

Participants in the forum are reminded of their responsibility to comply with competition laws

The EBA Competition Law Compliance Policy is available on the EBA website: [EBA Competition Law Compliance Policy](#).

Next to the policy document, a “60 seconds summary” of the EBA competition law compliance commitment is also available for download ([Do’s and Don’ts – the EBA competition law compliance commitment](#)).

The forum is an open group, where interested stakeholders can discuss and exchange information on industry-wide topics.

The content of the slides presented and the views expressed in the context of the activities of the forum are those of the respective participants in the forum, and do not represent the views of the Euro Banking Association (EBA).

Open Forum on Digital Transformation

Working capital at a crossroads: navigating change, complexity and opportunity while defining a strategy for the future

8 September 2026
Digital meeting

Public

Agenda (1/2)

Working capital at a crossroads: navigating change, complexity and opportunity while defining a strategy for the future

- 09:00** **Welcome and opening remarks**
Thomas Egner, Euro Banking Association
- 09:05** **Setting the scene and housekeeping**
Kate Pohl, moderator of the EBA Open Forum
- 09:10** **Working capital: navigating change, complexity and opportunity**
Jan Osenegg, Senior Advisory
- 09:40** **Re-imagining working capital with digital electronic bills of exchange – a client example**
Wayne Mills, ETR Digital
Baris Gokalp, Sisecam UK Plc
- 10:15** **Beyond the invoice – how working capital can finance the next supply chain**
Tanja Reilly, Ability Hub
- 10:45** **Coffee break**

Agenda (2/2)

Working capital at a crossroads: navigating change, complexity and opportunity while defining a strategy for the future

- 11:00 The next generation of working capital: innovation and impact in Trade**
Alexander Pawellek, Commerzbank
- 11:30 Unlocking working capital: where cash, trade and technology converge**
Jens Noffke, Calculum
Alexander Pawellek, Commerzbank
Christian Hausherr, Deutsche Bank
Sebastian Kupka, RBI
- 12:15 Combining MLETR and eIDAS 2.0 to digitise trade flows and trust – client testimonials**
André Casterman, Casterman Advisory
Gunnar Collin, Enigio
- 13:00 Wrap-up**

Thomas Egner

**Secretary General
Euro Banking Association**

Kate Pohl

**Executive Advisor
Euro Banking Association**

Jan Osenegg

MD
Senior Advisory



Working Capital - Navigating Change, Complexity & Opportunity

Jan Osenegg MD, Senior Advisory

*Tuesday, 8 September 2026 * online*

The Working Capital Landscape

Senior Advisory

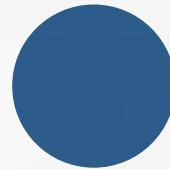


Navigating Change, Complexity and Opportunity



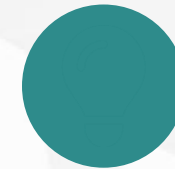
Change

New rules & rails:
MLETR, eIDAS 2.0, real-time
payments, new payment-rails



Complexity

Fragmented data, systems
and competing stakeholder
agendas



Opportunity

Massive € amounts tied up in
working capital, ready to be
unlocked



UNLOCKING THE GLOBAL WORKING CAPITAL OPPORTUNITY

€1,840,000,000,000,-

(i.e. 1.84 Trillion EURO)

is tied up in Working Capital globally and
could be unlocked for short-term financing!

Working Capital Management in its simplest form

Leading and lagging indicators turn buyer / supplier dynamics into a constant power struggle between competing agendas

Senior Advisory



COMPETING AGENDAS



BUYER



SUPPLIER



LEADING – suppliers want the money early

- Negotiated payment terms & contract clauses
- Purchasing and credit policy design
- Early engagement with suppliers and customers



LAGGING – buyers want to pay as late as possible

- DSO, DPO, DIO — actuals per period
- Cash Conversion Cycle (CCC)
- Variance vs. budget and prior year

» **Whoever sets the leading indicators shapes the lagging outcome — if one side wins, the other side ends up funding**

Active working capital management

Senior Advisory



It's about more than squeezing suppliers for longer payment terms; three areas of focus turn ambition into impact



Internal & stakeholder measures

- Cross-functional governance & clear ownership
- Shared KPIs and one single source of truth
- Incentives tied to DSO / DPO / DIO targets

Foundation: alignment before automation



Supporting tools

- AI-driven order-to-cash automation
- Data-led DPO / payment-term benchmarking
- Supplier & customer risk scoring

Examples: Stuut (O2C automation) ·
Calculus (AI-based DPO optimisation)



Financial instruments

- Deferred payments to suppliers
- Supply chain financing (reverse factoring)
- Working capital notes (digital bills of exchange)

Structuring capital, not just squeezing terms

» **Sustainable gains combine organisational alignment, the right tooling and the right financing instrument - no single lever works alone**

Internal & stakeholder measures

Senior Advisory



Foundation: alignment before automation, the governance and incentives that make every other lever stick

1

Cross-functional governance

A working capital steering committee spanning treasury, sales, procurement, finance and operations, chaired by one executive sponsor.

2

Clear process ownership

Named owners for order-to-cash, purchase-to-pay and inventory, with an escalation path when functional targets clash.

3

One shared KPI set

A single definition of DSO, DPO and DIO group-wide - no parallel 'local' numbers or shadow spreadsheets.

4

Single source of truth

One dashboard, refreshed monthly and visible to every stakeholder, with consistent methodology across entities.

5

Incentives that align

WoCa targets embedded in management KPIs and incentives, not just P&L or booked-revenue metrics

6

Communication & buy-in

Recognise cross-functional wins and communicate early - sustainable change is behavioural, not just structural.

Supporting tools

Senior Advisory



Data and automation help turn alignment into consistent day-to-day execution

1

AI-driven O2C automation

Automated invoicing, matching, dunning and collections prioritisation e.g. Stuu - cutting DSO without adding headcount.

2

P2P & invoice automation

Straight-through processing of supplier invoices, reducing cycle time and unlocking early-payment capture.

3

DPO / term benchmarking

AI-based analysis of peer and market payment terms e.g. Calculum - to set realistic renegotiation targets.

4

Risk scoring

Predictive supplier and customer risk scoring flags cash-flow exposure before it hits the balance sheet.

5

Cash-flow forecasting

Real-time, AI-assisted forecasting that connects AR, AP and inventory data into a single view.

6

Integration & data quality

ERP/TMS connectivity and clean master data are the prerequisite, tools amplify good data, not bad.

Financial instruments

Senior Advisory



Structuring capital, not just squeezing terms — matching the instrument to the respective need

1

Deferred supplier payments

Extending DPO through negotiated terms needs careful relationship management to avoid destroying supplier value.

2

Supply chain financing

Reverse factoring lets the buyer's credit rating fund early supplier payment, typically via a bank or fintech.

3

Dynamic discounting

Buyer-funded early payment in exchange for a discount is an alternative when deploying the company's own liquidity.

4

Working Capital Notes

Digitised, tradeable bills of exchange, enabled by eIDAS 2.0 and MLETR — opening up new investor access.

5

Receivables financing

Selling or discounting receivables to accelerate cash conversion on the supplier side of the ledger.

6

Inventory & asset-based finance

Financing tied to inventory or other WoCa assets, where reducing DIO alone isn't enough.

Six moves to tackle working capital

Senior Advisory

How corporates turn a working-capital ambition into a program with teeth



Make it measurable

Agree one set of KPIs across the whole company: one DSO, one DPO, one DIO.



Align the organisation

Tone from the top: make WoCa a priority for every function, not just treasury.



Build a WoCa strategy

Create a strategy built on visible quick wins as much as on longer-term, strategic goals.



Create management objectives

Translate the KPIs into management objectives; what gets measured gets done.



Support cross-functional teams

Build x-functional teams across sales, procurement, finance & ops to drive the agenda.



Establish program management

Run it like a program with a real budget and mandate - in WoCa, there is no free lunch.

Setting the scene for Working Capital

Senior Advisory

Key takeaways from this session



Working capital is a power struggle: leading indicators shape the lagging outcome between buyer and supplier.



Sustainable impact needs all three levers at the same time
1) organizational alignment,
2) smart tooling and
3) the right financing instrument.



Corporates that treat Working Capital as a program, with ownership, KPIs and real budget, make the gains stick.

Wayne Mills

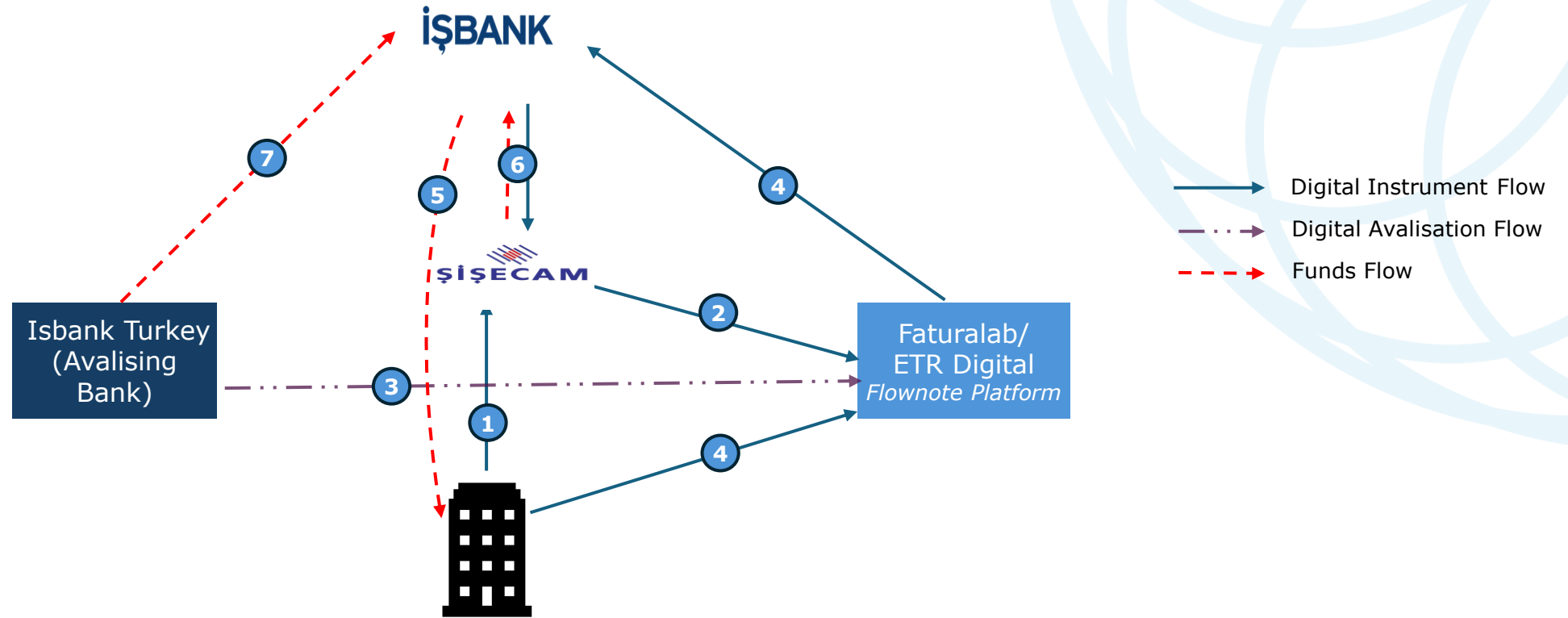
**Co-Founder and CPO
ETR Digital**

Baris Gokalp

**Director of Treasury
Sisecam UK Plc**

Working Capital Notes™ (WCN)

Avalised Promissory Note Workflow



Workflow Notes

1. Goods supplied in the normal course of business under existing agreed payment terms.
2. Sisecam requests issue of a Digital Working Capital Note™ (Promissory Note) from Faturalab/ ETR Digital and signs on Flownote™ platform via Docusign.
3. Isbank Turkey (Avalising Bank) adds its aval to the WCN on Flownote platform. *(Drawn/avalised WCN now "live" and available to Supplier.)*
4. Supplier indorses avalised WCN (using Flownote platform) in favour of Isbank UK.
5. Isbank UK discounts the WCN and provides funding to Supplier against risk acceptance (by aval) of Isbank Turkey.
6. At maturity, Isbank UK present WCN to Sisecam and receive payment.
7. In case of non-payment by Sisecam, Isbank UK present WCN to Isbank Turkey and receive payment.

Coffee break

10:45 – 11:00 CET

During coffee break, do not “leave the meeting”
(i.e., stay connected while muting your sound and turning off your camera)

Alexander Pawellek

**Global Head of Product Management Trade Finance
Commerzbank**

Panel discussion

Unlocking working capital: where cash, trade and technology converge

André Casterman

**Founder and MD
Casterman Advisory**

Gunnar Collin

**Director
Enigio**

EBA OPEN FORUM ON DIGITAL TRANSFORMATION · SESSION 12:15–12:50

Combining MLETR and eidentity to digitalise trade flows and trust

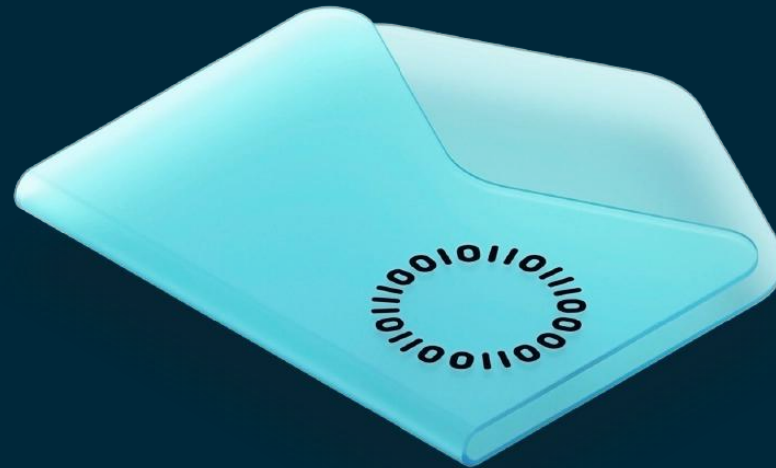
Gunnar Collin

Director, Enigio

With Andre Casterman, Founder and MD, Casterman Advisory

Working capital at a crossroads · 8 September 2026

**Any Document
All the Data
To Anyone**



This is Enigio

A Stockholm technology company behind trace:original

Enigio is a Stockholm-based global technology provider of **trace:original**, a standardised solution for digital original documents and digital envelopes. Founded in Stockholm in 2012, the team combines computer engineering, cryptography, distributed ledger technology, archival science and deep trade, banking and logistics expertise.

- **Patented SaaS** B2B technology, with patents granted in Sweden, USA, Singapore, China, India, UK, France and Germany
- **Backed by industry** Major investors are Lloyds Bank, Stockhorn Capital and MOOR Holding
- **Live and proven** A mature, scalable product with paying and live customers, and a growing distribution network

Any document. All the data. To anyone.

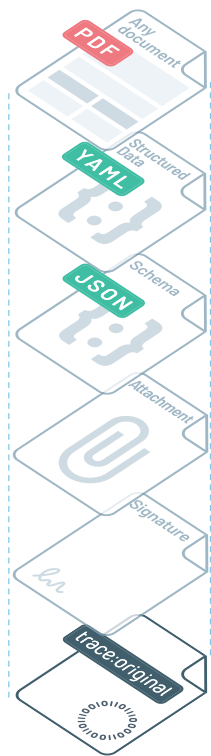
trace:original is recognised and compliant across the frameworks that make digital originals enforceable and interoperable:

- ✓ MLETR-compliant digital originals
- ✓ UCC Article 12 compliant
- ✓ Verified ICC DSI reliable system
- ✓ eUCP and eURC compliant
- ✓ IGP&I approved
- ✓ ICC DSI KTDDE compatible

What trace:original is

A neutral trust layer that turns any document into a legal digital original

Not a platform and not a data vault. Trust travels inside the document, so any counterparty can verify and act on it — with no onboarding, accounts or lock-in.



One trusted document — six layers

- 1 **Human-readable PDF** — the document as people read it today
- 2 **Machine-readable structured data** — same data, any standard, for STP and AI
- 3 **Data standards and schema** — current and future, several at once
- 4 **Attachments** — supporting documents and originals
- 5 **Electronic signatures and seals** — issuer identity and intent
- 6 **Blockchain possession and integrity** — singularity, control and audit trail

trace:original answers five questions for any document

- Is this the original?
- Is this the current version?
- Who controls it?
- Has it changed?
- What verified data does it contain?

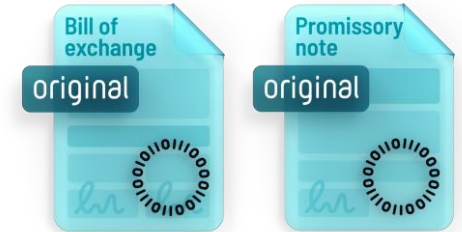
Freely transferable, end to end

Issuer creates it → bank examines and forwards → financier discounts or buys and verifies independently → any counterparty receives and acts. The data travels with the document, carried in the trace:original envelope, with no platform lock-in.

Live now – not a concept

Negotiable instruments already run on trace:original

Digital bills of exchange and promissory notes on trace:original have moved real value in production with J.P. Morgan, Lloyds Bank, Mercore and Traxpay; under the UK's Electronic Documents Act, ITFA Digital Negotiable Instrument framework and now the New York UCC.



Lloyds Bank

UK's first digital promissory note

First DPN purchase and first transaction under the ITFA DNI Initiative; a GBP 48m sale settled in a single day. 100% of Lloyds' housebuilder promissory notes are now digital.



Mercore

UK's first digital bill of exchange

A trade from Nicaragua to the UK, executed as a digital BoE on trace:original; same-day settlement, no paper, no closed platform.



Traxpay

SCF 2.0 with digital negotiable instruments

Traxpay uses trace:original inside ERP-integrated supply chain finance flows to create digital promissory notes or bills of exchange from approved invoice data and transfer the original to financiers for liquidity and settlement.



J.P. Morgan

Scaling around UCC Article 12

Expanding a trace:original-based electronic bill of exchange offering around the New York UCC Article 12 date, positioning digital BoEs and PNs for working capital and treasury.

The same original works far beyond negotiable instruments

The same trace:original document handles the other originals that move trade — documents of title, bank undertakings, transport and warehousing — each carrying its data, identity and possession inside the file, verifiable by any counterparty.



Electronic bills of lading (eBLs)

Documents of title for ocean and multimodal cargo

A negotiable or straight eBL as a trace:original — MLETR-compliant, transferable endorsee to endorsee, and IGP&I-approved for carrier and P&I acceptance.



Bank guarantees and standby LCs

Independent undertakings under URDG 758 and ISP98

Guarantees, counter-guarantees and standby letters of credit as signed digital originals — verifiable directly by the beneficiary, with no courier of the paper undertaking.



Electronic transport (eCMR)

Road consignment notes and transport records

Digital CMR consignment notes and supporting transport documents carried as originals.



Warehouse receipts and certificates

Documents of title and supporting originals

Warehouse receipts, certificates of origin, inspection and insurance certificates as verifiable originals that banks and buyers can authenticate without a shared platform.

Trusted data all can rely on

Trusted data sets the whole chain can rely on

Other trade documents — invoices, packing lists, certificates of origin, inspection and insurance certificates — need no possession or control. Their value is a predefined, trusted data set embedded in the original that every party in the trade chain can verify, rely on and reuse.



Data inside the original

Predefined, structured data sets

An agreed schema (e.g. ICC DSI KTDDE) travels inside the file alongside the human-readable document — one authoritative source, no separate feed and no re-keying.



Verifiable by anyone

No possession or control required

Any party confirms origin, integrity and the current version straight from the document.



Trusted across the chain

One truth, reused by all parties

Buyer, seller, banks, carriers, customs and insurers read the same trusted data — removing duplicate checks, reconciliation and disputes.



Network effect

Value grows with every participant

Each new party able to verify makes these documents useful, driving straight-through processing and AI-assisted checks across the corridor.

The trace:original envelope – the trusted transaction

If the document is the trusted asset, the envelope is the trusted transaction – the digital courier pouch. A **one-time, sealed container** that carries a full presentation set as one trusted unit.



WHAT IT IS · ONE SEALED CONTAINER

A mixed set, sent as one

One trace:original original enables the use of a trace:original envelope; the invoice, packing list, certificates and insurance travel with it as ordinary files or trace:original documents.

Possession transfers on acceptance

The instant the receiver accepts, control of the originals passes to them – a bank takes control to examine; title passes to release the goods.

One-time pouch logic

Each envelope is opened once by the authorised recipient; a fresh envelope is created for onward transfer, keeping a clean transaction trail.

Release controls

Onward release is blocked until the required endorsements, acceptances and checks are complete.

Envelope data layer

A machine-readable inventory of contents and key fields, so banks, platforms and AI agents can process. Verified free at traceoriginal.com.

HOW IT MOVES · AN LC / COLLECTION PRESENTATION

1

Assemble

The exporter receives an eBL or other transport document from the carrier, and/or creates a trace:original document, then drops the invoice, packing list, certificates and insurance into the envelope.

2

Present

The full set is sent to the advising / collecting bank over any digital channel as one sealed envelope – under eUCP / eURC.

3

Examine

The bank takes control of the originals and examines the set, then forwards to the opening bank in a new envelope, which takes control and examines in turn.

4

Accept and release

The importer receives the set of documents in a new envelope, accepts or pays; possession of the title document transfers to release the cargo – with automatic receipts and a full audit trail.

1

The two frameworks are complementary

MLETR makes the document a legal original; eIDAS makes the identity and signatures trusted. You need both for fully digital trade.

2

It works today, under real rules

Live transactions already run on trace:original for banks and corporates.

3

Start with one flow, then scale

Pick one document type and one corridor, prove it end-to-end, then expand across users, partners and jurisdictions — no closed network.

CONTACT

Gunnar Collin

Director, Enigio

Enigio AB

Drottningholmsvägen 10
Stockholm, Sweden

 gunnar.collin@enigio.com

 +46 761 139 500

 www.enigio.com

August 2026

Verifiable Credentials in Trade Finance.

*Preparing for AI-scale risk with portable,
issuer-verifiable proof under eIDAS 2.0*

André Casterman

Founder & Managing Director, Casterman Advisory

► TRADE FINANCE · ► VERIFIABILITY · ► eIDAS 2.0 · ► vLEI · ► QEL · ► QEAA · ► QTSP

Verifiable Credentials in Trade Finance

Preparing for AI-scale risk with portable,
issuer-verifiable proof under eIDAS 2.0

André Casterman

Founder and MD
Casterman Advisory



Board Member
ITFA



Trade Finance · Verifiability · vLEI · eIDAS 2.0 · QEAA · QEL · QTSP

August 2026

Data-centric
Trust ·

Portable
Proof ·

Machine-
Verifiable

Two Regimes, Two Questions

They are not competing standards. They answer different questions about the same transaction.

MLETR · ADOPTED 13 JULY 2017

"Who holds it now?"

Governs the digital equivalent of **possession** — so an electronic record can carry the legal the legal weight a paper instrument carried.

ART. 11 — CONTROL, VERBATIM

"Where a rule of law requires the **possession** of a transferable document or instrument ... that requirement is met ... if a reliable method is used to establish **exclusive control** of that electronic transferable record by a person."

- ▶ Bills of lading · bills of exchange
- ▶ Promissory notes · warehouse receipts
- ▶ Transfer of control = transfer of possession

eIDAS 2.0 · ADOPTED 11 APRIL 2024

"Who attested to it?"

Governs the **evidentiary status** of attestations about identity, mandate and events — and what a court may presume about them.

ART. 45k(2) — PRESUMPTION, VERBATIM

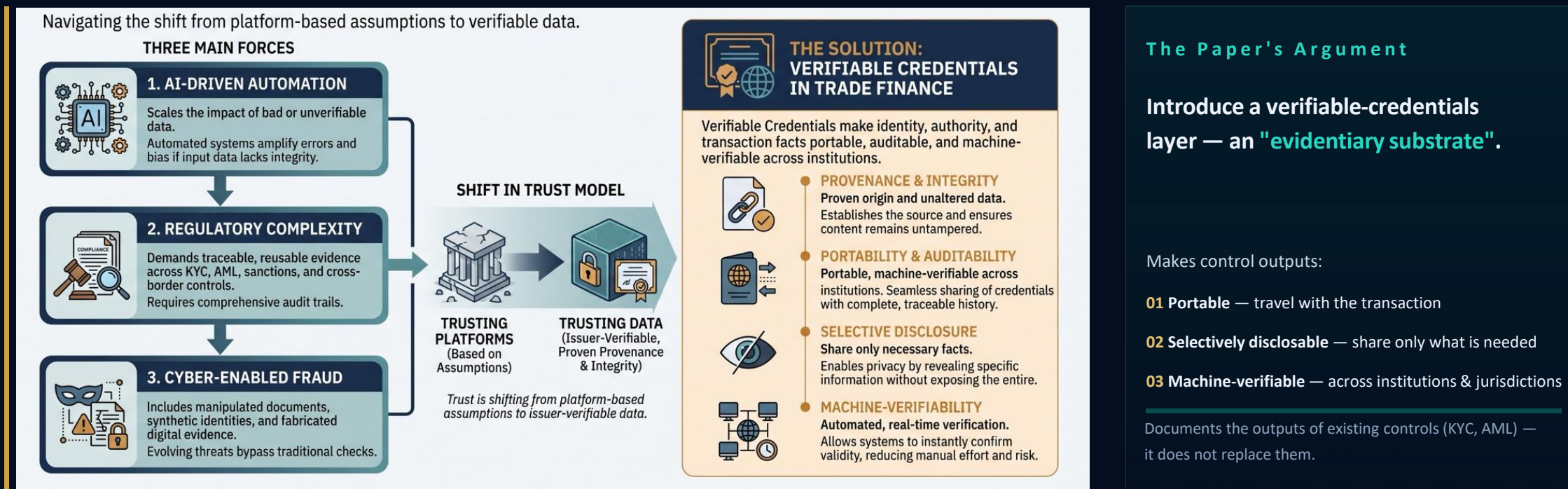
"Data records contained in a qualified electronic ledger shall enjoy the **presumption** of their unique and accurate sequential chronological ordering and of their integrity."

- ▶ QEAA — who made a claim
- ▶ QEL — what happened, and when
- ▶ vLEI — which entity, which mandate

MLETR moves the asset. | eIDAS 2.0 proves the record. | A financed shipment needs both.

Three Forces Reshaping Trust in Trade Finance

As AI will orchestrate the handling of goods, documents and money, trust needs to evolve and be fed with verifiable data.



Four Risk Surfaces

Four interacting risk surfaces exacerbate the trust deficit — with growing intensity. Recent fraud cases illustrate them.

01 /
SURFACE

Counterparty Opacity

Lack of transparency regarding the **identities and mandates** of parties involved in a transaction.

WHO YOU ARE DEALING WITH

02 /
SURFACE

Transaction Opacity

Difficulty tracking the alignment of **physical, financial, and legal** domains across the transaction lifecycle.

WHAT'S ACTUALLY HAPPENING

03 /
SURFACE

Document Fragility

Digital documents (PDFs) lack **inherent, portable proof of authenticity** once they leave their originating system.

CAN THE DOCUMENT BE TRUSTED

04 / SURFACE ⚠

Synthetic / Deepfake Risk

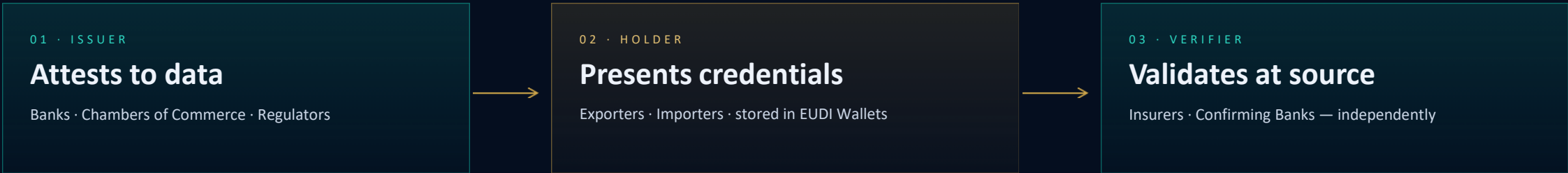
Fabricated digital evidence — **spoofed documents and AI-generated identities** designed to bypass traditional controls.

THE NEW AI-SCALE FRONTIER

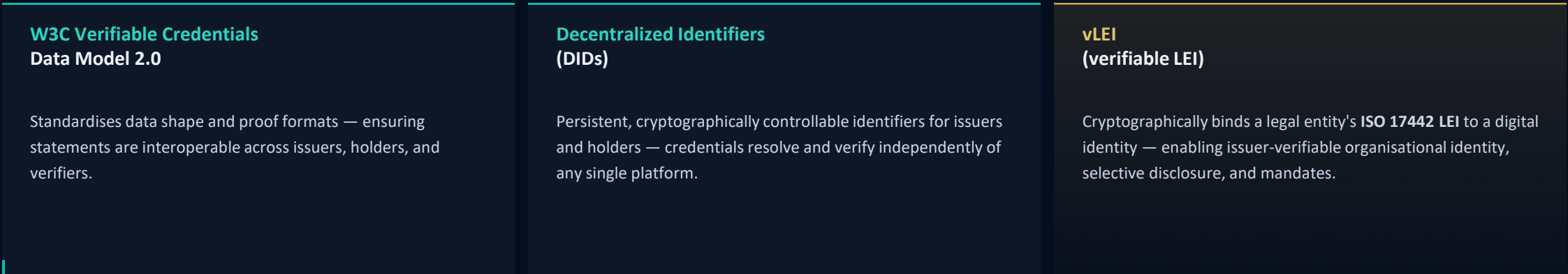
A Verifiable Credentials Layer

A portable, issuer-verifiable data substrate. Does not replace existing controls (KYC, AML) — it documents their outputs in a machine-verifiable format that travels with the transaction.

► Trust Flow



► Foundational Standards

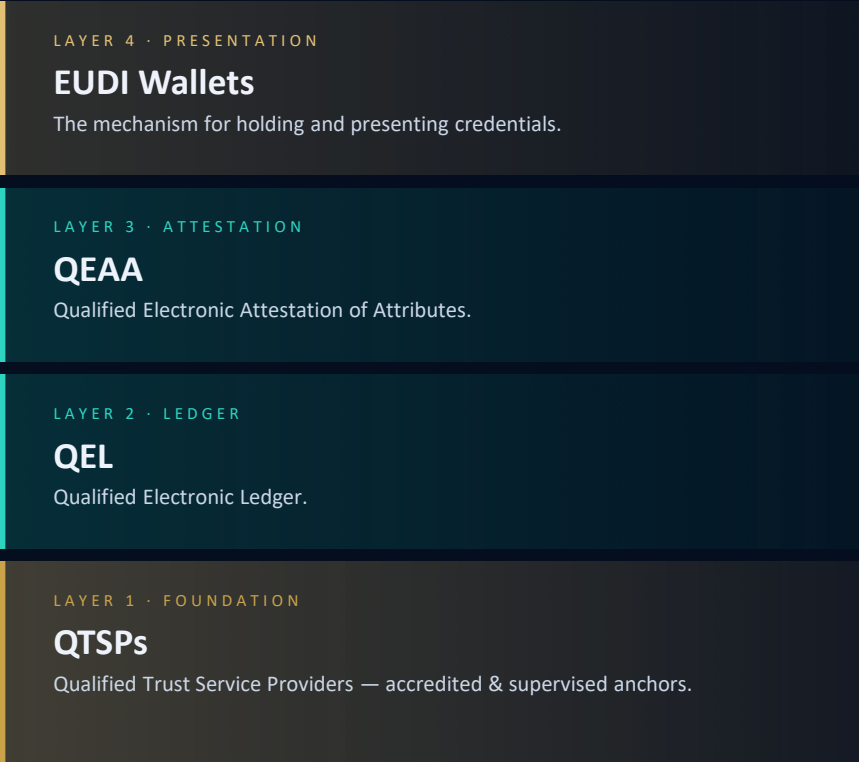


The shift: from **platform-centric trust** → to **data-centric trust** — authenticity verified at the issuer level.

The Trust Stack — eIDAS 2.0

Regulation EU 2024/1183 provides regulatory weight through qualified trust services — the layer that turns credentials into legally recognised evidence.

▸ Stack (top → bottom)



▸ What each piece answers



Together: a **QTSP** issues a **QEAA** (based on vLEI / W3C) to a Holder, who presents it to a Verifier; transaction milestones anchor on a **QEL** for a chronological audit trail.

Use Cases Across the Trade Finance Lifecycle

01 · IDENTITY

Identity, Compliance & Onboarding

- ▶ Portable evidentiary layer for KYC files, AML monitoring, sanctions screening.
- ▶ **vLEI** verifies legal existence and official roles/authority of individuals.
- ▶ Mandate-credentials prove signatory authority.
- ▶ **QEAA** gives portable, selectively disclosable identity & mandate claims.

02 · EXECUTION

Execution & Logistics

- ▶ Invoice issuance, shipment milestones, payment commitments recorded as attestations on a **QEL**.
- ▶ Bills of lading, customs docs, delivery events, bunker delivery notes gain provenance & integrity.
- ▶ Invoice acceptance records & invoice uniqueness — preventing fraud at submission.

03 · FINANCING

Financing & Risk Management

- ▶ **Double-financing detected at submission** — not later reconciliation.
- ▶ ESG labels & attestations issued by third parties.
- ▶ Lenders and insurers access narrowly scoped attestations — e.g. *"sanctions-cleared as of date X"* — supporting syndication and securitization.

04 · LEGAL

Legal Frameworks

- ▶ Legal recognition of electronic transferable records (e-bills of lading, e-promissory notes).
- ▶ Governed by national adoption of **UNCITRAL MLETR**.
- ▶ VCs provide the **evidentiary layer** — not the legal transfer mechanism.

Benefits & Fraud Prevention

► BENEFITS

What executives gain

01 · Portable Trust

Compliance outputs (KYC, AML, sanctions screening) travel with the transaction — **no repeated compliance work** at every counterparty.

02 · Selective Disclosure

Share only the required attributes — e.g. *"sanctions-cleared as of date X"* — without exposing all underlying commercial data.

03 · Streamlined Onboarding

Verify entity credentials (vLEI) & signatory mandates issued by chambers of commerce or the entities themselves — no more resending and manually validating unstructured PDFs.

04 · Interoperability

Standardised **W3C 2.0** data shape — independent of the originating platform.

► FRAUD PREVENTION ⚠

Against AI-scale risk

► Combats Synthetic Media & Deepfakes

High-integrity, tamper-evident data detects AI-generated falsified identity documents and synthetic identities.

► Detects Double-Financing at Submission

Lifecycle events anchored on a **QEL** reveal duplicate financing attempts in real time.

► Authoritative Identities & Mandates

QEAA ensures identities and mandates are authoritative and independently verifiable.

► Issuer-Level Verification

Removes reliance on platform trustworthiness — verifiers detect spoofed documents directly at the source.

From **platform-centric** trust to **data-centric** trust.

Core Insight

AI "scales **whatever data it is given.**"

Without high-integrity, issuer-verifiable data, automation accelerates error, fraud, and poor decision-making. Data authenticity must be verifiable at the issuer level — before AI agents take action. A verifiable-credentials layer makes proof of compliance controls portable and machine-verifiable.

Prepare for AI-scale risk with portable, issuer-verifiable proof.

01 · TAKEAWAY

Already underway

The shift to issuer-verifiable data is already happening happening across regulated markets (e.g., vLEI).

02 · TAKEAWAY

Evidentiary, not substitutive

VCs document work already being done (KYC, AML, AML, controls) — not a replacement.

03 · TAKEAWAY

Documentation layer

Success = treating VCs as a disciplined documentation documentation layer — not an isolated tech project. project.

Wrap-up

Thank you!

Participants in the forum are reminded of their responsibility to comply with competition laws

The EBA Competition Law Compliance Policy is available on the EBA website: [EBA Competition Law Compliance Policy](#).

Next to the policy document, a “60 seconds summary” of the EBA competition law compliance commitment is also available for download ([Do’s and Don’ts – the EBA competition law compliance commitment](#)).

The forum is an open group, where interested stakeholders can discuss and exchange information on industry-wide topics.

The content of the slides presented and the views expressed in the context of the activities of the forum are those of the respective participants in the forum, and do not represent the views of the Euro Banking Association (EBA).