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

DGC-DSI MOU
Sept 2023

Development
Kick off
Jan 2024

Pilot
July 2024

Launch
Oct 2024

Development
of third-party
assessment
scheme

2025

Overview of the Framework

Self-Assessment Template Overview

1. Engagement Details

2. Instructions

3. Controls

4. MLETR Coverage

5. Draft Claims

6. Repository

1. Engagement Details

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

2. Instructions

- 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

- 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 be signed by the issuer and all subsquent 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 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

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

DIGITAL TRUST VERIFIED

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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$+$

FAQ on MLETR on ICC Academy website

Last day to register FREE for MLETR Foundations!

The ICC Academy is the online learning arm of the International Chamber of Commerce

icc.academy/digital-trade-strategy-certificate
icc.academy/mletr-foundations