ICMA

Webinar

Tokenisation & DLT market readiness: Digital bonds, digital money and the next phase of market adoption

7 July 2026

Tokenisation and DLT Market Readiness

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Agenda

1. Welcome remarks and introduction, Gabriel Callsen, ICMA
2. Tokenisation and DLT market readiness – The Big Picture
3. Challenges & opportunities: Digital bonds, digital money and the next phase of market adoption
4. Outlook
5. Live Q&A

DLT securities and digital money – Global developments*

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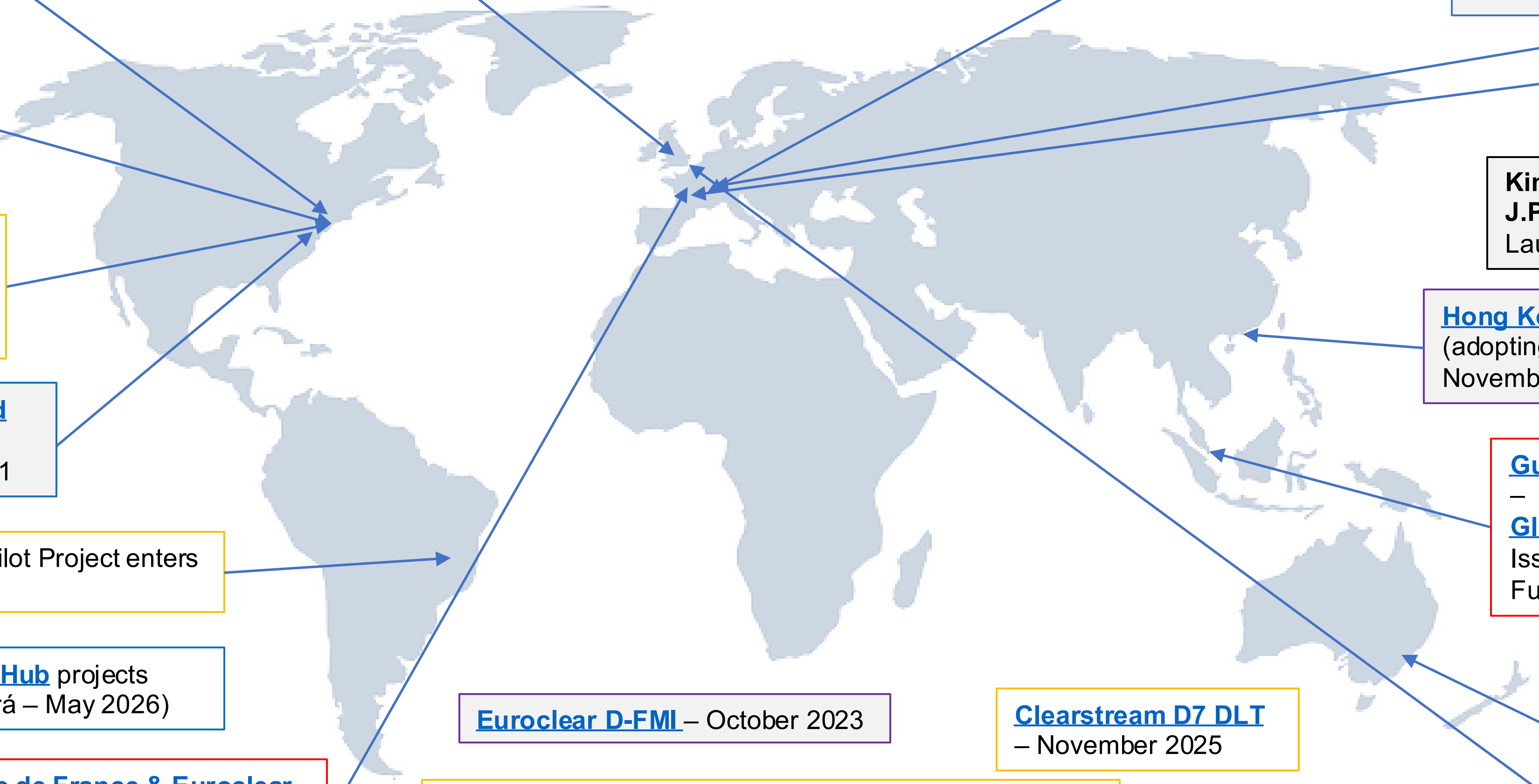


DTCC tokenisation service – July/October 2026

NYSE – MoU to support tokenised securities – March 2026

Nasdaq – Received SEC approval for tokenized trading framework – March 2026

Broadridge –Distributed Ledger Repo (DLR) platform – Launched 2021

ANBIMA – Tokenisation Pilot Project enters testing phase – April 2026

BIS Innovation Hub projects (Eg Project Agorá – May 2026)

Banque de France & Euroclear France: Project Pythagore – NEU CP – end of 2026

UK Digital Securities Sandbox (DSS) – Launched 2024 & **Digital Gilt (DIGIT)** pilot update – February 2026

Eurosystem Pontes **Project – Q3 2026**

Euroclear D-FMI – October 2023

Swift – Blockchain-based shared ledger progresses to MVP implementation – March 2026,
Launch of Digital Asset Standards platform PoC embedding the Bond Data Taxonomy – September 2025

Clearstream D7 DLT – November 2025

SNB & SIX Project Helvetia (wholesale CBDC) – live since 2023 until at least mid-2027

HQLAx Securities financing – launched 2019

Kinexys (formerly Onyx) by J.P.Morgan Intraday repo – Launched 2020

Hong Kong SAR – Digital bond issuances (adopting Bond Data Taxonomy) – November 2024 and 2025

Guardian Fixed Income Framework – Launched 2024, updated 2025; **Global Layer 1** – Launched 2024); Issuance of **tokenised MAS Bills** – Future trial.

Project Acacia / A new multi-stream programme to be rolled out – May 2026.

Regulated Layer 1 – To be established as European Cooperative Society (ECS) – April 2026

Seturion pan-European settlement platform – September 2025

*Selected initiatives, further information can be found on ICMA's tracker.

DLT Bonds Working Group – Fostering the development of digital bond markets

Objectives:

- **Foster discussion on how to support liquidity in DLT-based debt instruments and promote common standards (eg Bond Data Taxonomy).**
- **Provide market guidance.**
- **Engage with central banks and regulators to support market stability and consistency through the safe and secure adoption of innovative and transformational technologies.**
  - Eurosystem's New Technologies for Wholesale Settlement Contact Group (NTW-CG);
  - Eurosystem's AMI-SeCo DLT Collateral Management Expert Group;
  - MAS Project Guardian Fixed Income Framework (GFIF).

Chair:

- **Christoph Hock (Head of Tokenisation and Digital Assets, Union Asset Management Holding AG).**

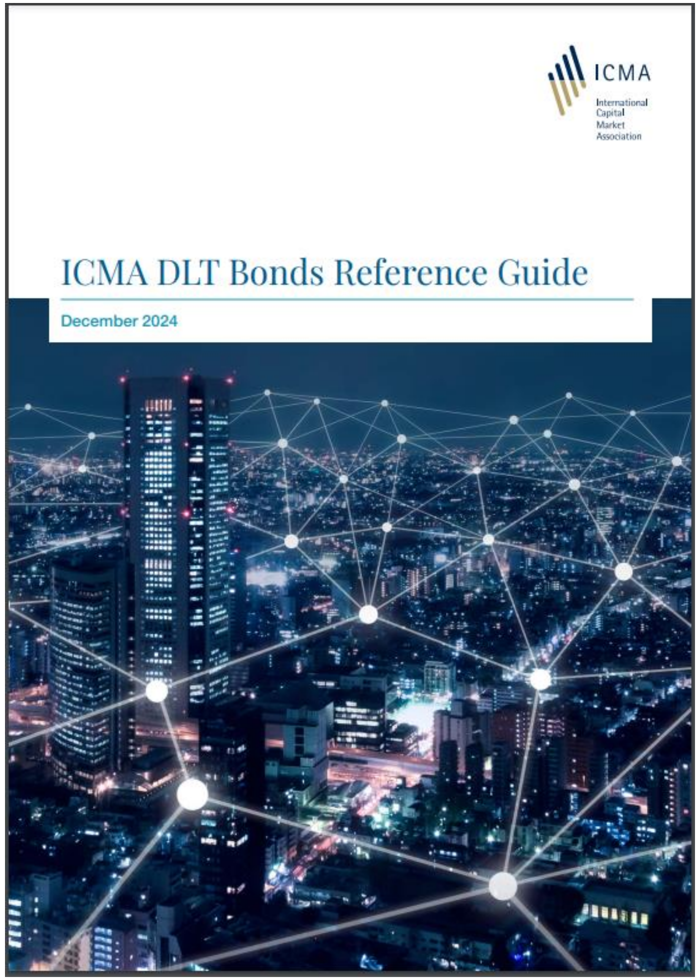
Recent responses to consultations include:

- ICMA's consolidated response to call for input on EU's MISP proposals – March 2026
- ICMA response to Eurosystem consultation on Appia Roadmap – April 2026
- ICMA response to FCA and Bank of England's call for input on the future of tokenisation – July 2026

Participation:

- Over 300 individuals from ICMA member firms across the value chain of international bond markets:
  - SSA and private sector issuers, investors, banks;
  - Market infrastructure providers, central banks (observers), law firms, rating agencies, data providers and technology vendors.

DLT Bonds Working Group – Key resources



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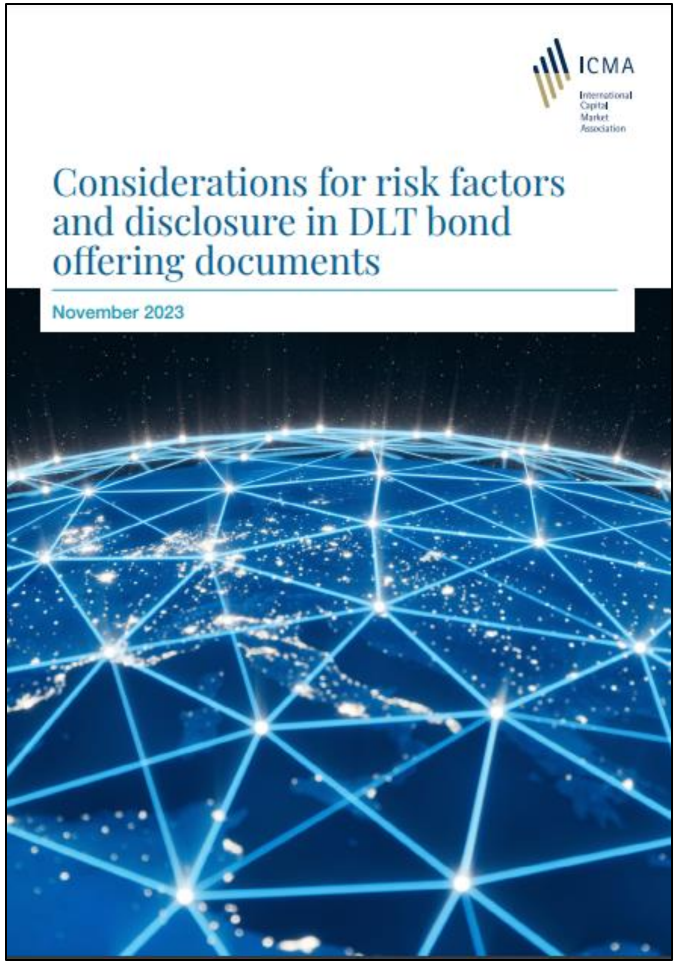

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Frequently Asked Questions on DLT and blockchain in bond markets

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Published in September 2022

Project Guardian: DvP settlement guide & Lessons learnt from custody arrangements of DLT-based debt securities

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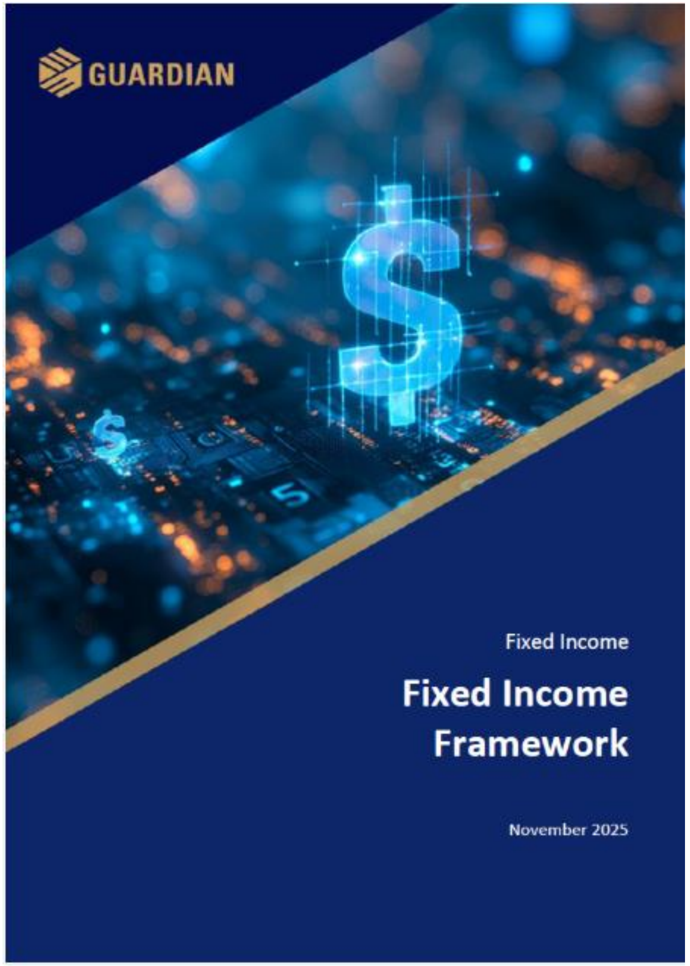
- Project Guardian is a collaborative initiative between policymakers and the financial industry to enhance liquidity and efficiency of financial markets through asset tokenisation standards in fixed income, foreign exchange (FX) and asset & wealth management, as announced on 27 June 2024.
- In 2024, ICMA contributed to the Fixed Income workstream, which resulted in the publication of the "Guardian Fixed Income Framework" (GFIF) 4 November 2024
- GFIF builds on the BDT to promote standardisation of protocols and data specifications, lower the cost of implementation and promote STP and interoperability, and consider the types of risk factors and disclosures required in a tokenised bond offering document, amongst other aspects.
- In 2025, ICMA was appointed by MAS to lead the Fixed Income Workstream. **The workstream produced two reports, released as an addendum to the Guardian Fixed Income Framework (GFIF) during the Singapore FinTech Festival on 12 November 2025**:
    - (i) Delivery versus Payment (DvP) settlement guide for DLT-based debt securities, including an overview and assessment of wholesale CBDC, tokenised bank liabilities and regulated stablecoins.
    - (ii) Lessons learned from Custody arrangements for DLT-based debt securities.



Bond Data Taxonomy (BDT) – Designed by the market for bond issuance and lifecycle

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- ❑ What is the Bond Data Taxonomy (BDT)?
  - The Bond Data Taxonomy is a common machine-readable language designed for the debt securities lifecycle & capital markets ecosystem across traditional and tokenised bonds.
  - First published in March 2023, version 2.0 was released in April 2026.

- ❑ What are the benefits of the BDT?
  - The BDT acts as practice and data standard.
  - Promotes both straight-through-processing (STP) and interoperability in the issuance process and post-trade operations.
  - Helps bridge the gap with tokenised securities.
  - Being vendor & technology agnostic it enables the exchange of data between multiple solutions & systems.

BDT – Adoption & announcements

Conventional Capital Markets

Inveztor: Debt markets software built with full ICMA BDT integration (March 2023)

World Bank Treasury: ASTRA and SHASTRA apply AI and the BDT to streamline operations, reduce settlement fails and support liquidity management (Aug 2025)

Euroclear & Clearstream: Digitalisation of the Eurobond Market initiative in alignment with the BDT (Sep 2025)

ECB AMI-SeCo: Report includes recommendations to adopt existing market standards such as the BDT to reduce barriers in securities post-trade (Sep 2025)

Covalent Capital: LIMO, Liability Management & Money Market Solution (November 2025)

Origin Markets: Support for version 2.0 of the BDT (May 2026)

BDT integration into ISO 20022: ICMA and Swift (ongoing).

DLT-based Capital Markets

HKSAR Government: Third Digital Green Bonds Offering (Nov 2025) expanded BDT adoption, building on the second 2024 issuance; ICMA/HKMA webinar (Feb 2026)

Société Générale Forge: CAST Framework integrates the BDT (2024)

MAS Project Guardian: BDT forms an integral part of the Guardian Fixed Income Framework (Nov 2024)

DZ Bank & KfW: Pilot transaction (Mar 2026) underpinned by Smart Bond Contract (SBC) whitepaper (May 2025) using the BDT

SWIFT: Digital Asset Standards platform proof-of-concept announced at SIBOS (Sep 2025)

For further details see ICMA's BDT webpage. Other implementations by issuers and market stakeholders are ongoing and will be announced in due course.

GMRA Digital Assets and Digital Bonds Annex

- **In August 2024, ICMA published the GMRA Digital Assets Annex.**
  - The Digital Assets Annex provides a standardised framework and set of terms which can be used to document repo transactions involving digital cash, digital securities (including tokenised traditional securities), or asset-backed digital assets.
  - The Annex clarifies that in the GMRA 2011, references to Securities includes Platform Transferred Securities, and references to cash or currency encompasses Digital Cash.
  - The Annex also seeks to address some of the commercial considerations that arise as a result of the operational feasibility of intra-day repo transactions, which have been made possible by the shorter settlement times offered by digital assets and technological platforms.

- **In April 2026, ICMA released the Digital Bonds Annex, a further addition to the Global Master Repurchase Agreement (GMRA).**
  - The Digital Bonds Annex further expands and complements the GMRA framework to include transactions involving digital bonds, reflecting ongoing innovation in capital markets.
  - The definition of "Digital Bond" within the Digital Bonds Annex is designed to capture natively-issued digital debt securities and makes it clear that the terms and conditions of the Digital Bond must envisage the use of distributed ledger technology.
  - Driven by member demand, the Digital Bonds Annex was developed by the Digital Assets Legal Working Group run by ICMA in partnership with ISLA, with Clifford Chance as legal counsel.

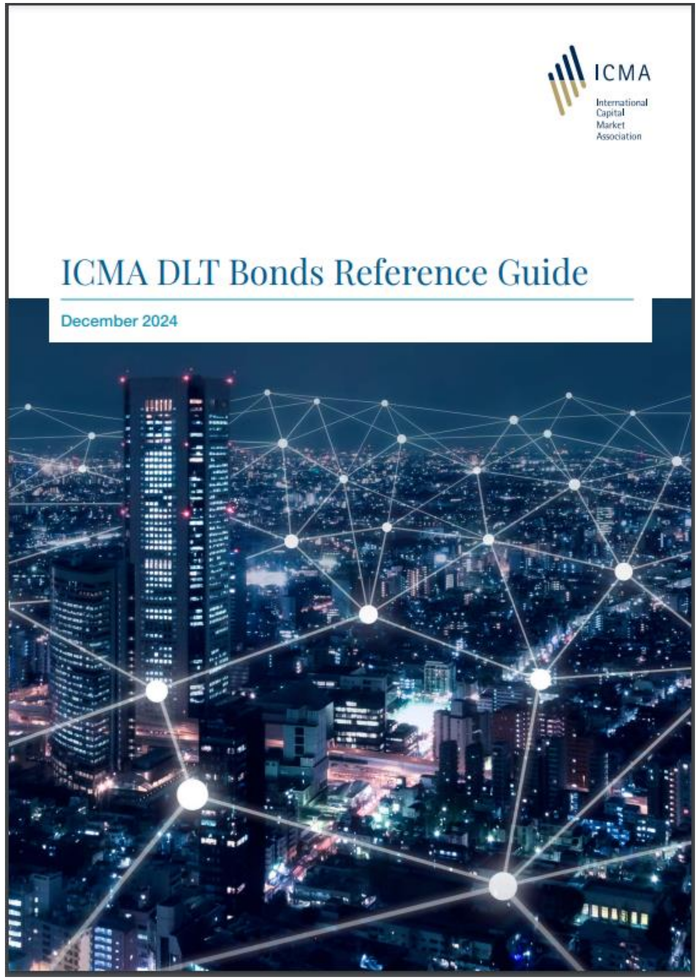
Q&A

Tokenisation in bond markets and how to get involved

- Market guidance, standards and further resources are publicly available on ICMA's website, including latest research:
  - The Stablecoin question: An impractical distraction or a powerful alternative? (January 2026)
  - DLT and repo, Part 1 (June 2026)

- ICMA's FT&D Working Groups are open to all members.

- Join the conversation at upcoming ICMA events:
  - ICMA's annual FinTech & Digitalisation Forum, London – 29 September 2026
  - Innovation in capital markets roundtable, Hong Kong, w/c 2 November 2026
  - Innovation in capital markets event, Singapore, 19 November 2026



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Useful links:

FinTech Overview

Bond Data Taxonomy

DLT Bonds Working Group

FINOS Common Domain Model (CDM)

Tracker of new FinTech applications

FinTech newsletter

Podcasts