



January 3, 2022

RE: Microsoft comment regarding proposed rule changes for SEC Rule 17a-4(f)

To whom it may concern:

SEC Request for Comment #12: *12. Is the proposed rule text requiring the broker-dealer or SBS Entity to maintain a backup electronic recordkeeping system appropriate and necessary?*

Microsoft Comment: A 'backup electronic recordkeeping system' describes one of several methods of records recovery in the event an electronic recordkeeping system is disrupted, malfunctions, or otherwise becomes inaccessible. Further, for a 'backup electronic recordkeeping system' to be an effective recovery method many dependencies must be considered, such as assuring geographic dispersion. For example, for a larger disruption, like a full zone or region outage, M365 assures data resilience through LRS storage, which makes sure that data objects on the Cloud PC OS disks are 99.999999999% resilient against data loss, over a given year. Therefore, Microsoft suggests more general language, such as:

(iii) Maintain redundancies that provide an alternative that meets the other requirements of this paragraph (f) to locate and re-create records, in the event the primary records required to be maintained and preserved pursuant to §§ 240.17a-3 and 240.17a-4 are unavailable.

SEC Request for Comment #14: *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?*

Microsoft Comment: Books and records, e.g., blotters and ledgers, are comprised of multiple separate transactions. As explained in 'D. Requirements for Electronic Recordkeeping Systems':

Broker-dealers have explained to Commission staff that the electronic recordkeeping systems used for business purposes are dynamic and updated constantly (e.g., with each new transaction or position) and easily accessible for retrieving records; whereas the WORM-compliant electronic recordkeeping systems are more akin to static “snapshots” of the records at a point in time and less accessible,

The 'static snapshots' are generated through automated processes, e.g., the trading system generates the blotter at a given interval and an automated process writes the blotter to a 17a-4(f) compliant system. 'Accountability regarding inputting of records' is achieved through a repeatable automated process (not a person) that creates and inputs (stores) the record in a 17a-4(f) compliant system.

As an alternative to the WORM requirement, the SEC separately proposed an option for an audit trail, which involves tracking 'individual(s) creating, modifying, or deleting the record.'

Microsoft is **not** suggesting a change to the WORM-alternative. Instead, Microsoft is suggesting that the requirements for individual names in the audit system of controls be removed, as edited, below:

(v)(A) Have in place an auditable system of controls that records, among other things: (1) Each input, alteration, or deletion of a record; (2) Accountability for inputting, altering, or deleting a record; and (3) The date and time of such input, altered, or deleted the record;

Very truly yours,



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