



Reliable System Assessment Framework

Introductory Webinar

October 30, 2024

CONSEIL DE
GOUVERNANCE
NUMÉRIQUE



DIGITAL
GOVERNANCE
COUNCIL

ICC | Digital
Standards
Initiative

The Digital Governance Council works through its members across the public and private sectors to strengthen trust in Canada's digital economy by collaboratively identifying, prioritizing and acting on digital governance opportunities and challenges.

DIGITAL GOVERNANCE STANDARDS INSTITUTE, part of the Digital Governance Council, is an accredited standards development body. The Institute enables greater trust and confidence in Canada's digital systems through developing technology governance standards collaboratively across a range of stakeholders.

The Digital Standards Initiative (DSI) is a global initiative backed by the International Chamber of Commerce (ICC), Enterprise Singapore, Asian Development Bank, World Trade Organisation and the World Customs Organisation.

DSI aims to accelerate the development of a globally harmonised, digitalised trade environment, as a key enabler of dynamic, sustainable, inclusive growth. We engage the public sector to progress regulatory and institutional reform, and mobilise the private sector on standards, interoperability, adoption and digital trust.

What is the Reliable Systems Assessment Framework?

- An Assessment of a system's reliability in transferring Electronic Transferable Records under MLETR
- Self-assessment (at present) with option of Statement of Verification

Who has contributed

Working Group :

British Standards Institution
TradeTrust / Singapore IMDA
Enterprise Singapore (Standards)
SGS
Ethisphere
LRQA
Enigio
Beijing Municipal Government
Inditex
Independent experts
Digital Container Shipping Assn
Centre for Digital Trade and Innovation

Pilot participants who submitted the assessment and/or feedback (9):

- AEO Trade (Beijing) Technology Co Ltd
- Attajari Bank Tunisia
- Blockchain Fieldlab BV
- BlueX Trade/Open EBL
- BOEX CIC
- CargoX Ltd
- Enigio AB
- ICE Digital Trade
- Secro




Indicative timeline






Overview of the Framework

Self-Assessment Template Overview

1. Engagement Details
2. Instructions
3. Controls
4. MLETR Coverage
5. Draft Claims
6. Repository

| | |
|---|---|
| MLETR Reliable Systems Assessment Framework | |
|  |   |
| | |
| Engagement Name: | |
| Engagement Type: | |
| Entity: | |
| Entity Location: | |
| Status | |
| Entity Authority | |
| Entity Contacts | |
| | |
| Main Scope: | |
| Topic: | |
| Sub-Scope | |
| Focus | |
| Assessment Class Level | |
| Caveats | |
| Applicable Standard | |
| | |
| Validation/Verification | |
| Director | |
| Audit Team Member | |
| | |
| Additional Information | |
| Assessment Methodology | Self Assessment |
| | |
| | Provide the following information |
| Scope of System | Description of the target system to be assessed. If detail warrants, provide information in a separate document. |

1. Engagement Details




| MLETR Reliable Systems Assessment Framework | |
|---|--|
|    | |
| Engagement Name: | |
| Engagement Type: | |
| Entity: | |
| Entity Location: | |
| Status | |
| Entity Authority | |
| Entity Contacts | |
| Main Scope: | |
| Topic: | |
| Sub-Scope | |
| Focus | |
| Assessment Class Level | |
| Caveats | |
| Applicable Standard | |
| Validation/Verification | |
| Director | |
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| Additional Information | |
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| | |
| | Provide the following information |
| Scope of System | Description of the target system to be assessed. If detail warrants, provide information in a separate document. |

- Self-Assessment Worksheet
 - Engagement Details
 - Digital Trust Conformity Assessment Details
 - Main Scope: Digital Trust
 - Topic: Digital Trade Documentation
 - ...
 - ETR Types
 - Applicable Artefacts

[illegible]

NOTE: Applicable artefacts include any: legislation, standards, specifications, operating procedures, frameworks (interoperability, etc.), or any official documentation that should be considered in relation to the assessment. Any artefact that is considered to be part of the scope of the assessment should be indicated as such.

2. Instructions

| MILETR Reliable Systems Assessment Framework | |
|--|--|
|    | |
| No. Controls | No. of Criteria |
| Control Criteria and related questions are specified on the "Controls" worksheet | 21 |
| Assessment | |
| For each control, the self-assessor should provide a sufficient response in the EVIDENCE/ATTESTATION column. References to additional document may be provided. | |
| The ASSESSMENT OUTCOME column indicates the determination by a reviewer, upon reviewing the EVIDENCE/ATTESTATION material. Outcomes may be "SATISFACTORY/UNSATISFACTORY/NOT APPLICABLE" or whatever is deemed appropriate for the engagement. | |
| Each control has one or several questions that may be answered by the self-assessor. The controls are mapped to the relevant MLETR Provision or Article. | |
| The "MLETR Coverage" worksheet is an aid to assist in the assessment and mapping the assessment to substantive claims against the MLETR Provisions and Articles. The Controls are cross-reference to MLETR, and specifically, Article 12 General Reliability. The cross-reference are in Roman numbers from I to XII. For example, an assessor assessing III (Writing) may review in conjunction Controls: 6, 8, 9, 3, 4, and 2 to substantiate what is required for Article 12. Green and yellow cells indicate where an independent reviewer or supervisory body may wish to make a determination on the overall outcomes. | |
| The "Draft Claims" worksheet is a set of draft verification claims that may be used to issue a certificate or statement resulting from a formalized assessment process. | |
| Note 1: | SELF-ASSESSMENT: As this assessment tool is still in development, it is highly recommended that the tool be used initially for self-assessment purposes with the aim of providing feedback to improve the tool and the overall assessment scheme. |
| Note 2: | FORMAL ASSESSMENT: If the assessment tools is used in conjunction with a formal or accredited certification scheme, the assessment should be completed by a competent assessor who has sufficient matter expertise and knowledge regarding specific certifications and assessment methodologies. This knowledge and expertise is intended to enable an independent and objective assessment and provide an assurance to a recipient (or customer) who does not have specific knowledge of system and relies on the outcome of assessment process, to give comfort that the system passes the test. |
| Acronyms | |
| ETR - Electronic Transferable Record | |
| MLETR - Model Law on Electronic Transferable Records | |

- Instructions
 - How to use the spreadsheet
 - Self-assessment guidance
 - Formal Assessment guidance
- Digital Trade Conformity Assessment Scheme
 - Still under development
 - DGC Digital Trust Conformity Assessment Program may be used for more formalized assessments.

3. Controls

- 21 controls have been defined
- Each control has:
 - ID, Criteria, Assessment Outcome, MLETR Reference
 - Assessment Requirement/Question
 - Evidence/Attestation

| CID | Control Criteria | Assessment Outcome | MLETR Reference | Assessment Requirement/Question | Evidence/Attestation |
|-----|--|--------------------|--------------------------|---|----------------------|
| 1 | The system is defined and described | | MLETR General Provisions | Provide a high-level description and scope of application of the system, describing key functionalities and highlighting how these support the objectives of MLETR. | |
| | | | | Provide a high-level description of the legal and policy considerations relevant to the design, implementation, and operation of the system? | |
| | | | | Describe electronic transferable records and transferable documents or instruments used within your context | |
| 2 | Reliability: The system demonstrates general reliability | | MLETR-Article 12 | List any applicable documentation used for the assessment of reliability | |
| | | | | Describe processes and technologies related to the assurance of data integrity | |
| | | | | Describe the regularity and extent of audit by an independent body | |
| | | | | Provide any declaration by a supervisory body, an accreditation body or a voluntary scheme regarding the reliability of the method. | |
| | | | | Provide any additional evidence that demonstrates how the system meets the reliability requirements outlined in MLETR. | |

4. MLETR Coverage

| MLETR Coverage | | | | | | | | | |
|--|--|---------------------------------------|--|---|--|---|--|--|--|
| Assessment | | | | | | | | | |
| X-REF | General Provisions | Assessment | | | | | | | |
| I General Provisions: Articles 1 thru 7 | CID 1 | | | | | | | | |
| Article 12. General reliability standard | | | | | | | | | |
| II General Reliability | CID 2,3,4,5 | | | | | | | | |
| For the purposes of articles 9, 10, 11, 13, 16, 17 and 18, the method referred to shall be: | (a) As reliable as appropriate for the fulfilment of the function for which the method is being used, in the light of all relevant circumstances | | | | | | | | (b) Proven in fact to have fulfilled the function by itself or together with further evidence. |
| | (i) Any operational rules relevant to the assessment of reliability; | (ii) The assurance of data integrity; | (iii) The ability to prevent unauthorised access to and use of the system; | (iv) The security of hardware and software; | (v) The regularity and extent of audit by an independent body; | (vi) The existence of a declaration by a supervisory body, an accreditation body or a voluntary scheme regarding the reliability of the method; | (vii) Any applicable industry standard | | |
| III Article 8: Writing | CID 6 | Data Integrity CID 8,9 | Security and Suitability CID 3,4 | | | | Technical Standards CID 2 | | |
| IV Article 9: Signature | CID 7 | | | | | | | | |
| V Article 10: Transferable Documents or instruments | CID 8,9,10,11,12,13 | | | | | | | | |
| VI Article 11: Control | CID 14,15,16 | | | | | | | | |
| VII Article 13: Indication of time and place in electronic transferable records | CID 17 | | | | | | | | |
| VIII Article 15 Endorsement | CID 18 | | | | | | | | |
| IX Article 16: Amendment | CID 19 | | | | | | | | |
| X Article 17: Replacement of a transferable document or instrument with an electronic transferable record | CID 20 | | | | | | | | |
| XI Article 18: Replacement of an electronic transferable record with a transferable document or instrument | CID 21 | | | | | | | | |
| XII Article 14, 19 are not assessed | | | | | | | | | |
| | Scope of Self-Assessment | | | Self-Assessment | | | | | |
| | Additional | | | | | | | | |
| | ICC-DGC Assessment Program | | | Reviewed by ICC-DGC | | | | | |
| | Statement of Verification | | | Grant of a Statement of Verification | | | | | |

- Controls have been cross-referenced with the MLETR Articles
- Focus on Article 12 General Reliability Standard
 - a) *As reliable as appropriate for the fulfilment of the function...*
 - b) *Proven in fact to have fulfilled the function by itself or together with further evidence...*



4. MLETR Coverage (Summary of Controls)

| Summary of Controls | | | | | |
|---------------------------------------|-----|--|--|--|--|
| Applicable MLETR Articles | CID | Text | | | |
| General Provisions: Articles 1 thru 7 | 1 | The system is defined and described | | | |
| General Provisions: Articles 1 thru 7 | 2 | The technical standards used by the system are identified. | | | |
| General Provisions: Articles 1 thru 7 | 3 | The system has applicable operational and security controls in place. | | | |
| General Provisions: Articles 1 thru 7 | 4 | Technical procedures used in the creation, maintenance, and transfer of electronic records are suitable to ensure they meet current technological standards | | | |
| Article 12 | 5 | Reliability: The system demonstrates general reliability | | | |
| Article 8 | 6 | Information contained within the ETR is readable in the required natural language and is accessible and usable for subsequent references. | | | |
| Article 9 | 7 | The signature in relation to an ETR identifies the signatory (i.e. legal or natural person) and sufficiently expresses the intention of that person related to the information contained within the ETR. (Signature) | | | |
| Article 10 | 8 | Records are to be signed by the issuer and all subsequent entries are signed by authorized persons | | | |
| Article 10 | 9 | ETRs remain complete and unaltered apart from any change which arises in the normal course of communication, storage and display. | | | |
| Article 10 (a) | 10 | Information: The ETR contains information that is required in a transferable document or instrument. | | | |
| Article 10 (b)(i) | 11 | The ETR has a reliable identification to ensure its uniqueness | | | |
| Article 10 (b)(ii) | 12 | The ETR has the ability to prevent unauthorized replication. | | | |
| Article 10 (b)(iii) | 13 | The ETR has the ability to prevent multiple requests for the performance of the same obligation. | | | |
| Article 11(1)(a) | 14 | The system establishes exclusive control of that ETR by a legal person. | | | |
| Article 11(1)(b) | 15 | The system identifies the person that is the person in exclusive control. | | | |
| Article 11 (2) | 16 | Where the law requires, the system has the ability to transfer exclusive control to another person | | | |
| Article 13 | 17 | The system has a reliable method for indication of time and place | | | |
| Article 15 | 18 | Where required by law, the system has the ability to include information indicating the endorsement of an ETR. | | | |
| Article 16 | 19 | Where required by law, the system has the ability to include information indicating the amendment of an ETR. | | | |
| Article 17 | 20 | An ETR may have the ability to replace a transferable document or instrument if a reliable method for the change of medium is used. | | | |
| Article 18 | 21 | A transferable document or instrument may replace an ETR if a reliable method for the change of medium is used. | | | |


5. Draft Statement of Verification Claims

| Statement of Verification Claims (Draft) | |
|--|---|
| 1. | <Entity> has completed the MLETR self-assessment tool and has been independently reviewed by a qualified assessor. |
| 2. | Based on the self-assessment and the outcome of the review, <Entity> has provided sufficient evidence to demonstrate: |
| | a) adherence to the general provisions outlined in Articles 1 through 7. |
| | b) functional equivalence in relation for Articles 8, 9, 10 and 11. |
| | c) fulfilment of the general reliability standard specified in Article 12 for the purposes of Articles 9, 10, 11, 13, 16, 17, 18, and additionally Article 15. |
| 3 | <Entity> has provided sufficient evidence to demonstrate, in support of the Article 12 general reliability standard, that: |
| | a) the organization has applicable operational and security controls in place to support general reliability. |
| | b) technical procedures used in the creation, maintenance, and transfer of electronic records are suitable to ensure they meet current technological standards. |
| | |
| | |
| | |


- Draft Statement of Verification Claims have been developed.
- These statements can be tailored during for an assessment process where a third-party claim is required.



What an Example Certificate Might Look Like



DRAFT Verification Statement
(Issuance No: DGC-VV-2024-XX)



Issued To:
<Entity>
<Product/Service>

Issuer:
Digital Governance Council /
ICC Digital Standards Initiative

Verification Claims:

<Entity> has completed the MLETR Self-Assessment Tool for the <Product/Service>. The self-assessment has been reviewed by the Digital Governance Council ("DGC") on behalf of the ICC Digital Standards Initiative ("DSI") in accordance with the articles of the Model Law on Electronic Transferable Records (MLETR) and in accordance with the policies and procedures of the DGC Digital Trust Conformity Assessment Program.

Based on the self-assessment and the outcome of the review DGC/ICC DSI can confirm that <Entity> has provided sufficient evidence regarding the <Product/Service> for the following verification claims:

- <Product or Service> demonstrates adherence to the general provisions outlined in MLETR Articles 1 through 7.
- <Product/Service> demonstrates functional equivalence in relation to MLETR Articles 8 through 11 (Writing, Signature, Transferable documents or instruments, Control).
- <Product/Service> fulfills of the general reliability standard specified in MLETR Article 12 for the purposes of Articles 9, 10, 11, 13, 16, 17,18, and additionally, Article 15
- In support of Article 12 general reliability standard, <Entity> has:
 - Applicable operational and security controls in place to support general reliability
 - Technical procedures used in the creation, maintenance and transfer of electronic records are suitable to ensure compliance with current technological standards.

DGC Statement of Assurance

DGC assures that the assessment process was conducted impartially, fairly and transparently using evidence provided in accordance with DGC Digital Trust Conformity Assessment Program, policies and procedures publicly available at: <https://github.com/dgc-cgn/CAS-Digital-Trust>.

This verification statement is subject to the following:

- This verification statement does not constitute an endorsement of the <Product/Service> or the <Entity> by DGC/ICC DSI.
- Until such time that the DGC Digital Trust Conformity Assessment Program receives accreditation this verification statement shall be relied on as an *interim acknowledgement* only. Once accreditation is received, this verification statement shall be reviewed and considered for *formal recognition*. This is a third-party verification.

Issued on: 2024-XX-XX

Signature(s):

Keith Jansa, CEO, Digital Governance Council

Pamela Mar, Managing Director, ICC Digital Standards Initiative

Grant Registry



Official registry of grants issued by the Digital Governance Council.

Grants

| No. | Grantee | Topic | Sub-Scope | Focus | Applicable Standard(s) | Assesment Level | Date Issued |
|--------------------------------|-------------------------|------------------|--|-------------------------|------------------------|--------------------------|-------------|
| DGC-VV-2024-01 | PlaceSpeak Inc. | Digital Identity | Trusted Digital Identity | Certified B Corporation | CAN/DGSI 103-1:2023 | Class 1: Self-Assessment | 2024-01-04 |
| DGC-VV-2024-02 | Ontario Brain Institute | Health | Health Data and Information Capability Framework | Core HDI Capabilities | CAN/DGSI 105-5:2023 | Class 2: Targeted Method | 2024-05-17 |

<https://dgc-cgn.github.io/CAS-Digital-Trust/>



Open Discussion / Q&A

Digital Governance Council GitHub Repo

Digital Trust Conformity Assessment Program

Issues 3 open

[Digital Governance Council Website](#)[Conformity Assessment Schemes](#)[Grant Registry](#)[Public Statements](#)[GitHub Repository](#)[Webinar Slides](#)



Objective

The Digital Trust Conformity Assessment program brings together standards, assessment methodologies, accreditation programs and communities to engender digital trust that is principles-driven, evidence-based and open-source by design.

Open by Design

All conformity assessments are developed in the open and are open by design. Additional details on [Open Conformity Assessment](#)

Accreditation

The Digital Governance Council's [Digital Trust Conformity Assessment Scheme](#) is being developed with overall goal of being accredited under the auspices of the [Standards Council of Canada Accreditation Program](#).

The two programs currently under consideration for accreditation:

Conformity Assessment Scheme: Digital Trade Documentation

Quick Links: [Link to this repo](#) | [DGC](#) | [ICC](#) |

The Digital Standards Initiative (DSI) of the International Chamber of Commerce (ICC) and the Digital Governance Council (DGC) of Canada have collaborated to develop a Technical Assessment Framework for evaluating the reliability of digital services or networks that enable the transfer of Electronic Transferable Records (ETRs) within supply chains.

Overview

This new framework provides a standardized method for assessing the reliability of platforms that support the use of ETRs in place of traditional paper-based trade documentation. The assessment aligns with the Model Law on Electronic Transferable Records (MLETR), offering a clear benchmark for service providers to demonstrate their platform's capability to execute reliable ETR transfers in compliance with global standards.

As more countries adopt the MLETR, this framework establishes a common market standard for evaluating the reliability of platforms handling ETRs. Service providers can use the framework to showcase their adherence to these standards, which are increasingly recognized worldwide.

Development and Collaboration

The ICC DSI and DGC have led the creation of this assessment framework with contributions from a diverse working group, including:

- Standards bodies
- Technical experts
- Assessment firms
- Commercial and industry stakeholders

The working group also received strategic guidance from the Industry Advisory Board of the ICC DSI, ensuring that the framework is robust, technically sound, and aligned with industry needs.

Beta Release

The assessment framework has undergone initial piloting with several ETR service providers to evaluate its utility, market relevance, and effectiveness. It is now available as a beta version for self-assessment. Plans are underway to introduce a certification program with third-party assessments.

Get Started

The finalized assessment worksheet can be downloaded [here](#).

<https://github.com/dgc-cgn/CAS-Digital-Trust>

<https://github.com/dgc-cgn/CAS-Digital-Trade-Documentation>



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+

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+

FAQ on MLETR on ICC Academy website

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for MLETR Foundations!**



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