







Invested in America

May 24, 2018

Submitted via email: rule-comments@sec.gov

Brent J. Fields Secretary Securities and Exchange Commission 100 F Street, NE Washington, DC 20549

Re: Petition for Rulemaking to Amend Exchange Act Rule 17a-4(f) - ADDENDUM

Dear Mr. Fields,

The Securities Industry and Financial Markets Association ("SIFMA")¹, the Futures Industry Association ("FIA")², International Swaps and Derivatives Association ("ISDA")³, and the Financial Services Institute⁴ (together, the "Associations") respectfully submit this addendum

¹ SIFMA is the voice of the U.S. securities industry. We represent the broker-dealers, banks and asset managers whose nearly 1 million employees provide access to the capital markets, raising over \$2.5 trillion for businesses and municipalities in the U.S., serving clients with over \$18.5 trillion in assets and managing more than \$67 trillion in assets for individual and institutional clients including mutual funds and retirement plans. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA). For more information, visit http://www.sifma.org.

² FIA is the leading trade organization for the global futures, options and over-the-counter cleared derivatives markets with offices in Washington, DC, London and Singapore. Its mission is to support open, transparent and competitive markets, protect and enhance the integrity of the financial system and promote high standards of professional conduct. FIA's core constituency consists of firms registered with the Commodity Futures Trading Commission as futures commission merchants (FCM). Many of these FCMs are also registered as broker-dealers with the Securities and Exchange Commission. The primary focus of the association is the global use of exchanges, trading systems and clearing organizations for derivatives transactions. FIA's members include clearing firms, exchanges, clearinghouses, trading firms and commodities specialists from more than 48 countries, as well as technology vendors, lawyers and other professionals serving the industry.

³ Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has more than 900 member institutions from 68 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: www.isda.org. Follow us on Twitter @ISDA ⁴ The Financial Services Institute (FSI) is an advocacy association comprised of members from the independent financial services industry, and is the only organization advocating solely on behalf of independent financial advisors and independent financial services firms. Since 2004, through advocacy, education and public awareness, FSI has been working to create a healthier regulatory environment for these members so they can provide affordable, objective financial advice to hard-working Main Street Americans. For more information, visit

("Addendum") to the petition filed with the Securities and Exchange Commission ("SEC" or "Commission") on November 14, 2017, pursuant to Rule 192(a) of the Commission's Rules of Practice, to amend Rule 17a-4 under the Securities Exchange Act of 1934 ("Exchange Act") ("Petition"). In the Petition, the Associations requested that the Commission amend Rule 17a-4(f) to no longer require broker-dealers to implement a "non-rewriteable, non-erasable" or "write once, read many" ("WORM") standard, notify their designated examination authority of their intent to use electronic storage, have an electronic records audit system, and employ a third-party downloader. The Associations are filing this Addendum with additional support for the Petition as requested by various Commission staff during meetings with the Associations since filing the Petition.

Although the staff has suggested that new guidance may be sufficient to achieve the goals of the Petition, the Associations continue to believe that these changes require a rule change to most clearly provide the necessary relief. The existing rule uses too many outdated references and standards that any corrective guidance would only further highlight the problems with this rule.

Specifically, the staff have asked for additional information on: (1) the types of alternative recordkeeping controls that would be used in place of a WORM compliant system; (2) the challenges of storing specific types of records required to be retained in WORM; and (3) the costs incurred by broker-dealers associated with implementing and maintaining the WORM.

A. Alternative Recordkeeping Controls

The Petition proposed a rigorous retention standard that is technology-neutral, principles-based, and consistent with international standards and current business approaches to managing and protecting data. In subsequent meetings, the staff requested more specific information on the types of retention systems that broker-dealers could use in place of WORM, if the Petition is granted. Of course, the proposed rule language in the Petition is intended to be technology neutral so these examples are intended to provide additional details about the currently available technology which cannot be used to meet the SEC's retention requirements for broker-dealers. The proposed language in the Petition would allow firms to use technology which evolves over time to meet the requirements of the new principles-based rule.

Recordkeeping systems incorporate various controls which protect the integrity of the document while still allowing the records to be indexed, searched, and produced in a usable format. These controls are inherent in the native systems where the records are created and, therefore, do not require that records be moved to an entirely separate system as is required by WORM technology. Some examples of these controls include access controls, lifecycle management controls, and audit logs, each of which is explained in more detail below.

1. Access Controls

Limiting access to documents is the first line of defense for protecting records from both willful and unintentional modification and destruction. Firms actively manage access controls to limit the pool of associated persons who can access various types of records. Individuals are only able

to access those records that are required for the individual to perform their job functions. Access controls have been used for decades, but current technology allows the use of multi-factor identification and other methods that further bolster the security of records.

2. Lifecycle Management Controls - Destruction Protocols

Modern data management principles provide the concept of a lifecycle for data which culminates in its deletion following the appropriate retention requirements. Any technology used to meet the proposed rule requirements would not allow records to be deleted, except when the relevant retention period has expired and there is no other restriction on deleting the record (such as a legal hold). Neither users nor administrators can delete documents prior to their set expiration date.

3. Audit Logs – Protecting Against Record Alteration

For many years, the SEC staff have argued that the WORM standard protects records against modifications, whether intentional or unintentional. We note, however, there are today many simpler ways to achieve this goal without resorting to the archaic WORM standard. For example, a firm's "live" recordkeeping system can be backed up onto a second system. When a change is made to an original document, those changes would not be reflected in the back-up copy which would instead indicate that the record had changed in an audit log. Modifications can similarly be tracked using record metadata which also cannot be removed or deleted. Changes to the record are stored in the metadata which could then be used to track changes to the original record. This technology, along with many others, is evolving and may prove to be valuable recordkeeping tools in the future. Broker-dealers should have the flexibility to adopt new technology as it becomes available.

We note that our petition requested that the Commission delete the "audit system" requirement in Rule 17a-4(f)(v) as this has never been defined or publicly interpreted by the staff. As a result, broker-dealers have had to comply with a standard that does not use generally accepted terminology. Broker-dealers propose the use of an "audit trail" in lieu of the audit system because it has a generally accepted and longstanding meaning within the IT community.

For example, NIST defines audit trail as:

- A chronological record that reconstructs and examines the sequence of activities surrounding or leading to a specific operation, procedure, or event in a security relevant transaction from inception to final result.
- A record showing who has accessed an information technology (IT) system and what operations the user has performed during a given period.
- A record showing who has accessed an IT system and what operations the user has performed during a given period.
- A chronological record that reconstructs and examines the sequence of activities surrounding or leading to a specific operation, procedure, or event in a security-

relevant transaction from inception to final result.⁵

The adoption of the term "audit trail" would help broker-dealers better understand compliance with this requirement as a widely accepted term with applicable technology solutions.

B. Challenges of Storing Databases in WORM Format

One of the biggest challenges of the broker-dealer recordkeeping requirements is the inability to accurately retain structured databases in WORM format. Financial institutions use databases for any number of regulatory purposes, but particularly for Exchange Act Rule 17a-3 and 17a-4 compliance, including general ledgers⁶, blotters⁷, accounting⁸, client management⁹, trading¹⁰, and more. Complex databases such as these amass data from various sources (including other databases) and collate them into a record which may change several times every second. Firms do retain back-up copies of this record, but it is not WORM compliant because such copy would be worthless due to the ever-changing nature of these records.

As explained in the Petition, any attempt to retain a structured database in WORM format only reflects the millisecond when the "picture" was taken. Any data that came or went before or after that millisecond is not backed up in WORM format. Further, that static picture cannot be used to recreate or reproduce the database even at that moment in time. As a result, although it is technically possible to retain a database in WORM format with that single "picture," that record has next to no value because it is not an accurate representation of the database and cannot be reproduced in a useful way.

Today, firms effectively back-up their databases in other ways, such as those outlined above, for a variety of purposes including business continuity planning. Such approaches control the unlawful alteration or destruction of records.

C. Costs of Rule 17a-4 Compliance

Although broker-dealers have been required to store records in WORM format for 20 years, the cost of compliance has not decreased in that time. These costs are significant for many firms. Broker-dealers must use a WORM compliant retention system and ensure that any new system or technology must also comply with the WORM standard – either within the system or feeding into another system which meets the requirement.

In April 2018, SIFMA anonymously surveyed a group of member firms about the costs of WORM compliance. Of the 25 respondents, 16 firms had implemented a new WORM-compliant recordkeeping system in the past three years. The average reported cost of a new system was over \$6 million, with several firms reporting costs in excess of \$25 million and one firm reported that their WORM-compliant record storage system cost \$39 million to implement. In addition,

⁸ Rule 17a-3(a)(11)

⁵ NIST Glossary (available at https://csrc.nist.gov/Glossary/?term=3040).

⁶ Rule 17a-3(a)(2) and (3)

⁷ Rule 17a-3(a)(1)

⁹ Rule 17a-3(a)(17)

¹⁰ Rule 17a-3(a)(6) and (7)

the firms reported that the new recordkeeping system took 20 months to implement on average; with several firms reporting that the implementation took more than 3 years with 10-45 employees spending at least 50% of their time on this effort during that period.

WORM compliant recordkeeping costs are not limited to implementation. SIFMA members reported that ongoing costs of WORM compliance are nearly \$4 million, and several firms reported annual costs in excess of \$20 million.

Further, firms must ensure that any new system that creates a compliance record must store, or be able to be modified to store, such records in compliance with Rule 17a-4, and therefore often incur additional costs. SIFMA members have reported that these costs vary but can exceed \$1 million in supplemental expenses and take an additional six months to one year to implement given the requirements in Rule 17a-4(f). As a result, broker-dealers are limited in their ability to use newer technology due to the archaic nature of these recordkeeping requirements. In recent years this has been particularly true of new communications tools. Broker-dealers have been hampered in their ability to adopt new technology because the archaic recordkeeping requirements do not lend themselves to modern communications platforms.

Finally, the costs of the third-party downloader service range according to the size of the firm. On average, firms pay over \$80,000 per year for each broker-dealer to comply with the third-party downloader requirements. Several firms reported that their total costs across their firm and all broker-dealers was more than \$500,000.

The costs of complying with Rule 17a-4(f) certainly outweigh any perceived benefit of this outdated rule. Today's technology provides significant cost savings that our members cannot realize because they are held back by these outmoded requirements. Eliminating the WORM standard will likely increase competition among recordkeeping vendors for broker-dealers thus decreasing their compliance costs. Our members will be able to avail themselves of the technology that any type of company could use, and not just the relative few that offer WORM compliant systems.

The Associations urge the Commission to act quickly to rectify the ongoing WORM standard issues by rewriting Rule 17a-4(f) to provide broker-dealers with the necessary flexibility to use the most current recordkeeping technology.

* * * * *

We welcome the opportunity to meet with the Commission staff to discuss the Petition in further detail and to answer any questions the staff may have. Please contact Melissa MacGregor, Managing Director and Associate General Counsel, SIFMA at 202-962-7300 with any questions or to arrange a meeting with the Associations.

Respectfully submitted,

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