

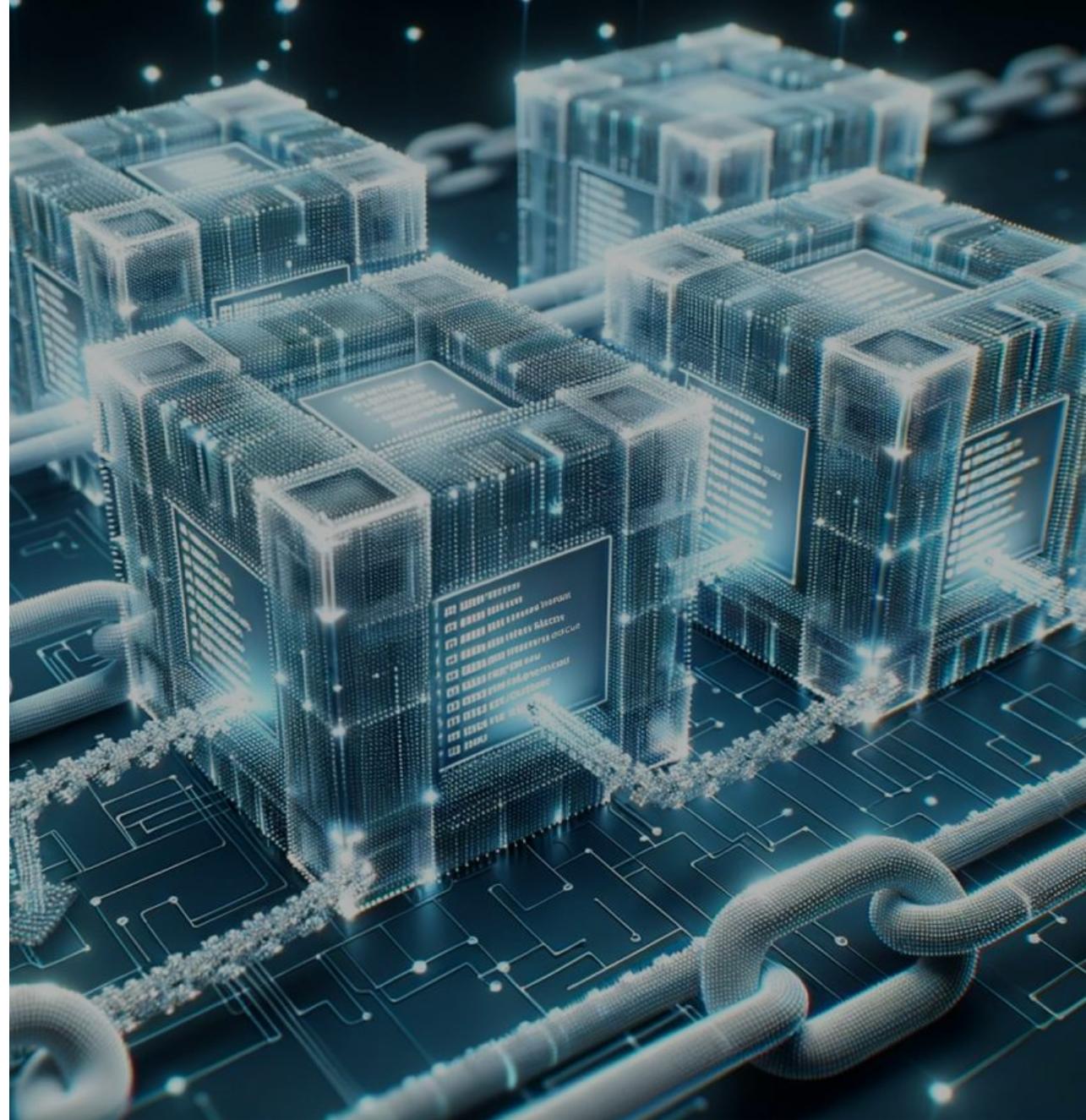
Blockchain Implications

IESBA Board Meeting: Technology Presentation • June 2024

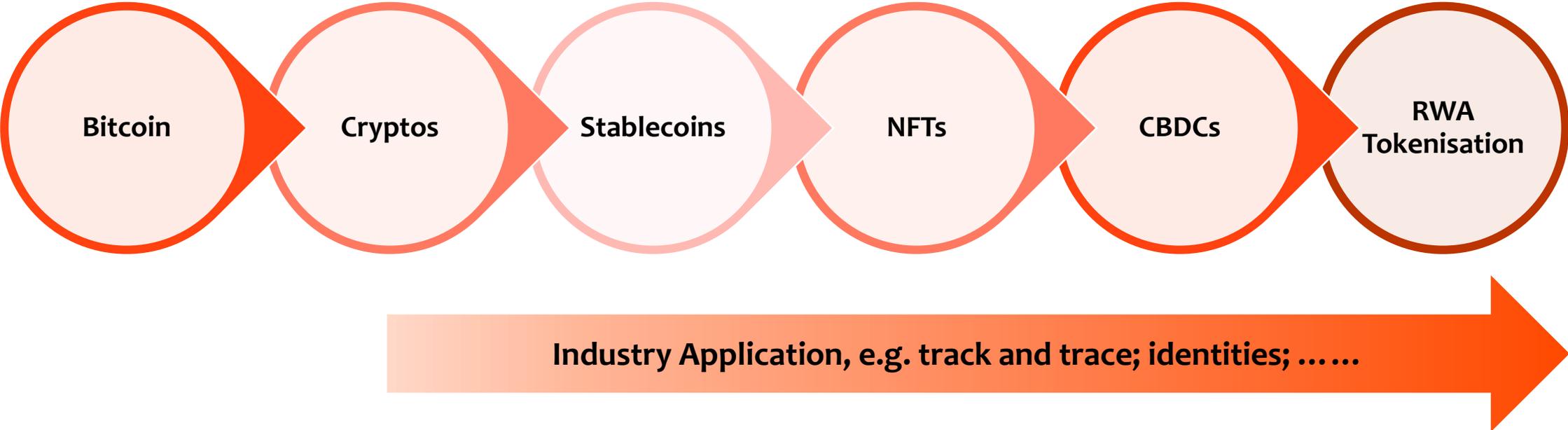
illumináre

Agenda

- Beyond the Technology Revisions
- Emerging Regulations
- Risks and Opportunities



The Blockchain Evolution





Beyond the Technology Revisions

Implication of Blockchain on current Ethical Framework

Impact of Technology-related Revisions



Business Relationships: Providing, Selling, Reselling or Licensing Technology

520.7 A1 Where a firm or a network firm **provides, sells, resells or licenses** technology:

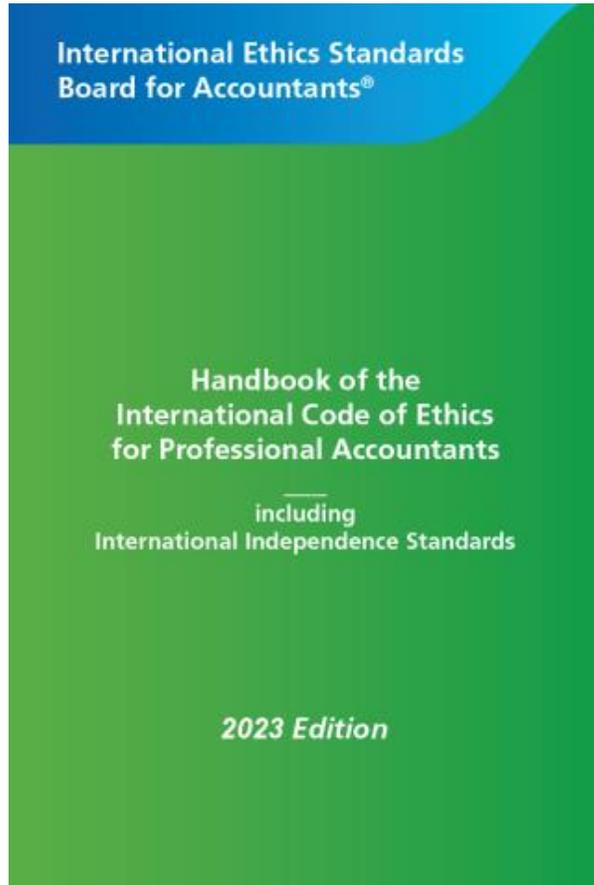
- (a) To an audit client; or
- (b) To an entity that **provides services using such technology** to audit clients of the firm or network firm, depending on the facts and circumstances, the requirements and application material in Section 600 apply.

Provision of Non-assurance Services to an Audit Client

600.6 The requirements and application material in this section apply where a firm or a network firm:

- (a) Uses **technology to provide** a non-assurance service to an audit client; or
- (b) **Provides, sells, resells or licenses** technology resulting in the provision of a non-assurance service by the firm or a network firm:
 - (i) To an audit client; or
 - (ii) To an entity that provides services using such technology to audit clients of the firm or network firm.

Subtle Challenges...



The IESBA Code – Overview of Parts and Sections

As of September 2023

Part 1

Complying with the Code, Fundamental Principles and Conceptual Framework

Section 100 Complying with the Code

Section 110 The Fundamental Principles

Section 120 The Conceptual Framework

Part 2

Professional Accountants in Business

Section 200 Applying the Conceptual Framework

Section 210 Conflicts of Interest

Section 220 Preparation and Presentation of Information

Section 230 Acting with Sufficient Expertise

Section 240 Financial Interests, Compensation and Incentives Linked to Financial Reporting and Decision Making

Section 250 Inducements, including Gifts and Hospitality

Section 260 Responding to Non-compliance with Laws and Regulations

Section 270 Pressure to Breach the Fundamental Principles

Part 3

Professional Accountants in Public Practice

Section 300 Applying the Conceptual Framework

Section 310 Conflicts of Interest

Section 320 Professional Appointments

Section 321 Second Opinions

Section 325 Objectivity of an Engagement Quality Reviewer and Other Appropriate Reviewers

Section 330 Fees and Other Types of Remuneration

Section 340 Inducements, Including Gifts and Hospitality

Section 350 Custody of Client Assets

Section 360 Responding to Non-compliance with Laws and Regulations

International Independence Standards (Parts 4A and 4B)

Part 4A

Independence for Audit and Review Engagements

Section 400 Applying the Conceptual Framework to Independence for Audit and Review Engagements

Section 405 Group Audits

Section 410 Fees

Section 411 Compensation and Evaluation Policies

Section 420 Gifts and Hospitality

Section 430 Actual or Threatened Litigation

Section 510 Financial Interests

Section 511 Loans and Guarantees

Section 520 Business Relationships

Section 521 Family and Personal Relationships

Section 522 Recent Service with an Audit Client

Section 523 Serving as a Director or Officer of an Audit Client

Section 524 Employment with an Audit Client

Section 525 Temporary Personnel Assignments

Section 540 Long Association of Personnel (Including Partner Rotation) with an Audit Client

Section 600 Provision of Non-Assurance Services to an Audit Client

Section 800 Reports on Special Purpose Financial Statements that Include a Restriction on Use and Distribution (Audit and Review Engagements)

Part 4B

Independence for Assurance Engagements other than Audit and Review Engagements

Section 900 Applying the Conceptual Framework to Independence for Assurance Engagements Other than Audit and Review Engagements

Section 905 Fees

Section 906 Gifts and Hospitality

Section 907 Actual or Threatened Litigation

Section 910 Financial Interests

Section 911 Loans and Guarantees

Section 920 Business Relationships

Section 921 Family and Personal Relationships

Section 922 Recent Service with an Assurance Client

Section 923 Serving as a Director or Officer of an Assurance Client

Section 924 Employment with an Assurance Client

Section 940 Long Association of Personnel with an Assurance Client

Section 950 Provision of Non-Assurance Services to Assurance Clients Other than Audit and Review Engagement Clients

Section 990 Reports that Include a Restriction on Use and Distribution (Assurance Engagements Other than Audit and Review Engagements)

The 2023 edition of the [International Code of Ethics for Professional Accountants \(including International Independence Standards\)](#) (the Code) was issued in September 2023 and incorporates:

- The revisions relating to (a) the definition of engagement team, and (b) group audits. The revisions will become effective for audits of financial statements and audits of group financial statements for periods beginning on or after December 15, 2023.
- A signpost of the expiring “jurisdictional provision” addressing long association of personnel with an audit client. The jurisdictional provision will expire and be no longer available for audits of financial statements for periods beginning on or after December 15, 2023.

In addition, the 2023 edition of the Code contains the IESBA-approved revised definition of a public interest entity (and related provisions) and technology-related revisions that will become effective in December 2024.

[Click here](#) to access the Code in PDF and on e-International Standards (eIS).

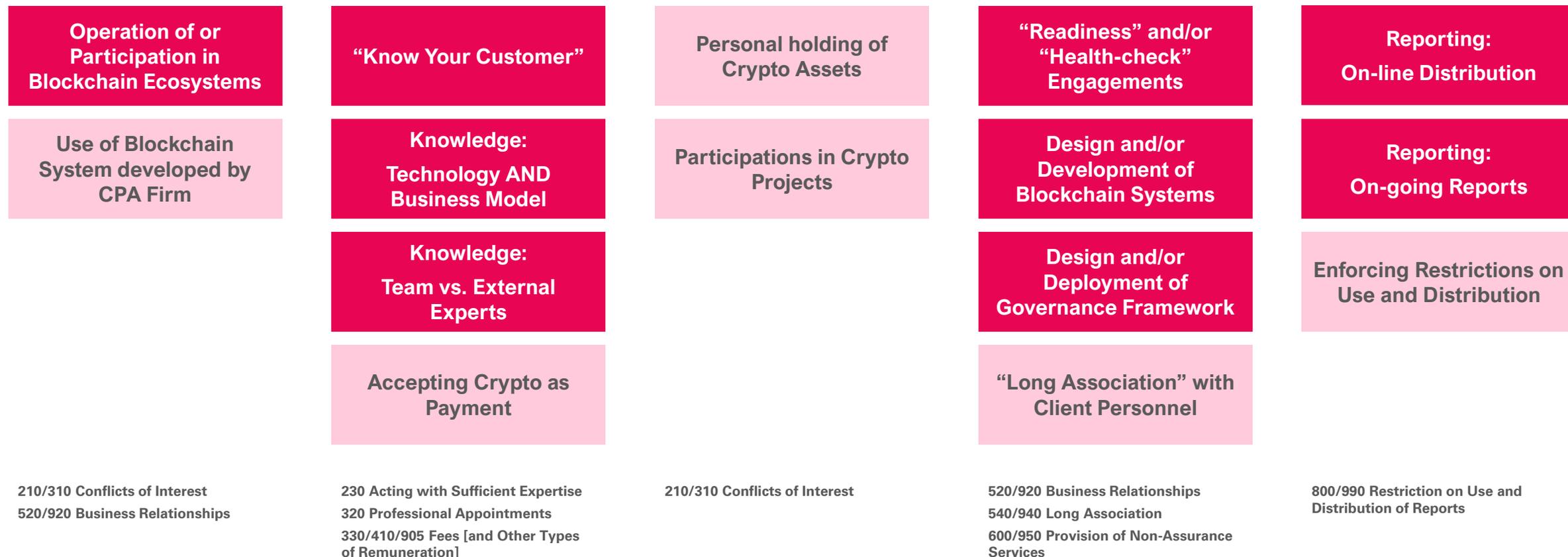


This document is prepared by the staff of the IESBA and illustrates the sections of the Code that were revised since the 2022 edition:

▲ Includes the engagement team and group audit revisions to the Code.

* Includes a signpost of the expiring “jurisdictional provision” addressing long association of personnel with an audit client

Known Scenarios





Emerging Regulations

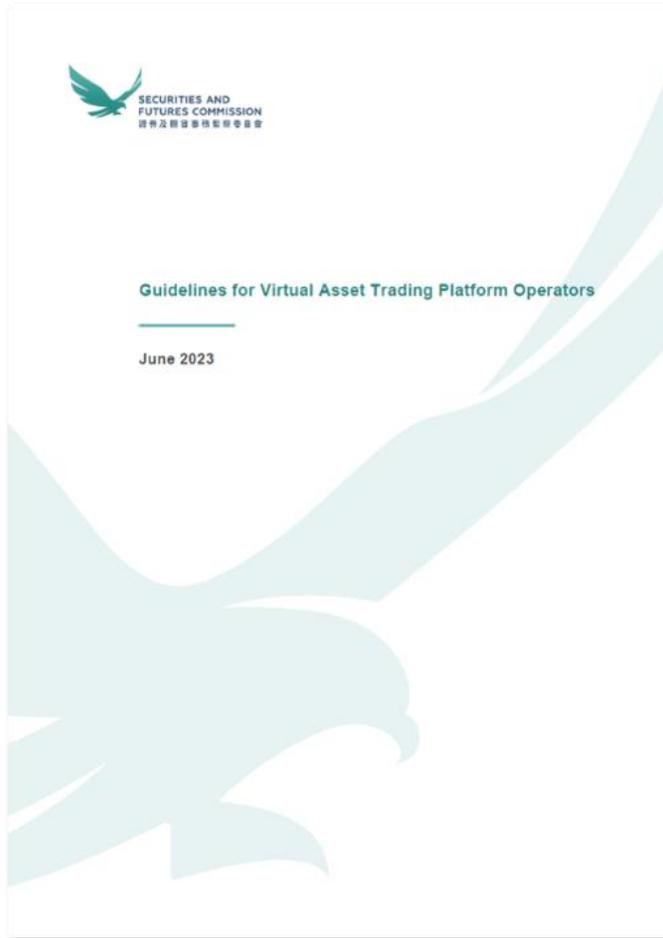
Implication of Blockchain on current Ethical Framework

Latest Blockchain Related Regulatory Developments

- Oct 2022 : Hong Kong Government issued Policy Statement on development of Virtual Assets
- Jun 2023 : Hong Kong Securities and Futures Commission issued Guidelines for Virtual Asset Trading Platform Operators
- Jul 2023 : Canadian Securities Administrators approved publicly traded Bitcoin ETF
- Jan 2024 : US Securities and Exchange Commission approved Bitcoin ETF
- Jan 2024 : The Hong Kong Monetary Authority and the Financial Services and Treasury Bureau proposed a licensing and regulatory regime for Issuers of Fiat-Referenced Stablecoins
- Feb 2024 : Hong Kong Financial Services and Treasury Bureau issued legislative proposals to regulate over-the-counter trading of virtual assets
- Mar 2024 : ESMA published Final Report on Draft technical Standards that specified requirements of the Markets in Crypto Assets Regulation (MiCA)
- Apr 2024 : Hong Kong SFC approved Bitcoin and Ethereum spot ETFs
- May 2024 : US Securities and Exchange Commission approved Ethereum ETF
- May 2024 : [Financial Times] UK Financial Conduct Authority approved first cryptocurrency Exchange-Traded Products (Bitcoin and Ethereum)

SFC Guidelines for Virtual Asset Trading Platform Operators

Smart Contract Audits and Technology Audits



§ 7.10 Before admitting any virtual assets for trading, a Platform Operator should exercise due skill, care and diligence in selecting and appointing an **independent assessor** to conduct a **smart contract audit** for smart-contract based virtual assets, unless the Platform Operator demonstrates that it would be reasonable to rely on a smart contract audit conducted by an independent assessor engaged by a third party. The smart contract audit should focus on reviewing that the smart contract is not subject to any **contract vulnerabilities or security flaws** to a **high level of confidence**

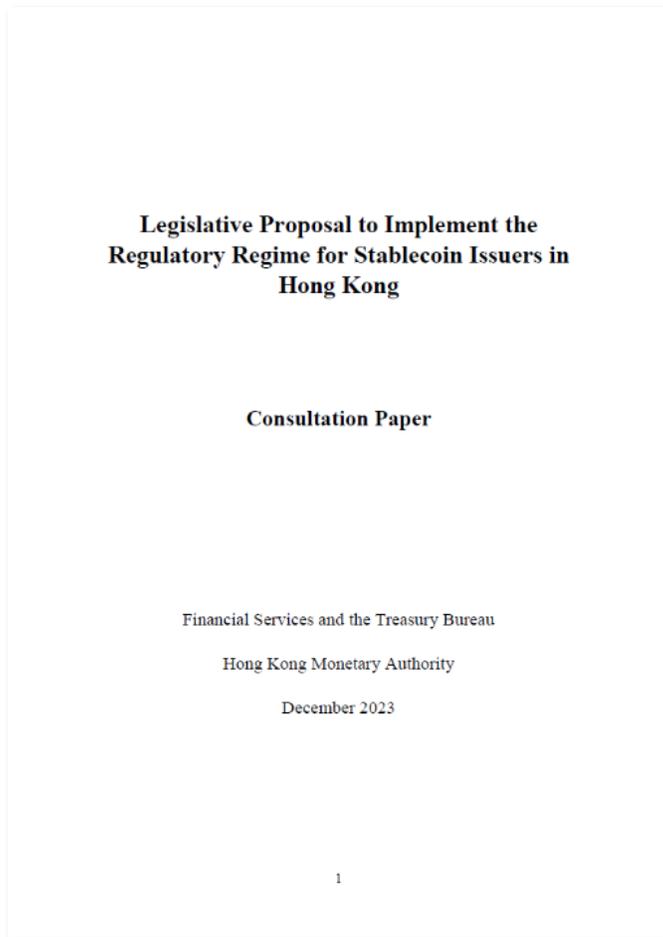
§ 9.28 In respect of the posting of information for each virtual asset in paragraph 9.27(d) above, the types of information which are considered relevant include: (g) **link to the smart contract audit report** and other bug reports of the virtual asset (if any)

§ 12.7 A Platform Operator should arrange a periodic (at least annual) **technology audit** by a suitably qualified independent professional so as to be satisfied that the Platform Operator and its Associated Entity have fully complied with **Part XII[†]** of these Guidelines

[†] Part XII of the Guidelines covers Cybersecurity, addressing the governance framework, the integrity and reliability of the platform, technical security, platform capacity, backup and contingencies

HKMA Proposed Regulatory Regime for Stablecoin Issuers

Reserve Assets and Operational Soundness



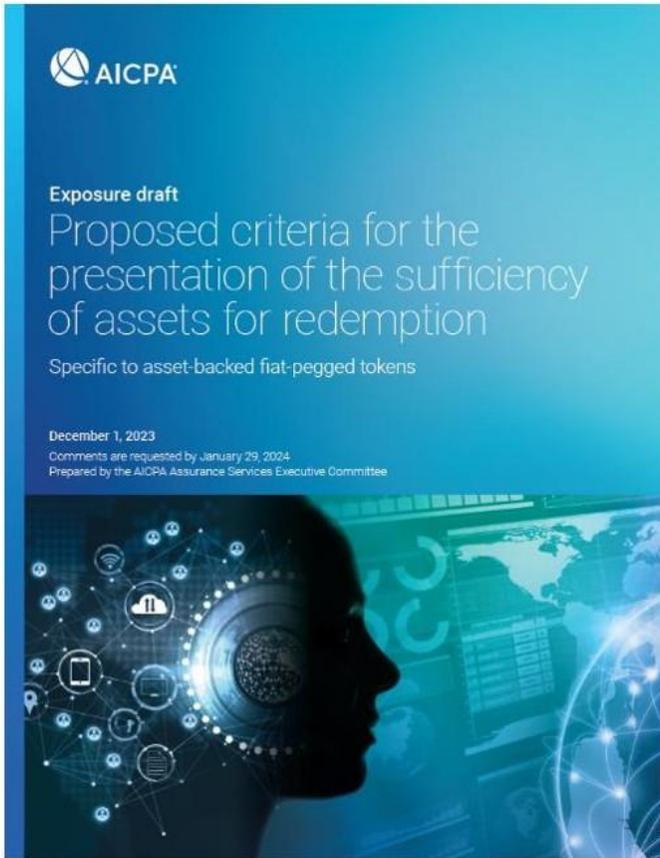
§ 6.2.5. [Disclosure and reporting] The total amount of the FRS in circulation, the mark-to-market value of reserve assets and the composition of reserve assets must be disclosed regularly to the general public. The issuer, in consultation with the MA, must engage a **qualified and independent auditor** to perform **regular attestation**, including on: (i) the composition and market value of the reserve assets, (ii) the par value of FRS in circulation, (iii) whether the reserve assets are adequate to fully back the value of FRS in circulation, and are sufficiently liquid, as of the last business day of the period covered by the attestation; and (iv) whether the conditions on the reserves management as imposed by the MA have all been fulfilled. It is proposed that the total amount of FRS in circulation and the value of reserve assets be disclosed at least daily, the composition of reserve assets be disclosed at least weekly, and **attestation by the independent auditor be performed at least monthly**

§ 6.2.21. [Audit requirements] The FRS issuer must submit audited financial statements to the MA on an annual basis. As and when required by the MA, the FRS issuer must submit reports prepared by **external independent auditors and assessors** to validate the **management and operational soundness of FRS issuance**, such as whether the FRS issuer has **adequate systems of control for the management of reserve assets, cybersecurity and the integrity of the “smart contracts”**

Observations for Hong Kong

- Reference to “Auditor”, “Assessor” and “suitably qualified independent professional”
- Reference to “Audit Report”
- Different subject matters:
 - Smart contract audit: reviewing that the smart contract is not subject to any contract vulnerabilities or security flaws to a high level of confidence
 - Technology audit: complied with Part XII [cybersecurity] of these [SFC] Guidelines
 - “Reserve Audit”:
 - (i) *the composition and market value of the reserve assets*
 - (ii) *the par value of FRS in circulation*
 - (iii) *whether the reserve assets are adequate to fully back the value of FRS in circulation, and are sufficiently liquid, as of the last business day of the period covered by the attestation; and*
 - (iv) *whether the conditions on the reserves management as imposed by the MA have all been fulfilled*
 - As required: validate management and operational soundness of FRS issuance
- Require Audit Reports to be disclosed on-line

AICPA ED on Proposed Criteria for Reserve Report Dec 2023



- Defined criteria for “Proof of Reserve” for stablecoins issuers
- Designed to report on three subject matters at a specific point in time:
 - Completeness and accuracy of a token issuer’s redeemable tokens outstanding and related disclosures
 - Completeness and accuracy of the redemption assets available to redeem redeemable tokens outstanding and related disclosures
 - Redemption assets are equal to or greater than the redeemable tokens outstanding and related disclosures
- Provided “Points of Focus” on criteria under each subject matter
- Implied the need to establish processes, but no specific reference to “controls”
- Required the need to ascertain “in-scope smart contracts”, but did not include “smart contract audit”; instead noted that “lack of third-party smart contract code assessments” would be “an event or occurrence that has had a material impact on the tokens”



Risks and Opportunities

Implication of Blockchain on current Ethical Framework

Current Industry Practice and Example Reports

CIRCLE | Home | Products | Solutions | Company | **RESERVE** | EN

Transparency & Stability

USDC is always redeemable 1:1 for US dollars, and EURO is always redeemable 1:1 for euros. Always.

Reserve composition

USDC

Asset Class	Percentage
US Treasury Bills	~85%
US Government Bonds	~15%

EURO AND RESERVE

Asset Class	Percentage
US Treasury Bills	~65%
US Government Bonds	~25%
US Treasury Inflation Protected Securities	~10%

tether | Home | Products | Solutions | Company | **TRANSPARENCY** | EN

Transparency

USDT is always redeemable 1:1 with the underlying fiat currency, and is backed 100% by Deposits and T-Bills. Always. Always. Always. Always. Always. Always. Always. Always. Always. Always.

Total USDT	100,000,000,000
Total USDT in Circulation	99,999,999,999
Total USDT in Reserve	100,000,000,000

USDT is always redeemable 1:1 with the underlying fiat currency, and is backed 100% by Deposits and T-Bills. Always. Always. Always. Always. Always. Always. Always. Always. Always. Always.

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PAXOS | Home | Transparency | Legal | Contact | Support | **TRANSPARENCY** | EN

Transparency Reports

Paxos is a US State-licensed money transmitter. We make every report available because your money matters.

Fostering trust through verification

Trust Record

As a state-licensed money transmitter, we are required to maintain a public Trust Record. This record is available to all users of our platform and is updated in real-time. It provides a transparent view of our financial health and the assets backing our digital tokens.

Advisors

Our platform is supported by a team of independent advisors who provide a second opinion on our financial statements and the assets backing our digital tokens. This ensures that our users have the most accurate and up-to-date information available.

Labs | Home | **TRANSPARENT** | EN

#Transparent

Transparency is a commitment to openness and accountability. It's about being clear about what you're doing, why you're doing it, and how you're doing it. It's about being honest about your strengths and weaknesses, and about being open to feedback and criticism. It's about being transparent about your data, your processes, and your people. It's about being transparent about your values, your mission, and your vision. It's about being transparent about everything.

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Current Industry Practice and Example Reports



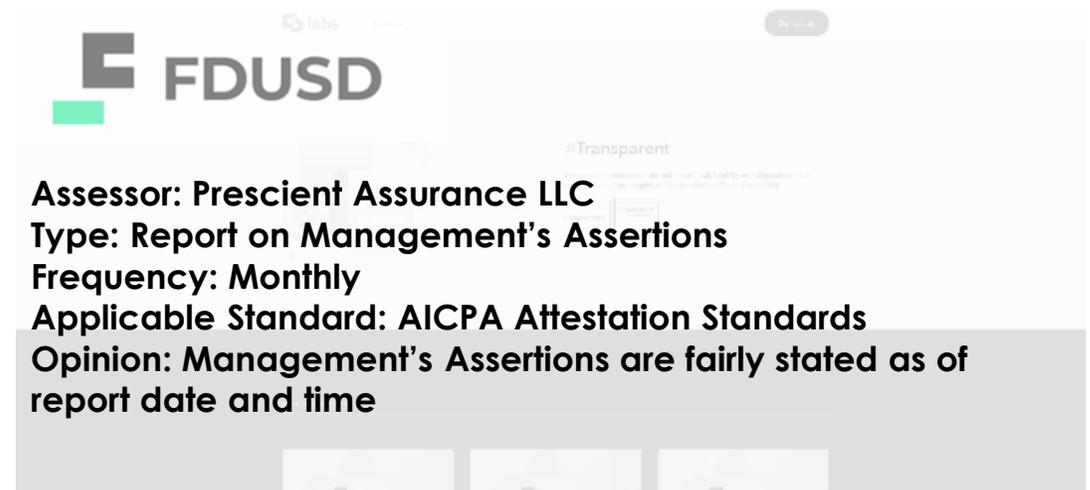
Assessor: Deloitte & Touche LLP
Type: Report on Management's Assertions
Frequency: Monthly
Applicable Standard: AICPA Attestation Standards
Opinion: Management's Assertions are fairly stated as of report date and time



Assessor: Withum Smith+Brown, PC
Type: Report on Management's Assertions
Frequency: Monthly
Applicable Standard: AICPA Attestation Standards
Opinion: Management's Assertions are fairly stated as of report date and time



Assessor: BDO Italia S.p.A.
Type: Report on Management's Assertion
Frequency: Quarterly
Applicable Standard: ISAE 3000 Revised
Opinion: Reserve Report is fairly presented



Assessor: Prescient Assurance LLC
Type: Report on Management's Assertions
Frequency: Monthly
Applicable Standard: AICPA Attestation Standards
Opinion: Management's Assertions are fairly stated as of report date and time

Earlier Proof of Reserve Reports

Mazars and Armanino

Mazars House, Rialto Road
Grand Maandagse
P.O. Box 9000
Doxex 9 Century City

Tel: +27 21 818 5000
Fax: +27 21 818 5001
Email: cpt@mazars.co.za
www.mazars.co.za



7 December 2022

Binance Capital Management Co. Ltd.
c/o Harkom Corporate Services Limited,
Jayla Place, 2nd Floor, Road Town,
Tortola, VG1110,
British Virgin Islands.

Dear Sir / Madam

BINANCE CAPITAL MANAGEMENT CO. LTD. ("BINANCE") – PROOF OF RESERVE ("POR") REPORT

Our report is solely for the purpose of providing additional transparency and reassurance that their *In-Scope Assets* are collateralized, exist on the blockchain(s) and are under the control of Binance at the below mentioned reporting date. For the purpose of this Agreed-Up Upon Procedures engagement, the *In-Scope Assets* are defined as where Binance's *In-Scope Assets* are held, as per the *Customer Liability Report* owed to and receivable from customers.

For the purpose of this engagement the customers' spot, options, margin, futures, funding, loan and earn accounts for bitcoin ("BTC") and wrapped bitcoin ("BBTC" and "BTCB") held on the Bitcoin, Ethereum, BNB Chain and Binance Smart Chain blockchains will be defined as the *In-Scope Assets*.

Binance has requested and corresponding liability holders to acknowledge that the AUP are appropriate for the purpose of the engagement and are responsible for the subject matter on which the AUP are performed.

We have conducted the AUP engagement in accordance with the International Standard on Related Services (ISRS) 4400 (Revised) Agreed-Up Upon Procedures Engagements. An AUP engagement involves us performing the procedures that have been agreed with Binance, and reporting the findings, which are the factual results of the AUP performed. We make no representation regarding the appropriateness of the AUP.

Mazars temporarily halted crypto related work
Mazars explained it was pausing such work due to “concerns regarding the way these reports are understood by the public.”
Mazars commented that proof-of-reserves reports “do not constitute either an assurance or an audit opinion on subject matter. Instead they report limited findings based on the agreed procedures performed on the subject matter at a historical point in time.”

<https://www.theguardian.com/business/2022/dec/16/binance-auditor-mazars-withdraws-from-working-with-cryptocurrency-exchange>
<https://www.reuters.com/technology/auditing-firm-mazars-pauses-work-binance-other-crypto-clients-coindesk-2022-12-16/>
<https://time.com/6241755/binance-mazars-halts-crypto-work/>

Independent Accountant's Report on Agreed-Up On Procedures

To the Management and Clients of Gate.io:

We have performed the procedures enumerated below as of 00:00AM Coordinated Universal Time ("UTC") on October 20, 2022. Management of Gate.io ("Gate.io") has agreed to and acknowledged that the procedures performed are appropriate to meet the intended purpose of demonstrating that, at the time the procedures were performed, Gate.io retained custody over a sufficient amount of the in-kind assets to cover the in-scope client liabilities as observed within the procedures performed. The procedures performed may not address all the items of interest to a user of this report and may not meet the needs of all users of this report and, as determined whether the procedures performed are appropriate for their purposes.

The procedures and the associated findings are set forth in the attached sections:

Procedures: Steps of procedures requested by Gate.io and performed by Armanino.
Findings & Results: The results of the procedures performed by Armanino.

We were engaged by Gate.io to perform this agreed-upon procedures engagement and conducted our engagement in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review engagement, the objective of which would be the expression of an opinion or conclusion, respectively, related to the platform account liabilities and asset balances represented by Gate.io. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported.

Unique Risk Attributes and Implications

Global and Decentralised

- Cross Jurisdictions
- Differences in laws and regulations
- Global Exposures for Firms and Professionals

Beyond Ethical Standards

- Guidance and Standards: Operational, Management, and Technical
- Technology Infrastructure and Services

Broadening Skill Set

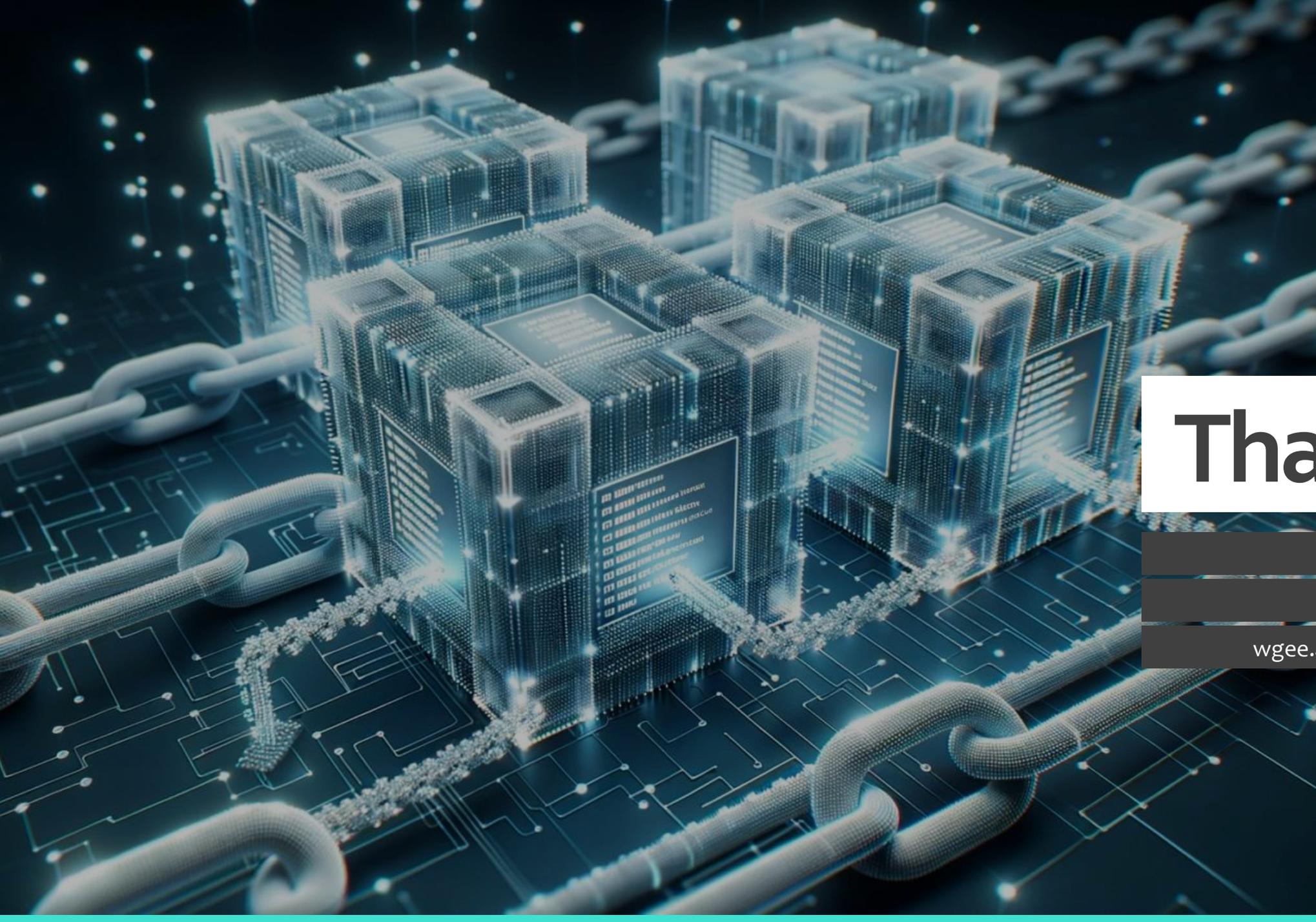
- Evolving Roles
- Need for Collaboration
- Bridging Skill Gaps

Opportunities

**Enable Extension of Trust
Provider Role to new
Emerging Sectors**

**Reference for Future
Domains, e.g. AI**

**Prepare the Profession for
the Future**



Thank You!

William Gee



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