



**PAYMENTS
CANADA**

LYNX RULE 11

TESTING AND CERTIFICATION

2023 CANADIAN PAYMENTS ASSOCIATION

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IMPLEMENTED

August 29, 2021

AMENDMENTS

1. Updates to accommodate the introduction of Payment Messages in the Lynx MX Format. Approved by the Board June 23, 2022 and September 15, 2022, effective November 20, 2022.
2. Amendments throughout rule to accommodate Swift name rebranding. Approved by the Board May 12, 2023, effective July 11, 2023.

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Lynx Environments

1. Lynx pre-production and training environments must be made available to Participants by the Association for testing and training as needed.

New Participant Testing and Certification

2. All applicants for participation in Lynx must meet the requirements set out in Lynx Rule 3, *Lynx Service Level Description* and *CSN Service Level Description* (as applicable).

New Participant Testing and Certification

3. All requirements will be tested by the Association and will include the requirement for an applicant to process at least one day's volume of test Payment Messages utilizing all system components of the Lynx environment with all normal Lynx Operating Schedule steps in place. This testing will be witnessed and monitored by the Association to ensure that complete and accurate testing is completed. The applicant must provide to the Association a complete record of its test results including a record of its monitoring activities for the "test day" including evidence of payment reconciliation.

Lynx and Supporting Infrastructure Change Testing

4. If changes are made to Lynx there will be three (3) levels of testing, as outlined in sections 5 through 7, involving the Participants. For each change, an acceptance test working group appointed by the Lynx Working Group will oversee all testing and will define and run all required acceptance testing. This acceptance test working group will report back to the Lynx Working Group. All Participants will be required to participate in the user acceptance tests for any such changes.

First Level

5. The first level of testing will be to review any Participant interface changes which have been made to support the new or changed feature(s) and which are required to be used in the user acceptance testing of the change. Each Participant will coordinate any such testing in the same manner as it would for changes to one or more of its own systems.

Second Level

6. The second level of tests will be the formal user acceptance testing. This will be a formal documented test. The Association will coordinate this testing and will ensure that technical assistance is available in case of problems.

Third Level

7. The third level of testing is production acceptance testing. This testing will be a formal documented test against the tested software release in the production environment on the weekend prior to the next Business Day.

Participant Change Testing

8. If a Participant plans to test any new hardware, software or procedures using the Lynx pre-production environment, the Participant must pre-arrange its testing with the Association. The pre-production environment will normally be available 24 hours per day, 5 days per week.

Required Assistance

9. If a Participant requires that other Participants or the Association take part in the testing it is the responsibility of the Participant to request the assistance of the other Participant(s), to co-ordinate the testing activities with the Association and to structure the testing to be mutually agreeable to all parties. A minimum of 30 days advance notice is required.

Testing and Training BIC and Distinguished Name (DN)

10. Each Participant must provide the Association with:
 - a. test and training Swift address (BIC) to be entered into the Lynx MT Closed User Group (CUG) to support Lynx MT testing and training at least 30 days prior to the start of the testing period, unless the Participant in question has already used this Swift BIC in Lynx testing; and
 - b. Distinguished Name (as described in Rule 3, section 17) to be entered into the Lynx MX Pilot Closed User Group (CUG) to support MX testing and training at least 30 days prior to the start of the testing period, unless the Participant in question has already used the Distinguished Name in Lynx testing.

Lynx ISO 20022 Message Testing

11.
 - a. Each Participant that elects to start sending Lynx ISO 20022 messages must notify the Association at least 30 days in advance of their first intended exchange in production. The Association will notify other Participants of the Participant's intention to send and the implementation date.
 - b. Each Participant must complete message validation and end to end message testing (as defined in Lynx ISO 20022 Message Testing Guidelines) prior to sending Lynx ISO 20022 messages in the production environment including:
 - i. Each Participant must complete message validation and user acceptance testing (as defined in Lynx ISO 20022 Message Testing Guidelines) prior to sending Lynx ISO 20022 messages in the production environment including:
 - ii. changes to the existing Lynx ISO 20022 messages or if new Lynx ISO 20022 messages are introduced.

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Other Testing

12. The Association may conduct such other testing relating to system upgrades, Participant system changes, including Bank-system changes, or Lynx changes. Each Participant must participate in mandatory testing coordinated by the Association, with the exception of CLS testing which is only mandatory for Lynx Participants who participate in CLS-related payment processing.

Ongoing Participant Training

13. The test and training facility of Lynx may be used by a Participant subject to the requirement that such training be coordinated and pre-arranged with the Association. A Participant may make use of the Association's standard training exercises or a Participant may devise its own when using this facility.

Business Continuity Testing by the Association

14.
 - a. The Association must conduct business continuity testing for Lynx at least twice per calendar year in accordance with the requirements outlined in the Lynx Service Level Description.
 - c. The Association must conduct business continuity testing for the administration services (people and premises) of Lynx at least twice per calendar year. The testing will take place during a Payments Processing Cycle, and will consist of the Association accessing the Lynx Web Client using its alternate site workstation-to ensure connectivity.

Participant Business Continuity Testing

15.
 - a. Subject to subsection (b) each Participant must conduct business continuity testing for its alternate site (people and premises) at least twice per calendar year. Each Participant must define "alternate site" as it relates to its contingency procedures and processes. The test will consist of the Participant managing and processing Settlement Instructions and Payment Messages, as well as Pledging and allocating Collateral from its alternate site during a Payments Processing Cycle. Each Participant must provide to the Association, by way of an attestation form, confirmation that it has conducted two business continuity tests within the last calendar year and confirm that Settlement Instructions and Payment Messages were successfully managed and processed from its alternate site. The completed attestation form must be provided to the Association by each Participant's Senior Operational Committee representative no later than January 31 of the following year. The attestation form will be provided by the Association.
 - b. Each Participant that regularly manages and processes Settlement Instructions and Payment Messages from its primary and alternate sites during a Payments Processing Cycle must provide to the Association, by way of an attestation form,

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confirmation that it has successfully managed and processed Settlement Instructions and Payment Messages, as well as Pledging and allocating Collateral from those locations during the last calendar year. The completed attestation form must be provided to the Association by each Participant's Senior Operational Committee representative no later than January 31 of the following year. The attestation form will be provided by the Association.

Participant System Testing

16. Each Participant must conduct disaster recovery testing at least once per calendar year. Participants will test mechanisms to support sending, receiving and processing Settlement Instructions and Payment Messages using its back-up payments technology, networking and supporting systems (e.g. data centre). All functionalities do not need to be tested at the same time. Each Participant must provide to the Association, by way of an attestation form, confirmation that it has conducted such testing within the last calendar year and confirmation that this testing was successfully completed. The completed attestation form must be provided to the Association by each Participant's Senior Operational Committee representative no later than January 31 of the following year. The attestation form will be provided by the Association.

Lynx Resiliency Testing

17. Each Participant must participate in the annual exercising of the contingency procedures outlined in the Lynx Emergency Procedures. This exercise will be scheduled and coordinated by the Association.

CLS Contingency Testing

18. The Association and each Participant involved in CLS-related payments processing must execute CLS contingency testing which will be coordinated by the Association and the Bank.

All CLS contingency testing must be conducted, in accordance with test scripts provided by the Bank.

Any Participant that is preparing to participate in CLS related activities is required to conduct contingency testing of their proprietary CLS operations prior to exchanging CLS-related payments. This testing must be coordinated through a bilateral arrangement between the Participant and the Bank and should simulate the use of the Bank of Canada CLS contingency procedures, available from the Bank.

System-wide CLS contingency testing must be conducted according to the following:

- a. Swift Outage testing will be conducted periodically as established by CLS on a date agreed to by the Bank and the Participants involved in CLS-related payment

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processing; and

- b. Lynx Outage testing will be conducted periodically as established by CLS on a date agreed to by the Bank, the Association, and the Participants involved in CLS-related payment processing.

Evidence of Compliance

19. Where the Association, in its discretion, requests confirmation of the completion of any procedure or step by a Participant such confirmation must be by way of a current (completed within the previous 18 months) audit report, pertinent extract, or management attestation statement dealing with any such steps or procedures, filed with the Association by the Participant's internal audit group, inspection group or management representative executed by a duly authorized officer of the Participant.