INTRODUCTION

The Federal Reserve Bank of Richmond ("FRBR") accepts certain electronic loan pledges from qualifying depository institutions participating in the Borrower-in-Custody program. These loans to secure borrowings from the discount window or for payment system risk purposes are subject to certain terms and conditions. If an institution should elect to pledge electronic loans, the FRBR will conduct an initial interview to discuss the unique issues related to such pledged collateral. If, following the interview, the FRBR does not feel comfortable with the established controls surrounding the electronic loans; then such loans will not be eligible for pledge. Information contained in this document is to provide general guidance on what type of electronic loans are considered acceptable, controls and labeling of the electronic loans, and the onsite review process.

DEFINITION

An electronic loan is defined as either (i) a note that has been originated electronically and exists solely in electronic form, or (ii) a loan that was originated in paper, the original paper note intentionally destroyed, and the image is relied upon as the primary source of the document. An imaged loan is a note that was originated in paper, imaged, and the original note retained. The focus of this document is on electronic loans and not imaged loans.

ELECTRONIC ORIGINATION

Loans originated electronically must contain some form of authentication of the borrower executing the documents. Signer authentication may include use of secure email sent to the borrower, a PIN or password that is unique to the borrower, security challenge questions specific to the borrower, etc. The loan documents should also contain standardized language regarding the institution’s acceptance of electronic signatures.

ELEGIBLE ELECTRONIC LOAN TYPES

- Consumer loans (secured and unsecured)
- Commercial loans
- Credit Card Receivables

INELIGIBLE ELECTRONIC LOAN TYPES

- Commercial Real Estate loans
- Construction and Raw Land loans
- 1-4 Family Mortgages (first lien, second lien, home equity)

PERFECTION OF SECURITY INTEREST

FRBR perfect its security interest in electronic loans through a UCC financing statement filing with the state in which the pledging institution is headquartered, as well as a filing with any state where pledged electronic loans are stored. In addition, for federal and national institutions, a UCC financing statement will also be filed in Washington, D.C.
Additional agreements, such as a comfort letter, will be required if any priority lien interests exist on the electronic loans to be pledged to FRBR. Should FRBR be unable to establish a satisfactory lien position, the electronic loans will be ineligible for pledging.

**ELECTRONIC COLLATERAL REQUIREMENTS**

Electronic loans must be adequately identified and controlled to ensure the risks associated with pledging such loans have been properly mitigated to reduce any exposure to FRBR. The following areas will be assessed when considering the eligibility of electronic loans:

- **LABELING**
  - Proper electronic labeling of the loan record can be established by one or more of the following:
    - Electronic notation on each imaged loan
    - Electronic stamp on each loan
    - Posting an attention comment on each imaged loan
    - Segregation of the imaged loans on a separate folder or directory that is password protected
    - The file name of the imaged loan indicates that it is pledged to the Reserve Bank
    - A splash screen, pop-up message or some other clearly visible notation appears each time a user accesses the note/logs into the imaging system which indicates that it is pledged to the Reserve Bank
  
  *Other labeling options could be utilized once reviewed and approved by the Reserve Bank.

- **ACCESS**
  - Appropriate safeguards must be in place to prevent unauthorized access to the electronic loans. The labeling or indexing of the images should allow for easy retrieval, preferably using the loan number. The following should be considered when reviewing access for electronic loans:
    - Restriction levels on those who have access to alter or delete the image of the electronic loan should be implemented and reviewed at least annually to ensure appropriateness. The individual who performs the review should not have access to the system housing the electronic loans.
    - Proper controls and procedures to ensure the image of the electronic loans are monitored. For example, implementing controls to verify that the authoritative copy cannot be altered.
    - Audit trail capability to ensure the electronic loan is examined for improper edits, deletions or removals. The individual who performs the review should not have access to the system housing the electronic loans.
    - The system or product that is used to create, maintain and retrieve the electronic loans, including the location of servers on which electronic records reside should be accurate and secure.

- **QUALITY CONTROL**
  - Adequate controls must be in place to ensure the quality of the image of the electronic loan. A proper verification process must be in place to ensure that all pages of the electronic document
are viewable, accurate, and complete. In addition, there must be procedures to verify and authenticate the individual executing the electronic loan documents. Institutions must ensure that the electronic loans include standardized language that the loan document is the only single authoritative copy of the loan record and that no paper version will exist, along with language where the debtor agrees to the acceptance of electronic signatures.

- **CONTINGENCY**
  Adequate contingency or back-up plans must exist to prevent the loss of any electronic loan documents. Up-to-date firewall and virus protection must be implemented to ensure the electronic loans are not compromised in any way.

- **OTHER THINGS TO CONSIDER**
  The institution should consider the following as it relates to the electronic loans:
  - Proper controls to ensure the risk of the electronic loan being sold or doubled pledged is minimized. For example, an electronic notation on the institution’s loan system showing the status of the loan.
  - Ensure any legal requirements have been followed to pledge electronic loans.
  - A documented opinion by the institution’s legal counsel on the ability of the institution to pledge electronic loans to FRBR.
  - A detailed explanation with supporting documentation that describes the process for how the electronic loans will be pledged to FRBR.
  - Assess the effectiveness of policies, procedures or guidelines that describes the electronic loan process.

**ONSITE (REMOTE) REVIEWS**

Electronic loans will be subject to periodic onsite (remote) review. The frequency of the review will be at the discretion of FRBR and will generally depend on the asset size and financial condition of the pledging institution and any documentation or control issues previously identified. Given the limited amount of time allocated for BIC reviews, analysts will assess during the initial setup of the electronic BIC arrangement, as well as verify during the onsite (remote) review the following, which could include, but is not limited to:

- An end-to-end process flow diagram from origination of the electronic loan to loan closing.
- The process for selecting and creating the electronic loans for pledge to FRBR.
- The parameters of the eVault system to determine who has access, administration rights, delete capabilities, etc.
- Verification of the backup measures in place to protect against loss.
- The adequacy of controls in place surrounding the labeling of the electronic loans.
- The adequacy of controls in place surrounding the quality of the electronic loans.
- The adequacy of how electronic loan documentation is stored, archived and accessed.
- The adequacy of contingency plans of the institution and any third-party vendor, if applicable, to safeguard the accuracy and availability of electronic records.
- The process for removing electronic loans from the system.
- The process for authenticating the borrower executing the electronic loans.
- The appropriateness of relevant policies, procedures or guidelines and vendor material that describe the electronic loan process.
• The accuracy of the system or product that is used for electronic loan originations, including indexing and categorizing records.
• Verification of access controls for the system of electronic records.
• Procedures for granting and monitoring access to the electronic records.
• How the borrower’s authorization is obtained to incur the obligation.
• The process and safeguards of the digital signature pad/online technology used to obtain customer signatures and electronic documents, including how the process ensures the signatures and images are reliable, legible and accurate.
• Appropriateness of any third-party vendor arrangements used in the process of creating and storing the electronic loans.

CONTACT INFORMATION

For further questions related to the pledge of electronic loans to the discount window, please contact a collateral analyst at 800-526-2036 or discountwindow@rich.frb.org.

<table>
<thead>
<tr>
<th>Date</th>
<th>Initials</th>
<th>Description</th>
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<tbody>
<tr>
<td>2023</td>
<td>SMD</td>
<td>Removed verbiage under electronic label that said “electronic notation within the loan system on each loan record to indicate its pledge to FRBR” as that is not an acceptable label by itself. Also added, splash screen when accessing the image or imaging system as an acceptable option.</td>
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<tr>
<td>6/14/2023</td>
<td>SMD</td>
<td>Added more clarity around the acceptable labeling options. Also added remote language to the onsite review section.</td>
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