record; and”

15. Is the proposal to eliminate the requirement that a broker-dealer engage a third party with access to the firm’s electronic records who undertakes to provide them to the Commission and other securities regulators appropriate? If so, explain why. If not, explain why not. Further, is the proposal to modify this requirement so that a senior officer of the broker-dealer must have access to the records and undertake to provide them to the Commission appropriate? If so, explain why. If not, explain why not. Should the Commission require that a second senior officer at all times have independent access to and the ability to provide the records and to execute the undertakings? If so, explain why. If not, explain why not. For example, would this increase insider cybersecurity risk in comparison to the proposed approach? Would switching from a third party to a senior officer reduce cybersecurity risk compared with the current third-party requirement? If so, explain why. If not, explain why not. Would switching to a senior officer provide the Commission and other securities regulators with adequate means to obtain records if the broker-dealer refuses to produce them in the normal course? If so, please explain. If not, explain why not.

NRS agrees that the elimination of the requirement for a designated third-party is appropriate. The current implementation was nothing more than a burdensome administrative step that ultimately provided little to the goal of ensuring access to records by the Commission. In NRS’ experience, broker-dealers rely on numerous systems and vendors to fulfill their recordkeeping obligations. The routine practice in the industry was to name a designated third party, but not to clearly identify which records and/or timeframe that party covered. Moreover, there was no mechanism for un-designating a third party that ceased providing a service. Therefore, NRS feels that eliminating this requirement makes sense.

However, replacing the designated third-party with a “senior officer” may not eliminate some of the issues applicable to the designated third-party. NRS finds it implausible that a single person at a large and complex broker-dealer will possess the authority and skillset to independently produce the myriad records required by the Commission. Even an executive officer (e.g., CTO or COO) who
might possess the authority to authorize the release of those records would require the assistance of a multi-disciplinary team of individuals.

NRS humbly suggests the following alternative to proposed Rule 17a-4(f)(3)(vi):

(vii) Have at all times a senior officer of the member, broker, or dealer (hereinafter, the “undersigned”), who has, or has the authority over a team of individuals necessary to have, access to and the ability to provide all records required to be maintained and preserved on the electronic recordkeeping system(s), file with the designated examining authority for the member, broker or dealer the following undertakings with respect to such records:

16. NRS believes that authority as used in this case should include, at a minimum, the ability to compensate staff, pay vendors, if needed, and ensure that those individuals that assist in an effort against the wishes of management do not face retribution. What type of senior officer could fulfill the proposed access and undertakings requirements? For example, which senior officers have access to electronic recordkeeping systems? Are there any circumstances in which the senior officer would not be an associated person? Should the Commission specify which officers or officers with specific responsibilities and reporting lines that would be appropriate to provide the senior officer undertakings? If so, please identify them and explain why it would be appropriate for them to provide the undertakings.

See NRS’ response to question 15 above.

17. Is the proposal to eliminate the option to place in escrow and keep current a copy of the physical and logical file format of the electronic storage media, the field format of all different information types written on the electronic storage media, and the source code, together with the appropriate documentation and information necessary to access records and indexes, appropriate? If not, explain why. For example, do broker-dealers use this option?

Given the totality of the proposed amendments, especially the combination of the production formats and the senior officer undertaking requirement, the existing escrow rule is unnecessary, and its elimination is reasonable and appropriate.

18. Do broker-dealers or SBS Entities use micrographic media to store regulatory records? If not, should the Commission delete the option to use micrographic media in Rule 17a-4(f)? If so, should the Commission add an option to use micrographic media to Rule 18a-6(e)? Are the current requirements in Rule 17a-4(f) for broker-dealers using micrographic media consistent with this
technology as it exists today? If so, explain why. If not, explain why not. Should the current requirements be updated? If so, explain how.

NRS, in its consulting practice, has not come across the use of micrographic media for a number of years. It is possible that some records that have long retention periods (corporate documents, employment documents for long-tenured employees, etc.) may still be stored using micrographic media. NRS recommends that the Commission include a rule that explicitly allows broker-dealers to convert records from one recordkeeping system to another as long as the record and record of its audit trail are stored in the new system. This would allow broker-dealers to retire any micrographic media and WORM-based systems in favor of a modern electronic recordkeeping system that meets the requirements proposed by these amendments.

19. Should the Commission adopt a sunset provision after which time broker-dealers would no longer be able to use micrographic media? If so, explain why or why not. If not, please describe broker-dealers’ continued use of micrographic media to store records. Would any broker-dealers incur costs in moving from micrographic media to paper or electronic storage media? If so, identify and explain the costs. Moreover, do broker-dealers continue to preserve records using paper, rather than electronic storage methods, to fulfill the record preservation requirements of Rule 17a-4? If so, please provide data as to the frequency of such use.

No, however, as discussed in the response to question 18, above, NRS believes that the Commission should allow broker-dealers to convert records stored in systems based on older technology to a modern system. Broker-dealers would naturally migrate to the new system and retire the old resulting in efficiencies for both the broker-dealer and their DEA.

20. Are the proposed amendments to paragraphs (j) and (g) of Rules 17a-4 and 18a-6, respectively, that would require firms to furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant to paragraph (e) of this section in a reasonably usable electronic format, if requested by a representative of the Commission, appropriate? If not, explain why.

The proposed amendments, requiring the record and its audit trail, are appropriate, but only if explicitly requested by a representative of the Commission. NRS finds the relationship and precedence of the first and second sentences of the proposed rule lack clarity. Does the Commission intend to establish a default whereby all records are to be provided without an audit trail, regardless of the way in which they are preserved, and only, if the audit trail is specifically requested and the record is stored in an electronic recordkeeping system, as proposed, it must be provided?
As written, the proposed rule could also be interpreted to mean that any time a record is requested, and it is stored in an electronic recordkeeping system, as proposed, the record’s audit trail must also be delivered.

Conclusion

NRS continually interacts with broker-dealers of all sizes through our client relationships and compliance education programs. NRS applauds the Commission’s decision to revisit the recordkeeping rules and strongly agrees with the modern and flexible approaches embodied in the proposed amendments. We urge the Commission to consider our comments in the spirit in which they were intended.

NRS appreciates the opportunity to comment on this Proposal. If we may assist further or provide additional information or background on our comments, please let me know.

Respectfully,

John Gebauer
President, NRS